# KAI CHEN

Department of Economics, University of California, Riverside

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#### **EDUCATION**

Ph.D. in Economics, University of California, Riverside (STEM, GPA 3.9/4.0)	June 2021
M.A. in Economics, University of California, Riverside (GPA 3.9/4.0)	June 2018
M.Sc. in Finance, Clark University	June 2016
B.A. in International Finance, Jiangxi University of Finance and Economics	July 2014

# **RESEARCH INTERESTS**

International Finance, International Economics, Empirical Economics, Macroeconomics, Finance, Growth, Development

# WORKING PAPERS

"Commodity Currency Reactions and the Dutch Disease: The Role of Capital Controls" (Job Market Paper)

"Nonparametric Risk Adjusted Uncovered Equity Parity Model"

"Oil Shocks and Exchange Rate Volatility: A GARCH-MIDAS Analysis"

#### **REFERENCES**

Marcelle Chauvet (Co-Chair)	Dongwon Lee (Co-Chair)	Aman Ullah	Matthew Lang
Professor of Economics,	Assistant Professor of	Distinguish Professor of	Associate Professor of
University of California,	Economics, University of	Economics, University of	Teaching, University of
Riverside	California, Riverside	California, Riverside	California, Riverside
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# TEACHING INTERESTS

Macroeconomics, Microeconomics, Econometrics, Empirical Economics, International Finance/Economics, Finance, Business

# TEACHING EXPERIENCE

Lecturer, l	University of California, Riverside		
•	Econ 171, International Finance	[Upper Division]	Summer 2020
•	Econ 002, Intro to Macroeconomics	[Lower Division]	Summer 2019
Teaching <i>J</i>	Assistant, University of California, Riverside		
	Econ 201B, Macroeconomic Theory	[Core PhD Course]	Winter 2020
•	Econ 105A, Intermediate Macroeconomics	[Upper Division]	Winter/Summer/Fall 2018, Winter/Fall 2019
•	Econ 105B, Intermediate Macroeconomics	[Upper Division]	Spring 2019, Spring 2020
•	Econ 135, The Stock Market	[Upper Division]	Fall 2017, Summer 2018, Fall 2020
•	Econ 002, Intro to Macroeconomics	[Lower Division]	Spring 2018

# SEMINAR AND CONFERENCE PRESENTATIONS

Economic Theory Colloquium, University of California, Riverside	Oct 2020
Brown Bag Econometrics Seminar, University of California, Riverside	Nov 2019

#### HONORS

Outstanding Teaching Assistant Award, University of California, Riverside	June 2020
Dean's Distinguished Fellowship, University of California, Riverside	Sept 2016
CFA Level III Candidate (Passed CFA Level II), Chartered Financial Analyst Institute	July 2016
Beta Gamma Sigma International Business Honor, Clark University	June 2016
Tamarkin Scholarship, Clark University	Sept 2014

#### SKILLS

Programming: STATA, Python, R, MATLAB, EViews, Microsoft Office, LAT<sub>E</sub>X Languages: Chinese (native), English (fluent)

# PAPER ABSTRSCTS

#### Job Market Paper

"Commodity Currency Reactions and the Dutch Disease: The Role of Capital Controls"

Commodity windfall gains generally induce real exchange appreciations in commodity-rich economies and make other tradable sectors less competitive in global markets. This Dutch disease phenomenon has been blamed for causing slow economic growth. Based on a proposed theoretical framework, we hypothesize that applying capital controls may mitigate the transmission of positive commodity price shocks to the real exchange rate and help shield manufactured exports. Examining a panel dataset of 37 developing countries over the period from 1980 to 2017, we find that a more excessive commodity currency appreciation indeed has a more detrimental impact on the export performance of the manufacturing sector. Restrictions on capital inflows tend to curb real appreciation pressures and alleviate the severity of the Dutch disease in accordance with our hypothesis. Our findings suggest that countercyclical use of capital controls in commodity-exporting countries foster economic diversification and improve their growth potential.

#### **Work in Progress**

"Nonparametric Risk Adjusted Uncovered Equity Parity Model"

This paper proposes a semiparametric risk adjusted uncovered equity parity (RUEP) model that incorporates time-varying coefficient estimators into a parametric RUEP structure. It investigates the potential dynamics of market risk and investors' behavior under a portfolio-rebalancing framework in developed and emerging markets. The intuition behind the uncovered equity parity (UEP) is that investors have the incentive to rebalance their portfolio to reduce exchange risk exposure induced by a differential equity return in two countries. Investors may reduce risk in their portfolio by selling domestic equity that yields higher return (risk-return tradeoff). As a result, the demand for domestic currency falls, resulting in currency depreciation. The semiparametric RUEP model allows time-varying coefficients estimation and dynamic analysis of economic idiosyncrasy, of the effect of macroeconomic information such as the level of integration between two markets, and of the effect of microeconomic information such as regulation, transaction costs, distance, capitalization, and default risk. Additionally, based on portfolio flows direction, this paper demonstrates the investors' rebalancing behavior corresponding to hedging or arbitrage purpose, over business cycles, global shocks, and other major events. In particular, using monthly data from 1990 to 2018, the paper takes Japan as the benchmark developed market, and examines the modeling relationship between Japan and other two developed markets: U.S., and U.K., as well as three emerging markets: South Korea, Malaysia and Thailand. The findings support evidence that: generally markets are less integrated and much riskier during the post-crisis time; estimated time-varying coefficients become significant for financial crisis episodes that count for fewer than half of sample periods; market risk and portfolio flow direction do vary between Asian emerging markets and developed countries especially during financial crisis periods, and effects on Japan and U.K. markets are relatively more volatile.

# **On-Going Research**

"Oil Shocks and Exchange Rate Volatility: A GARCH-MIDAS Analysis"

This project employs the GARCH-MIDAS model of Engle et al. (2013) to distinguish and extract short-term GARCH component and long-term component of exchange rate volatility. GARCH-MIDAS provides a set-up based on mixed data sampling that incorporates low-frequency closely related macroeconomic fundamentals into high frequency volatility components, which allows examination of the link between volatility and economic activity. Two oil-exporting countries are considered: Norway and Canada. As in Baumeister and Hamilton (2019) oil price shocks are composed of shocks of oil supply, economic activity, oil consumption demand, and oil inventory demand, which are among the most important macroeconomic determinants of exchange rate volatility. My conjecture is that all four oil shocks, especially economic activity and oil consumption demand shocks, play a crucial role in predicting exchange rate volatility. Given that oil exports are an essential driving force of economic growth in oil exporters, a higher world oil demand pushes up the dollar-invoiced oil prices, leading to an appreciation in domestic currency and, thus, to an increase in exchange rate volatility.