

# Marzie Taheri Sanjani

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## EDUCATION

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**Ph.D.**, Economics, London Business School, 2013

- *Title of Thesis: 'Essays on Financial Frictions'*

**MRe.**, Economics, London Business School, 2011

**MSc.**, Electrical and System Engineering, University of Pennsylvania, 2009

**B.Sc.**, Electrical and Computer Engineering, University of Tehran, 2007

## EMPLOYMENT

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- **Economist at International Monetary Fund, 2013 to the present**
- **Internship at the International Monetary Fund, Summer 2012**
- **Internship at Norwegian Central Bank, Spring and Fall 2012**
- **Internship at Minneapolis Federal Reserve Bank, Summer 2011**
- **Teaching Assistantship:**
  - London Business School, International Macroeconomics, Spring 2013
  - University of Pennsylvania, Modern Feedback Control Theory, Spring 2009
  - University of Tehran, Electromagnetic Theory, Spring 2005
  - University of Tehran, Electronics I, Fall 2006
- **Research Assistantship:**
  - London Business School

## SKILLS

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**Economic technical skill:** Timeseries econometrics, DSGE modeling and estimation

**Computer skills:** MATLAB, Dynare, Latex, C++, Eviews, Microsoft Office

**Language skills:** Persian (Native), English (Fluent)

## Publication and Working Progress

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- Francesco Furlanetto, Paolo Gelain, and Marzie Taheri Sanjani, "[Monetary Policy Tradeoffs and Financial Frictions](#)", IMF Working Paper No. 14/128, 2014
- Marzie Taheri Sanjani, "Financial Frictions in the Data: Evidence and Impact", IMF Working Paper Forthcoming
- Marzie Taheri Sanjani, "[Financial Frictions and Sources of Business Cycle](#)", IMF Working Paper No. 14/194, 2014
- Serhat Solmaz and Marzie Taheri Sanjani, "How External Headwinds Affect Emerging Markets: Case of Turkey", IMF Working Paper Forthcoming

- Marzie Taheri Sanjani, Lusine Lusinyan, and Junior Maih “Growth Transitions and Determinants in Advanced Economies ”, IMF Working Paper Forthcoming
- Marc Gerard, Patrick Gitton, Gjorgji Nacevski and Marzie Taheri Sanjani, “[Remittances and Economic Development in FYR Macedonia](#)”, Selected Issue Paper 14/232, 2014
- Marzie Taheri Sanjani and Pau Rabanal, “Potential Output and Financial Frictions: Case of Euro Area”, IMF Working Paper Forthcoming

## **ENGINEERING PATENT & PUBLICATION**

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- M. Rinaldi, C. Zuniga, N. Sinha, M. Taheri, S. M. Khamis, A. T. Johnson, and G. Piazza, "Gravimetric Chemical Sensor Based on the Direct Integration of SWNTs on AlN Contour-Mode MEMS Resonators", Proceedings of the IEEE International Frequency Control Symposium 2008, Honolulu, Hawaii, USA, 18-21 May 2008, pg, 443-448 [nominated for Best Student Paper Award].

## **ABSTRACTS**

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### **“Steady As She Goes—Estimating Potential During Financial Booms and Busts “(Helge Berger, Tom Dowling, Sergi Lanau, Weicheng Lian, Mico Mrkaic and Pau Rabanal)**

Potential output is a crucial benchmark for policymakers. However, it is difficult to estimate when financial “booms and busts” drive actual GDP growth. This paper uses a DSGE model estimated for the euro area core and periphery to distinguish unsustainable credit-fueled housing booms from changes in potential output linked to a reduction in financial frictions. The same logic can be applied to help identify potential output in a simple multivariate filtering approach. The results suggest that, as a rule, potential output adjusted for the financial moves more steadily during financial “boom and bust” periods than commonly thought or implied by conventional HP-filter estimates. This has important implications for policymakers.

