JANHAVI SHANKAR TRIPATHI

PhD Candidate in Econometrics and Quantitative Economics at Fordham University

CONTACT AND PERSONAL INFORMATION

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Personal: Indian citizen, F-1 visa; **Languages:** English, Hindi, Marathi

RESEARCH INTERESTS

Financial Economics, International Finance, Behavioral Finance, Financial Markets, FinTech, Empirical Asset Pricing, Applied Econometrics, and Economic Development

EDUCATION

Fordham University, Graduate School of Arts and Sciences — New York, USA
PhD in Econometrics and Quantitative Economics, GPA: 3.8/4.0 — Aug 2018 – present
Fields: Financial Economics, International Economics, Applied Econometrics
Thesis: Topics on Fractional Trading and Trade–Growth Nexus
Advisors: Dr. Erick W. Rengifo (Co-chair), Dr. Dominick Salvatore (Co-chair), Dr. Hrishikesh D. Vinod, Dr. Duncan James
MA in Econometrics and Quantitative Economics, 2018 – 2020
Advanced Certificate, Financial Econometrics and Data Analysis, 2019 – 2020

Symbiosis International University, School of Economics — Pune, India
MSc in Economics — 2014 - 2016
Specializations: International Trade and Finance, Applied Econometrics
Thesis: Trade-Growth Nexus: A Study of G20 Countries

University of Pune, Fergusson College — Pune, India
BSc in Physics (Major), Mathematics, Statistics — 2011 - 2014
Thesis: Magnetohydrodynamics and Dynamo Theory

EXPERIENCE

Fordham University, Graduate School of Arts and Sciences — New York, USA
Graduate Research and Teaching Assistant to Professor Dominick Salvatore — Aug 2018 - Present
- Set up economic models and run econometric analyses on research projects in Trade and Development
- Created/edited diagrams, charts, and tables for textbooks, teaching materials, articles, and research works
- Updated and proof-read in entirety the manuscript for Prof. Salvatore's International Economics textbook, 13th edition, a leading textbook on International Economics
- Teaching Assistant for graduate courses in Microeconomic Theory-I, International Trade, and International Finance

International Monetary Fund, Monetary and Capital Markets Department — Washington DC, USA
Research Intern (Fund Internship Program), Financial Supervision and Regulation — June 2022 – Aug 2022
- Worked on a paper studying the Bond ETF Performance During the COVID-19 Crisis

University of Cambridge Judge Business School, Centre for Alternative Finance — Cambridge, UK (Remote)
Research Intern, Cryptoasset and Blockchain Research — June 2020 – Aug 2020
- Worked on the Global Alternative Finance Benchmarking (GAFB) project focused on data analyses and dashboard prototype development. The project is aimed at creating an interactive dashboard providing historical analyses and insights at the aggregated level into the latest development and trends in the alternative finance markets and their regulatory environment
- Contributed to the 3rd edition of Global Cryptoasset Benchmarking Study, focusing on data analyses based on the collected public and survey data. The study reviews the market trends and provides insights into the state of the cryptoasset industry

ZS — Pune, India
Associate, Business Performance and Advanced Analytics — June 2016 - July 2018
Area of work: Multi-channel Marketing, Key Drivers Analytics, and Business Performance
- Provided business-relevant analytics and insights to a major US Pharma client; served as a key point of contact with clients and provided follow-up with clients after project deliverable had been completed to ensure client satisfaction
- Understand clients' strategy, business goals, and KPIs and help to design viable recommendations across multiple sales and marketing channels; analyze brand journey/ business processes and tactics, identify pain areas for sales and marketing channels, and propose investments and actionable insights for new marketing channels for long-term value creation
- Designed and developed Tableau dashboards with valuable insights and the performance of different tactics across channels for the client to make an informed decision and automated the reporting process for a hassle-free refresh for the client's internal use and distribution
- Analyzed the key drivers of sales and gauged the effectiveness of different tactics across different channels, and evaluated

investment returns across channels using advanced regression models to help clients make informed decisions to allocate their investments/ resources accordingly
- Contributed towards practice capability building through the preparation of presentation decks, training documents, and client briefing sessions and helping/training new people on the project with various tools and project-specific business concepts/ information to help them get on board

