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Variable Rate Mortgages: Confusion of Means and Ends

Fixed rate mortgages reduce households' exposure to interest rate risk. With a long-term, low-down-payment fixed rate mortgage, the duration of a house times its value will approximately equal the duration of the mortgage on the house times its value. Changes in the value of the house due to changes in market interest rates will be offset by changes in the value of the mortgage. On the other hand, the financial intermediary issuing the mortgage will be exposed to interest rate risk.

In an effort to reduce exposure to such risk, intermediaries have introduced variable rate mortgages. These instruments allow intermediaries to match the duration of the mortgages they issue against the duration of their deposits. In effect, variable rate mortgages eliminate intermediaries' interest rate risk by transferring the risk to households. Because households are not as efficient in managing risk as intermediaries, this transfer increases the price of risk-bearing in the economy as a whole.

COMMERCIAL BANKS and savings and loan associations have responded to the highly unstable interest rate environment of the past decade by introducing variable rate financial instruments. Variable rate instruments reduce the interest rate risk of intermediaries by transferring this risk to savers and investors. This transfer may not be in the best interests of the economy as a whole.

Intermediaries exist because they are cost-effective suppliers of risk-reduction and risk-bearing services. They reduce risk to the economy by managing well diversified portfolios and absorb risk from customers by bearing nondiversifiable risk. For this latter service, they charge a price, known as the market price of risk, which depends partly on the amount of risk they bear.

Efficiency in risk reduction implies the ability to diversify the greatest amount of risk at a given cost. If intermediaries are efficient risk diversifiers, then, the market price of risk should be lowest when they are the ones providing the diversification services. By issuing variable rate instruments, however, they transfer risk reduction to savers and investors, who are less efficient risk reducers. As a consequence, the market price of risk rises. Because this price is an element of the cost of capital to businesses and the consumption-saving decisions of households, capital costs may be expected to be higher, causing investment, economic growth and economic welfare to be lower than otherwise.

This effect is especially important for house construction, as the costs of diversification are likely to be higher for households than for businesses. This article analyzes the effects of variable rate mortgages on the cost to households of managing interest rate risk. In particular, it focuses on how variable rate mortgages affect households' ability to reduce this risk by maintaining duration-matched balance sheets. Variable rate mortgages tend to increase the economy's cost of managing interest rate risk by reducing the extent of duration matching by homeowners even as they allow financial institutions to increase their duration matching.

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