Economics

Test ID: 7440383

Question #1 of 98

Question ID: 461890

Terrance Burnhart, a junior analyst at Wertheim Investments Inc., was discussing the concepts of purchasing power parity (PPP) and uncovered interest rate parity (UIRP) with his colleague, Francis Ferngood. During the conversation Burnhart made the following statements:

Statement 1: Absolute PPP is based on a number of unrealistic assumptions that limits its real-world usefulness. These assumptions are: that all goods and services can be transported among countries at no cost; all countries use the same basket of goods and services to measure their price levels; and all countries measure their rates of inflation the same way.

Statement 2: UIRP rests on the idea of equal real interest rates across international borders. Real interest rate differentials would result in capital flows to the higher real interest rate country, equalizing the rates over time. Another way to say this is that differences in interest rates are equal to differences in expected changes in exchange rates.

With respect to these statements:

✗ **A)** **only statement 2 is correct.**

✓ **B)** both are correct.

✗ **C)** only statement 1 is correct.

Explanation

UIRP means that interest rates and exchange rates will adjust so the risk adjusted return on assets between any two countries and their associated currencies will be the same. PPP is based on the idea that a given basket of goods should cost the same in different countries after taking into account the changes in exchange rates. PPP does not hold due to transportation costs and other factors.
(Study Session 4, LOS 14.f)

Question #2 of 98

Question ID: 461936

Which of the following concepts is uniquely associated with the classical theory of economic growth?

✗ **A)** **Target rate of return.**

✗ **B)** Real GDP growth.

✓ **C)** Subsistence real wage.

Explanation

Classical growth theory contends that there is a subsistence real wage, defined as the minimum real wage necessary to support life. Whenever real wages are greater than the subsistence real wage, the population will increase, leading to diminishing returns to labor, and eventually, decreased labor productivity. The key to classical growth theory is the population explosion that occurs whenever real GDP per labor hour increases above the subsistence level, which will eventually eliminate any gains from increased labor productivity.

Question #3 of 98

Question ID: 461891

Assume that the domestic nominal rate of return is 4% and the foreign nominal rate of return is 5%. If the current exchange rate is DC/FC 0.400, the forward rate consistent with covered interest rate parity is:

✗ **A)** **0.400.**

✓ **B)** 0.396.

✗ **C)** 0.318.

Explanation

F/S = $(1 + r_D) / (1 + r_F)$ where the currency is quoted as DC/FC

F = (1.04/1.05)(0.400) = 0.396

(Study Session 4, LOS 14.g)

Question #4 of 98

Question ID: 461876

Which of the following statements regarding purchasing power parity (PPP) is *least* accurate?

✗ **A)** **Under absolute PPP the foreign price level expressed in domestic currency terms should be equal to the domestic country's price level.**

✗ **B)** Absolute PPP is similar to the law of one price, except it concerns a basket of goods rather than a single good.

✓ **C)** Relative PPP states that prices for goods and services are the same whether it is for one good or for a basket of goods.

Explanation

Relative PPP does not state that prices for goods and services are the same, only that the rate of change in the FX rate is a function of the inflation differentials between the two countries. (Study Session 4, LOS 14.e)

Question #5 of 98

Question ID: 461934

Which of the following concepts is uniquely associated with the endogenous growth theory of economic growth?

✗ **A)** **Increased spending on health care and population growth.**

✓ **B)** No diminishing returns to knowledge capital.

✗ **C)** Real gross domestic product (GDP) growth based on investment in new capital and technological change.

Explanation

Knowledge capital is a special type of public good because it is not subject to the law of diminishing returns. This is a key element of endogenous growth growth theory. The implication is that, unlike the classical or neoclassical growth theories, economic growth is not limited.

Questions #6-11 of 98

Wisterbon, Pratia and Surico are neighboring nations. The three countries share borders and frequently trade with each other.

Pratia

- A developing nation with an abundant oil reserves
- Primary economic activity is oil industry

Wisterbon

- A developing nation focusing on labor intensive industries because it lacks many natural resources

Surico

- A developed nation
- Largest trading partner for both the other two countries

The following economic and demographic statistics are available for the three countries.

	Wisterbon	Pratia	Surico
GDP (in $ billions) 10 years ago	$100.0	$100.00	$3,000.00
GDP (in $ billions) Current	$156.0	$164.00	$4,209.00
Long-term growth rate in technology (est.)	1.5%	1.2%	2.1%
Long-term growth rate of capital	4.9%	4.40%	3.4%
Sovereign credit rating	A	A+	AAA
Savings rate (average is 10.0%)	12.5%	10.0%	5.0%
Population (in millions)	10.2	10.0	50.4
Labor Growth Rate	2.8%	2.5%	0.6%
Cost of capital relative to total factor cost	30.0%	35.0%	27.5%
Capital Growth Rate	4.9%	4.4%	3.4%
TFP Growth Rate	1.5%	1.2%	2.1%

The three countries have sent their top finance ministers and economists to the annual Trade and Economic Growth Forum (TEGF) to discuss potential trade and growth opportunities. Comments pertaining to concerns regarding future growth potential included:

Economist #1: We are concerned about the GDP per capita and population growth. The current GDP per capita appears to be beyond the subsistence level.

Economist #2: We are concerned that the output per capital ratio has been constant. It is likely that the equilibrium growth rate has been reached and the economy cannot grow any faster.

Economist #3: We are concerned that we are not investing enough in infrastructure and education to increase the growth rate.

Some common initiatives for economic growth were listed from the TEGF:

1. Fund a technology research center
2. Lower trade barriers
3. Provide financial incentives for innovation

4. Coordinate energy policies
5. Invest in education

Each country decided to adopt four of the five initiatives. Pratia did not like lowering trade barriers. Surico did not like coordinating energy policies. Wisterbon did not like providing financial incentives for innovation.

Question #6 of 98

Question ID: 485731

Which country is *most likely* to rely on improving technology rather than capital deepening for increase in potential GDP growth?

✗ **A)** **Wisterbon.**

✓ **B)** Surico.

✗ **C)** Pratia.

Explanation

Surico is a developed country and has the lowest share of output allocated to capital of 27.5%. Surico will gain less from capital deepening. The growth rate in potential GDP for Surico is 2.1% + (0.275) × (3.4%) + (0.725) × (0.6%) = 3.4%. About 61% of potential GDP growth is based on the total factor of production (TFP), the highest of the three.
(Study Session 4, LOS 13.d)

Question #7 of 98

Question ID: 485732

The natural resources advantage of Pratia compared to Wisterbon and the differences in growth rates may be explained by:

✓ **A)** **Pratia's economic growth is hampered by the focus on extracting oil.**

✗ **B)** Wisterbon's inability to access natural resources.

✗ **C)** Pratia's economic growth surpasses Wisterbon because of natural resources advantage.

Explanation

Pratia's potential GDP growth rate = 1.2% + (0.35)(4.4) + (0.65)(2.5) = 4.37%
Wisterbon's potential GDP growth rate = 1.5% + (0.3)(4.9) + (0.7)(2.8) = 4.93%

Pratia's potential GDP growth rate is less than that of Wisterbon's. One theory that supports a country that has natural resources but could grow at a lesser rate than a country without natural resources is that the ownership of natural resources may be focusing on its recovery over developing other industries.
(Study Session 4, LOS 13.f)

Question #8 of 98

Question ID: 485733

Which economist is mostly applying neoclassical theory when stating her concerns?

✓ **A)** **Economist #2.**

✗ **B)** Economist #3.

✗ **C)** Economist #1.

Explanation

The neoclassical growth theory is based on when the output to capital ratio is constant, both the labor to capital ratio and output per capita grow at the same equilibrium rate. Economist #1's concern is supported by the classical growth theory and Economist #3's concern is supported by the endogenous growth theory.
(Study Session 4, LOS 13.i)

Question #9 of 98

Question ID: 485734

The country *most likely* to achieve convergence of higher living standards is:

- ✗ **A)** **Pratia.**
- ✗ **B)** Surico.
- ✓ **C)** Wisterbon.

Explanation

Removing trade barriers can speed up growth rate in living standards for a developing nation. Both Wisterbon and Surico follow outward-oriented policies, only Wisterbon is a developing nation.
(Study Session 4, LOS 13.l)

Question #10 of 98

Question ID: 485735

The three countries' willingness to provide financial incentives for innovation is because:

- ✗ **A)** **Increase in innovation would lead to convergence of standard of living.**
- ✓ **B)** consideration of private benefits alone would lead to suboptimal investment in R&D.
- ✗ **C)** increase in innovation is the only way to grow under the endogenous growth theory.

Explanation

When private investments in R&D are sub-optimal, financial incentives may restore the level of investment to optimal levels. Under the endogenous growth theory, the growth rate in *standard of living* can be achieved via technological growth as well as capital deepening. Convergence of standard of living would only be an incentive for developing countries.
(Study Session 4, LOS 13.k)

Question #11 of 98

Question ID: 485736

For Surico, the education investment that may increase the growth rate of potential GDP is the one that would increase:

- ✗ **A)** **application of technology to increase TFP and productivity of labor.**
- ✓ **B)** research and development to increase TFP.
- ✗ **C)** non-ICT capital to increase capital deepening.

Explanation

Surico is a developed country. It is not likely to benefit much from capital deepening and application of technology. Innovations and research and development can increase the total factor productivity which is more likely to increase the impact of growth in potential GDP.
(Study Session 4, LOS 13.h)

Question #12 of 98

Question ID: 461874

Assume an investor living in Mauritius can borrow in $ or in Mauritius Rupee (MUR). Given the following information, determine whether an arbitrage opportunity exists. If so, how much would the arbitrageur profit by borrowing MUR 1,000,000 or the equivalent in $? (Assume a period of one year and state the profit in domestic currency terms.)

Spot rate (MUR/$)	30.73000
Forward rate (MUR/$)	31.50000
Domestic (MUR) interest rate (%)	6.50%
Foreign ($) interest rate (%)	5.20%

Which of the following is *closest* to the correct answer?

✗ **A) Borrow $. Arbitrage profits are $13,340.**

✗ **B)** Borrow domestic. Arbitrage profits are $39,685.

✓ **C)** Borrow MUR. Arbitrage profits are MUR 13,340.

Explanation

Step 1: Determine whether an arbitrage opportunity exists.

- We can arrange the formula for covered interest rate parity (CIP) to look like: $(1 + r_{domestic}) - [((1 + r_{foreign}) \times Forward_{DC/FC}) / Spot_{DC/FC}] = 0$
- If this condition holds with the financial data above, there are no arbitrage opportunities: (1 + 0.06500) − [((1 + 0.05200) × 31.5000) / 30.73000] = 1.06500 − 1.07836 = **-0.01336**
- Since the no arbitrage condition does not hold, we move on to:

Step 2: Borrow Domestic or Foreign?

