

## TRUE OR FALSE

**Q1: Higher the interest sensitivity of money demand, the larger the effect of a tax rate change on investment.**

**ANS:**

False.

The interest sensitivity of money demand refers to how responsive the demand for money is to changes in the interest rate. When the demand for money is highly interest-sensitive, it means that even small changes in interest rates lead to significant changes in the demand for money.

In the context of the effect of a tax rate change on investment, the key factor is the interest sensitivity of investment, not money demand. If investment is highly sensitive to interest rates, a tax change that affects interest rates will have a larger impact on investment. However, if money demand is highly sensitive to interest rates, it primarily affects the liquidity and money market equilibrium rather than directly influencing investment decisions.

Therefore, the effect of a tax rate change on investment is more directly influenced by the interest sensitivity of investment, not the interest sensitivity of money demand.

**Q2: Balanced Budget Multiplier is unity if central pegs interest rate, but not if it pegs money supply.**

**ANS:**

True.

The balanced budget multiplier (BBM) refers to the concept that a simultaneous increase in government spending and taxation by the same amount can impact overall output. The BBM is theoretically equal to one under certain conditions, implying that the increase in government spending is exactly offset by the increase in taxes, resulting in no net change in aggregate demand.

**1. \*\*Interest Rate Peg (Central Bank Targets Interest Rate):\*\***

- When the central bank targets or pegs the interest rate, it adjusts the money supply to maintain the target rate. Under this regime, fiscal policy (changes in government spending and taxation) can have a direct effect on aggregate demand because the interest rate remains stable.

- If the government increases spending and raises taxes by the same amount, the resulting increase in aggregate demand (due to higher government spending) is not offset by changes in interest rates, since the central bank adjusts the money supply to keep the interest rate constant. This allows the balanced budget multiplier to be close to one.

## **2. \*\*Money Supply Peg (Central Bank Targets Money Supply):\*\***

- When the central bank targets the money supply, it does not adjust it in response to changes in fiscal policy. Instead, interest rates are allowed to fluctuate.

- In this scenario, an increase in government spending and taxation may lead to higher interest rates if the increased demand for money (due to higher economic activity) is not met by an increase in the money supply. Higher interest rates can crowd out private investment, reducing the overall impact on aggregate demand.

- As a result, the balanced budget multiplier may be less than one because the increase in government spending is partly offset by a decrease in private investment due to higher interest rates.

Therefore, the statement is true: the balanced budget multiplier is unity if the central bank pegs the interest rate, but it is not unity if the central bank pegs the money supply.

**Q3: Higher the investment of sensitivity of investment, the larger the impact of change in expected inflation on equilibrium interest rate.**

**ANS:**

True.

The sensitivity of investment to interest rates, often referred to as the interest elasticity of investment, measures how much investment responds to changes in interest rates. When investment is highly sensitive to interest rates, even small changes in interest rates lead to significant changes in the level of investment.

Consider the impact of a change in expected inflation on the equilibrium interest rate:

### 1. **\*\*Expected Inflation and Interest Rates:\*\***

- When expected inflation increases, lenders will require higher nominal interest rates to maintain their real rate of return. This is described by the Fisher equation, which states that nominal interest rates are the sum of the real interest rate and expected inflation.

### 2. **\*\*Effect on Investment:\*\***

- If investment is highly sensitive to changes in interest rates, a rise in expected inflation leading to higher nominal interest rates will significantly reduce investment.

- Conversely, if expected inflation decreases, leading to lower nominal interest rates, investment will increase substantially if it is highly sensitive to interest rates.

### 3. **\*\*Adjustment to Equilibrium:\*\***

- In an economy where investment is very sensitive to interest rates, changes in expected inflation will cause larger shifts in investment, which in turn affects aggregate demand and the overall economy.

- To restore equilibrium, the changes in interest rates must be larger to counterbalance the significant shifts in investment caused by changes in expected inflation.