AWARDS AND HONORS
- Graduate Student Support Grant for conference participation and research at Fordham University, 2023
- GSAS Teaching Associateship to pursue Ph.D. in Economics at Fordham University, *2022 - 2023*
- Mahony Prowse Scholarship for academic excellence in the field of Economics at Fordham University, *2020*
- Dominick Salvatore Summer Research Fellowship for the pursuit of promising research at Fordham University, *2020*
- Omicron Delta Epsilon International Honor Society for Economics Membership by Fordham University's chapter of ODE, *2019*
- GSAS Fellowship to pursue Ph.D. in Economics at Fordham University, *2018 - 2022*
- Outstanding Achievement Award for work on Multi-channel Marketing Analytics (Non-personal Promotion Digital Tactics), ZS/BMS, *2017*
- OPSCAR award (ZS) for overall excellence in Business Operations and contribution to Global Analytics Team, ZS, *2017*
- Selected among 55 students across India for National Initiative on Undergraduate Sciences (NIUS)- Physics camp 9.1, HBCSE – TIFR, *2012*
- Selected among 30 students across India for Radio Astronomy Winter School (RAWSc 2011) and won the first prize as a group for work and poster presentation on AstroSat, IUCAA & NCRA – TIFR, *2011*

PUBLICATIONS
- **Tripathi, J. S.**, & Rengifo, E. W. (2023). **The Impact of Fractional Trading on Risk Aversion for Non-professional Investors.** Finance Research Letters 52: 103547 [DOI]
- **Tripathi, J. S.** (2016). **Trade-Growth Nexus: A Study of G20 Countries.** IOSR J Econ Finance, 7(3), 60-70. [DOI]
- Desai, N., & **Tripathi, J. S.** (2016). **Rupee Exchange Rate Dynamics from 1993 to 2011: Study of Factors Driving the Exchange Rate.** IOSR J Econ Finance, 7(2), 19-25. [DOI]

JOB MARKET PAPERS
The Impact of Fractional Trading on Risk Aversion for Non-professional Investors. (w/ Erick W. Rengifo). [SSRN Link]
Finance Research Letters 52 (2023) 103547. [DOI]
Abstract: We study the impact of fractional trading (FT) on non-professional investors' decision-making under uncertainty. Using the expected utility framework, we show that with the recent easiness to trade in stock markets and with the option to buy or sell a fraction of a share of a stock or ETF (exchange-traded fund), the risk appetite of nonprofessional investors might have gone up, increasing market participation and demand for stocks. Furthermore, we show that this change in the non-professional investor's risk aversion behavior varies by household income levels. Based on constructed probabilities, we estimate that approximately 83 billion dollars have been newly invested in stock market post-FT. Our results suggest that easy access to trade stocks and FT allows households with lower discretionary income a new tool to diversify their portfolio and participate in the stock markets by investing in different stocks and ETFs while at the same time having a significant impact on the stocks' price levels and price dynamics observed in the markets.

The Impact of Fractional Trading on Order Book Dynamics. (2022). (w/ Erick W. Rengifo). [SSRN Link]
Abstract: We study the impact of fractional trading on the price levels and order book dynamics observed in stock markets. Fractional trading has recently been introduced on multiple trading platforms in equities markets, allowing individuals to buy a fraction of a share of stocks or ETFs (exchange-traded funds). Fractional trading, along with direct and easier access to the markets through commission-less trading apps, can potentially modify the risk appetite of non-professional investors (who are generally myopic and risk-averse) and create opportunities for portfolio creation and diversification, hence increasing the demand for stocks. It can also impact non-professional investors' investment behavior, price levels, and market volatility. Using Nasdaq data feed at a minute frequency, we show that there has been a significant increase in the slope of the price-volume structure. In some cases, there is an increase in the number of steps required to place a limit order after the introduction of fractional trading. Our results suggest that increased demand for stocks led by easiness to trade stocks and fractional trading impacts the order book's price formation process and price-volume structure.

WORKING PAPERS
Relationship Between Trade and Growth for Developing Countries at Different Levels of Income. (2023). (w/ Dominick Salvatore). Submitted, Under Review.
Abstract: We explore the relationship between trade openness and economic growth for developing countries at different income levels using a simultaneous equations model from 2004-2019. The model is estimated using a full information maximum likelihood method for the developing high-income (HI), upper-middle-income (UMI), lower-middle-income (LMI), and low-income (LI) countries. We find that for developing HI, UMI, and LI countries, trade positively impacts growth which varies significantly in magnitude. Trade contributes significantly higher growth for developing HI countries when compared to developing UMI and LI countries. The results suggest that trade is positively related to growth, but it works as a handmaiden rather than a growth engine. On the other hand, for developing LMI countries, we find that trade negatively impacts growth. For developing LMI countries, trade contributes significantly to capital formation for these countries, leading to growth. Further, we also perform dynamic policy

simulations based on the most advocated policies like increasing growth of exports, foreign capital inflows, curbing domestic inflation, etc. We find that these policies are not very effective in increasing the growth rate of the real per capita income.

