

CHRISTIAN A. STOLTENBERG

PERSONAL

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FIELDS OF CONCENTRATION

Heterogeneous agents, Advance Information, Structural estimation, Subjective expectations

EDUCATION

2007	Visiting PhD student, Federal Reserve Bank of Minneapolis
2003–2009	PhD Economics, Humboldt-University Berlin (HUB)
1997-2002	Diplom (M.A.) Economics, University of Cologne

APPOINTMENTS AND ACADEMIC EXPERIENCE

2019	Visiting Scholar, CREST (Paris), September–October
2018	Visiting Scholar, CREST (Paris), May–June
2014–present	Associate Professor, University of Amsterdam (UvA)
2013	Visiting Scholar, Federal Reserve Bank of Minneapolis, April–May
2013–present	Research Fellow Tinbergen Institute
2008–2014	Assistant Professor, University of Amsterdam (UvA)

WORKING PAPERS

ADVANCE INFORMATION AND CONSUMPTION INSURANCE: EVIDENCE FROM PANEL DATA (2023), with Marcelo Pedroni and Swapnil Singh, *R&R at Journal of Monetary Economics*.

We show that households' private information on future income can be identified from the correlation between consumption growth and future income growth *conditional* on current income growth. Employing PSID data, we find that this conditional correlation is positive and significant. We use this evidence to structurally estimate a standard incomplete markets model and discover that US households possess enough advance information to reduce their income forecast errors by 15%. This significantly affects the measurement of consumption insurance. With advance information, 25% more income shocks pass through to consumption on average, and more than twice as much for the 5% asset poorest.

CONSUMPTION CHOICES AND EARNINGS EXPECTATIONS: EMPIRICAL EVIDENCE AND STRUCTURAL ESTIMATION (2023), with Arne Uhlenhorff, *submitted*.

In this paper, we document that households' consumption expenditures crucially depend on their expected earnings – even after controlling for realized earnings and wealth. To explain this evidence, we develop and structurally estimate a standard-incomplete markets model in which rational households receive private signals on their future earnings. We find that households' earnings uncertainty is significantly lower than what is typically assumed in incomplete markets models. Facing lower earnings uncertainty, households prefer less progressive earnings taxes.

PUBLICATIONS

ON THE EXISTENCE OF PRIVATE UNEMPLOYMENT INSURANCE WITH ADVANCE INFORMATION ON FUTURE JOB LOSSES (2023), with Piotr Denderski, *Journal of Public Economics*, 224, August, 104946.

We study the existence of a profitable unemployment insurance market in a dynamic economy with adverse selection rooted in workers' advance information on future job losses. The new feature of the model is that the insurer and workers interact repeatedly. Repeated interactions make it possible to threaten workers with exclusion from future insurance benefits after a default on insurance premia. With exclusion, the insurer can offer not only insurance against unemployment risk itself but also against bad news about a future job loss. We discipline our model with estimates of the willingness to pay for unemployment insurance and the costs of adverse selection in the US. Our quantitative results illustrate that private unemployment insurance could be profitable for an exclusion length of one year. To stimulate the emergence of a private unemployment insurance market, policymakers can facilitate the creation of a registry that archives past defaults on insurance premia.

CONSUMPTION INSURANCE WITH ADVANCE INFORMATION (2020), with Swapnil Singh, *Quantitative Economics*, 11 (2), pp. 671–711.

This paper investigates whether assuming that households possess advance information on their income shocks helps to overcome the difficulty of standard models to understand consumption insurance in the US. As our main result, we find that the quantitative relevance of advance information crucially depends on the structure of insurance markets. For a realistic amount of advance information, a complete markets model with endogenous solvency constraints due to limited commitment explains several key consumption insurance measures better than existing models without advance information. In contrast, when advance information is integrated into a standard incomplete markets model, it affects household consumption-saving decisions too little to bridge the gap between the model and the data and can induce counterfactual correlations between current consumption growth and future income growth.

RISK SHARING WITH PRIVATE AND PUBLIC INFORMATION (2020), with Piotr Denderski, *Journal of Economic Theory*, 186, March, 104988.

In this paper, we revisit the conventional view on efficient risk sharing that advance information on future shocks is detrimental to welfare. In our model, risk-averse agents receive private and public signals on future income realizations and engage in insurance contracts with limited enforceability. Consistent with the conventional view, better private and public signals are detrimental to welfare when only one type of signal is informative. Our main novel result applies when both signals are informative. In this case, we show that better public information can improve the allocation of risk when private signals are sufficiently precise. More precise public signals spread out the outside option values of high-income agents with high and low public signals and their willingness to transfer resources to low-income agents decreases. With informative private signals, however, more informative public signals increase outside option values of agents with a high signal by less than outside options of agents with a low signal decrease, facilitating more transfers. The latter effect dominates the former when private signals are sufficiently precise.

NESTED MODELS AND MODEL UNCERTAINTY (2016), with Alexander Kriwoluzky, *Scandinavian Journal of Economics*, 118 (2), pp.324–353

Uncertainty about the appropriate choice among nested models is a central concern for optimal policy when policy prescriptions from those models differ. The standard procedure is to specify a prior over the parameter space ignoring the special status of some sub-models, e.g. those resulting from zero restrictions. Following Sims (2008), we treat nested sub-models as “probability models” and formalize a procedure that ensures that sub-models are not discarded too easily and do matter for optimal policy. For the United States, we find that optimal policy based on our procedure leads to substantial welfare gains compared to the standard procedure.