Thus, the higher the sensitivity of investment to interest rates, the larger the impact of a change in expected inflation on the equilibrium interest rate, because the central bank needs to make more significant adjustments to stabilize the economy.

**Q4: A.C Pigou's asset effect can be a perfect solution to liquidity trap.**

**ANS:**

False.

A.C. Pigou's asset effect, often referred to as the "Pigou effect," suggests that during deflation, the real value of money and other nominal assets increases, which in turn increases consumer wealth and spending, potentially helping to pull an economy out of a downturn. However, while this mechanism can mitigate some negative effects of a liquidity trap, it is not considered a perfect solution.

In a liquidity trap, interest rates are very low, and monetary policy becomes ineffective because people prefer to hold cash rather than invest in non-liquid assets, no matter how much the central bank increases the money supply. Here are the reasons why the Pigou effect is not a perfect solution:

**1. \*\*Limited Wealth Effect:\*\***

- The increase in real wealth from deflation may not be sufficient to boost aggregate demand significantly. The marginal propensity to consume out of increased real wealth might be low, especially if consumers are uncertain about the future or if the wealth is concentrated in the hands of those with a lower propensity to spend.

**2. \*\*Debt Deflation:\*\***

- Deflation increases the real burden of debt, which can lead to decreased spending by debtors who now owe more in real terms. This effect can offset the positive wealth effect on consumers with nominal assets.

**3. \*\*Deflationary Expectations:\*\***

- If deflationary expectations become entrenched, consumers and businesses might delay spending and investment in anticipation of lower future prices, which exacerbates the liquidity trap.

**4. \*\*Zero Lower Bound:\*\***

- When nominal interest rates are at or near zero, the central bank's ability to stimulate the economy through traditional monetary policy is limited. Even with increased real wealth, the economy might not escape the liquidity trap if overall demand remains weak.

**5. \*\*Sticky Prices and Wages:\*\***

- Prices and wages may be sticky downwards, meaning they do not adjust quickly enough to changes in economic conditions. This rigidity can prevent the economy from adjusting smoothly through the Pigou effect.

Therefore, while the Pigou effect may contribute to alleviating some aspects of a liquidity trap, it is not a perfect solution on its own. Addressing a liquidity trap often requires a combination of monetary policy, fiscal policy, and structural reforms to restore economic stability and growth.

**Q5: if expected inflation rises more rapidly than the nominal interest rate, the “excess demand gap” will be widened.**

**ANS:**

TRUE

- **Excess Demand Gap:** This refers to a situation where the demand for goods and services in an economy is higher than the capacity of the economy to produce them. This leads to price increases, which is inflation.
- **Nominal Interest Rate:** This is the actual interest rate set by the central bank to influence borrowing and lending.
- **Expected Inflation:** This is what people expect the inflation rate to be in the future
- **Rising Expected Inflation:** If people expect inflation to rise faster, they might be more willing to borrow money to buy things now before they get more expensive later. This increases demand.
- **Relatively Stagnant Nominal Interest Rate:** If the nominal interest rate doesn't rise as fast as expected inflation, it becomes cheaper to borrow money in real terms (after accounting for inflation). This further incentivizes borrowing and spending, again increasing demand.

When demand rises faster than the supply, the gap between them widens. This is the "excess demand gap" widening. This situation can lead to higher actual inflation if left unchecked.

Here are some additional points to consider:

- Central banks often use interest rates to manage inflation. They might raise interest rates to cool down a hot economy with excess demand.
- This scenario can be particularly challenging because the central bank might be behind the curve if inflation expectations rise faster than they anticipated.

I hope this explanation clarifies the situation!

**Q6: Interest rate will decrease if we move right and downwards along the aggregate demand schedule.**

**ANS:**

False.

The movement along the aggregate demand schedule itself doesn't directly affect the interest rate. Here's why:

- The aggregate demand (AD) schedule shows the relationship between the price level and the quantity of goods and services demanded at that price level.
- Moving right along the AD curve indicates an increase in the quantity demanded due to a decrease in the price level (assuming we're not shifting the curve).
- Interest rates are typically influenced by the central bank and economic factors, not directly by the price level on the AD curve.

