

# SHANGDI HOU

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## PERSONAL INFORMATION

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Citizenship: Chinese

Date of Birth: 19 December 1991

## EDUCATION

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**Universitat Autònoma de Barcelona & Barcelona School of Economics**      Barcelona, Spain  
International Doctorate in Economic Analysis      *9/2016 - 7/2023(expected)*

### References:

**Prof. Albert Marcet** (advisor)  
Centre de Recerca en Economia Internacional  
Universitat Pompeu Fabra  
albert.marcet@crei.cat

**Prof. Alexander Ludwig**  
House of Finance  
Goethe University Frankfurt  
nieraad@econ.uni-frankfurt.de

**Prof. Luis Rojas**  
MOVE(Markets, Organizations, Votes in Economics)  
Universitat Autònoma de Barcelona & BSE  
luis.rojas@UAB.es

**Université Paris 1 Panthéon-Sorbonne**      Paris, France  
Erasmus Mundus Joint Master- Models and Methods of Quantitative Economics      *9/2015 - 7/2016*

**Xi'an Jiaotong University (XJTU)**      Xi'an, China  
Bachelor of Science: Computational Mathematics      *8/2010 - 7/2014*

## HONORS, SCHOLARSHIPS, AND FELLOWSHIPS

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Grant FPI (Spanish Ministry of Science and Innovation, PhD fellowship)      *8/2019 - 7/2023*  
FUNDACIÓN ARECES EXCELLENCE DISTINCTION(UAB)      *10/2017*  
CSST Scholarship (UCLA, undergraduate summer internship)      *7/2013 - 9/2013*  
National Scholarship (Chinese Ministry of Education for top 1% students)      *11/2012*

## RESEARCH

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### **Optimal Monetary Policy with Signal Extraction (job market paper)**

In this paper I study the optimal discretionary monetary policy under partial information (PI) where the central bank can only extract information from an endogenous signal, price inflation. Meanwhile the signal is determined in equilibrium by the policy rate and the unobserved supply and demand shocks. I solve for the optimal policy in a non-linear model where the Phillips curve is bent by asymmetric wage adjustment costs and the “certainty equivalence” principal prevailed in linear models cannot be applied. The optimal policy prescribes that the central bank should raise interest rate gradually when

price inflation is low but respond strongly when it is high. This non-linearity arises because signal extraction interacts differently with optimal policy depending on the price inflation observed.

### **Optimal fiscal policy with Ricardian and hand-to-mouth agents**

I study the optimal fiscal policy in a model with two types of agents who are different in their access to the financial markets: Ricardian agents have full access to the financial markets while the hand-to-mouth agents are constrained and could only consume their labor income in each period. I find that the optimal labor-tax is more volatile compared with a representative-agent economy without physical capital and the volatility is captured by the equilibrium condition that these two types of agents are faced with the same proportional labor tax. When capital is introduced to this economy, I find that in the long run capital tax should still be zero in the deterministic case. But the ex ante capital tax in the stochastic economy is again disturbed by the same proportional labor tax condition, which makes it fluctuate around zero instead of staying there.

### **TEACHING EXPERIENCE**

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#### **Advanced Macroeconomics II**

*2020 winter term*

Universitat Autònoma de Barcelona

*TA for Prof. Alexander Ludwig*

#### **Advanced Macroeconomics III**

*2022 Spring term*

Universitat Autònoma de Barcelona

*TA for Prof. Francesc Obiols-Homs*

### **PRESENTATION**

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Shandong University

*9/2022*

ENTER Jamboree(Stockholm University)

*6/2021*

Bellaterra Macro Club

*2019, 2020, 2021, 2022*

Barcelona School of Economics PhD Jamboree

*9/2021*

### **CO-ORGANIZATION OF CONFERENCES**

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9th Barcelona School of Economics PhD Jamboree

*5/2022*

### **COMPUTATIONAL SKILLS**

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Matlab, Excel, STATA, L<sup>A</sup>T<sub>E</sub>X