- Rule 1: If the sign on the result of Step 1 is *negative, borrow domestic*. If the sign is positive, borrow foreign. **Here**, the sign is negative, so **borrow domestic**.
- Rule 2: See table below. (Rule 2 is an alternative to Rule 1).

$(r_d - r_f)$ **<** (Forward − Spot) / Spot	Borrow **Domestic**
$(r_d - r_f)$ **>** (Forward − Spot) / Spot	Borrow **Foreign**

Here, (0.06500 - 0.05200) compared to (31.5000 - 30.73000) / 30.73000 0.013000 < 0.02506, **borrow domestic.**

Step 3: Conduct Arbitrage and Calculate Profits.

Step	*Description*	*Rate*	*Calculation*	*Result*
a	Borrow Domestic		MUR 1,000,000	MUR 1,000,000
b	Exchange MUR for $	Spot	= MUR 1,000,000 / 30.73000 MUR/$	$32,541
c	Lend $ at Foreign (U.S.) Rate		= $32,541 × (1.05200)	$34,233
d	Contract to sell proceeds	Fwd	= $34,233 × 31.50000 MUR/$	MUR 1,078,340

	fwd[1]			
e	Calculate loan payoff[2]		= MUR 1,000,000 × (1.06500)	MUR 1,065,000
f	Calculate profit (d-e)			**MUR 13,340**

Note: [1] This is the amount you will have available to repay the loan. [2] This is the amount you need to repay.

Question #13 of 98

Question ID: 461932

An increase in growth rate of potential GDP in developed countries is *most likely* to be driven by:

✓ **A) technological progress.**

✗ **B)** capital deepening.

✗ **C)** both capital deepening and technological progress.

Explanation

Improvement in potential GDP growth in developed countries is largely driven by technological progress. Developing countries have the potential to grow through both capital deepening and technological progress.
(Study Session 4, LOS 15.h)

Question #14 of 98

Question ID: 461871

The forward rate on a 90-day contract is FC/USD 5 and the spot is FC/USD 4. The USD is trading at a forward:

✗ **A) discount of 1.0.**

✗ **B)** premium of 0.8.

✓ **C)** premium of 1.0.

Explanation

Base currency (USD in this case) is at a forward premium if the forward rate is above the spot rate. Forward premium = forward rate - spot rate = 5 − 4 = 1.
(LOS 14.C, LOS type)

Question #15 of 98

Question ID: 461906

Which of the following is *least likely* the objective of central bank intervention?

✓ **A) prevent appreciation of domestic currency**

✗ **B)** have ability to pursue an independent monetary policy

✗ **C)** reduce excessive inflow of foreign capital

Explanation

Central bank objectives include prevention of *excessive* appreciation of domestic currency, reduction of excessive foreign capital inflows and pursuit of independent monetary policy.

Question #16 of 98

Question ID: 461920

Which of the following would *least likely* occur due to an increase in growth rate of potential GDP?

- ✗ **A)** **Fiscal policy would be expansionary.**
- ✗ **B)** Monetary policy would be expansionary.
- ✓ **C)** Credit spreads on fixed income investments widen.

Explanation

An increase in growth rate of potential GDP (keeping actual growth rate unchanged) would most likely allow the government to pursue expansionary monetary/fiscal policies. An increase in growth rate of potential GDP reduces expected credit risk for all fixed income securities and hence narrows the credit spreads.

Note: The question does not provide any information about actual growth rate, hence we have to assume it to be constant for a least likely type question.

(Study Session 4, LOS 15.c)

Question #17 of 98

Question ID: 461930

A country with relatively poor endowment of natural resources is *least likely* to:

- ✓ **A)** **suffer from 'Dutch disease'.**
- ✗ **B)** develop other industries not reliant on natural resources.
- ✗ **C)** import natural resources.

Explanation

Countries with poor endowment of natural resources may enjoy relatively high levels of GDP growth rate as long as they have access to natural resources. Dutch disease refers to situation where a country with large endowments of natural resources finds its currency appreciating driven by foreign demand for those resources. This increase in currency value may render other domestic industries uncompetitive globally. Countries with abundant natural resources may devote disproportionate amount of its economic energy in pursuing those resource industries at the expense of other industries.
(Study Session 4, LOS 15.f)

Question #18 of 98

Question ID: 461893

Ashok Jain is assessing the currency value of Lutina. He uses the IMF approach to assess the long-term equilibrium real exchange rate. One mechanism he employs is to assess the change in real value of the currency necessary to force the current levels of Lutina's debt relative to its GDP towards reasonable levels.
This approach is known as:

- ✗ **A)** **Reduced-form econometric approach**

✓ **B)** External sustainability approach

✗ **C)** Macroeconomic balance approach

Explanation

The assessment of sustainable levels of debt relative to GDP is called as the external sustainability approach.

Question #19 of 98

Question ID: 461896

The following information is gathered for three countries:

Country	Comment
A	Current account deficit is very large relative to GDP
B	Imports highly price-elastic goods
C	Exports global commodities

Which country will *most likely* see its current account deficit restored to sustainable level more rapidly under the flows mechanism of balance of payments?

✗ **A) Country C**

✓ **B)** Country B

✗ **C)** Country A

Explanation

Countries with lower initial current account deficits, with import and export prices sensitive to exchange rate movements and with imports and exports with high price elasticity of demand would see their current account deficits quickly restored to sustainable level due to depreciation of their currency. Country B imports goods that have high price elasticity. Country A has large current account deficit and hence will take time to adjust to sustainable level. Country C exports commodities whose global prices are not sensitive to their own currency's values.

Questions #20-25 of 98

Jennifer Nance has recently been hired as an analyst at the Central City Bank in the currency trading department. Nance, who recently graduated with a degree in economics, will be working with other analysts to determine if there are profit opportunities in the foreign exchange market.

Nance has the following data available:

	US Dollar ($)	*UK Pound (£)*	*Euro ()*
Expected inflation rate	6.0%	3.0%	7.0%
One-year nominal interest rate	10.0%	6.0%	9.0%

Market Spot Rates			
	US Dollar ($)	*UK Pound (£)*	*Euro ()*
US Dollar ($)	$1.0000	$1.6000	$0.8000
UK Pound (£)	0.6250	1.0000	2.0000
Euro ()	1.2500	0.5000	1.0000

Market 1-year Forward Rates			
	US Dollar ($)	*UK Pound (£)*	*Euro ()*
US Dollar ($)	$1.0000	$1.6400	$0.8082
UK Pound (£)	0.6098	1.0000	2.0292
Euro ()	1.2373	0.4928	1.0000

Nance receives a report from Jamshed Banaji, Chief Economist at Central City Bank providing broad U.K and U.S. macro-economic forecasts. Nance notes that the Bank of England is expected to pursue an expansionary monetary policy while the Federal Reserve monetary policy is expected to be neutral. Also, the British parliament is expected to reduce the budget deficits more aggressively as compared to the U.S.

Question #20 of 98

Question ID: 485710

Assume borrowing and lending rates are equal and bid-ask spreads are zero in the spot and forward markets. Using the data above, Nance is asked to calculate the profits in pounds from covered interest arbitrage between the United Kingdom and the United States, assuming an investor starts by borrowing £500,000. The answer is:

✓ **A) £6,585.37.**

✗ **B)** £36,585.37.

✗ **C)** £6,750.00.

Explanation

In this example, covered interest arbitrage involves borrowing pounds at the U.K. interest rate, converting to dollars at the spot rate, investing the dollars at the U.S. interest rate, converting the dollar investment proceeds back to pounds at the forward rate, and repaying the pound loan. Arbitrage profits are the difference between the proceeds from the forward contract and the amount repaid on the loan.

We start by borrowing 500,000. At a borrowing rate of 6.0%, we will have to repay 500,000(1.06) = 530,000 at the end of the year.

We convert the 500,000 pounds to dollars at the spot rate of $1.6000, which gives us 500,000 × 1.6000 = $800,000.

We invest $800,000 for one year at 10.0%, and at the end of the year we receive $800,000(1.10) = $880,000.

This means that initially we must enter into a forward contract at $1.6400 and then at the end of the year convert $880,000 into ($880,000 / $1.6400) = 536,585.37.

We pay back the 530,000 loan balance and our arbitrage profits are 536,585.37 − 530,000 = 6,585.37. (LOS 12.e)

Question #21 of 98

Question ID: 485711

The no-arbitrage one-year forward USD/EUR rate is *closest* to:

✓ **A) USD/EUR 0.8073.**

✗ **B)** USD/EUR 0.8082.

✗ **C)** USD/EUR 0.7925.

Explanation

Interest rate parity implies that, in order to prevent covered interest arbitrage, the one-year forward USD/EUR rate should be equal to $0.8000(1.10) / (1.09) = $0.8073. (LOS 12.e)

Question #22 of 98

Question ID: 485712

Everything else held constant, if the output gap (i.e., current output - potential output) is higher in US than in UK, the *real* value of £/$ is *most likely* expected to:

✗ **A) remain unchanged.**

✓ **B)** increase

✗ **C)** decrease

Explanation

Under the Taylor rule, a higher output gap in U.S. would translate into higher real interest rates in US leading to appreciation of the USD (and hence higher pounds/dollar). An increase in the output gap in the euro area relative to the output gap in the United States should strengthen the euro versus the dollar in real terms. (LOS 12.m)

Question #23 of 98

Question ID: 485713

Assuming high capital mobility in the U.K. and the U.S., according to the Mundell Fleming model, the £/$ is *most likely* expected to:

✗ **A) remain unchanged.**

✓ **B)** increase.

✗ **C)** decrease

Explanation

Relative to the U.S, the U.K. monetary policy is expected to be expansionary and fiscal policy is expected to be restrictive. Under the Mundell-Fleming framework (in the case of high capital mobility), the pound should depreciate and hence the £/$ rate should increase. (LOS 12.l)

Question #24 of 98

Question ID: 485714

For an investor pursuing a carry-trade, the funding currency would *most likely* be the:

✓ **A) Pound.**

✗ **B)** US Dollar.

✗ **C)** Euro.

Explanation

Under a carry trade, the funding currency is the lower yielding currency (in this case, the pound with 1-year nominal interest rate of 6% is the best candidate). (LOS 12.i)

Question #25 of 98

Question ID: 485715

Which of the following is *least likely* to be a warning sign for currency crisis?

✗ A) **Inflation increases.**

✗ B) Nominal credit relative to bank reserves increase.

✓ C) Real exchange rate substantially lower than mean reverting level.

Explanation

One of the warning signs of a currency crisis is that real exchange rate is substantially higher than the mean reverting level. (LOS 12.o)

Question #26 of 98

Question ID: 461938

Which of the following factors is *most likely* to contribute to a failure of the convergence hypothesis?

