

Research Proposal to NBER Household Finance Working Group

Income Shocks and Investment in Risky Assets

Investigators: Shashwat Alok, Prachi Deuskar, and Nitin Kumar
Assistant Professors, Finance Area
Indian School of Business, Hyderabad, India

Project Description:

This study proposes to investigate effect of a shock to income on investment in risky assets via mutual funds. There is growing body of literature looking at income shocks on household consumption and debt repayment behavior.¹ Theoretically, in a life-cycle consumption choice model, savings and investment are as important as consumption. However, there is little evidence about how household investment changes in response to income shocks. An agent engaged in consumption smoothing should save more in response to transitory positive shocks to income. However, as some behavioral models note, if agents lack self-control, the temporarily higher income can result in immediate consumption. Bertrand and Morse (2009) find some evidence to this effect. Further, if investors engage in mental accounting, they may put transitory income gains in separate account and use those towards “special” consumption rather than regular consumption or saving. Thus, effect of income shocks on savings and particularly on investment in risky assets is unclear. Yet, it is a question of paramount consequence since level of savings and portfolio allocation will significantly affect the standard of living of the household in future.

This question is of importance to any economy, and is particularly important to households in India. In India, household savings average to around 25% of GDP, a large fraction. Yet less than 5% of financial assets are invested in stocks and bonds and nearly 50% are held in bank deposits.² Thus any household choices that affect savings and investment behavior have a potential of significant impact on future wealth of the household. In this study, we will attempt to identify income shocks based on level of income of the investor and tax law changes. We will estimate the average effect of an income shock on the investment in risky assets via mutual funds.

Further, there is likely to be cross-sectional variation in response of household investment to income shocks. This is because, as summarized in Browning and Lusardi (1996), there are several motives for savings and investment, each is likely to have differential importance across households. Thus, we will also examine impact of various investor characteristics on their response to investment shocks. Previous studies (Bailey, Kumar, Ng (2011)) have shown that investor characteristics can have significant impact on their investment behavior.

¹ See for example, Stephens (2003, 2006, 2008), Agarwal, Liu, and Souleles (2007), Bertrand and Morse (2009) among many others.

² Report of the Working Group on Savings during the Twelfth Five-Year Plan submitted to the Planning Commission of India.

Data:

Mutual fund investor account level data from a large mutual fund company in India along with some investor characteristics such as income, geographic location and risk attitudes.

References:

- Agarwal, S., Liu, C. and Souleles, N.S., 2007. The Reaction of Consumer Spending and Debt to Tax Rebates—Evidence from Consumer Credit Data. *Journal of Political Economy*, 115(6).
- Bailey, Warren and Kumar, Alok and Ng, David, 2011. Behavioral Biases of Mutual Fund Investors. *Journal of Financial Economics*, 102(1-27).
- Bertrand, M. and Morse, A., 2009. What Do High-Interest Borrowers Do with Their Tax Rebate? *The American Economic Review*, 99(2), pp.418-423.
- Browning, M. and Lusardi, A., 1996. Household saving: Micro theories and micro facts. *Journal of Economic literature*, 34(4), pp.1797-1855.
- Kale, J.R. and Panchapagesan, V., 2012. Indian mutual fund industry: Opportunities and challenges. *IIMB Management Review*, 24(4), pp.245-258.
- Stephens, M., 2003. “3rd of that month”: Do Social Security recipients smooth consumption between checks? *The American Economic Review*, 93(1), pp.406-422.
- Stephens, M. 2006. Paycheck Receipt and the Timing of Consumption. *The Economic Journal*, 116(513), pp.680-701.
- Stephens, M., 2008. The consumption response to predictable changes in discretionary income: Evidence from the repayment of vehicle loans. *The Review of Economics and Statistics*, 90(2), pp.241-252.

Budget:

Data acquisition, cleaning, processing = \$12,000

Purchase of IT systems for data cleaning, processing = \$3,000

Conference travel = \$5,000

Total = \$20,000

Shashwat Alok

CONTACT INFORMATION

Department of Finance
Indian School of Business
Hyderabad -50032

Voice: +919963522206
E-mail: shashwatalok@wustl.edu

EDUCATION

Olin Business School, Washington University in St. Louis, USA

Ph.D. in Finance, May 2013

M.S., Business Administration, May 2012

Manipal University, Manipal, India

B.E., Computer Science and Engineering, May 2008

RESEARCH INTERESTS

Politics and Finance, Labor and Finance, Household Finance, Corporate Governance and Financial Intermediation.

