

Impact of the is-Im model



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“ IS-LMentary”

The IS-LM model is one of the central tenants of the neoclassical movement and shows the relationship between interest rates, the real outcome, the market for goods and services, and the money market. It is one of the basic tools to know the economic policy and for that reason it is a necessary concept of macroeconomics. The X axis represents the level of income Y (or GDP of a country), and the Y axis represents the interest rate (r) of that country. The IS curve denotes all of the equilibrium points in the goods and services market and is named after the terms investment and savings. The LM curve represents all of the equilibrium points in the money market and owes its name to L (liquidity) and M (money supply). The intersection of both curves constitutes the moment of “ equilibrium”, where there is a simultaneous balance in both markets. It should be noted that the IS-LM model is an instrument for the static analysis of the economy and it constitutes a valuable tool of economic policy, or more simply, fiscal and monetary policy (Mankiw, 330).

The LM curve represents all points at which the various combinations of interest rate and real money market income levels are in equilibrium. Its positive slope reflects the role of money in the economy in a simple way: a high interest rate encourages investment, which stimulates income (GDP) and its shift to the right. On the other hand, a low interest rate discourages investment and causes firms and individuals to opt for large amounts of cash (preference for liquidity), which causes a decrease in income. In extreme circumstances, interest rates become so low that the preference for liquidity becomes a liquidity trap (Mankiw, 333-335). The LM curve is defined by:

$$M/P = L(r, Y)$$

M/P represents the real money quantity, where M is the nominal money amount and P is the price level. L is the real demand for money, which is a function of the interest rate (r) and the real GDP or income (Y). As with the IS curve, each point on the LM curve represents a situation of equilibrium in the money market. This includes the need to maintain cash for everyday transactions. As Krugman mentions, the concept of the liquidity trap appears when “nominal interest rates reach a minimum level below which they cannot be reduced, so that monetary policy ceases to be effective as an instrument of expansion of aggregate demand” (Krugman, 1). According to Mankiw “monetary policy works by reducing interest rates and stimulating investment spending, but since interest rates have already fallen almost to 0, then perhaps monetary policy is no longer effective” (Mankiw, 334). Since nominal interest rates can never be negative, the limit is set at zero.

Suppose initially that the economy is at its potential income level with a real interest rate equal to 2%, which is obtained with an inflation rate of 2% and a nominal interest rate of 4%. As the economy is in equilibrium with that level of income, inflation tends to remain constant. If there is a fall in demand for consumption and investment, as in 2008 and 2009 in most developed countries, the IS shifts to the left. Based on Mankiw “moderate inflation gives policymakers more room to stimulate the economy when needed, reducing the risk to falling into a liquidity trap” (Mankiw, 334). This means that a lower real interest rate is needed to maintain potential income through a more expansive monetary policy.

However, if this fall is very pronounced, a negative real interest rate, which could be impossible to achieve with a positive nominal interest rate, would in fact be necessary. For example, if the real interest rates to be reached is -3%, but with the current rate of inflation of 2%, the minimum that can be achieved is -2% (assuming 0% nominal interest rate). Monetary policy faces a situation of liquidity trap, according to this second scenario. In order to avoid this trap, the government will have to adopt more expansive policies other than the monetary policy. For example, through fiscal stimulus programs or an increase in government spending, the economy can enter a deflationary spiral, moving the IS curve back to the right. In this case, real interest rates will fall and nominal interest rates will start to increase. In conclusion, Krugman shows that the IS-LM model is very useful to explain extreme situations like the 2008 financial crisis. He shows that monetary policy is ineffective when a liquidity trap is present, which is why fiscal policy is so important. An increase in government spending or a tax cut will shift the IS curve to the right increasing interest rates and income (Mankiw, 336). It is important to understand that this increase in government spending needs to be big enough in order to prevent a potential downturn in economic activity. Finally, fiscal policy has been proved to be the best way to counteract a zero lower bound rate.

Work Cited

Krugman, Paul. "IS-LMentary." *The New York Times*. The New York Times, 09 Oct. 2011. Web. 01 Mar. 2017.

Mankiw, N. Gregory. *Macroeconomics*. 7th ed. New York: Worth, 2007. Print.