There might be situations where a decrease in price level (moving down on the AD) could indirectly lead to an interest rate change as a response to control inflation or economic conditions, but it's not a cause-and-effect relationship along the AD curve itself.

**Q7: The nominal stock of money would shrink if we move left and upwards along with the aggregate demand schedule**

**ANS:**

False.

The nominal stock of money typically doesn't change due to movements along the aggregate demand (AD) curve. Here's the breakdown:

- The AD curve represents the relationship between the price level and the total quantity of goods and services demanded in the economy.
- Moving along the AD curve signifies a change in the quantity demanded at a given price level, not the money supply itself.

The nominal stock of money is usually controlled by the central bank through monetary policy tools like open market operations and reserve requirements. These tools influence the money supply, not the movement on the AD curve.

**Q8: It is interesting that most of Western countries banks reacted to the accelerating inflation of the early 1970s by shifting away from a pegged money supply policy.**

**ANS:**

TRUE

- **Pegged Money Supply:** This refers to a system where the government or central bank fixes the growth rate of the money supply. This policy was common under the Bretton Woods system, which dominated the international monetary system after World War II.
- **Early 1970s Inflation:** This period saw a significant rise in inflation in many Western economies due to various factors like the Vietnam War, oil price shocks, and supply chain disruptions.

The pegged money supply system became problematic in this situation. Here's why:

- **Limited Ability to Respond:** With a fixed money supply, governments had limited tools to address economic downturns or inflation.
- **Stagflation:** The 1970s also saw a period of stagflation, a situation with both high inflation and high unemployment. Pegged money supply made it difficult to address both issues simultaneously.

**Shifting Gears:** To combat these challenges, Western countries began abandoning the pegged money supply system in favor of a more flexible approach. This allowed central banks to:

- **Adjust Interest Rates:** They could raise interest rates to curb inflation and lower them to stimulate the economy during recessions.
- **Manage Money Supply:** They gained more control over the money supply to influence economic activity.

This shift towards a more flexible monetary policy system laid the groundwork for the practices used by central banks today.

**Q9: Under Classical assumptions, demand management policies, would be irrelevant in affecting aggregate demand.**

**ANS:**

True.

Under classical economic assumptions, the economy operates at full employment in the long run, and prices and wages are flexible, adjusting to ensure that markets clear. In such a framework, the economy automatically adjusts to shocks, and any deviation from full employment is temporary and self-correcting.

Classical economists believed in Say's Law, which states that "supply creates its own demand." According to this principle, all production is ultimately sold, and income generated from producing goods and services is used to purchase those goods and services.

**Under these assumptions:**

1. **\*\*Full Employment:\*\*** The economy is always at full employment in the long run, with all available resources being utilized efficiently.
2. **\*\*Flexible Prices and Wages:\*\*** Prices and wages adjust quickly to changes in supply and demand, ensuring that markets clear.
3. **\*\*Self-Correcting Mechanisms:\*\*** Any temporary deviations from full employment are quickly corrected by market forces, such as adjustments in prices and wages.

Given these assumptions, demand management policies, such as fiscal policy (government spending and taxation) or monetary policy (central bank actions affecting interest rates and money supply), are considered ineffective or even harmful in affecting aggregate demand. In the classical view, attempts to stimulate demand through such policies would be futile because any increase in demand would simply lead to inflation rather than increased output or employment.

Therefore, the statement is true under classical assumptions: demand management policies would be irrelevant in affecting aggregate demand.

**Q10: Aggregate demand is not defined in cases classical inconsistencies.**

**ANS:**

False.



Aggregate demand is a concept used in macroeconomics to represent the total demand for goods and services within an economy at a given price level and in a given period. It is typically represented by the aggregate demand curve, which shows the relationship between the overall price level and the quantity of goods and services demanded by households, businesses, government, and foreign buyers.