✗ A) **Political stability.**

✓ B) Low rates of savings.

✗ C) Regulatory policies that encourage investment.

Explanation

Low rates of savings is one factor that can cause a developing country to fail to converge. The convergence hypothesis suggest that developing countries should have higher rates of growth of productivity and GDP, which should lead to the per capita GDP, and the gap narrowing between developing and developed economies over time. Other reasons that countries may fail to converge include: low rates of investment, political instability, a lack of property rights, poor education and health, taxes and regulations that discourage working and investing, and restrictions on trade.
(Study Session 4, LOS 15.j)

Question #27 of 98

Question ID: 461907

Which of the following is *least likely* a warning sign of an impending currency crisis?

✗ A) **Official foreign exchange reserves decline dramatically.**

✓ B) Nominal private credit shrinks.

✗ C) Real exchange rate is substantially higher than the mean-reverting level.

Explanation

Warning sign of an impending currency crisis is when nominal private credit grows substantially (not shrinks).

Question #28 of 98

Question ID: 461875

Which of the following statements regarding relative purchasing power parity is *most* accurate? Relative purchasing power states that exchange rates:

✗ **A) will change to reflect differences in nominal interest rates between countries.**

✗ **B)** will change to reflect differences in real interest rates between countries.

✓ **C)** will change to reflect differences in inflation between countries.

Explanation

Purchasing power parity states that exchange rates will change to reflect differences in inflation between countries. Interest rate parity states that exchange rates must change so that risk-adjusted returns on investments in any currency will be equal. (Study Session 4, LOS 14.e)

Question #29 of 98

Question ID: 461935

Which of the following concepts is uniquely associated with the neoclassical theory of economic growth?

✗ **A) diminishing marginal product of capital.**

✓ **B)** In steady state, the rental price of capital is equal to capital's share of total output divided by total capital.

✗ **C)** In steady state GDP growth rate is equal to growth rate in total factor productivity divided by labor's share of total factor cost.

Explanation

Neoclassical theory contends diminishing marginal productivity of capital but constant marginal product of capital. In steady state, marginal product of capital (MPK) is equal to rental price of capital. MPK = (capital's share of total output as % x output)/total capital = capital's share of total output/total capital. In steady state, GDP growth rate = growth rate in total factor productivity divided by labor's share of total factor cost + growth in labor force

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Questions #30-35 of 98

CDM is a small country in South East Asia that has seen significant growth in both GDP and GDP per capita over the last decade. Alain Toure runs a large equity fund for an investment house based in the UK and is currently reviewing macroeconomic and political data on CDM to assess its suitability for investment.

One of Toure's main concerns is whether the growth is sustainable. He is particularly interested in two factors which may have influenced recent growth - the size of the labor force and a large increase in tourism. Toure fears that neither factor appears to be sustainable.

Exhibit 1 shows the demographic data that Toure has used to study trends in the population and labor force over recent years.

Exhibit 1 - CDM Demographics

Year	Population (000s)	Participation Rate (%)	Percent of Population under 15	Percent of Population over 65

2000	11,290	72.4	39.50%	2.85%
2005	12,090	73.8	39.40%	2.80%
2010	12,943	78.2	39.20%	2.80%

Using the data in Exhibit 1, Toure draws two conclusions:

Conclusion 1

The population increased between 2000 and 2010 and this increase may explain the increase in the growth rate of GDP per capita over that period.

Conclusion 2

The participation rate increased between 2000 and 2010 and this is another potential reason for the increase in the growth rate of GDP per capita over that period.

Toure believes that the increase in the participation rate is due to a larger percentage of women gaining employment and cannot see this trend lasting indefinitely. In addition, he has concerns that the increase in tourism may falter due to several pieces of negative publicity concerning the two largest destinations in the country. Extracts from a trade journal covering the issues are shown in exhibit 2:

Exhibit 2 - Tourism Press Articles

"Three Hospitalized in Gas Leak at East Coast Resort"

Three members of the same family were in hospital last night with suspected carbon monoxide poisoning. The suspected leak was from a hot water heating system in the under fire 'Smuggler's Cove' apartment complex. The leak follows three cases of illness which were reported in the last two months as a result of bacterial infections caused by swimming in the complex's indoor heated swimming pool. Health officials said a thorough review would be carried out and a decision on whether to close the complex was pending. A spokesman commented "If it is found that the leak was caused by equipment that does not meet the stringent legal safety standards enacted by the government in 2010, the strongest possible action allowed by the law will be taken."

"Government Seeks Tougher Regulation"

Government officials are meeting with tourism bosses this week as concern grows over mounting negative publicity surrounding the industry. A government source stated that "the rapid growth in the industry is obviously a welcome boost to the economy, but along with growth comes responsibility. There is a very real concern that tourists will turn away from the country unless their health and safety can be guaranteed." Two hotels in the last month have been closed down due to violations of health and safety laws passed by the government in 2010. However, Danish Li, head of the government's culture and tourism department, thinks more regulation is required. Li told tourism bosses that he favored the implementation of a strict code of conduct, written and enforced by a regulatory body made up of industry insiders. However, if this could not be agreed upon he was willing to set up a government agency with sweeping legal powers to oversee the industry and its development.

Toure's colleague Adam Deerstole is less skeptical about CDM's future growth potential, citing government investment in physical capital in the last decade as a reason for optimism. He believes the high levels of investment in capital will benefit CDM significantly as currently the capital per worker ratio is very low. However, Deerstole does admit to concerns that a large percentage of the investment has been in information, computers and technology (ICT) and that network externalities may limit the usefulness of this investment.

Deerstole also believes in the neoclassical growth theory, and that every economy has access to the same technology. Under this theory he believes that the CDM economy will catch up to developed economies and match them in per capita GDP levels. As he believes that CDM will consistently see population growth levels above that of most developed countries, he believes this convergence will occur within 20 years.

Toure does not agree with Deerstole's model, as he believes the endogenous growth theory model better explains how an economy grows, and this theory does not predict any convergence of GDP. He therefore believes that encouraging private investment in new technology is a key factor in promoting growth as positive externalities from research and development mean that private companies often under invest in this area.

Question #30 of 98

Question ID: 461949

Are Toure's conclusions regarding GDP per capita using exhibit 1 most likely correct?

- ✗ **A) Only conclusion 1 is correct**
- ✗ **B)** Yes
- ✓ **C)** Only conclusion 2 is correct

Explanation

Conclusion one is incorrect, as population growth has no impact on the rate of increase of per capita GDP (although it may help the overall growth of the economy). (Study Session 4, 13.g)

Question #31 of 98

Question ID: 461950

If the Smuggler's Cove complex is shut down due to the carbon monoxide leak, this is most likely a result of a:

- ✗ **A) breach of administrative regulations**
- ✗ **B)** breach of industry standards
- ✓ **C)** breach of statute

Explanation

A breach of a law written by a legislative body is a breach of statute. (Study Session 4, 14.a)

Question #32 of 98

Question ID: 461951

The approach to regulation for the tourism industry suggested by Li is based on a:

- ✓ **A) Self-regulating organization**
- ✗ **B)** Independent regulator
- ✗ **C)** Government agency

Explanation

An entity which is not backed by a government agency and is regulated by its own members is a self-regulating organization. (Study Session 4, 14.a)

Question #33 of 98

Question ID: 461952

Deerstole's comments are most likely:

- ✓ **A) correct regarding the benefits of capital deepening for an economy with a low level of capital per worker but incorrect regarding the risk that network externalities may reduce the impact of ICT investment**

✗ **B)** correct regarding the benefits of capital deepening for an economy with a low level of capital per worker and the risk that network externalities may reduce the impact of ICT investment

✗ **C)** incorrect regarding the benefits of capital deepening for an economy with a low level of capital per worker and the risk that network externalities may reduce the impact of ICT investment

Explanation

An economy with a low level of capital per worker will benefit from capital deepening, but network externalities - e.g., the ability to work remotely, communicate via e-mail etc. - have a positive effect on growth. (Study Session 4, 13.h)

Question #34 of 98

Question ID: 461953

Deerstole's comments on the neoclassical model and the convergence of GDP are most likely:

✗ **A) incorrect as the model would not predict convergence of per capita GDP growth rate or GDP levels given the difference in population growth rate**

✓ **B)** incorrect as the model would only predict a convergence of per capita GDP growth rate given the difference in population growth rate

✗ **C)** correct

Explanation

The neoclassical model predicts absolute convergence of GDP levels only when countries have the same savings rates, population growth and production functions. Given the difference in population growth, it would predict only a convergence in the rate of growth. (Study Session 4, 13.j)

Question #35 of 98

Question ID: 461954

Toure's comments regarding endogenous growth theory are most likely:

✗ **A) incorrect as the endogenous growth theory predicts that all economies will eventually grow at the same rate due to the positive externalities associated with research and development**

✓ **B)** correct

✗ **C)** incorrect as the constant returns to capital mean that companies will always invest optimally in research and development

Explanation

Endogenous growth theory suggests that the positive externalities associated with R&D spending mean that companies do not spend enough in this area. Because of constant or increasing returns to knowledge capital, there is no reason why GDP levels or growth rates should converge. (Study Session 4, 13.k)

Question #36 of 98

Question ID: 461958

Maldovia is a rapidly growing emerging market economy. To boost the level of capital per worker, the government allows for higher-than-previously allowed levels of depreciation expense for tax purposes on new equipment lowering the effective cost

for the business.
This is an example of:

✓ **A) a price mechanism regulatory tool.**

✗ **B)** requiring certain activity regulatory tool.

✗ **C)** a provision of public good/financing private project regulatory tool

Explanation

Tax breaks on new equipment purchases are effectively government subsidies. Taxes and subsidies are examples of price mechanism regulatory tool.
(Study Session 4, LOS 16.e)

Question #37 of 98

Question ID: 461908

Which of the following is *least likely* a warning sign of an impending currency crisis?

✓ **A) Money supply relative to bank reserves shrinks.**

✗ **B)** Equity markets experience a boom-bust cycle.

✗ **C)** Terms of trade deteriorate.

Explanation

Warning sign of an impending currency crisis is when money supply relative to bank reserves grows (not shrinks).

Question #38 of 98

Question ID: 461940

Which of the following investments is *least likely* to be described as a foreign direct investment or FDI? When a foreign company invests in the domestic economy by:

✗ **A) buying property and equipment.**

✗ **B)** building a manufacturing plant.

✓ **C)** purchasing equity securities.

