Bullipe R. Chintha

Website | LinkedIn | GitHub | +1-224-460-7712 | @ bullipe.chintha@kellogg.northwestern.edu

Education

Kellogg School of Management, Northwestern University — Evanston, USA
Research Specialist (Visiting), Accounting Information & Management — *Jan 2023 – Feb 2024 (Expected)*

Indian School of Business — Hyderabad, India
Doctoral Candidate, Accounting — *Aug 2018 – June 2024 (Expected)*

Indian Institute of Management — Kozhikode, India
Master of Business Administration — *2014 – 2016*

National Institute of Technology — Warangal, India
B Tech, Chemical Engineering — *2008 – 2012*

Research Interests

Intangible Capital, Financial Accounting, Machine Learning and AI

References

Sanjay Kallapur (Co-Chair) — Department of Accounting
@ *sanjay_kallapur@isb.edu* — *Indian School of Business*

Swaminathan Sridharan (Co-Chair) — Accounting Information & Management
@ *s-sridharan@kellogg.northwestern.edu* — *Kellogg School of Management*

Anup Srivastava — Accounting, Decision-Making & Capital Markets
@*anup.srivastava@ucalgary.ca* — *Haskayne School of Business*

Andrew K Leone — Accounting Information & Management
@*andrew.leone@kellogg.northwestern.edu* — *Kellogg School of Management*

Ravi Jagannathan — Department of Finance
@*rjaganna@kellogg.northwestern.edu* — *Kellogg School of Management*

Research (Working Papers)

A Machine Learning–Based Measure of Intangible Capital
Job Market Paper | *See abstract*

Globalization and Profitability of US Firms: The Role of Intangibles
With Swaminathan Sridharan & Ravi Jagannathan | *See abstract* | *Manuscript available on request*
Preparing for submission to AER & NBER Working Paper series

Types of Component Auditors and Shareholder Ratification of the Auditor
With Sriniwas Mahapatro | *Revise & Resubmit at JBFA* | *See abstract*

Research (Book Chapters)

Estimation of Earnings Response Coefficients using Bayesian Hierarchical Models
With Sanjay Kallapur | *See abstract* | *SSRN* | *GitHub*

Research (Work-in-progress)

Addressing the Bias–Variance Dilemma in Earnings Management Detection
With Andrew Leone | *Data analysis stage* | *See description*

Media

ChatGPT and Academic Research – A Valuable Ally or a Mere Distraction?
Medium article | *Link*

Work Experience

Process Excellence Manager, Finance 2016 – 2018
Edelweiss Financial Services *Mumbai, India*

Co-founder and Game Design Head 2014
Prestoo Games *Bangalore, India*

Scholarships and Fellowships

Research Specialist Funding 2023 – 2024
Accounting Research Center, Kellogg School of Management

Doctoral Fellowship 2018 – 2024
Indian School of Business

DAAD Scholarship 2015
German Academic Exchange Service

Summer Research Fellowship 2011
Indian Academy of Sciences

Academic Merit Scholarship 2010
National Institute of Technology

Conferences and Presentations

The Kellogg Midwest and Accounting Conference 2023
Kellogg Accounting Brown Bag Seminar 2023 (Presenter)
AAA Annual Meeting 2023 (Presenter, Ad hoc reviewer)
ISB Accounting Research Conference 2022 (Discussant)
ISB – NBER Conference 2022
Deakin Accounting Research Seminar 2022 (Presenter)
Journal of Accounting & Finance (JAAF) Symposium 2021
AAA Annual Meeting 2021 (Virtual)
AFAANZ Conference 2021 (Virtual)
EAA Conference 2021 (Virtual)
IIMB Accounting Research Conference 2020

Teaching

Statistical Modeling with JMP: Executive Doctoral Program at ISB
Overall rating: 6.9/7.0 (Knowledge: 6.9/7.0; Communication: 7.0/7.0) | Class size - 16

Financial Accounting – The Language of Business: Bachelors at Hamstech
Overall rating: 6.7/7.0 (Knowledge: 6.6/7.0; Communication: 6.5/7.0) | Class size - 45

Teaching Assistance

Accounting: Executive Doctoral Program at ISB
Assisted Jake Thomas (Yale)
Statistical Modeling: Executive Doctoral Program at ISB
Assisted Richard Waterman (Wharton)
Theoretical Accounting: Doctoral Program at ISB
Assisted Swaminathan Sridharan (Kellogg)

Teaching Interests

Financial Accounting, Data Analytics in Accounting, Managerial Accounting, Accounting Information Systems, AI in Accounting and Finance