HONORS AND AWARDS

Hubert C. Moog Scholar for Academic Excellence, Washington University in St. Louis (2012)

Doctoral Fellowship, Washington University in St. Louis, 2008 - 2013

Ranked 3rd in the Department of Computer Science and Engineering, Manipal University, 2008

Merit Rank Holder, National Maths Olympiad, India, 1998

TEACHING EXPERIENCE

Advance Corporate Finance (Fall 2013, ISB)

Corporate Finance Core I and II (Fall 2014, ISB)

Corporate Finance Core II (Fall 2015, ISB)

Teaching assistant

Investment Praxis (UG) (Ohad Kadan, Spring 2010)

Integrated Value Creation: The Wholomics Approach (MBA)(Anjan Thakor, Fall 2010)

Numerical Methods & Optimization in Finance (MSF) (Phil Dybvig, Fall 2010)

Creating Exceptional Value: Performance w/o Compromise (MBA) (Anjan Thakor, Fall 2011)

Information Economics & Corporate Finance Theory (PhD)(Anjan Thakor, Spring 2012)

RESEARCH

Working papers under Review

- “Politics, State Ownership, and Corporate Investments.”, joint with Meghana Ayyagari (Under Review at Review of Financial Studies)

- **“Managerial Compensation in Multi-Division firms.”**, joint with Radha Gopalan (Resubmitted for 2nd Round review at Management Science)

Completed Working papers

- **“Stock price informativeness and the mix of long-term and short-term pay”**, joint with Felipe Cortes and Radha Gopalan
- **“Employee Property Rights and Innovation”**, joint with Krihnamurthy Subramanian
- **“Saliency Bias in Mutual Fund Portfolios and its Implications for Stock Price Efficiency: Evidence from a Natural Experiment”**, joint with Nitin Kumar

Work in progress

- **“Household balance sheets and regional economic outcomes”**
- **“Creditor Rights and Labor: Evidence from a Natural Experiment”**
- **“Related Party Transactions and Expropriation of Minority Shareholders”**
- **“Management’s Bargaining Power, Corporate Governance and Ex-Post Efficiency of Bankruptcy Resolution.”**, joint with Felipe Cortes

ACADEMIC PRESENTATIONS:

“Politics, State Ownership, and Corporate Investments.”

- 6th Emerging Markets Finance Conference, December 2015
- AFA Annual Meetings, January 2014
- University of Florida, October 2013 (Presented by Co-author)
- 26th Australasian Finance and Banking Conference, December 2013
- Brown Bag, Olin Business School, September 2012
- Research in Finance Seminar, Olin Business School, September 2012
- 7th Annual Economics Graduate Student Conference, Washington University in St. Louis, October 2012
- PhD Poster Session, 9th Annual Conference on Corporate Finance, Washington University in St. Louis, November 2012

“Managerial Compensation in Multi-Division firms.”

- CAF Annual Conference, July 2014
- Vanderbilt-Auckland-ISB Law and Finance Conference, June 2014
- EFA Annual Meetings, August 2013
- Summer Research Camp, July 2013
- Sam M. Walton College of Business, University of Arkansas, April 2012 (Presented by Co-author)
- College of Business Administration, University of Missouri St. Louis, April 2012
- Olin Brown Bag, November 2011

“Saliency Bias in Mutual Fund Portfolios and its Implications for Stock Price Efficiency: Evidence from a Natural Experiment”

- 4th Luxembourg Asset Management Summit, October 2015
- NFA annual meetings, September 2015 (Presented by Co-author)
- ISB Brown Bag, May 2015
- Summer Research Camp (ISB), July 2014

“Employee Property Rights and Innovation”

- Summer Research Camp (ISB), July 2015
-

OTHER ACADEMIC
ACTIVITIES:

Ad-Hoc Reviewer

Management Science, Journal of Financial and Quantitative Analysis, Real Estate Economics

- External Committee Member (Thesis Review) for Masters in Finance (Research) student at UNSW, Australia.

Discussant

- CAF Annual Conference, July 2015
 - The Financial Intermediation Research Society (FIRS) Conference, May 2015
 - 4th International Conference on Corporate Governance in Emerging Markets, August 2013
-

PROGRAMMING
SKILLS:

Developed text processing script using python to automatically collect data from large pdf and text files.

