### Quiz 8 - Answers

### Question 1

Real business cycle theory

- A. emphasizes the role of changing productivity and technology in causing economic fluctuations.
- B. emphasizes the role of sentiments that create the self-fulfilling prophecies that drive economic fluctuations.
- C. explains how initial economic shocks are amplified through the multiplier process.
- D. explains how monetary factors drive business cycles.

The question aims at discussing the main theories of economic fluctuations: real business cycles (A), Keynesian (B) and financial and monetary (D). Multipliers are accommodated by all theories and relate more to the persistence of business cycles than to their emergence.

#### Ouestion 2

According to his theory of animal spirits and sentiment, changes in sentiment cause economic fluctuations through

- A. changes in household consumption and firm investment.
- B. changes in government expenditure.
- C. changes in productivity.
- D. decreases in offsetting movements in exports and imports.

This question further discusses the Keynesian theory, whereby sentiments affect consumption and investment in a way that is amplified by multipliers.

## **Question 3**

Technology suddenly and unexpectedly improves due to a breakthrough. Which of the following best describes the mechanism of a multiplier?

- A. Firms being able to produce more goods
- B. Firms being able to demand more labour
- C. Workers being able to purchase more goods
- D. Workers being able to supply more labour

While A and B certainly happen, they are only related to the immediate reaction to the shock and to how it affects employment, so the initial change in the demand curve. The secondary change in the demand curve is caused by worker's increase in labour income, which translates into more consumption and thus more labour demand. This question is aimed at discussing the mechanics of a multiplier.

#### Question 4

Assuming flexible wages, in which case would the change in total employment be greater during a recession:

**Scenario 1:** If workers do not increase their quantity of labour supplied very much in response to an increase in the wage.

**Scenario 2:** Workers substantially increase their quantity of labour supplied in response to an increase in the wage.

- A. Scenario 1, because the labour supply curve in this case will be flatter.
- B. Scenario 1, because the labour supply curve in this case will be steeper.
- C. Scenario 2, because the labour supply curve in this case will be flatter.
- D. Scenario 2, because the labour supply curve in this case will be steeper.

More rigid labour supply makes supply curve steeper and changes in labour demand affect employment more than prices.

## Question 5

Which of the following key factors can help explain the Great Recession of 2007-2009?

- 1. Increased trade protectionism, decreasing net exports.
- 2. A reduction in consumer wealth, curtailing spending.

- 3. A fall in the value of the stock market.
- 4. An increase in mortgage defaults, negatively impacting banks.
- 5. A fall in housing prices.
- 6. A reduction in new home construction, leading to a decrease in labour demand.
- 7. An increase in inflation.
- A. 1, 2, 5 only
- B. 3, 4, 6, 7 only
- C. 2, 4, 5, 6 only
- D. 1, 2, 4, 6 only

The crisis started in the housing market, with a sudden collapse of housing demand leading to lower housing prices (5) and lower construction (a shift along supply curve) in turn lowering labour demand (6), lower house prices together with suddenly higher unemployment lowering consumers' wealth and spending (2) as well as bringing many households to default on mortgages (4).

# Question 6

How would Keynes's concept of animal spirits explain the creation of a housing bubble?

- A. With an expanding economy, real wages were driven up, leading to higher demand for housing, which expanded the economy further and drove up wages again, resulting in an upward spiral driven by optimism.
- B. People believed that a house was a worthwhile investment, which led to an increased demand for housing and thus pushed prices up. This confirmed to people that housing was a worthwhile investment, which led to more demand, resulting in an upward spiral driven by optimism.
- C. The increase in mortgage defaults led to reduced lending by banks, which in turn reduced demand for housing, leading to more defaults and higher prices for those who could buy as banks attempted to recoup losses.
- D. Home builders reduced their level of construction and investment, which led to higher prices and profits due to decreased supply, and as inventory declined, prices continued to climb.

Self-fulfilling prophecies and the role of expected appreciation of an asset into higher current prices, leading to explosive dynamics.

### Question 7

Contractionary monetary policy can lead to an economy wide recession through

- A. a reduction in the real interest rate, leading to a decrease in production costs and therefore lower demand for labor.
- B. an increase in the real interest rate, leading to an increase in production costs and therefore lower demand for labor.
- C. an increase in the price level, leading to a reduction in employment because of downward wage rigidity.
- D. All of the above

#### Question 8

The former chairman of the Federal Reserve, Alan Greenspan, used the term "irrational exuberance" in 1996 to describe the high levels of optimism among stock market investors at the time. Stock market indexes such as the S&P Composite Price Index were at an all time high. Some commentators believed that the Fed should intervene to slow the expansion of the economy.

Why would central banks want to clamp down when the economy is growing?

- A. To block the formation of unsustainable speculative asset bubbles.
- B. To curtail excessive profits in the banking system.
- C. To prevent inflationary forces from gathering momentum.
- D. A and C.

The question is intended to discuss the rationale for countercyclical monetary policies, in particular why would contractionary policies be needed when the economy is doing well.

#### Ouestion 9

When nominal interest rates have hit the zero lower bound, can central banks affect the interest rates?

A. Yes: since the zero lower bound applies to nominal rates, not real rates, and it is real rates that are relevant for investment decisions.

- B. No: once the zero lower bound is hit, central banks can no longer employ interest rates to stimulate economic activity.
- C. Yes, but the mechanism by which central banks manipulate the interest rates that matter for spending must deviate from the banks' traditional method.

#### D. A and C.

Discuss Zero Lower Bound, how it affects use of primary instrument by central bank, how it relates with inflation expectations and what other instruments are available to the CB.

# Question 10

According to the Taylor rule, the Federal Reserve should raise the federal funds rate

# A. when the output gap rises.

- B. when the Fed's inflation rate target rises.
- C. when the inflation rate falls.
- D. when the Fed's longrun target for the federal funds rate falls.

B is not relevant; C and D go contrary to Taylor rule. Discuss Taylor rule and reasoning behind it. (Handout 15)