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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 staff working papers published on the Bank of Canada's website.

PUBLISHED PAPERS

In Press

Fung, Ben S.C. & Enchuan Shao, "Counterfeit Quality and Verification in a Monetary Exchange", Economic Modelling, Volume 52, January 2016, Pages 13-25

Forthcoming

Alessia, Campolmi & Stefano Gnocchi, "Labour Market Participation, Unemployment and Monetary Policy" Journal of Monetary Economics

Witmer, Jonathan, "Does the buck stop here? A comparison of withdrawals from money market mutual funds with floating and constant share prices" Journal of Banking and Finance

STAFF WORKING PAPERS

Champagne, Julien, André Kurmann, & Jay Stewart "Reconciling the Differences in U.S. Aggregate Wage Series", Bank of Canada Staff Working paper 2016-01

Barnett, Russell, Karyne B. Charbonneau, & Guillaume Poulin-Bellisle "A New Measure of the Canadian Effective Exchange Rate", Bank of Canada Staff Discussion paper 2016-01

Fritsche, Alexander & Katherine Ragan, "Extending the Labour Market Indicator to the Canadian Provinces", Bank of Canada Staff Discussion paper 2016-02

Letendre, Marc-André & Joel Wagner "Agency Shocks, Risk Shocks and International Cycles", Bank of Canada Staff Working Paper 2016-02

Vardy, Jill, "Reputational Risk Management in Central Banks", Bank of Canada Staff Discussion Paper 2015-16

ABSTRACTS

Counterfeit Quality and Verification in a Monetary Exchange

Recent studies on counterfeiting in a monetary search framework show that counterfeiting does not occur in a monetary equilibrium. These findings are contrary to the observation that counterfeiting of bank notes in some countries has recently experienced rapid increases. In this paper, we construct a model of counterfeiting in which counterfeiting can exist as an equilibrium outcome. A

competitive search environment is employed in which sellers post offers and buyers direct their search based on posted offers. When sellers are uninformed, their offers are pooling and thus buyers can extract some rents by using counterfeit money. Therefore, counterfeit notes can coexist with genuine notes under certain conditions. We also explicitly model the interaction between sellers' verification decisions and counterfeiters' choices of counterfeit quality. This allows us to better understand how policies can affect counterfeiting.

Labour Market Participation, Unemployment and Monetary Policy

We incorporate a participation decision in a standard New Keynesian model with matching frictions and show that treating the labor force as constant leads to incorrect evaluation of alternative policies. We also show that the presence of a participation margin mitigates the Shimer critique.

Does the buck stop here? A comparison of withdrawals from money market mutual funds with floating and constant share prices

Recent reform proposals call for an elimination of the constant net asset value (NAV) or “buck” in money market mutual funds to reduce the occurrence of runs. Outside the United States, there are several countries that have money market mutual funds with and without constant NAVs. Using daily data on individual fund flows from these countries, this paper evaluates whether the reliance on a constant NAV is associated with higher fund redemptions. The data suggest that funds with a constant NAV experienced more negative net flows during the period of the run on the Reserve Primary fund, even after controlling for measures of fund risk and risk aversion. However, I do not find convincing support for the hypothesis that the effect of sponsor strength on fund flows was stronger for constant NAV money market funds.

Reconciling the Differences in U.S. Aggregate Wage Series

Average hourly real wage series from the Labor Productivity and Costs (LPC) program and the Current Employment Statistics (CES) program have evolved very differently over the past decades. While the LPC wage has grown consistently over time and become markedly more volatile since the mid-1980s, the CES wage stagnated from the early 1970s to the mid-1990s and experienced a substantial drop in volatility since the mid-1980s. These differences are due to the divergent evolution of average weekly earnings in the two data sets. Average weekly hours, by contrast, have evolved very similarly. Using information from the Current Population Survey and other publicly available data, we identify two principal sources for the divergent evolution of weekly earnings: differences in earnings concept (employer-paid supplements and irregular earnings of high-income individuals included in the LPC data but not in the CES data); and differences in worker coverage (all non-farm business workers for the LPC data versus production and nonsupervisory workers in private non-agricultural establishments for the CES data). The results have important implications for the appropriate choice of aggregate wage series in macroeconomic applications.

A New Measure of the Canadian Effective Exchange Rate

Canada's international competitiveness has received increasing attention in recent years as exports have fallen short of expectations and Canada has lost market share. This paper asks whether the Bank of Canada's current effective exchange rate measure, the CERI, is still an accurate measure of Canada's international competitiveness. Overall, while the CERI represented an improvement over previous measures when it was introduced, we find that it has several drawbacks that make it less well suited to address current competitiveness issues. To address these deficiencies, we develop a new Canadian effective exchange rate (CEER) index using a methodology based on current international best practices. The new index includes a broader set of countries and uses annually updated competition-based weights. These weights account for both Canada's bilateral trade with another country and the competition Canada faces from that country on a product-by-product basis in third markets. We find that the CEER has depreciated less than the CERI in recent years, reflecting the greater importance of third-market competition from emerging-market economies in the CEER. This could help explain why Canada's share of the U.S. import market has continued to decline despite the recent large depreciation of the Canadian dollar against the currencies of a number of advanced economies.

Extending the Labour Market Indicator to the Canadian Provinces

Calculating the labour market indicator (LMI) at the provincial level provides useful insights into Canada's regional economies and reveals differing trends in the state of underlying labour market conditions across provinces. Conclusions based on the Canadian LMI do not necessarily translate to the provinces. In most cases, the correlations between the provincial LMIs and the underlying labour market variables have the expected sign. Differences among provinces reflect idiosyncratic differences among provincial labour markets. The values of the provincial LMIs are not invariant to the sample period used when constructing them. We find that using a longer sample estimation period improves the properties of some of the provincial LMIs. Recent values for the LMI show that labour markets have deteriorated notably in Alberta, Saskatchewan, and Newfoundland and Labrador. At the same time, the LMIs for British Columbia, Ontario, Quebec and New Brunswick have improved over the course of the past year and the gap between the unemployment rate and the LMI has tended to narrow.

Agency Costs, Risk Shocks and International Cycles

We add agency costs as in Carlstrom and Fuerst (1997) into a two-country, two-good international business-cycle model. In our model, changes in the relative price of investment arise endogenously. Despite the fact that technology shocks are uncorrelated across countries, the relative price of investment is positively correlated across countries in our model, much as it is in detrended U.S./euro area data. We also find that the financial frictions tend to increase the volatility of the terms of trade and the international correlations of consumption, hours worked, output and investment. We then compare this model to an alternative model that also includes risk shocks à la Christiano, Motto and Rostango (2014). We use credit spread data (for the United States) to calibrate the AR(1) process for risk shocks. We find that risk shocks are too small to significantly impact the model’s dynamics.

Reputational Risk Management in Central Banks

This paper discusses reputational risk in the context of central banking and explains why it matters to central banks. It begins with a general discussion of reputational risk within the broader framework of risk management. It then outlines how central banks define, measure, monitor and manage reputational risk, citing examples from central banks around the world, including the Bank of Canada. Finally, it presents a model for integrating reputational risk into policy analysis and operational planning—an “embedded communications” approach that ensures such considerations are brought into the core of central bank decision making.