- Used it to collect electoral data from pdf files (election commission of India) into CSV format.
 - Can also be used to collect data from 10-K statements, Proxy statements etc in Edgar.
-

MEDIA ARTICLES

- “PSUs: Prudent Investors or Political Pawns?,” The Economic Times (May 3, 2014).
- “Drop in Trade deficit: Much ado about something?,” IBN Live (October 3, 2014).

Prachi Deuskar

Indian School of Business
Finance Area
Office Suite # 6104, AC 6, Level 1
Gachibowli, Hyderabad – 500032
INDIA

Phone: +91 (40) 2318 7425
Email: prachi_deuskar_at_isb_dot_edu

EMPLOYMENT

Indian School of Business

Assistant Professor, 2014-

University of Illinois at Urbana-Champaign

Assistant Professor, 2007-2014

Lecturer, 2006-2007

EDUCATION

Stern School of Business, New York University

PhD in Finance, 2007

Indian Institute of Management, Bangalore

Post Graduate Diploma in Management (MBA), 2001

The Institute of Chartered Accountants of India

Chartered Accountant, 1997

AWARDS, FELLOWSHIPS AND GRANTS

Grant by NSE – NYU Stern Initiative on the Study of Indian Financial Markets,
2014-15

List of Teachers Ranked as Excellent by their Students, Fall 2009-2013

Arnold O. Beckman Research Award, UIUC Campus Research Board, 2008 (jointly
with Z. Jay Wang)

Willensky Endowment Fellowship for Advanced Doctoral Students, NYU Stern School
of Business, 2005-2006

Jules I. Bogen Fellowship, NYU Stern School of Business, 2005-2006

FMA Annual Meeting Competitive Paper Award (Category: Fixed Income), 2004

Gold Medal for second rank, Indian Institute of Management Bangalore, 2001

Ratan Tata Scholarship for excellent academic performance, Indian Institute of
Management Bangalore, 2000

First President's Gold Medal for the best candidate in India, The Institute of Chartered
Accountants of India, 1997

RESEARCH INTERESTS

Asset Pricing, Liquidity, Mutual Funds and Hedge Funds, Behavioral Finance, Derivatives

TEACHING INTERESTS

Investments, Portfolio Management, Asset Pricing, Asset Liability Management, Derivatives

ARTICLES

The Good or the Bad? Which Mutual Fund Managers Join Hedge Funds? (with Joshua Pollet, Z. Jay Wang, and Lu Zheng), 2011, *Review of Financial Studies* 24(9), pp 3008-3024. doi: 10.1093/rfs/hhr057

Market Liquidity and Flow-Driven Risk (with Tim Johnson), 2011, *Review of Financial Studies* 24(3), pp 721-753. doi: 10.1093/rfs/hhq132

Liquidity Effects in OTC Options Markets: Premium or Discount? (with Anurag Gupta and Marti G Subrahmanyam), 2011, *Journal of Financial Markets* 14, pp 127-160. doi: 10.1016/j.finmar.2010.08.003

The Economic Determinants of Interest Rate Option Smiles (with Anurag Gupta and Marti G Subrahmanyam), 2008, *Journal of Banking and Finance* 32(5), pp 714-728. doi: 10.1016/j.jbankfin.2007.05.012

WORKING PAPERS

Central Banks and Dynamics of Bond Market Liquidity (with Tim Johnson)

The Dynamics of Hedge Fund Fees (with Z. Jay Wang, Youchang Wu, and Quoc Nguyen).

Experience of Regret and Subsequent Trading Behavior (with Pan Deng and Fei Wu).

Extrapolative Expectations: Implications for Volatility and Liquidity.

WORK IN PROGRESS

Limits to arbitrage in an emerging market (with V Ravi Anshuman, K V Subramanian, Ram Thirumalai)

Media sentiment and stock returns (with K R Subramanyam and Peeyush Taori)

Liquidity: Over the counter and on exchanges (with Abhishek Bhardwaj)

TEACHING MATERIALS

ICICI Bank and the Issue of Long Term Bonds (with Victoria Ivashina, Smita Aggarwal, and Marti G Subrahmanyam), 2016, Harvard Business School Case 216-043.

