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Bank of Canada Monthly Research Update

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This monthly newsletter features the latest research publications by Bank of Canada economists. The report includes papers appearing in external publications and working papers published on the Bank of Canada's website.

PUBLISHED PAPERS

In Press

Ehrmann, Michael and Marcel Fratzscher, "Dispersed Communication by Central Bank Committees and the Predictability of Monetary Policy Devisions", Public Choice, 157(1) October 2013, 223-244

Forthcoming

Buyuksahin, Bahattin, Michel A. Robe, Celso Brunetti and Kirsten R. Soneson, "Do OPEC Members Know Something the Market Doesn't? 'Fair Price' Pronouncements and the Market Price of Crude Oil", The Energy Journal

Gans, Joshua and Hanna Halaburda, "Some Economics of Private Digital Currency", Economics of Digitization: An Agenda, A. Goldfarb, S. Greenstein and C. Tucker (eds), NBER

WORKING PAPERS

Alpanda, Sami and Sarah Zubairy, "Housing and Tax Policy", Bank of Canada Working Paper 2013-33

Feunou, Bruno, Mohammad R. Jahan-Parvar and Roméo Tedongap, "Which Parametric Model for Conditional Skewness?", Bank of Canada Working Paper 2013-32

Halaburda, Hanna and Guillaume Haeringer, "Monotone Strategyproofness", Barcelona GSE Working Paper No. 712 | August 2013

Imura, Yuko, "Endogenous Trade Participation with Incomplete Exchange Rate Pass-Through", Bank of Canada Working Paper 2013-30

König, Philipp, Kartik Anand and Frank Heinemann, "The 'Celtic Crisis': Guarantees, Transparency and Systemic Liquidity Risk", Bank of Canada Working Paper 2013-31

ABSTRACTS

Dispersed Communication by Central Bank Committees and the Predictability of Monetary Policy Devisions

The paper asks whether members of central bank decision-making committees should communicate with the public in a collegial manner, by conveying the consensus or majority view of the committee, or in an individualistic way, by providing the diversity of views among the

committee members. It finds that more active as well as more consistent communication by committee members improves the predictability of monetary policy decisions significantly. This effect is sizeable as communication dispersion across committee members accounts on average for one third to one half of the market's prediction errors of FOMC policy decisions. Moreover, more active and more consistent communication are found to also reduce the degree of uncertainty about the future path of interest rates. These findings suggest that a collegial communication which stresses the consensus view on policy inclinations can enhance the effectiveness of central bank communication.

Do OPEC Members Know Something the Market Doesn't? 'Fair Price' Pronouncements and the Market Price of Crude Oil

OPEC producers, individually or collectively, often make statements regarding the "fair price" of crude oil. In some cases, the officials commenting are merely affirming the price prevailing in the crude oil market at the time. In many cases, however, we document that they explicitly disagree with the contemporaneous futures price. A natural question is whether these "fair price" pronouncements contain information not already reflected in market prices. To find the answer, we collect the "fair price" statements made from 2000 to 2009 by officials from OPEC or OPEC member countries. Visually, the "fair price" series looks like a sampling discretely drawn (with a lag) from the daily futures market price series. Formally, we use several methodologies to establish that "fair price" pronouncements have little influence on the market price of crude oil and that they supply little or no new news to oil futures market participants.

Some Economics of Private Digital Currency

This paper reviews some recent developments in digital currency focusing on platform-sponsored currencies such as Facebook Credits. In a model of platform management, we find that it will not likely be profitable for such currencies to expand to become fully convertible competitors to state-sponsored currencies.

Housing and Tax Policy

In this paper, we investigate the effects of housing-related tax policy measures on macroeconomic aggregates using a dynamic general-equilibrium model. The model features borrowing and lending across heterogeneous households, financial frictions in the form of collateral constraints tied to house prices, and a rental housing market alongside owner-occupied housing. Using our model, we analyze the effects of changes in housing-related tax policy measures on the level of output, tax revenue and household debt, along with other macroeconomic aggregates. The tax policies we consider are (i) increasing property tax rates, (ii) eliminating the mortgage interest deduction, (iii) eliminating the depreciation allowance for rental income, (iv) instituting taxation of imputed rental income from owner-occupied housing and (v) eliminating the property tax deduction. We find that among these fiscal tools, eliminating the mortgage interest deduction would be the most effective in raising tax revenue, and in reducing household debt, per unit of output lost. On the other hand, eliminating the depreciation allowance for rental income would be the least effective. Our experiments also highlight the differential welfare impact of each tax policy on savers, borrowers and renters.

Which Parametric Model for Conditional Skewness?

This paper addresses an existing gap in the developing literature on conditional skewness. We develop a simple procedure to evaluate parametric conditional skewness models. This procedure is based on regressing the realized skewness measures on model-implied conditional skewness values. We find that an asymmetric GARCH-type specification on shape parameters with a skewed generalized error distribution provides the best in-sample fit for the data, as well as reasonable predictions of the realized skewness measure. Our empirical findings imply significant asymmetry with respect to positive and negative news in both conditional asymmetry and kurtosis processes.

Monotone Strategyproofness

We propose a way to compare the extent of preference misrepresentation between two strategies. We define a mechanism to be monotone strategyproof when declaring a "more truthful" preference ordering in the mechanism dominates - with respect to the true preferences - declaring a less truthful preference ordering. Our main result states that a mechanism is strategyproof if, and only if, it is monotone strategyproof. This result holds for any deterministic social choice function on any domain; for probabilistic social choice functions it holds under a mild assumption on the domain.

Endogenous Trade Participation with Incomplete Exchange Rate Pass-Through

This paper investigates the implications of endogenous trade participation for international business cycles, trade flow dynamics and exchange rate pass-through when price adjustments are staggered across firms. I develop a two-country dynamic stochastic general equilibrium model wherein firms make state-dependent decisions on entry and exit in the export market and the frequency of price adjustment is time-dependent. Consistent with recent empirical findings, producers of traded goods in this model differ in their productivities, trade status and prices. At the aggregate level, quantitative properties of the model successfully reproduce some important characteristics of international business cycle moments in data.

In contrast to previous findings in the literature, my model reveals that the inclusion of exporter entry and exit generates large, immediate responses in the number of exporters, export volumes and the export price index following aggregate shocks. I trace this result to the micro-level price stickiness present in my model but absent in existing models of endogenous trade participation. Moreover, I show that productivity heterogeneity rather than price age differences plays a dominant role in firms' export decisions, and hence the additional realism of endogenous trade participation in the model does not mitigate incomplete exchange rate pass-through arising from nominal rigidity. This suggests that exporter characteristics, market structure and pricing conventions may be critical in analyzing the role of endogenous trade participation for international business cycles and exchange rate pass-through.

The 'Celtic Crisis': Guarantees, Transparency and Systemic Liquidity Risk

Bank liability guarantee schemes have traditionally been viewed as costless measures to shore up investor confidence and prevent bank runs. However, as the experiences of some European countries, most notably Ireland, have demonstrated, the credibility and effectiveness of these guarantees are crucially intertwined with the sovereign's funding risks. Employing methods from the literature on global games, we develop a simple model to explore the systemic linkage between the rollover risks of a bank and a government, which are connected through the government's guarantee of bank liabilities. We show the existence and uniqueness of the joint equilibrium and derive its comparative static properties. In solving for the optimal guarantee numerically, we show how its credibility can be improved through policies that promote balance-sheet transparency. We explain the asymmetry in risk transfer between the sovereign and the banking sector, following the introduction of a guarantee as being attributed to the resolution of strategic uncertainties held by bank depositors and the opacity of the banks' balance sheets.