

Advanced Economic Principles and Theories

Economics · Answer Key · 10 Questions

1. The Solow-Swan model's fundamental prediction regarding convergence suggests that, holding all else equal, countries with lower initial levels of capital per worker will tend to grow faster than countries with higher initial levels. This is primarily due to diminishing marginal returns to capital. Which empirical observation is MOST consistent with the prediction of conditional convergence within the Solow-Swan framework?

A) Developed nations consistently exhibit higher GDP growth rates than developing nations over extended periods.

B) Poorer countries with similar structural characteristics (institutions, education, savings rates) to richer countries tend to catch up in terms of income per capita.

C) Countries with high population growth rates always experience faster economic growth.

D) Technological diffusion is instantaneous and uniform across all economies, negating any convergence effects.

2. The Permanent Income Hypothesis (PIH), developed by Milton Friedman, posits that individuals make consumption decisions based on their expected lifetime income, not just their current income. This implies that changes in income that are perceived as temporary will have a smaller impact on consumption than changes perceived as permanent. Which real-world phenomenon best illustrates the predictive power of the PIH?

A) A sudden, unexpected surge in consumer spending immediately following a one-time tax rebate.

B) A sustained increase in consumption driven by permanent wage increases rather than temporary bonuses.

C) A sharp decline in savings during a period of prolonged economic recession.

D) A minimal change in consumer spending following a temporary reduction in sales tax.

3. The Ricardian Equivalence theorem, attributed to David Ricardo, suggests that government financing of deficits through debt issuance is effectively the same as financing them through taxation. This is because rational taxpayers anticipate future tax liabilities to repay the debt and adjust their current savings accordingly. Which scenario, assuming rational expectations and intergenerational altruism, would support Ricardian Equivalence?

A) A substantial increase in private savings immediately following an announcement of increased government spending financed by new debt.

B) A marginal increase in current consumption after a one-time tax cut financed by borrowing.

C) A significant decrease in overall government debt despite increased fiscal deficits.

D) Increased reliance on future tax increases leading to a reduction in current private investment.

4. The Lucas Critique, formulated by Robert Lucas Jr., argues that traditional econometric models used for policy evaluation are flawed because they fail to account for the fact that economic agents will rationally alter their behavior in response to policy changes. This means that estimated relationships between variables may not remain stable when policies are changed. Which is a direct implication of the Lucas Critique for macroeconomic policymaking?

A) Historical correlations between unemployment and inflation can be reliably used to predict the impact of demand management policies.

B) The effectiveness of a policy intervention depends on agents' expectations and their rational adaptation to the policy.

C) The Phillips curve relationship will always remain stable regardless of monetary policy interventions.

D) Simple regression analysis of past data is sufficient for forecasting future economic outcomes under any policy regime.

5. The theory of endogenous growth, pioneered by economists like Paul Romer, posits that sustained long-run economic growth is driven by factors that are internal to the economic system, such as technological innovation, human capital accumulation, and knowledge spillovers, rather than exogenous factors. What is a key implication of endogenous growth theory for policy?

A) Governments should focus solely on increasing the savings rate to drive long-run growth.

B) Policies that promote research and development, education, and intellectual property rights are crucial for sustainable growth.

C) International trade is largely irrelevant for long-term economic prosperity.

D) Diminishing returns to investment will eventually halt all economic growth, regardless of policy.

6. The concept of 'rational expectations' in economics, most prominently associated with John Muth and later developed by economists like Robert Lucas, assumes that economic agents use all available information efficiently and make forecasts about future economic variables that are, on average, correct. This implies that predictable policy actions will have limited impact on real economic variables. Which of the following empirical findings would be MOST challenging for a strict rational expectations framework?

A) Evidence of systematic forecasting errors by individuals in financial markets.

B) The observation that stock market prices often follow a random walk.

C) The success of monetary policy in influencing inflation in the short to medium term.

D) The existence of business cycles characterized by predictable patterns of booms and busts.

7. The Heckscher-Ohlin model of international trade explains trade patterns based on differences in countries' factor endowments (labor, capital, land) and the factor intensity of goods. It predicts that countries will export goods that intensively use their relatively abundant factors of production and import goods that intensively use their relatively scarce factors. The Stolper-Samuelson theorem, derived from this model, states that under free trade, the price of a country's relatively abundant factor will rise, and the price of its relatively scarce factor will fall. Which empirical observation aligns with the Stolper-Samuelson theorem?

A) Developed countries with high capital endowments tend to import capital-intensive goods.

B) Trade liberalization leads to a decline in real wages for low-skilled labor in countries abundant in low-skilled labor.

C) Countries with large land endowments primarily export manufactured goods.

D) Opening to trade universally increases the returns to all factors of production within a country.

8. The Grossman-Helpman model of endogenous innovation and trade posits that technological progress is driven by R&D undertaken by firms, and international trade can affect the pace and direction of innovation through several channels, including the size of markets and the diffusion of ideas. This model suggests that trade can have a positive impact on long-run growth. Which of the following is a key mechanism through which trade promotes endogenous growth in this model?

A) Trade leads to a greater concentration of market power, stifling innovation.

B) Larger export markets incentivize firms to invest more in R&D to develop new, differentiated products.

C) Trade primarily leads to the exploitation of less developed economies through factor price equalization.

D) The diffusion of knowledge is hampered by increased international competition.

9. The theory of optimal currency areas (OCA), developed by Robert Mundell, outlines conditions under which a group of countries would benefit from adopting a single currency. These conditions include high labor mobility, similar business cycles, fiscal transfer mechanisms, and high degrees of trade integration. Which of the following is a PRIMARY criterion for an OCA?

- A) Independent monetary policies that can be used to smooth domestic shocks.
- B) The ability of workers to move freely between member countries to seek employment.**
- C) High inflation rates across all member countries.
- D) Significant differences in national economic structures and development levels.

10. The Barro-Grossman model of the 'disequilibrium economy' highlights the possibility of persistent unemployment and underproduction even in the presence of price flexibility, due to the coordination failures that arise when agents cannot fully realize their desired transactions. This framework suggests that aggregate demand plays a crucial role in determining output levels. Which economic phenomenon is MOST consistent with the predictions of the Barro-Grossman model?

- A) Rapid price adjustments leading to immediate market clearing in all sectors.
- B) Sustained periods of high unemployment and underutilized capacity during recessions, despite falling prices.**
- C) Perfect synchronization of economic activity across all industries.
- D) An automatic and immediate return to full employment following any shock.