Selected Coursework

Theoretical Accounting A & B: Swaminathan Sridharan (Kellogg)
Overview of Accounting Research: Jacob Thomas (Yale)
Data Analysis Techniques in Accounting Research: Mani Sethuraman (Cornell)
Empirical Research in Accounting A: Anup Srivastava (Calgary)
Empirical Research in Accounting B: Hariom Manchiraju (ISB)
Special Topics in Empirical Accounting Research: Andrew Leone (Kellogg)
Research in Auditing: Kannan Raghunandan (Florida)
Empirical Asset Pricing A: Vikas Agarwal (Georgia State)
Empirical Asset Pricing B: Scott Murray (Georgia State)

Skills and Interests

Programming: Python, STATA, SAS, LaTeX, JMP
Languages: Telugu (Native), English (Professional), Hindi (Elementary)
Interests: Creative writing, Modern technologies, Travel (36 countries), Gamification and game design

Abstracts

A Machine Learning–Based Measure of Intangible Capital

I provide a new measure of a firm's internally generated intangible capital based on a machine learning approach. My model improves upon recent progress in the literature that estimates in-house intangible capital by linearly accumulating past expenditures. The machine learning approach explicitly considers three features in which intangible investments differ, at least in degree, with respect to property, plant, and equipment: (1) less likely to erode with use, (2) facilitate easier interaction and repackaging with other intangible investments to create firm value, and (3) can be rapidly and simultaneously deployed in multiple markets with minimal capital expenditures. I use purchase price allocated to intangibles in mergers and acquisitions transactions to train my machine learning model and then apply it to a wider Compustat sample. My estimates of intangible capital outperform as-reported values and linear cost accumulation models in explaining cross-sectional variation in enterprise values, predicting future investments, and earning higher high minus low (HML) value–factor portfolio returns.

Globalization and Profitability of US Firms: The Role of Intangibles

China's admission to the WTO in December 2001 heralded an era of increased globalization of trade, increasing import competition in the domestic markets and export opportunities for US firms. The profitability of S&P 500 index firms as measured by the ratio of aggregate Earnings Before Interest and Taxes to aggregate Sales (EBIT Margin), a proxy for market power in the aggregate, increased significantly from an average of 11.2% during 1984-2001 to 12.4% during 2002-2019. This is driven by their foreign EBIT Margin increasing from an average of 10.8% to 15.5%. Our findings highlight the need for separating foreign and domestic segments when examining whether the market power of firms has changed over time.

Types of Component Auditors and Shareholder Ratification of the Auditor

The PCAOB's Rule 3211 mandates firms to disclose the types of component auditors employed and their contribution to the overall audit. Using a difference-in-differences approach, we examine the effect of the disclosure of component auditor usage on shareholder dissatisfaction. We find that MNCs reporting higher use of large component auditors (LCAs, or those contributing materially to the audit) experience a 17% decrease in shareholder votes against (or abstaining from) auditor ratification compared to MNCs with lower usage. This effect is more pronounced for firms with high levels of institutional shareholding. We do not observe such effects for the use of small component auditors (SCAs). Our findings are robust to a variety of definitions for treated and control firms. Our results support the view that, on average, LCAs offer higher 'local' benefits and impose lower coordination costs compared to SCAs.

Estimation of Earnings Response Coefficients using Bayesian Hierarchical Models

Accounting parameters such as earnings response coefficients (ERC) are generally heterogeneous across firms. When panel data is available, the parameters are typically estimated using OLS with either pooled data which ignores parameter heterogeneity or using firm-specific observations, which tends to give noisy estimates. An alternative is to use Bayesian hierarchical models, which preserve parameter heterogeneity but have the advantage of being less noisy than firm-specific OLS. In this study, using a sample of 301 firms, we compare the results from three Bayesian hierarchical models to OLS-based firm-specific ERCs. Our results show that the Bayesian models produce ERCs that reduce the number of negative ERCs from 48 to 6 and lower mean squared error in a hold-out sample by more than 90%.

Addressing the Bias–Variance Dilemma in Earnings Management Detection

This study examines the traditional methodologies used in detecting earnings management activities. On the one hand, firm-specific longitudinal regressions, despite being effective in accounting for operational environment and financial reporting practices, often suffer from a high degree of variance in estimations and difficulties associated with small sample sizes. On the other hand, industry-level regressions, while encompassing industry-wide influences, grapple with interpretational challenges and a propensity to ignore the natural reversal of the accrual process, yielding high bias. In response, a three-level, nested model is proposed as a solution. With firm-years nested within firms and firms within industries, this model is predicated on the heterogeneity of coefficients, achieving a balanced trade-off between bias and variance.