IET Supplement
Cross-Country Comparison

May 2005

Comparing Short- and Long-Term Interest Rates

As the charts show, long-term interest rates tend to move more closely together than short-term interest rates for Canada, Japan, the United Kingdom, and the United States. Why is this so?

Three factors determine interest rates at any horizon: expected inflation, real economic activity, and an inflation risk premium. An increase in any of these factors over the maturity of the bond/loan tends to raise interest rates.

Changes to technology, preferences, or economic policies will often affect one or more of these three factors and thus can also affect interest rates. The portion of those changes that affect interest rates internationally are called common shocks, while those that affect one country are called idiosyncratic shocks.

The information revolution that was driven by advances in computer technology is an example of a common shock. Changes in oil prices, likewise, tend to have international effects on interest rates. The charts (taken from pp. 41-42) illustrate that common shocks must be important determinants of interest rates, as both short- and long-term rates move together internationally.

On the other hand, the terrorist attacks of September 11th had a strong idiosyncratic component in that they affected the United States much more directly than the rest of the world. Other idiosyncratic shocks might include policy errors, wars, or short-term adjustments to new technology or preferences.

Although common shocks do affect short rates, idiosyncratic shocks have a relatively more important impact on them. For any country, though, those idiosyncratic factors tend to average out over time, leaving the common shocks as the main determinant of changes in long-term interest rates. That is, the September 11th attacks influenced U.S. GDP growth in 2001:Q4 much more than they influenced expectations of average U.S. GDP growth over the next 20 years. In other words, because average inflation or output growth is more stable over long horizons, long-term interest rates are more stable and tend to move together more closely than short-term rates.

—Christopher J. Neely