Explanation

Foreign direct investing refers to a foreign company investing directly in a domestic economy by building or buying property, plant, and equipment. A foreign company purchasing equity or fixed income securities issued by a domestic company is best described as indirect investing.
(Study Session 4, LOS 15.l)

Question #39 of 98

Question ID: 461872

An investor has entered into a 90-day forward contract to purchase 2 million GBP at an all-in rate of USD 1.4612. In 30 days, the following quotes were available:

	USD/GBP
spot rate	1.4522−24
30-day forward rate	1.4618−21
60-day forward rate	1.4621−25
90-day forward rate	1.4632−36

Interest rate information:

Interest rates	**When contract was initiated**		**Currently (t=30)**	
	USD	**GBP**	**USD**	**GBP**
30-day	0.20%	0.32%	0.20%	0.32%
60-day	0.21%	0.32%	0.21%	0.32%
90-day	0.21%	0.33%	0.21%	0.33%

The mark-to-market value of the forward contract is *closest to*:

- ✗ **A)** **USD 1999**
- ✓ **B)** USD 1800
- ✗ **C)** USD 2599

Explanation

To unwind the forward contract, the investor would enter into a 60-day forward contract to *sell* GBP. The relevant exchange rate is 1.4621. The value obtained will be in price currency (USD) and would be discounted at USD interest rate for 60 days (at t=30).

$$V_t = \frac{(FP_t - FP)(\text{contract size})}{\left[1+R\left(\frac{days}{360}\right)\right]} = \frac{(1.4621-1.4612)(2{,}000{,}000)}{\left[1+0.0021\left(\frac{60}{360}\right)\right]} = 1799$$

(Study Session 4, LOS 14.d)

Question #40 of 98

Question ID: 461897

The Mundell-Fleming model to determine exchange rate focuses on the impact of:

- ✗ **A)** **trade balance.**
- ✗ **B)** inflation.
- ✓ **C)** interest rates.

Explanation

Mundell-Fleming approach focuses on the role of interest rate in exchange rate determination. Mundell-Fleming model does not explicitly take into account the role of inflation.

Question #41 of 98

Question ID: 461888

Ackerman explains to Bos that a theoretical relationship exists between forward rates and future spot rates, called the foreign exchange expectation relation. This relation suggests that:

✗ **A)** **the forward rate is a biased predictor of the expected future spot rate, and uncovered interest rate parity would not hold.**

✓ **B)** the forward rate is an unbiased predictor of the expected future spot rate, and uncovered interest rate parity would hold.

✗ **C)** the forward rate is an unbiased predictor of the expected future spot rate, and uncovered interest rate parity would not hold.

Explanation

The foreign exchange expectation relation is F = E(S1), meaning that the forward rate is an unbiased predictor of the expected future spot rate. If this is the case, uncovered interest rate parity would be same as covered interest rate parity and since covered interest rate parity holds (by arbitrage), uncovered interest rate parity would also hold.
(Study Session 4, LOS 14.f)

Question #42 of 98

Question ID: 461956

Regulations are *least likely* needed under which of the following situations:

✗ **A)** **A small town is experiencing large inflow of out-of- town visitors constraining street parking.**

✗ **B)** A small privately-held developing 'Apps' seeks equity investors to finance development of additional software.

✓ **C)** A small investor is investigating a speculative stock and applies an incorrect growth estimate for the company's earnings.

Explanation

Regulations are needed in the presence of information asymmetry and externalities. A privately held company seeking new equity investors would be in a situation where the company insiders have better quality information than the investors (i.e., information asymmetry). Street parking is a public good (i.e., an externality) which needs to be regulated for its optimal production and allocation. Incorrect growth estimates are subjective and not due to information asymmetry and hence would not be a valid justification for regulations.
(Study Session 4, LOS 16.c)

Questions #43-48 of 98

Patrick Sheehan is the head of foreign currency desk at GPN Bank NA, a large U.S. Bank holding company. Patrick is concerned about recent spike in volatility of EUR. He obtains current spot and forward quotes from his terminal (given in Exhibit 1). He also collects interest rate information (given in Exhibit 2).

Exhibit 1: Current spot and forward exchange rate quotes

Currency Paid	Spot rates	Forward rates		
		30-day	60-day	90-day

USD/EUR	1.3110−14	+3.18/+3.38	+6.73/+7.18	+10.48/+10.78
CHF/USD	0.9273−77	−4.09/−3.79	−8.45/−7.95	−12.80/−12.05
USD/GBP	1.6242−47	−26.10/−24.6	−50.20/−47.20	−72.20/−68.2

Exhibit 2: Selected interest rates

Interest Rates	USD	EUR	CHF	INR
30 day	0.21%	0.90%	1.12%	6.72%
60 day	0.22%	0.93%	1.15%	6.84%
90 day	0.25%	1.04%	1.25%	6.90%

Sheehan reviews bank's current open forward contracts. One of the contracts calls for purchase of 200 million at an all-in rate of USD 1.3912 and matures in 30 days.

During the market turmoil of late 2008, GPN had lost a lot of money in FX carry trades. Sheehan realizes that GPN has not established any new FX carry trade positions since then and is anxious to establish new positions. One trade that he finds promising is a carry trade in Indian Rupee (INR). Sheehan notes that while the spot rate is 53.88 INR/USD, Melissa Andrews, GPN's Chief Economist expects the Rupee to trade at 54.12 INR/USD in 90 days.

During his conversation with Andrews, Sheehan asks about the driving factor behind depreciation of the Rupee in the recent past. Andrews explains that there are several theories to explain exchange rate movements. Personally, she prefers to focus on the long-term implications of fiscal policy. She then discusses the real exchange rate INR/USD_{REAL}. She feels that the real interest rate in India is expected to be higher than in the U.S. and the risk premium on INR investments will be similar to that of USD investments. She also states that India is following a more expansionary fiscal policy as compared to the U.S. and that policy is expected to continue. Sheehan observes that such deficits have resulted in large external debt relative to GDP for India.

Sheehan observes that over the past decade, capital controls in India have been loosened resulting in free flow of capital. Additionally, due to a relatively more restrictive monetary policy in India relative to the U.S., nominal interest rates have been substantially higher in India as compared to the U.S.

Question #43 of 98

Question ID: 485717

The most likely candidate for funding currency in the carry trade contemplated by Sheehan and the potential return on the carry trade is closest to:

	Funding currency	Expected return
✗ A)	**INR**	**6.95%**
✗ B)	USD	6.65%
✓ C)	USD	1.25%

Explanation

Indian Rupee has higher interest rate and hence would be the investment currency. USD, the counter currency, would be the funding currency. INR is expected to depreciate by [(1/53.88 - 1/54.12)]/(1/53.88) =0.44%

Potential Return on FX carry trade = interest earned - funding cost - depreciation of investment currency.

= (6.90/4) - (0.25/4) - 0.44 = 1.22% (note: 90-day holding period - hence divide the annual interest rates by 4). (Study Session 4, LOS 12.i)

Question #44 of 98

Question ID: 485718

The current mark-to-market value of the EUR forward contract is *closest* to:

- ✗ **A) -USD 15,889,620.**
- ✓ **B)** -USD 15,973,205.
- ✗ **C)** -USD 15,976,000.

Explanation

The contract calls for purchase of 200 million EUR in 30 days. To compute the mark-to-market value, we would have to use the quote on 30-day forward contract to sell EUR. Given USD/EUR quote structure, we should use the bid price (going up the quote).

$$V_t = \frac{(FP_t - FP)(\text{Contract size})}{\left[1+R\left(\frac{\text{Days}}{360}\right)\right]}$$

FP_t = 1.3110 + 3.18/10,000 = 1.31132
FP = 1.3912 (given)
R = 30-day USD interest rate (we are discounting USD, hence use U.S. interest rate) = 0.21%

$$V_t = \frac{(1.31132 - 1.3912)(200{,}000{,}000)}{\left[1+0.0021\left(\frac{30}{360}\right)\right]} = \frac{-15{,}976{,}000}{1.000175} = -15{,}973{,}205$$

(Study Session 4, LOS 12.d)

Question #45 of 98

Question ID: 485719

Regarding the valuation of INR, Andrews would *most likely* use:

- ✗ **A) Monetary approach**
- ✓ **B)** Portfolio Balance Approach
- ✗ **C)** Mundell-Fleming model

Explanation

Portfolio balance approach focuses on long-term implications of fiscal policy on exchange rate. Monetary approach focuses on implications of monetary policy while Mundell-Fleming model focuses on short-term implications of monetary/fiscal policies. (Study Session 4, LOS 12.l)

Question #46 of 98

Question ID: 485720

Based on Andrew's projections, under the capital account influences of the balance of payments, INR/USD_{Real} would *most likely*:

- ✗ **A) increase.**
- ✓ **B)** decrease.
- ✗ **C)** remain unchanged.

Explanation

Under capital account influences,
INR/USD_{Real} would decrease when $real_{INR} > real_{USD}$. (Study Session 4, LOS 12.j)

Question #47 of 98

Question ID: 485721

Based on the Mundell-Fleming model, relative to the USD, the INR would *most likely*?

✓ **A) appreciate.**

✗ **B)** depreciate.

✗ **C)** appreciate or depreciate.

Explanation

Under the Mundell-Fleming model, given high capital mobility, an expansionary fiscal policy combined with a restrictive monetary policy would lead to appreciation of the INR in the short-term. (Study Session 4, LOS 12.m)

Question #48 of 98

Question ID: 485722

Under the asset market approach to exchange rate determination, relative to USD, INR would *most likely*:

✗ **A) appreciate in the long-term.**

✓ **B)** depreciate in the long-term.

✗ **C)** appreciate in the short-term.

Explanation

Under the asset market (portfolio balance) approach, large levels of debt would lead to currency depreciation in the long-term. (Study Session 4, LOS 12.l)

Question #49 of 98

Question ID: 461870

Donna Ackerman, CFA, is an analyst in the currency trading department at State Bank. Ackerman is training a new hire, Fred Bos, a recent college graduate with a BA in economics.

Ackerman and Bos have the following information available to them:

Spot Rates		
	Bid Price	*Ask Price*
EUR/USD	1.0000	1.0015
GBP/USD	£2.0000	£2.0100
EUR/GBP	0.3985	0.4000

Ackerman and Bos are interested in pursuing profitable arbitrage opportunities for State Bank. What will be the profits from triangular arbitrage, starting with $1,000?

✗ **A) $248.46.**

✗ **B)** $245.65.

✓ **C)** $243.78.

Explanation

The EUR/USD and GBP/USD rates imply that the arbitrage free cross rates for the EUR/GBP are:
bid = 1.000/£2.0100 = 0.4975
ask = 1.0015/£2.0000 = 0.5008
Since the cross rates given (0.3985 − 0.4000) are outside of the arbitrage-free cross rates, profitable arbitrage is available.

It takes too few euros to buy 1 pound, so we want our arbitrage trades to go in the direction that will cause us to sell overvalued euros for pounds at the ask rate of 0.4000.
Start with $1,000.
Use the $1,000 to buy euros ($1,000 × 1.000/$) = 1,000.
Use the 1,000 to buy sterling (1,000 / 0.4000/£) = £2,500.
Use the £2,500 to buy dollars (£2,500 / £2.0100/$) = $1,243.78.

