CHENYU (SEV) HOU

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PERSONAL INFORMATION

Chinese *Citizenship*   Canadian *Permanent Residence*

ACADEMIC APPOINTMENT

Assistant Professor

Simon Fraser University, Canada   *2024 -*

Chinese University of Hong Kong, Shenzhen   *2021 - 2024*

EDUCATION

University of British Columbia   *2015 - 2021*

Ph.D. in Economics

University of Texas at Austin   *2013 - 2015*

M.Sc. in Economics

Simon Fraser University   *2012 - 2013*

M.A. in Economics

Fudan University   *2008 - 2012*

B.A. in Economics

RESEARCH FIELDS

Macroeconomics, Monetary Economics, Information Friction, Macro-development

PUBLISHED PAPER

[1] **Monetary Policy when the Phillips Curve is quite flat**

(with *Paul Beaudry* and *Franck Portier*)

American Economic Journal: Macroeconomics, 16(1):1-28, 2024. doi: 10.1257/mac.20220088

Abstract: This paper highlights how the presence of a cost channel of monetary policy can offer new insights into the relation between monetary policy and inflation when the Phillips curve is quite flat. For instance, we highlight a key condition whereby lax monetary policy can push the economy in a low inflation trap and we discuss how, under the same condition, standard policy rules for targeting inflation may need to be modified. In the empirical part of the paper we explore the relevance of the conditions that give rise to these observations. To this end, we present both (i) a wide set of estimates derived from single-equation estimation of the US Phillips curve and (ii) estimates based on structural estimation of a full model. The results from both sets of empirical exercises strongly support the key condition we emphasize.

[2] **The Dominant Role of Expectations and Broad-Based Supply Shocks in Driving Inflation**

(with *Paul Beaudry* and *Franck Portier*)

NBER Macroeconomics Annual 2024, forthcoming

Abstract: The goal of this paper is twofold. We begin by re-examining the relative role of labour market tightness versus inflation expectation in driving inflation in the US, with a particular focus on the last few years. Our explorations points to a Phillips curve has been quite stable for over 50 years, with inflation almost entirely driven by short run inflation expectations, with labour market tightness playing a very marginal role. We then explore the determination of short run inflation expectations. Here we emphasize the role of broad-based supply shocks in driving inflation expectations. In particular, we provide theory and evidence to support the notion that broad-based supply shocks are easily confused with pure inflation shocks, and this creates a signal extraction problem facing agents. When agents see the prices of many goods increase, they infer that part of the increase reflects pure inflation and this becomes self-fulfilling. In contrast, when inflation is driven by increases in a small number of price changes– for example large increases in gas prices– agents are not confused and accordingly, this does not propagate into persistent inflation. The role of monetary policy in such an environment is to convince agents that pure inflation shocks are unlikely.

WORKING PAPERS

[3] **Learning and Subjective Expectation Formation: A Recurrent Neural Network Approach**, submitted

Abstract: Most empirical studies on expectation formation models share a common dynamic structure but impose different functional form restrictions. I propose a flexible non-parametric method that maintains this dynamic structure to estimate a model of expectation formation using Recurrent Neural Networks. Applying this approach to data on macroeconomic expectations from the Michigan Survey of Consumers and a rich set of signals, I document three novel findings: (i) agents' expectations about the future economic condition have asymmetric and non-linear responses to signals; (ii) agents' attentions shift from signals about the current state to signals about the future as the economic condition deteriorates ; (iii) the content of signals on economic conditions plays the most important role in creating the attention-shift. Double Machine Learning approach is used to obtain statistical inferences of these empirical findings. Finally, I show these stylized facts can be generated by a model with rational inattention, in which information endogenously becomes more valuable when economic status worsens.

[4] **Convergence Across Castes**, submitted
(with *Viktoria Hnatkovska* and *Amartya Lahiri*)

Abstract: India witnessed a sharp wage catch-up by the historically disadvantaged scheduled castes and tribes (SC/STs) towards non-SC/ST levels during the period 1983-2012. We develop a multi-sector, heterogenous agent model where individuals differ in innate ability as well as their caste identity. Castes differ in the costs of schooling and accessing sectoral labor markets which results in caste-based talent misallocations. We show that exogenous productivity growth can explain 72 percent of the observed wage convergence. Endogenous worker re-allocations can explain 39 percent of the overall labor productivity growth in India during this period. Education convergence is the primary driver of the wage convergence in the model. We provide independent evidence in support of this mechanism.

