Information in Financial Asset Prices

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Extraction of Expected Inflation from Canadian Forward Rates

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General Discussion

Atta-Mensah stressed that these tests in effect estimated an identity, but that their goal was to examine forward rates on a daily basis. If the goal had been to obtain quarterly inflation forecasts, the vector error-correction model would have been sufficient, and there would have been no need to resort to the forward-rate rule. The interest in this rule comes from the fact that the additional information obtained by extracting daily market expectations about future inflation from forward rates may be useful for decision-making. Concerning the size of the risk premium, he noted that the observed risk premium is so small because the horizon considered is only four quarters, not an entire term to maturity.

Another element that he felt required a response concerned the expectations process: Should we be looking at rational expectations, market expectations, risk-neutral expectations, or the Bank's forecasts? He stressed that the research goal was not to obtain inflation forecasts, but simply to discover how to extract the market's expectations about inflation from forward rates. As for "real" or indexed bonds, he suggested that these are not sufficiently liquid to provide much useful information.

Yuan noted that the relationship between forward rates and expected inflation can be derived from a consumption-based capital-asset-pricing model, but that inflation is exogenous in this model, and thus it is of less interest. The size of the risk premium depends on the value given in the model to the risk-aversion parameter, and overall it is of little importance, since it does not affect the results obtained or the conclusion drawn.

A question from the audience dealt with the precision of the coefficients estimated for the forward-rate rule and the goodness-of-fit. Yuan answered that they did not calculate standard deviations for the estimated parameters, since their goal was merely to obtain the first moments. An *R*-squared coefficient was calculated, but not reported. The authors use the relative efficiency of the model as a gauge of goodness of fit.

Charles Freedman was puzzled at some of the results on the effect of announcements, which were not consistent with his recollection of events. In particular, he recalled that, since people were, for a time, unsure about how to interpret Governor Crow's Hanson lecture, the authors' finding that there was an immediate downward shift in inflation expectations is surprising. Freedman also disagreed with the authors' interpretation of the 1991 announcement. In fact, no one was expecting it. The reason the authors found no change was not that this was already anticipated, but rather that the market did not believe the message that, after 20 years at around 7 per cent, inflation was going to be cut to 3 per cent after a year and a half, and held at 2 per cent thereafter.

Finally, Pierre Duguay questioned the degree of statistical significance of the estimates presented in Figures 3 and 4, given the volatility of inflation expectations. In his view, Figure 2 is consistent with Freedman's point of view that the announcement had no real effect.