

The importance of exchange rate movements to Canadian trade is outlined in a 1989 Bank of Canada study.¹¹ It found that a one per cent depreciation of the effective exchange rate resulted in a C\$2 billion improvement in the Canadian trade balance over a period of about four years. It was recognized that dynamic effects, such as increased imports of intermediate products and higher domestic demand and prices, could reduce the \$2 billion improvement by as much as 50 per cent. Nevertheless, the effects are sizeable considering the Canadian dollar fell more than one per cent against the U.S. dollar in a single month on four occasions in 1992.

4.3 Exchange Rate Volatility and Trade

The questions of whether exchange rate movements overshoot new equilibriums or are excessively volatile in relation to underlying economic fundamentals -- such as growth of the money supply or real income -- are critical to interpreting their impact on trade.¹² The notion that exchange rates are too volatile is aided by anecdotal evidence, such as the fact that the U.S. dollar rose more than 2 per cent against the German mark in one day on seven separate occasions in 1992. Such volatility can not be entirely attributed to movements of underlying economic variables.

There are at least two views on why exchange rates have become so volatile.¹³ One argues that capital markets are so efficient that huge volumes of funds switch from currency to currency in response to small disturbances. It is the large-scale capital movements from one currency to another that alter the exchange rates. Another view is that there is too much destabilizing speculation. As a currency moves away from its long-run equilibrium, speculators exacerbate that movement by betting, at least temporarily, that the market will continue in one direction.

¹¹ R. Dion and J. Jacob, *The Dynamic Effects of Exchange Rate Changes on Canada's Trade Balance, 1982-87*. Working Paper 90-1. Ottawa: Bank of Canada, December 1989.

¹² Since the exchange rate is the price of foreign exchange, its equilibrium is ultimately determined by supply and demand. With little indication of the supply and demand curves for foreign exchange, the purchasing power parity (PPP) theory was developed to estimate equilibrium exchange rates. Simply put, the relative version of the PPP states that if one country's inflation rate is higher than that of its trading partners, the value of its currency should decline. Otherwise, its tradeable goods and services would be overpriced and internationally uncompetitive. Foreign exchange markets react to any indication of either impending or eventual movements in the price level. Thus, we are able to understand the attention central banks pay to the relationship between stable prices and a stable exchange rate.

¹³ See J.A. Frankel, "International Capital Mobility and Exchange Rate Volatility." In *International Payments Imbalances in the 1980s*. Boston: Federal Reserve Bank of Boston, 1988, pp. 162-85.