[5] **Urbanization, Structural Transformation and Rural-Urban Disparities in China and India**
(with *Viktoria Hnatkovska* and *Amartya Lahiri*)
reject & resubmit to **American Economic Journal: Macroeconomics**

Abstract: Over the past three decades India and China have experienced rapid growth and structural transformation. Underneath this similarity however was one significant difference: rural-urban wage gaps declined in India, but widened in China. In both countries, the majority of these wage dynamics are unexplained by worker attributes. We formalize a two-sector-two-location model in which structural transformation and urbanization respond endogenously to productivity shocks. While the structural transformation effect widens the urban-rural wage gap, the urbanization effect reduces it. We attribute the contrasting wage gap dynamics in the two countries to the higher costs of urban relocation for workers in China.

[6] **Uncovering Subjective Models from Survey Expectations**, submitted

Abstract: Consumers' inflation expectations are positively correlated with expectations of unemployment status. Such a correlation is inconsistent with realized data, professionals' beliefs, and the standard New Keynesian Model. I perform a structural test in the framework of the noisy information model and show that consumers form their expectations on multiple macroeconomic variables jointly rather than independently, thus causing these expectations to be correlated with each other. The test results imply that consumers believe economic conditions will be worse during episodes with extensive inflation news, which is at odds with the standard New Keynesian Model. These patterns call for explanations on how agents form beliefs on interactions between macroeconomic variables that are different from the actual structure of data. They also suggest Central Bank should use inflation-related expectation management policy with caution, as such a policy may induce pessimistic responses among households.

[7] On the Fragility of the Nonlinear Phillips Curve View of Recent Inflation, submitted
(with *Paul Beaudry* and *Franck Portier*)

Abstract: The paper examines whether the US evidence in favour of a nonlinearity in the Phillips curve is robust or fragile. To this end, we use both cross city and aggregate time series data. We are particularly concerned with the possibility that the evidence in favour a nonlinear Phillips curve may is fact be driven by improperly controlling for inflation expectations. Our finding suggest that the evidence in support of a nonlinear Phillips curve is very fragile.

WORK IN PROGRESS

[7] Reading between Lines: Measuring Narratives from Macroeconomic Texts using LLM
(with *Jiannan Jiang* and *Tao Wang*)
[8] Self-fulfilling New Keynesian Phillips Curve
(with *Zehao Li*)
[9] The Role of Subjective Precision of Information in Macroeconomic Expectations
(with *Tao Wang*)
[10] Bounded Rationality in Planning
(with *Giovanni Gallipoli*, *Wei Li*, and *Jesse Perla*)

HONORS

President's Academic Excellence Initiative PhD Award, University of British Columbia	*2020 - 2021*
Li Tze Fong Memorial Fellowship, University of British Columbia	*2015 - 2021*
Chuck Blackorby Prize, Vancouver School of Economics	*2016*
John Cragg Prize, Vancouver School of Economics	*2016*
Department of Economics Fellowship, University of Texas at Austin	*2013-2015*

CONFERENCES AND SEMINARS

(* indicates presentation by co-author)
2025: Guelph, Wilfred Laurier, Midwest Macro (scheduled), BSE Summer Forum (scheduled), ES World Congress (scheduled)

2024: NBER Macro Annual Conference, CUHKSZ-EFG workshop, NUS, NTU Singapore, CUHK, SFU

2023: Canadian Economic Association (CEA), PKU-NUS Annual International Conference, Mid-west Macro Conference, *2023 Time and Space Conference, PKU NSD, PKU PHBS, *UCSB, *UBC

2022: Computing in Economics and Finance, AMES China (*Session Chair*), CUHKSZ Macroeconomic Conference (*discussant*) *NBER Summer Institute, *Canadian Macro Study Group (CMSG) Annal Conference, *Goethe U, *USC, *UCSD

2021: EWMES, SED, PKU NSD, SFU, U Alberta, CUHK Shenzhen (×2)

2020: Bank of England Machine Learning Conference, UBC(×2), *U Michigan, *Bank of France, *DNB Annual Conference

TEACHING

SFU

Econ482 Computational Macroeconomics (*Undergrad*)	*2024-2025*
Econ807 Macroeconomic Theory and Policy (*Master*)	*2025*

CUHKSZ

ECO6221 Macroeconomics Theory I (*Ph.D.*)	*2022-2023*
ECO6201 Review of Quantitative Methods (*Ph.D.*)	*2023*
ECO6105 Advanced Macroeconomics (*Master*)	*2021-2023*
MAT1010 Calculus for Economic Analysis I (*Undergrad*)	*2021-2022*

PROFESSIONAL ACTIVITIES

Referee: Economic Journal (×3), JEBO (×2), JMCB, JEDC, Canadian Journal of Economics (×2)

SKILLS

Programming Languages: STATA, Matlab, Python, TensorFlow, LATEX, Julia (Basic), R(Basic)

REFERENCES

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