The paper aims to demonstrate the dynamics of business cycle in U.S. to the shocks of oil and macro markets under different monetary policy regimes. The policy regimes in this paper include nominal interest rates constrained and unconstrained by the zero lower bound (ZLB). I emphasize the various shocks that have significant impacts on the business cycle and distinguish their effects on the macro market individually when subjected to and not subjected to the ZLB. By developing and calibrating the Dynamic stochastic general equilibrium (DSGE) model, this paper shows that the impacts of various shocks are buffered when monetary policy is constrained by the ZLB. In addition, the effects may be varied with different characteristics of the model, such as oil intensity, consumer habit persistence as well as policy smoothing. Finally, this paper also estimates a structural vector autoregressive (SVAR) model with aggregate variables and different...
policy regimes, finding similar results. These results provide insights into the U.S. business cycle dynamics under different monetary policy regimes.

**U.S. Employment, Uncertainties and the Zero Lower Bound**

The purpose of this paper is to study the response of aggregate and sectoral employment in the United States to shocks and uncertainties in the oil and macro markets. Based on a New Keynesian model with a first-order perturbation on occasionally binding constraints and uncertainty shock introduction, we get a primary theoretical support on the impacts of monetary policy regimes and uncertainty shocks. To explore the interactions of uncertainties in oil and aggregate markets in the presence and absence of the zero lower bound (ZLB), we estimate a VAR model with 12 variables using U.S. data for the period 1986Q1-2021Q4. With alternative oil and macroeconomic uncertainties and different monetary authorities, employment is significantly negatively affected by uncertainties when ZLB binds and fluctuating in the absence of ZLB. Finally, we obtain the responses of sectoral employments to different types of uncertainties under different monetary regimes and find that employments of sectors related to oil industry in production and finance fall significantly to an increase in uncertainty under the ZLB. These findings highlight the empirical relevance of oil prices and macroeconomic uncertainty on U.S. labor market dynamics.

**Publication**

Has the Asymmetry of Oil Price Shocks in Inflation Expectations been Affected by the COVID-19 Outbreak? A Comparison between the United States and China

*(Accepted by Journal of Economics and Management Policy)*

This paper applies ARDL and Nonlinear ARDL models to long-term inflation targeting policy mechanisms in the United States and China to assess the impact of oil price dynamics and asymmetries on inflation expectations in the two countries, as well as the difference of this impact before and after the COVID-19 pandemic. According to the New Keynesian Phillips Curve (NKPC), taking oil price shock as a variable of interest, and introducing variables such as lagged inflation expectations, inflation rate, GDP and EPU, we find that the positive impact of oil price shock on U.S. inflation expectations has enhanced during the pandemic, whereas the positive impact on China inflation expectation has weakened. There is also sufficient evidence that oil price shock has asymmetric effects on inflation expectations in both countries, but the asymmetry has changed in China during the COVID-19 outbreak. Besides, lagged inflation expectations, inflation rate, GDP and EPU also affect inflation expectations to varying degrees.

**Professional Activities**

<table>
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<tr>
<th>Conference Presentation of Research</th>
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<tr>
<td>Midwest Economics Association Annual Conference, Cleveland OH</td>
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<tr>
<td>Missouri Valley Economics Association Conference, St.Louis MO</td>
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<td>Missouri Valley Economics Association Conference, Kansas City MO</td>
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**Professional Membership**

- American Economic Association
- National Economics Association
- Missouri Valley Economic Association
Honors
- Texas Tech Dr. Rashid B. Al-Hmoud Competitive Scholarship, Fall 22-Spring 23
- Graduate Student Fellowship for Missouri Valley Economics Association, Fall 21
- Graduate Student Fellowship for Missouri Valley Economics Association, Fall 18-Spring 23
- Graduate Student Fellowship for Missouri Valley Economics Association, Fall 17-Spring 18
- TEACH Fellow, Spring 18
- Outstanding Thesis of Zhongnan University of Economics and Law, Fall 16-Spring 17
- China National Encouragement Scholarship for Undergraduates, Fall 15-Spring 16
- China National Encouragement Scholarship for Undergraduates, Fall 17-Spring 18
- China National Encouragement Scholarship for Undergraduates, Fall 15-Spring 16

Skills
- Matlab, Stata, R, \LaTeX

Language
- Native in Chinese
- Fluent in English

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