PRESENTATIONS

Moody's/Stern/ICRA Conference on Fixed Income Research in India, 2015, Mumbai

NSE-NYU Indian Financial Markets Conference, 2015, Mumbai

2nd MSUFCU Conference on Financial Institutions and Investments, 2012, East Lansing

Financial Intermediation Research Society Conference, 2012, Minneapolis

22nd Annual Conference on Financial Economics and Accounting, 2011, Bloomington

UC Davis Symposium on Financial Institutions and Intermediaries, 2011, Davis

American Finance Association Meetings, 2011, Denver

2010 China International Conference in Finance, Beijing

American Finance Association Meetings, 2010, Atlanta

2009 China International Conference in Finance, Guanzhou

The Fifth Annual Early Career Women in Finance Conference, 2009, San Diego

Financial Intermediation Research Society Conference, 2009, Prague
2008 China International Conference in Finance, Dalian
Financial Management Association Meetings, 2007, Orlando
American Finance Association Meetings, 2007, Chicago
Derivatives Research Project Conference, 2004, New York
Derivative Securities and Risk Management Conference, 2004, New York
American Finance Association Meetings, 2004, San Diego

REFEREEING

Journal of Finance, Review of Financial Studies, Journal of Financial Intermediation,
Journal of Financial Markets, Journal of Banking and Finance, Journal of Derivatives,
Review of Derivatives Research, IIMB Management Review

PROFESSIONAL EXPERIENCE

Member of the Investment Committee, Robustwealth, 2015-
Co-developed and co-conducted a program for CAFRAL (promoted by RBI) on asset
liability management and forex risk for senior bankers, 2015
Summer Intern, ICICI Limited, Mumbai, India, 2000
Finance Manager, Cummins India Limited, Pune, India, 1997-1999
Audit and Tax Assistant, Gadre and Bhide Chartered Accountants, Pune, India, 1994-1997

Nitin Kumar

Indian School of Business
Hyderabad, AP 500032
India

Ph: +91-40-2318-7265
Fax:+91-40-2300-7032
Email: nitin_kumar@isb.edu

Employment

Assistant Professor, Indian School of Business
2013-present

Education

Robert H. Smith School of Business, University of Maryland, College Park, MD, USA
Ph.D., Finance, 2013

Indian Statistical Institute, Calcutta, India
M.S., 2006

Indian Institute of Technology, Kanpur, India
B.Tech., 2002

Research Interests

Empirical Asset Pricing, Behavioral Finance, Institutional Investing

Papers Under Review

Mutual Fund Competition, Managerial Skill, and Alpha Persistence (with Gerard Hoberg and N. R. Prabhala) [Reject & Resubmit at Review of Financial Studies]
(ABFER 2014, CFEA 2014, NFA 2014, AFA 2015, FDU 2015, FIRS 2015)

Working Papers

Saliency Bias in Mutual Fund Portfolios: Evidence from a Natural Experiment (with Shashwat Alok)
(NFA 2015, LAMS 2015, FIRS (2016, scheduled))

Competition and Momentum Profits (with Gerard Hoberg and N. R. Prabhala)

Work in Progress

Predicting Market Crashes (with Prachi Deuskar and Jeramia Poland)

Managerial Ownership, Trading Behavior of Portfolio Managers and Stock Returns

Conferences

- 2016: Financial Intermediation Research Society (Scheduled)
- 2015: American Finance Association
 - Finance Down Under
 - Financial Intermediation Research Society
 - Luxembourg Asset Management Summit
 - Northern Finance Association
- 2014: Asian Bureau of Finance and Economic Research
 - Conference on Financial Economics and Accounting
 - Northern Finance Association
- 2012: Northern Finance Association
- 2010: Financial Management Association Doctoral Student Consortium

Referee Activities

- Ad hoc Referee, Journal of Financial Services Research

Teaching

- Portfolio Management (MBA Level), Indian School of Business, 2014, 2015
- Corporate Finance-II (MBA Level), Indian School of Business, 2014
- Investment Analysis (MBA Level), Indian School of Business, 2013
- International Finance (Undergraduate Level), Smith School of Business, 2009

Honors and Awards

- International Conference Student Support Award, University of Maryland, 2012
- Jacob K. Goldhaber Travel Award, University of Maryland, 2012
- Dean's Fellowship, Smith School of Business, University of Maryland, 2011
- Dean's Summer Fellowship, Smith School of Business, University of Maryland, 2006-2011
- Graduate Assistantship, Smith School of Business, University of Maryland, 2006-2011
- Masters Scholarship, Indian Statistical Institute, Calcutta, 2004-2006