(Study Session 4, LOS 14.b)

Question #50 of 98

Question ID: 461931

Countries can increase labor productivity by:

- ✗ **A)** **increase in labor force participation rate.**
- ✗ **B)** increase in average hours worked.
- ✓ **C)** improvement in technology.

Explanation

Labor productivity can be enhanced by capital deepening and/or improvement in technology. Increase in labor force participation and average hours worked will increase the size of labor force but not labor productivity.
(Study Session 4, LOS 15.g)

Question #51 of 98

Question ID: 461969

Maldovia, an emerging market country in Latin America has joined a trade alliance. To comply with the terms of the alliance, Maldovian government is reducing farm subsidies and increasing taxes on environmentally unfriendly business practices in industrial waste treatment and mining industries.
Due to these changes, which Maldovian industries are least likely to shrink:

- ✗ **A)** **Food processing**
- ✓ **B)** Airline
- ✗ **C)** Mining

Explanation

Reduction in subsidy would shrink food processors as their costs increase. Mining industry would shrink due to additional taxes. Airline industry would be relatively unaffected by new regulations (nothing in the question suggests impact on airline industry).
(Study Session 4, LOS 16.i)

Question #52 of 98

Question ID: 461866

Today, the spot rate on pounds sterling is $0.6960 and 90-day forward pounds are priced at $0.6925. The forward discount/premium is:

- ✗ **A) premium of $0.0035**
- ✗ **B)** premium of $0.0005
- ✓ **C)** discount of $0.0035

Explanation

Premium (discount) = F-S = 0.6925-0.696 = -0.0035 (i.e., a discount).
(Study Session 4, LOS 14.a)

Question #53 of 98

Question ID: 461957

To combat childhood obesity, the city of San Francisco, CA banned fast food restaurants to bundle free toys with kids menu choices deemed unhealthy. The restaurants simply allowed customers an option to purchase toys at an insignificant cost in lieu of including it free.
This is an example of:

- ✗ **A) Regulatory failure**
- ✓ **B)** Regulatory arbitrage
- ✗ **C)** Regulatory capture

Explanation

Regulatory arbitrage occurs when the firms exploit the difference between the economic substance and interpretation of a regulation. Regulatory capture occurs when the regulatory body gets influenced (or even controlled) by the regulated industry. Regulatory failure is not defined in the curriculum.
(Study Session 4, LOS 16.d)

Question #54 of 98

Question ID: 461892

Given the following information, what is the forward exchange rate implied by interest rate parity?

- U.S. interest rate = 9%.
- North Korea interest rate = 10%.
- Spot rate = 1.65 KPW/$.

- ✗ **A) 1.635 KPW/$.**
- ✓ **B)** 1.665 KPW/$.
- ✗ **C)** 0.612 KPW/$.

Explanation

Forward rate (DC/FC) = Spot Rate (DC/FC) × [(1 + domestic rate) / (1 + foreign rate)],

Forward rate = 1 / 1.65 (KPW/$) × (1.09 / 1.10) = 0.60055 $/KPW, or 1.665 KPW/$.

Alternatively, forward rate = 1.65 (KPW/$) × (1.10 / 1.09) = 1.665 (KPW/$).
(Study Session 4, LOS 14.g)

Question #55 of 98

Question ID: 461939

Government incentives that encourage private investment in technology and knowledge are *most strongly* supported by the:

- ✗ **A) neoclassical growth model.**
- ✓ **B)** endogenous growth model.
- ✗ **C)** classical growth model.

Explanation

The endogenous growth model hypothesizes that expenditures on R&D and knowledge capital generate benefits to the economy as a whole, beyond the private benefit to the investing company. Under the endogenous growth model, the resulting increase in growth is likely to be enduring.
(Study Session 4, LOS 15.k)

Question #56 of 98

Question ID: 461877

Given currency quotes in DC/FC, if: $1 + r_{DC} < (1 + r_{FC})$(forward rate)/ spot rate funds will:

- ✗ **A) flow in and out of the domestic country.**
- ✗ **B)** flow into the domestic country.
- ✓ **C)** flow out of the domestic country.

Explanation

This equation is Interest Rate Parity rearranged! If the term on the left ($1 + r_{DC}$), is less than the term on the right, it means that the domestic rate is low relative to the hedged foreign rate. Therefore, there is a profitable arbitrage from borrowing the domestic currency and lending at the foreign interest rate. Because we lend in the foreign market, we say that the funds flow out of the domestic economy.
(Study Session 4, LOS 14.e)

Question #57 of 98

Question ID: 461895

Daniel Parthik has collected data that indicates that interest rates are expected to change for three countries as provided below:

Country	Real Interest rate	Risk premium
A	3%	0.5%

B	3.5%	1.5%
C	2.5%	1%

Assuming that the exchange rates are currently at equilibrium, which country would see their real exchange rate appreciate?

✗ **A)** **Country C**

✓ **B)** Country A

✗ **C)** Country B

Explanation

The difference in real interest rate and risk premium drive short-term real appreciation/depreciation of a currency. For country A, the difference is 2.5% while it is 2% and 1.5% for countries B and C respectively.

Question #58 of 98

Question ID: 461937

While having lunch with a group of friends, Francine Lenser, CFA, was overheard saying the following: "The recent boom in technological advances should keep the economy growing. Whenever the economy slows, someone will come along with a bold new idea that kick-starts it."

Lenser's statement *most accurately* reflects the:

✗ **A)** **neoclassical growth theory.**

✓ **B)** endogenous growth theory.

✗ **C)** exogenous growth theory.

Explanation

Lenser's statement is a decent layman's description of the endogenous growth theory. This theory argues that economic growth can continue indefinitely as long as technological advances are made.

Question #59 of 98

Question ID: 461918

Relative to the growth rate in potential GDP, the rate of appreciation in the aggregate stock market:

✗ **A)** **is the same in the short and long run.**

✗ **B)** can be higher in the long run but is the same in the short-term.

✓ **C)** can be lower in the short-term but is equal in the long run.

Explanation

In the short-term, appreciation in the aggregate stock market can be lower (or higher) than the growth rate in potential GDP. However, in the long-run, aggregate stock market appreciation should be equal to growth rate in potential GDP.
(Study Session 4, LOS 15.b)

Question #60 of 98

Question ID: 461959

Which of the following is *least likely* to be a purpose of regulating commerce:

✓ **A) Preserve integrity of stock exchanges.**

✗ **B)** Restrict unfair competition.

✗ **C)** Protect domestic industries from unfair foreign competition.

Explanation

Protecting domestic industries and restricting unfair competition are examples of purposes of regulating commerce. Preservation of integrity of stock exchanges is an example of regulating financial markets.
(Study Session 4, LOS 16.f)

Questions #61-66 of 98

RRT is a small democratic country in the South Pacific. Due to advantageous taxation rules it has grown rapidly over the last ten years as an influx of overseas investment gave rise to a significant financial services industry. Tom Wiggins, CFA, covers RRT for the investment firm he works for in the U.S. He correctly predicted RRT's rapid expansion and as a result his monthly research reports are widely distributed. He was recently referenced in a major academic journal as shown in exhibit 1

Exhibit 1 - Journal Extract

"...Wiggins, a prominent analyst who covers RRT, predicted the rapid growth in GDP before any of his peers. What is remarkable is that the growth rate was demonstrably higher than the steady state growth rate predicted by the neoclassical model that he himself is a proponent of. "

RRT is now facing a challenging period, however, as a high profile scandal has rocked the finance industry and is likely to lead to a series of sweeping reforms. The scandal centered on the two largest commodity futures exchanges which together processed 98% of commodity derivative transactions in the country. A whistleblower revealed that the market participants had colluded over a period of several years to keep spreads and commissions artificially high. There has also been a significant increase in insider trading cases, and an even more alarming increase in the number of such cases which have failed to result in a successful prosecution.

Regulation of the exchanges had been the responsibility of the Market and Trading Commission (MTC), a government agency which gained its authority from the Fair Market Trading Act (1992), a wide reaching but out-of-date piece of legislation that still governs the market today. The MTC in turn delegates responsibility to several other organizations. The two organizations that have been most heavily criticized as a result of the scandal are the Derivatives Trading Commission (DTC) and the Public Audit Commission (PAC).

The DTC is a self-regulating organization whose quoted mission is to 'protect market participants from abusive practices and promote transparent and competitive markets'. In carrying out this mission, the DTC has the power to prosecute under the Fair Market Trading Act and hand out fines of up to the equivalent of USD 50,000,000, in addition to custodial sentences.

The PAC was established by the previous government as a non-profit organization with the aim of overseeing the audit of all public companies. It is funded through a share of audit fees and staffed directly by the MTC.

The DTC has been criticized for failing to pick up on the market collusion and generally failing to utilize its powers to their full extent. The largest fine it has handed out to date is the equivalent of USD 2,500,000.

The PAC has had a troubled history since its formation. An independent review found that the audits of the companies accused of collusion failed to identify 'clear evidence' of collusion that they should 'reasonably' have been expected to uncover.

The PAC's response was that this kind of 'detective' work was not part of the statutory audit requirements and neither audit opinion was found to have been inappropriate.

The suggested reforms will take the form of a new piece of legislation to replace the Fair Market Trading Act (1992) and shake up the structure of market regulation. The reforms that Wiggins thinks will have the biggest impact if enacted are listed in exhibit 2.

Exhibit 2 - Potential Reforms

Proposal 14a.3 Maximum Spread/Commissions on Futures Transactions

The government has suggested putting a ceiling on spreads and commissions to limit the potential for the two exchanges to exploit their duopoly. Wiggins thinks that the limits are very low and the government may end up having to subsidize losses that the companies may make. His opinion is that the government is using the scandal as an excuse to reduce trading fees and attract trading to the country from overseas.

Proposal 15b.1 New Insider Trading Regulation

A new piece of legislation will seek to extend the definition of insider trading to cover a much wider range of situations. Two of the most debated points are as follows:

- Individuals in a non-business relationship who trade when aware of material non-public information passed on by someone other than a close relative may now be prosecuted.
- Individuals who trade when aware of material non-public information even if the trade was planned before gaining such knowledge may now be prosecuted

Proposal 18.d.5 Increased Disclosure Requirements for Hedge Funds and Private Equity Funds

Historically requirements in this area have been limited. New rules will require a large increase in the amount of reporting required for both type of funds, with a fund's prospectus and annual results likely to be subject to an independent audit.