### **“How External Headwinds Affect Emerging Markets: Case of Turkey” (With Serhat Solmaz)**

In the lead up to the recent global financial crisis, financial and monetary policy headwinds from advanced economies played a key role in the emerging markets. This empirical paper develops and estimates a Mixed Frequency Bayesian VAR (MF-BVAR) model to assess the impact of external and domestic factors on the output growth of Turkey. The model consists of two blocks representing home and foreign factors. By analyzing the conditional forecast, we find that the new release of external information would significantly enhance the accuracy of the forecast. Moreover, study of historical variance decompositions shows asymmetric elasticity of the response of GDP growth with respect to the financial risk aversion in the U.S. economy. Finally, we measure external shock propagation into the home economy by analyzing the impulse response functions.

### **“Financial Frictions in the Data: Evidence and Impact”**

This empirical paper studies the interaction between the real business cycle and the credit market. I use Bayesian techniques to estimate a large Vector AutoRegression and New Keynesian models to understand how financial shocks can have large and sluggish impact on real economy. I further identify default risk and maturity mismatch channels of monetary policy transmission. A generalized-IRF analysis is employed to assess cyclical properties of risk spreads. Finally, by tracing the impact of disruptions originating in the credit market into the real economy, I show that the maturity mismatch shocks produce a stronger impact than the default risk shocks.

### **“Monetary Policy Tradeoffs and Financial Frictions” (With Francesco Furlanetto and Paolo Gelain)**

The recent global financial crisis illustrates that financial frictions are a significant source of volatility in the economy. This paper investigates monetary policy stabilization in an environment where financial frictions are a relevant source of macroeconomic fluctuation. We derive a measure of output gap that accounts for frictions in financial market. Furthermore we illustrate that, in the presence of financial frictions, a benevolent central bank faces a substantial trade-off between nominal and real stabilization; optimal monetary policy significantly reduces fluctuations in price and wage inflations but fails to alleviate the output gap volatility. This suggests a role for macroprudential policies.

### **“Financial Frictions and Sources of Business Cycle”**

This paper estimates a New Keynesian DSGE model with an explicit financial intermediary sector. Having measures of financial stress such as the spread between lending and borrowing enables the model to capture the impact of the financial crisis in a more direct and efficient way. The model fits US post-war macroeconomic data well and also shows that financial shocks play a greater role in explaining the volatility of macroeconomic variables than marginal efficiency of investment (MEI) shocks.

### **“Growth Transitions and Determinants in Advanced Economies” (With Lusine Lusinyan and Junior Maih)**

Reviving the economic growth is a key challenge that many advanced economies are currently facing. Motivated by this challenge, the paper revisits the analysis of long-term growth in the advanced economies in a regime-switching framework. We study the growth process as transitions between different regimes of mean growth rates and/or growth volatility, and we document various characteristics of the growth process for a sample of 30 OECD countries. We also investigate the potential triggers of regime transitions for a few country cases, assuming that the probability of regime switching would depend on economic and structural factors. For our empirical analysis, we develop a novel and flexible Markov regime switching framework, which allows us to identify regimes over mean and volatility processes independently and endogenously. Our preliminary results indicate that for most OECD countries, the growth process can be characterized as the one driven by changes in the growth volatility, and that some structural factors, such as the share of services sector could potentially explain the shifts toward a less volatile growth regime. Overall, our analysis helps evaluate the prospects that the advanced economies have for moving from the current state of low growth and high volatility to the one of higher growth and lower volatility, and shed light on the policies that could accelerate such a move.

### **Potential Output and Financial Frictions: Case of Euro Area (With Pau Rabanal)**

Going beyond the traditional inflationary imbalances, we analyze the role of the credit and house prices in computing potential output. We develop and estimate a DSGE model of core and periphery regions for EA economy. The historical shock decompositions provide the macroeconomic story behind the path of potential output before, during, and after the crisis. We further discuss the channels through which credit boom led to widely divergent developments of actual and potential GDP in Euro Area Periphery.