MONETARY POLICY AND THE TRANSACTION ROLE OF MONEY IN THE UNITED STATES (2015), with Alexander Kriwoluzky, *Economic Journal*, **125** (September), pp. 1452–1473

The declining importance of money in transactions can explain the well-known fact that U.S. interest rate policy was passive in the pre-Volcker period and active after 1982. We generalise a standard cashless New Keynesian model (Woodford, 2003) by incorporating an explicit transaction role for money. In the pre-Volcker period, we estimate that money did play an important role and determinacy required a passive interest rate policy. However, after 1982, money no longer played an important role in facilitating transactions. Correspondingly, the conventional view prevails and an active policy ensured equilibrium determinacy.

POLICY ANNOUNCEMENTS AND WELFARE (2013), with Vadym Lepetyuk, *Economic Journal*, **123** (September), pp. 662–697

We show that in the presence of idiosyncratic risk, the public revelation of information about risky aggregate outcomes such as policy choices can have a welfare-reducing effect. By announcing information on non-insurable aggregate risk, the policy maker distorts households' incentives for insurance of idiosyncratic risk and increases the riskiness of the optimal self-enforceable allocation. The negative effect of distorted insurance incentives can be quantitatively important for a monetary authority that reveals changes in its short-run inflation target. We characterize parameters for which the effect dominates conventional effects that favour releasing better information.

REAL BALANCE EFFECTS, TIMING AND EQUILIBRIUM DETERMINATION (2012), *Journal of Money, Credit and Banking*, **34** (5), pp. 981–994

By assuming that money balances at the *beginning* instead of at the *end* of the period provide transaction services, standard results on nominal and real determinacy in monetary models are overturned. The key is that predetermined real money balances can be a state variable. Whereas the determination of the absolute price level typically depends on fiscal policy under an exogenous interest setting, nominal determinacy is now achieved even when fiscal policy is Ricardian. Also, in contrast to the Taylor-principle, the interest rate policy should respond passively to changes in inflation, thus, ensuring non-oscillatory and locally stable equilibrium sequences.

OPTIMAL INTEREST RATE STABILIZATION IN A BASIC STICKY-PRICE MODEL (2008), with Matthias Paustian, *Journal of Economic Dynamics and Control* **32** (10), pp. 3166–3191

This paper studies optimal monetary policy with the nominal interest rate as the single policy instrument. Firms set prices in a staggered way without indexation and real money balances contribute separately to households' utility. The optimal deterministic steady state under commitment is the Friedman rule – even if the importance assigned to the utility of money is small relative to consumption and leisure. We approximate the model around the optimal steady state as the long-run policy target. Optimal monetary policy is characterized by stabilization of the nominal interest rate instead of inflation stabilization as the predominant principle.

INTERNATIONAL CONFERENCE PRESENTATIONS

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| 2023 | Barcelona School of Economics Summer Forum
Theories and Methods in Macroeconomics (Paris)
Bristol Macroeconomics Workshop
Faculty Seminar, LMU Munich |
| 2022 | European Midwest Micro/Macro Conference
Workshop on Current Developments in Macroeconomics (LSE) |

AWARDS

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| 2020 | “Lecturer of the Year”, MSc Economics (1st place, UvA) |
| 2019 | Grant, Economics Institute of the Polish Academy of Sciences, Warsaw |

2018	“Lecturer of the Year” (3rd place , Tinbergen Institute)
2016	“Van der Schroeffer Price” for the best teacher (2nd place , UvA)
2012	“Van der Schroeffer Price” for the best teacher (2nd place , UvA)
2011	“Distinguished Teacher Award” (UvA)

MANAGEMENT/SERVICE

2024	Organizer <i>Theories and Methods in Macro 2024 (T2M)</i> , Amsterdam
2022–present	Examination Board (Tinbergen Institute)
2022	Re-profiling Bachelor Economics & Business Economics Committee
2021	Accreditation Research Master Program (Tinbergen Institute)
2020	AACSB/NVAO Accreditation (UvA)
2019–present	MSc Economics Track Coordinator, Monetary Policy and Banking (UvA)
2014–present	MInt Teaching allocation (UvA)
2010–present	MInt Job Market Hiring Committee (UvA)

PHD STUDENTS

Swapnil Singh (Bank of Lithuania)
 Eglė Jakučionytė (Bank of Lithuania)
 Eva Janssens (Federal Reserve Board)
 Stefan Wöhrmüller (on the job market)
 Evgenii Ivanov (2nd year)

TEACHING

Topics in Advanced Macroeconomics (Tinbergen, PhD); Macroeconomics (Tinbergen, PhD);
 Monetary Theory (UvA, M.A.); Research Seminar Monetary Policy and Banking (UvA, M.A.);
 Macroeconomics (UvA, M.A.); Asset Pricing (M.A., HUB); Open Economy Macroeconomics (M.A., HUB);
 Numerical Methods (M.A., HUB); International Trade (UvA, B.A.);
 Intermediate Macroeconomics (UvA, LMU, HUB, B.A.)

Amsterdam, January 2024