Question #61 of 98

Question ID: 461961

In exhibit 1, Wiggins' prediction of the higher than steady state growth rate:

✓ **A)** **is possible if the economy is opened up to world trade**

✗ **B)** is possible as long as the saving rate in RRT is higher than its trading partners

✗ **C)** contradicts the neoclassical growth theory model

Explanation

The neoclassical model predicts that opening an economy to world trade will temporarily increase the rate of growth even if savings levels are low. (Study Session 4, 13.l)

Question #62 of 98

Question ID: 461962

Which of the following organizations is most likely to face conflict of interest issues?

✗ **A)** **The Public Audit Commission**

✓ **B)** The Derivative Trading Commission

✗ **C)** The Market and Trading Commission

Explanation

A conflict of interest issue is most likely to arise when an industry makes use of a self-regulating organization. In this scenario, only the DTC is an SRO. (Study Session 4, 14.b)

Question #63 of 98

Question ID: 461963

If Wiggins is correct about the government motivation for proposal 14a.3 in exhibit 2, then this is most likely an example of:

✗ **A)** **Regulatory arbitrage**

✗ **B)** Regulatory capture

✓ **C)** Regulatory competition

Explanation

This is an example of regulatory competition. The government in this case is using regulation to make the industry more attractive. Regulatory arbitrage will occur if entities shift trading to the country to take advantage of the fee caps. (Study Session 4, 14.d)

Question #64 of 98

Question ID: 461964

The new rules contained in proposal 15b.1 in exhibit 2 are most likely examples of the government intervening in the markets using:

✗ **A)** **a mandatory activity**

✗ **B)** a price mechanism

✓ **C)** a restriction on activities

Explanation

This is a restriction on a trading activity. (Study Session 4, 14.e)

Question #65 of 98

Question ID: 461965

The disclosure rules being implemented in proposal 18d.5 most likely suggest that:

✗ **A)** **regulations have historically focused on institutional investors**

✗ **B)** regulations have historically taken a buyer beware approach for retail investors

✓ **C)** regulations have historically focused on retail investors

Explanation

Hedge funds and private equity funds are the domain of institutional and sophisticated investors not retail. The previous lack of disclosure requirements suggest a focus on retail investing and a buyer beware approach for more sophisticated investors. (Study Session 4, 14.f)

Question #66 of 98

Question ID: 461966

Which of the following statements is most likely correct regarding the approach a government typically takes to competition?

✓ **A)** **Antitrust laws typically aim to restrict competition from overseas and promote competition domestically**

✗ **B)** Antitrust laws typically aim to promote competition from overseas and restrict it domestically

✗ **C)** Antitrust laws typically aim to restrict competition from overseas and domestically

Explanation

Typically a government will seek to promote competition domestically but at the same time restrict it from overseas. (Study Session 4, 14.f)

Questions #67-72 of 98

Calisto is a developed market nation with large natural resources, oil and precious metals, with growing financial markets. Calisto is a stable constitutional monarchy with elected representatives as the legislative body, appointed and legislative-majority approved judges as the judicial body, and the ruling royal family as the executive body.

Calisto is a member of COPA, an alliance of three bordering countries, Calisto, Olaguay, and Peristan, that formed a regional monetary union. The COPA currency is known as the 'copa' with the symbol COP.

As part of Calisto joining COPA Calisto has standardized their regulations and regulatory institutions. Regulatory standardization among the three countries was part of the prerequisite for each to join. The standardization covers most major governmental agencies but does not cover all industries. Calisto anticipates having to bear additional costs and loss of productivity in some of their business sectors. Oil and precious metal extractions are expected to be affected by environmental regulations.

Calisto has adopted the COPA Financial Intermediaries Standards (COPA FIS). COPA FIS covers all financial institutions: (1) commercial banks, (2) exchanges for bonds, stocks, commodities and derivatives, and (3) insurance companies and pension entities. The COPA FIS were rewritten as legislation by Calisto's representatives and passed unanimously as the Financial Intermediaries Standards Act of 2001 (FISA).

Calisto restructured their financial regulatory institutions into three different organizations with each institution serving as government recognized self regulatory organizations (SRO) for oversight and enforcement for the industry.

- Commercial Banking Standards Board (CBSB) - regulates all commercial banking including capital requirements, underwriting standards for loans and investments. Often coordinates policy and procedures with the independent Central Bank of Calisto (CBoC).
- Exchange Trading Commission (ETC) - regulates all exchanges including margin requirements, counterparty stipulations, transactional information, transparency rules and market making standards.
- Insurance and Pension Oversight Committee (IPOC) - regulates all insurance and pension related matters.

One example of an ETC regulation is: All companies listed on the Calistose Stock Exchange are required to furnish audited financial statements on quarterly and annual basis prepared by Calistose accounting firms. The accounting standards of Calisto are a combination of US GAAP and IFRS that is used throughout COPA.

Before ETC rules and regulations, Calisto's equities markets were less liquid. The volume of trades have increased significantly since ETC has become the self regulatory organization for financial markets. More Calistose citizens are buying stocks and listing of both Calistose and foreign stocks has risen significantly over the last ten years (2002 - 2012).

Calisto	2002	2012	2022 (est.)
Population (in millions)	45.8	55.2	65.1
GDP (in $ billions)	$1,240.0	$2,000.0	$3,280.0

Effective Income Tax Rate	19.5%	20.4%	22.5%
Savings rate (average is 10.0%)	10.0%	9.8%	9.5%
Number of listed stocks	120	1200	2400

Calisto has a three tiered progressive income tax rates of 10%/20%/30%. Sales tax rates are 5% on most goods except food items and higher tax rates on snack foods, tobacco, alcohol and luxury imports. Most food items are not taxed. Government revenues are derived from taxes and oil revenues from government owned lands.

Tobacco and alcohol consumption in Calisto has been on the rise over the last years. Over the same time period smoking rates have fallen in Olaguay, and Peristan. Olaguay and Peristan both have higher tax rates on tobacco products, government warnings on tobacco packaging and anti-smoking marketing campaigns. Tobacco companies have purposefully targeted Calisto by lowering prices because of the higher demand. Calisto government health leaders will combat the higher smoking rates by adopting similar measures of their COPA members or creating a COPA regional policy.

Fines and penalties for insider trading are prohibitive high. Individuals who are fiduciaries and represent financial firms who are caught for insider trading can face more severe punishment for themselves and their firms.

Question #67 of 98

Question ID: 461942

What type of regulation is the Financial Intermediaries Standards Act of 2001 (FISA)?

- ✗ **A)** **A judicial law.**
- ✓ **B)** A statute.
- ✗ **C)** An administrative regulation.

Explanation

FISA was an act written and passed by Calisto's legislative body. This is a statute. (Study Session 4, LOS 16.a)

Question #68 of 98

Question ID: 461943

A possible economic rationale for Calistose increase in demand for equities is that the regulation intervention has lowered:

- ✓ **A)** **informational friction.**
- ✗ **B)** externalities of public goods.
- ✗ **C)** the savings rate.

Explanation

Economic rationale for regulations is needed because of informational friction or externalities. Equities are not a public good so there are no externalities for equities. The savings rate did decrease but that is not an economic rationale of a regulation intervention it is the result of demand for equities. The higher requirements in financial disclosures lessen information asymmetry.
(Study Session 4, LOS 16.c)

Question #69 of 98

Question ID: 461944

The differences in the consumption of tobacco is *most likely* a result of:

- ✗ **A)** **regulatory capture theory.**

✗ **B)** using pricing mechanisms.

✓ **C)** regulatory arbitrage.

Explanation

Tobacco companies have noticed the differences in regulatory environment. Tobacco companies have found Calisto to be least restrictive for their product; less taxes, no labels and no anti-smoking advertising are all lower regulatory burdens for tobacco producers. Tobacco companies targeting Calisto is a form of regulatory arbitrage. Regulatory capture theory does not apply as there was no mention of tobacco companies or industry employees participating as tobacco regulators. The use of pricing mechanism did not curb tobacco usage.
(Study Session 4, LOS 16.d)

Question #70 of 98

Question ID: 461945

Which industry could possibly benefit from Calisto's regulatory changes?

✓ **A)** **Accountancy**

✗ **B)** Oil.

✗ **C)** Tobacco.

Explanation

Oil industry will be negatively impacted by environmental regulations. Tobacco industry will be negatively affected by Calisto government actions of adopting regional practices or forming a regional policy. Accountancy may benefit from required actions of companies wanting to list their stocks on Calistose Exchange, creating more demand for Calisto accounting services.
(Study Session 4, LOS 16.i)

Question #71 of 98

Question ID: 461946

The *most likely* reason for an increase in demand for equities stemming from ETC's regulations is that disclosure requirements lead to:

✗ **A)** **mitigation of agency issues.**

✓ **B)** higher investor confidence.

✗ **C)** fiduciary responsibilities.

Explanation

Disclosure requirements provide more transparency which promotes investor confidence.
(Study Session 4, LOS 16.f)

Question #72 of 98

Question ID: 461947

The *least likely* tool of regulatory intervention of the anti-smoking campaign is:

✓ **A)** **warning labels as restricting certain activities.**

✗ **B)** higher taxes as a price mechanism.

✗ **C)** anti-smoking advertisements as financing of private projects.

Explanation

Although higher taxes, warning labels on tobacco packages and anti-smoking advertisements are all part of the anti-smoking campaign, warning labels are not a restriction on smoking.
(Study Session 4, LOS 16.e)

Question #73 of 98

Question ID: 484166

A review of an existing regulation with a sunset clause has revealed that the net regulatory burden is less than the initial estimates. A possible reason for this is that:

- ✗ **A)** **regulatory burden was underestimated.**
- ✓ **B)** private benefits were underestimated.
- ✗ **C)** indirect costs were underestimated.

Explanation

The net regulatory burden is the difference between the regulatory burden and private benefits. Prior to implementation of the regulation, a potential net regulatory burden is estimated. A sunset clause requires regulators to use actual outcomes to see if the regulation should be renewed. This is a comparison between actual and estimated values. Only when private benefits are underestimated would the actual net regulatory burden be less than the estimated.
(Study Session 4, LOS 16.h)

Questions #74-79 of 98

West Lundia and Cragistan are neighboring emerging market nations. These two countries share a border and frequently trade with each other. Cragistan has abundant oil reserves and precious metals, both of which West Lundia lacks. Kurtenstein is a developed market nation that borders both West Lundia and Cragistan and is the largest trading partner for both the other two countries. Kurtenstein is a major buyer of Cragistan's unrefined petroleum and West Lundia's cheaper labor. All three countries are politically stable and have formed a regional monetary union, known as WICKA (West Lundia, Cragistan, Kurtenstein Alliance - pronounced 'wicka'). Their currency, the WiCKA Rand or WCK, is a free floating currency.
Exhibit 1 shows selected economic and demographic statistics are for the three countries and for the year 20X1.