Bond ETF Performance During the COVID-19 Crisis. (2022). (w/ Jay Surti). IMF Working Paper, forthcoming.

Abstract: Arbitrage activity by large banks (called APs) is vital to ensuring efficiency and stability of ETF performance. Exploiting the availability of data for the period of the Covid-19 associated market instability, we analyze and contrast APs' arbitrage activity in normal versus stressed market conditions for a representative database of passive, fixed income ETFs. We find that APs trade ETF shares and bonds in a manner consistent with the arbitrage incentives predicted by theory, in normal times, for corporate bond ETFs, but not for broad market ETFs. For corporate bond ETFs, these incentives were dented significantly during March-April 2020 resulting in persistent, larger discounts-to-NAV of ETF share prices until the Fed's policy interventions turned the tide. APs' incentives to manage bond inflow shocks during this period constitute a key factor generating countervailing incentives, interacting with the liquidity of corporate bond ETFs' asset portfolios. Our results add to emerging empirical evidence that APs do not trade at a scale necessary to quickly close out price-NAV differentials and also appear to trade in a direction that exacerbates share price discounts-to-NAV during times of stress. We find no significant differences between ETFs that are primarily held by institutional versus retail investors.

Trade-Growth Nexus: A Study of G20 Countries using Simultaneous Equations Model with Dynamic Policy Simulations. (2021). Submitted, Under Review.

Abstract: This paper studies the relationship between trade openness and economic growth for G20 countries using a simultaneous equations model from 2004 to 2019. The model is estimated using a full information maximum likelihood method for the G20 countries. Further, the analysis is also done separately for Advanced and Developing G20 countries. The results suggest that trade is positively related to growth, but it works as a handmaiden rather than a growth engine. Trade contributes significantly higher growth for advanced G20 countries when compared to developing G20 countries. Further, we also perform dynamic policy simulations based on the most advocated policies like increasing growth of exports, foreign capital inflows, curbing domestic inflation, etc. We find that these policies are not very effective in increasing the growth rate of the real per capita income.

WORKS IN PROGRESS

- Fractional Trading, Earnings Announcement, and Order Book Dynamics. (w/ Erick W. Rengifo)
- Exchange Traded Funds, Market Liquidity, and Financial Stability. (w/ Jay Surti)
- The Impact of Fractional Trading on Risk Aversion and Wealth Allocation Behavior for Non-professional Investors under the Prospect Theory Framework. (w/ Erick W. Rengifo)

OTHER SELECTED PROJECTS

- Predicting COVID-19 Cases Using Google Community Mobility Report, 2020
- Trade-Growth Nexus: A Study of G20 Countries, 2016 [MSc Thesis]
- Performance Analysis and Estimation of Production Function of Indian Automobile Sector, 2015
- Magnetohydrodynamics and Dynamo Theory, 2014 [BSc Thesis]

TALKS AND PRESENTATIONS

- World Finance Conference, Aug 2023 (scheduled)
- SQA Trading Day Conference, Jun 2023 (scheduled)
- St. Bonaventure University School of Business, Mar 2023
- Fordham Fall 2022 Finance Workshop, Nov 2022
- NYSEA 2022 Conference, Oct 2022
- IMF Monetary & Capital Markets Policy Forum, Aug 2022
- FRL 2022 CEMLA Conference on New Advances in International Finance, Apr 2022
- Fordham Fall 2021 Finance Workshop, Nov 2021
- Fordham Spring 2021 Macro/ International Finance Workshop, May 2021

DISCUSSANT, REFEREE ACTIVITIES, AND PROFESSIONAL MEMBERSHIPS

- Discussant for "Adding Bitcoin to a Portfolio: A Cautionary Tale" by Joan Nix, & Bruce McNevin at the NYSEA 2022 Conference, Oct 2022
- Discussant for "Can fake news impact the stock market? Evidence from politicians' statements" by Rodrigo de Oliveria Leite, Matheus Moura, & Patrick Behr at the FRL 2022 CEMLA Conference on New Advances in International Finance, Apr 2022

Referee Services: Finance Research Letters

Professional Memberships: American Economic Association, American Finance Association, Financial Management Association, Omicron Delta Epsilon

COMPUTER SKILLS

Operating System: Windows, Linux
Language: R, Python, MATLAB, IDL, C/C++

Application: MS Office, SQL, Tableau, EViews, Weka, Power BI, SAS, Stata, SPSS, Gretl, LATEX, Amazon Redshift

REFERENCES

Dr. Dominick Salvatore *(Co-chair & Mentor)*
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