Even in cases where classical economic assumptions may not hold, such as situations of market imperfections, frictions, or short-run macroeconomic disturbances, the concept of aggregate demand remains relevant. While classical economists may have differing views on the determinants of aggregate demand and the effectiveness of certain policies in influencing it, the concept itself is still used to analyze and understand the behavior of economies.

In modern macroeconomic theory, which incorporates insights from both classical and Keynesian economics, aggregate demand plays a central role in explaining short-run fluctuations in output, employment, and prices. Therefore, the statement is false: aggregate demand is defined and remains relevant even in cases of classical inconsistencies.

**Q11: An increase in the Money supply has a greater effect on the interest rate when nominal government expenditure is pegged than when real government expenditure is pegged.**

**ANS:**

True.

When nominal government expenditure is pegged, an increase in the money supply can have a greater effect on the interest rate compared to when real government expenditure is pegged. Here's why:

**1. \*\*Nominal Expenditure and Money Supply Interaction:\*\***

- Nominal government expenditure refers to the actual dollar amount spent by the government, without adjusting for inflation. When nominal government expenditure is pegged, any increase in the money supply directly affects the nominal value of government spending.
- An increase in the money supply leads to higher nominal government spending, which can increase aggregate demand in the economy.

## 2. **\*\*Effect on Interest Rates:\*\***

- In the short run, an increase in aggregate demand can put upward pressure on interest rates as firms and individuals compete for funds to finance increased spending.
- When nominal government expenditure is pegged, the increase in the money supply adds to the demand for funds, further raising interest rates.
- This occurs because the increase in nominal government spending, coupled with higher private sector demand due to the expansion of the money supply, leads to a greater overall demand for funds in the economy.

## 3. **\*\*Real Expenditure and Money Supply Interaction:\*\***

- Real government expenditure adjusts for changes in the price level due to inflation. When real government expenditure is pegged, changes in the money supply do not directly impact the nominal value of government spending.
- Instead, changes in the money supply primarily affect the price level and inflation expectations.
- The impact on interest rates through changes in the real government expenditure peg is less direct compared to the nominal expenditure peg because changes in the money supply primarily influence inflation expectations rather than directly affecting government spending.

Therefore, an increase in the money supply has a greater effect on the interest rate when nominal government expenditure is pegged than when real government expenditure is pegged.

**Q12: There is no fundamental difference in applying correspondence principle and assessing the desirability of alternative government policies through stability analysis.**

ANS:

False.

The statement incorrectly suggests that there is no fundamental difference between applying the correspondence principle and assessing the desirability of alternative government policies through stability analysis. Let's clarify the differences:

### 1. **\*\*Correspondence Principle:\*\***

- The correspondence principle is a concept in economics that suggests economic theories should be consistent with observed real-world phenomena. In other words, economic models should correspond to actual economic behavior and outcomes.

- When applying the correspondence principle, economists evaluate economic theories and models based on their ability to explain and predict real-world economic phenomena. The goal is to ensure that economic theories accurately represent the complexities of the economy and provide meaningful insights into policy implications.

## 2. \*\*Assessing Desirability of Government Policies through Stability Analysis:\*\*

- Assessing the desirability of alternative government policies through stability analysis involves evaluating the potential effects of different policy interventions on economic stability, such as price stability, employment stability, or financial stability.

- Stability analysis examines how changes in policy variables, such as fiscal policy (government spending and taxation) or monetary policy (interest rates, money supply), impact key economic variables like output, employment, inflation, and interest rates.

- The goal of stability analysis is to determine whether proposed government policies are likely to achieve desired economic outcomes without leading to destabilizing effects, such as inflationary spirals, recessionary spirals, or financial crises.

While both the correspondence principle and stability analysis aim to improve the understanding and effectiveness of economic theory and policy, they operate at different levels of analysis and serve distinct purposes. The correspondence principle ensures that economic theories accurately reflect real-world economic behavior, while stability analysis evaluates the potential consequences of government policies on economic stability and welfare. Therefore, there is a fundamental difference between these approaches.