Exhibit 1: Selected economic and demographic statistic for 20X1

	West Lundia	Cragistan	Kurtenstein
Population (in millions)	5.63	5.52	25.18
Labor force participation (in %)	64.50%	64.50%	71.20%
GDP (in $ billions)	$50.0	$50.0	$1,500.0
Share of capital in total GDP	40.00%	35.00%	20.00%
Average Hrs. per worker in labor force per yr	1690.0	1690.0	1898.0
Sovereign credit rating	A	A+	AAA
Savings rate (average is 10.0%)	12.5%	10.0%	5.0%
Imports (in $ billions)	$7.50	$15.00	$250.00

Exports (in $ billions)	$8.00	$20.00	$200.00

Analysts' projected 10 year estimates are provided in Exhibit 2. Cragistan's projected population growth is based on a slightly higher fertility rate but also a less restrictive immigration policy.

20X2 10 Year estimates	West Lundia	Cragistan	Kurtenstein
Population (in millions)	6.44	6.51	25.94
Labor force participation (in %)	68.50%	65.50%	72.20%
GDP (in $ billions)	$50.0	$50.0	$1,500.0
Average Hrs. per worker in labor force per yr	1794.0	1742.0	1908.4
Actual GDP (in $ billions)	$78.0	$82.0	$2,014.0
Long-term growth rate in technology	1.20%	1.40%	2.00%
Long-term growth rate of capital	4.80%	4.50%	3.00%

The forecasted growth rate in potential GDP for Cragistan and Kurtenstein are 4.4% and 3.0% respectively. The estimated long-term actual GDP growth rate for West Lundia is lower than its estimated potential GDP growth rate.
Monetary Policy:

- All three countries have relatively independent central banks.
- All three target inflation as a primary goal.

Fiscal Policy:

- West Lundia has a slight surplus and actively seeks to affect aggregate demand.
- Cragistan has a moderate surplus and may seek to affect aggregate demand.
- Kurtenstein has a slight deficit and does not actively affect aggregate demand.

International Trade:

- West Lundia is a net exporter.
- Cragistan is a net exporter.
- Kurtenstein is a net importer.

Financial Markets:

- Kurtenstein has well established high volume liquid equity and fixed income markets.
- Cragistan and West Lundia both have moderately liquid equity markets.
- Cragistan has a credit market with more volume and smaller credit spreads than West Lundia.

Question #74 of 98

Question ID: 485724

Based on the Cobb-Douglas growth accounting relation, the forecasted long-term growth rate in potential GDP for West Lundia is *closest* to:

✗ **A)** **5.1%.**

✗ **B)** 2.6%.

✓ **C)** 4.7%.

Explanation

The formula for growth rate in potential GDP = long-term growth rate of technology + α (long-term growth rate of capital) + (1 − α) (long-term growth rate of labor).

West Lundia	
LT growth rate for technology	1.2% (given)
LT growth rate in capital	4.8% (given)
α	40.00% (given)
1 - α	60.00%

LT growth rate in labor	
20X1 total labor hours	5.63 mil × 0.645 × 1690.0 = 6137 million hours
20X2 total estimated total labor hours	6.44 mil × 0.685 × 1794.0 = 7914 million hours
Annualized labor growth rate	$(7914/6137)^{(1/10)} - 1 = 2.6\%$

Long-term growth rate in potential GDP = 0.012 + (0.40) × (0.048) + (0.60) × (0.026) = 4.68%.
(Study Session 4, LOS 13.e)

Question #75 of 98

Question ID: 485725

As compared to Cragistan's long-term growth rate of labor, West Lundia's higher long-term growth rate of labor is *most likely* caused by the difference in the two countries':

- ✗ **A) immigration policies.**
- ✓ **B)** labor force participation rates.
- ✗ **C)** fertility rates.

Explanation

West Lundia has a slightly lower fertility rate and a less friendly immigration policy both leading to a lower expected population growth rate of 1.4% while Cragistan's population is expected to grow at 1.7%. West Lundia's growth rate of labor is caused by a higher labor force participation rate and an increase in the number of hours per worker.
(Study Session 4, LOS 13.g)

Question #76 of 98

Question ID: 485726

In which country would a restrictive monetary policy *most likely* be implemented?

- ✗ **A) Kurtenstein.**
- ✓ **B)** Cragistan.
- ✗ **C)** West Lundia.

Explanation

All three central banks target inflation. Cragistan appears to have a higher actual GDP growth rate than a potential GDP growth rate. To calculate the actual GDP growth rate input the following: PV = -50, FV = 82, N = 10 and solve for I/Y. The actual GDP growth rate is 5.1%; the potential GDP growth rate is given as 4.4%. Inflation is potentially a problem. Kurtenstein's and West Lundia's estimated actual GDP growth rates do not exceed their potential growth rates.
(Study Session 4, LOS 13.c)

Question #77 of 98

Question ID: 485727

Cragistan's potential GDP growth rate exceeds that of Kurtenstein's. Which difference in factors could help justify Cragistan's higher sustainable growth rate?

✗ **A) The free trade and unrestricted capital flows.**

✓ **B)** The savings rate between the two countries.

✗ **C)** The established financial sector intermediation.

Explanation

One precondition for growth is adequate savings and investment. A country with a higher savings rate is likely to have a higher potential growth since a country with a higher savings rate is less likely to need foreign investments for growth. Because both Cragistan and Kurtenstein are both part of the monetary union with a floating currency, there is no difference in free trade and restrictions on capital flows. Cragistan has a less established financial sector, but the difference in itself may not be a potential benefit or a potential issue.
(Study Session 4, LOS 13.a)

Question #78 of 98

Question ID: 485728

The evidence that supports the club convergence hypothesis includes, Cragistan's and West Lundia's:

✗ **A) savings rates, and population growth rates are stabilizing and becoming similar to Kurtenstein's rates.**

✓ **B)** institutions are becoming standardized according to regional monetary union guidelines.

✗ **C)** long-term growth rates are converging toward Kurtenstein's long-term growth rates.

Explanation

Under club convergence, countries can 'join' the club by making appropriate institutional changes. Both West Lundia's and Cragistan's adherence to regional monetary union standards show their willingness to join the developed nations' club. Emerging nations' long-term growth converging toward a developed country's long-term growth rates is part of the absolute convergence hypothesis. The conditional convergence hypothesis states that convergence in living standards will only occur for countries with the same savings rates, population growth rates, and production functions.
(Study Session 4, LOS 13.j)

Question #79 of 98

Question ID: 485729

If in Kurtenstein the growth in earnings relative to GDP is 0.50% and the growth of price-to-earnings is 0.8%, then the long-term aggregate equity growth rate is:

✓ **A) 3.0%.**

✗ **B)** 3.9%.

✗ **C)** 4.7%.

Explanation

Over the long-term, the growth in earnings relative to GDP is zero; labor will be unwilling to accept an ever decreasing share of GDP and the growth in P/E ratio will also be zero over the long term as the P/E ratio cannot grow indefinitely. Over the long run, the growth in aggregate stock market value should equal the growth in GDP.

(Study Session 4, LOS 13.b)

Question #80 of 98

Question ID: 461869

Given the following quotes for the Canadian dollar (CAD) and the British pound (GBP), the implied CAD/GBP bid-ask quotes are *closest* to:
CAD/USD 1.59031 − 1.59701
GBP/USD 0.69459 − 0.69686

- ✓ **A)** **CAD/GBP 2.2821 − 2.2992.**
- ✗ **B)** CAD/GBP 2.2992 − 2.3163.
- ✗ **C)** CAD/GBP 2.2895 − 3.2886.

Explanation

USD/GBP(bid) = 1/0.69686 = 1.4350
USD/GBP(ask) = 1/0.69459 = 1.4397

CAD/GBP bid quote is 1.4350 × 1.5903 = 2.2821
CAD/GBP ask quote is 1.4397 × 1.5970 = 2.2992

Question #81 of 98

Question ID: 461865

Given spot exchange rate of CAD/EUR 1.425-1.435, The spread is *closest* to:

- ✗ **A)** **10 pips EUR**
- ✗ **B)** CAD 0.0010
- ✓ **C)** CAD 0.010

Explanation

Spread = CAD 1.4350 − 1.4250 = CAD 0.010
(Study Session 4, LOS 14.a)

Question #82 of 98

Question ID: 461889

Professor Imada Suzaken made the following statement to his economics class: "If you can earn 8% on A-rated bonds in the U.S. but only 6% on similar bonds in Canada, Canadian investors may want to buy those bonds in the U.S. for the excess return. However, after collecting the extra dollars, the investors would lose those profits when they converted their gains into their home currency." Suzaken's statement *most accurately* describes:

- ✗ **A)** **purchasing-power parity.**
- ✗ **B)** covered interest rate parity.
- ✓ **C)** uncovered interest-rate parity.

Explanation

Uncovered interest-rate parity is the concept that exchange rates must change so that the return on investments with identical risk will be the same in any currency. Suzaken's statement reflects uncovered interest rate parity. Covered interest rate parity would be applicable if the investor hedges the foreign exchange risk via a forward exchange rate contract.
(Study Session 4, LOS 14.f)

Question #83 of 98

Question ID: 461909

Which technical analysis tool focuses on disclosure inadequacies in the foreign exchange markets?

- ✓ **A)** **FX dealer order books**
- ✗ **B)** Currency options markets
- ✗ **C)** Trend-following trading rules

Explanation

In forex markets, dealer order books have valuable inside information not available to general market participants. Technical analysis using FX dealer order books focuses on this market imperfection.

Question #84 of 98

Question ID: 461894

The return distribution of FX carry trade is characterized by:

- ✗ **A)** **negative skewness and negative excess kurtosis.**
- ✗ **B)** positive skewness and positive excess kurtosis.
- ✓ **C)** negative skewness and positive excess kurtosis.

Explanation

FX carry trade return distribution exhibits negative skewness and positive excess kurtosis.
(Study Session 4, LOS 14.i)

Question #85 of 98

Question ID: 461878

If the forward exchange rate is DC/FC 2 and the spot rate is DC/FC 1.9 when the foreign rate of return is 12% and the domestic return is 10%, which of the following statements would be *most* accurate?

- ✓ **A)** **Arbitrage is possible here, investors should borrow domestic, lend foreign.**
- ✗ **B)** Arbitrage is possible here, investors should borrow foreign, lend domestic.
- ✗ **C)** The arbitrage possibilities cannot be determined with the data given.

Explanation

Question 1: Is there an arbitrage opportunity?
If the result of the following formula (derived from rearranging the interest rate parity condition) is *not* equal to 0, there is an

arbitrage opportunity.

$(1 + r_{domestic}) - [((1 + r_{foreign}) \times Forward_{DC/FC})) / Spot_{DC/FC}] = ?$
Here, $(1 + 0.10) - [((1 + 0.12) \times 2.0_{DC/FC}) / 1.9_{DC/FC}] = (1.10 - 1.18) = -0.08$, which is not equal to 0. **Arbitrage opportunities exist**.

Question 2: Borrow Domestic (local) or Foreign?
Here are some "rules" regarding where to start the arbitrage (where to borrow). *These rules only work if there are no transaction costs and only if the currency is quoted in DC/FC terms.*
Rule 1: If the sign on the result of question 1 is *negative, borrow domestic*. If the sign is positive, borrow foreign. Here, the sign is negative, so borrow domestic.

Rule 2:
$(r_d - r_f) <$ (Forward − Spot) / Spot then Borrow Domestic
$(r_d - r_f) >$ (Forward − Spot) / Spot then Borrow Foreign
Here, borrow domestic:

$(r_d - r_f) = (0.10 - 0.12) = -0.02 <$ (Forward − Spot) / Spot $= (2.0_{DC/FC} - 1.9_{DC/FC}) / 1.9_{DC/FC} = 0.05$
$-0.02 < 0.05$

Summary: To take advantage of arbitrage opportunities, borrow domestic and lend foreign.
(Study Session 4, LOS 14.e)

Question #86 of 98

Question ID: 461955

Self regulating organizations that are recognized by the government and are given regulatory powers:

✓ **A) may be susceptible to political pressures from members.**
✗ **B)** are most effective in carry out objectives.
✗ **C)** are common in civil law countries.

Explanation

SROs that are given recognition and regulatory powers may be still subject to political pressure from their members. Independent SROs when properly supervised by regulatory agencies have been effective in carrying out the objectives of the regulation and use of independent SROs in civil-law countries is not common.
(Study Session 4, LOS 16.b)

Question #87 of 98

Question ID: 461933

The endogenous growth theory contends that economic growth is a function of which of the following two economic variables?

✗ **A) The subsistence real wage and real interest rates.**
✓ **B)** The creation of knowledge capital and real interest rates.
✗ **C)** Real interest rates and technological change.

Explanation

The endogenous growth theory holds that productivity growth is a function of society's ability to discover new products and methods (i.e., the creation of knowledge capital), and real interest rates.

Question #88 of 98

Question ID: 461929

Hemali is an emerging market economy where labor's share of GDP is 60%. The long-term trend of labor growth is 2%. Capital investment has been growing at 1.5% and is expected to continue at that rate in the future. Hemali has increased the budgetary allocation for primary and secondary education. Accordingly, economists estimate that labor productivity will increase by 2% per year.
The potential GDP growth rate for Shefali is *closest to*:

- ✓ **A) 4%**
- ✗ **B)** 5.5%
- ✗ **C)** 3.8%

Explanation

Using the growth accounting equation:
growth rate in potential GDP = long-term growth rate of labor force + long-term growth rate in labor productivity = 2% + 2% = 4%
(Study Session 4, LOS 15.e)

Question #89 of 98

Question ID: 461867

Which of the following statements about foreign currency bid-ask spreads is *least* accurate? Foreign currency bid-ask spreads:

- ✓ **A) increase as the size of the transaction decreases.**
- ✗ **B)** are a function of transaction volume and volatility.
- ✗ **C)** are influenced by time window in a trading day.

Explanation

Bid-ask spreads are size related in that the larger the transaction the *larger* the spread.
(Study Session 4, LOS 14.a)

Question #90 of 98

Question ID: 461879

One-year interest rates are 7.5% in the U.S. and 6.0% in New Zealand. The current spot exchange rate is USD/NZD 0.5500. If uncovered interest rate parity holds, the expected spot rate in one year must be *closest to:*

- ✗ ***A) USD/NZD 0.56675.***
- ✗ ***B)*** *USD/NZD 0.54233.*
- ✓ ***C)*** *USD/NZD 0.55778.*

Explanation

Uncovered interest rate parity is given by:
Expected Spot = 0.5500 × (1.075/1.06) = USD/NZD 0.55778

(Study Session 4, LOS 14.e)

Question #91 of 98

Question ID: 461910

Which technical analysis tool has utility in combination with FX carry trade to manage foreign exchange risk?

- ✗ **A)** ***FX dealer order books***
- ✗ **B)** *Currency options markets*
- ✓ **C)** *Trend-following trading rules*

Explanation

Even though trend-following trading rules have failed to generate superior portfolio returns lately (especially for developed markets currencies), they have utility in managing foreign exchange risk in a FX carry trade.

Question #92 of 98

Question ID: 461905

Under the Mundell-Fleming model and the asset market approach to exchange rate determination, a country following sustained expansionary fiscal policy would see its currency:

- ✗ **A)** ***appreciate in the short-run and appreciate in the long-run.***
- ✓ **B)** *appreciate in the short-run and depreciate in the long-run.*
- ✗ **C)** *depreciate in the short-run and depreciate in the long-run.*

Explanation

Under Mundell-Fleming model, a country running expansionary fiscal policy (i.e., running fiscal deficits) would attract foreign capital due to high interest rates and will see its currency appreciate in the short-run. Under the asset market approach, in the long-run sustained deficits will increase the risk of the country's debt and lead to a currency depreciation.
(Study Session 4, LOS 14.m)

Question #93 of 98

Question ID: 461880

The domestic interest rate is 9% and the foreign interest rate is 7%. If the forward exchange rate is DC/FC 5.00, what spot exchange rate is consistent with covered interest parity?

- ✗ **A)** ***4.83.***
- ✗ **B)** *5.09.*
- ✓ **C)** *4.91.*

Explanation

$Forward_{DC/FC} / Spot_{DC/FC} = (1 + r_{domestic}) / (1 + r_{foreign})$.

$Spot_{DC/FC}$ = $Forward_{DC/FC}$ $(1 + r_{foreign}) / (1 + r_{domestic}) = (5.00)(1.07) / (1.09) = 4.908$
(LOS 14.e, LOS type)

Question #94 of 98

Question ID: 461928

Shefali is an emerging market economy where labor cost accounts for 35% of total factor cost. The long-term trend of labor growth is 2%. Capital investment has been growing at 1.5% but is expected to grow at 3% in the future. Shefalian economy is expected to experience annual growth of 2.5% in total factor productivity. The potential GDP growth rate for Shefali is closest to:

✓ ***A) 5.15%***

✗ ***B)** 7.5%*

✗ ***C)** 4.85%*

Explanation

Using the growth accounting equation: growth rate in potential GDP = long-term growth rate of technology + α(long-term growth rate of capital) + (1 − &aplpha;) (long-term growth rate of labor)
= 2.5% + (0.65)(3%) + (0.35)(2%) = 5.15%
(Study Session 4, LOS 15.e)

Question #95 of 98

Question ID: 461873

Assume an investor living in Japan can borrow in the domestic yen (JPY) or in the foreign U.S. dollar (USD). Given the following information, determine whether an arbitrage opportunity exists. If so, how much would the investor profit by borrowing JPY 58,175,000 or the equivalent in USD? (Assume a period of one year.)

Spot rate (JPY/USD)	116.35
Forward rate (JPY/USD)	112.99
Domestic (Japanese) interest rate (%)	1.50
Foreign (U.S.) interest rate (%)	4.00

✓ ***A) An arbitrage opportunity results in a profit of JPY 292,825.***

✗ ***B)** An arbitrage opportunity results in a profit of JPY 27,963.*

✗ ***C)** An arbitrage opportunity results in a profit of JPY 25,170.*

Explanation

Step 1: Determine whether an arbitrage opportunity exists.

We can arrange the formula for covered interest rate parity to look like:

$(1 + r_{domestic}) − [((1 + r_{foreign}) × ForwardDC/FC) / SpotDC/FC] = 0$

If this condition holds with the financial data above, there are no arbitrage opportunities.

*(1 + 0.01500) − [((1 + 0.04000) × 112.99000) / 116.35000] = 1.01500 − 1.00997 = **0.00503***

Since the no arbitrage condition does not hold, we move on to:

Step 2: Borrow Domestic or Foreign?

The sign on the result of step 1 is positive, so borrow foreign.

$(r_d - r_f)$		(Forward − Spot) / Spot
(0.01500 − 0.04000)		(112.99000 − 116.35000) / 116.35000
-0.02500	>	-0.02888

Step 3: Arbitrage Process

Description	Rate	Calculation	Result
Calculate foreign equivalent & borrow this amount.	Spot	JPY 58,175,000 / 116.35000JPY/USD	USD 500,000
Invest Domestic at Domestic interest rate*		JPY 58,175,000 × (1 + 0.01500)	**JPY 59,047,625**
* This is the amount you will have available to repay the loan.			
Calculate loan payoff (foreign currency)		500,000USD × (1 + 0.04000)	USD (520,000)
Calculate payoff in Domestic currency**	Fwd	520,000USD × 112.99000JPY/USD	**JPY (58,754,800)**
**This is the amount you need to repay.			
Calculate Arbitrage Profit		JPY 59,047,625 − JPY 58,754,800	**JPY 292,825**

Question #96 of 98

Question ID: 461868

A bank in Canada is quoting CAD/USD 1.4950 − 1.5005, and USD/EUR 0.9350 − 0.9400. What is bid/ask exchange rate for CAD/EUR?

- ✗ **A) CAD/EUR 0.6254 − 0.6264.**
- ✓ **B)** CAD/EUR 1.3978 − 1.4105.
- ✗ **C)** CAD/EUR 1.5904 − 1.6048.

Explanation

The CAD/EUR bid quote is 1.495 × 0.935 = 1.3978
The CAD/EUR ask quote is 1.5005 × 0.940 = 1.4105
(Study Session 4, LOS 14.b)

Question #97 of 98

Question ID: 461967

A Swiss company is looking to acquire their main competitor based in Singapore. This acquisition could create a company that represents 55% of the market share. An analyst following this industry must be aware of potential anti-trust regulatory issues in:

- ✓ **A) both Singapore and Switzerland.**
- ✗ **B)** Switzerland.
- ✗ **C)** Singapore.

Explanation

Regulators in both countries can potentially block this acquisition. An analyst following the industry has to be aware of both countries' anti-trust regulations.
(Study Session 4, LOS 16.g)

Question #98 of 98

Question ID: 461919

Which of the following is least likely to affect the rate of appreciation of the aggregate stock market?

- ✓ ***A) Reinvestment of dividends***
- ✗ ***B)*** *Growth in Price earnings multiples*
- ✗ ***C)*** *Growth rate in potential GDP*

Explanation

The appreciation of aggregate stock market depends on GDP growth rate, growth of share of capital in GDP and growth in P/E multiples. In the long run, stock market appreciation depends only on GDP growth rate as the other two factors cannot increase (or decrease) in perpetuity.
(Study Session 4, LOS 15.b)