CHAPTER 34

INTRODUCTION TO CO...AND COMMODITY DERIVATIVES

1. (B) **Commodities that are subject to sudden and large demand shocks may exhibit backwardation in the futures market due to significant convenience yields.**

   Explanation

   Storage costs increase the price of commodities futures contracts. If a commodity is subject to demand shocks the benefit from holding the commodity is higher and hence the higher convenience yield may force the futures market into backwardation. Higher convenience yields reduce the futures price.

   (Module 34.1, LOS 34.f)

   Related Material

   SchweserNotes - Book 4

2. (A) **the basis for corn futures contract is negative.**

   Explanation

   When the futures contract is in backwardation, the spot price is greater than the futures price and the difference between the spot and futures price (i.e., the basis) will be positive. If the market is in backwardation, roll yield will be positive.

   (Module 34.1, LOS 34.e)

   Related Material

   SchweserNotes - Book 4

3. (C) **Copper.**

   Explanation

   Production of industrial metals such as copper has large economies of scale in mining and processing.

   (Module 34.1, LOS 34.b)

   SchweserNotes - Book 4

4. (B) **physical assets.**

   Explanation

   As opposed to financial assets such as stocks and bonds, commodities are usually physical assets. While commodities do not have any cash flows, they do have intrinsic value and can trade in spot markets.

   (Module 34.1, LOS 34.c)

   Related Material

   SchweserNotes - Book 4

5. (A) **rebalancing return**

Explanation

Rebalancing return is applicable on a commodity index (or portfolio) and is zero for a single commodity position.

(Module 34.2, LOS 34.g)

Related Material

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6. (C) **The collateral yield on a commodity futures position is negative if the convenience yield is lower than the storage cost.**

Explanation

The collateral yield is the return on the cash used to collateralize the futures position and is independent of the futures price.

(Module 34.1, LOS 34.f)

Related Material

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7. (C) **entail purchasing fewer contracts to maintain same value exposure to the commodity.**

Explanation

Contango markets have negative roll returns and entail purchasing fewer, higher-priced new contracts to replace the expiring lower-priced contracts.

(Module 34.2, LOS 34.g)

Related Material

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8. (A) **Livestock.**

Explanation

Historically, the US livestock industry has not been oriented towards export due to high spoilage risk. More recently, improvements in freezing technology have meant that livestock products (i.e. frozen meat) are now being traded globally.

(Module 34.1, LOS 34.b)

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9. (A) **The Insurance Theory.**

Explanation

Under the Insurance Theory, the shape of the futures price curve can be explained by producers of a commodity (i.e. market participants that are long the physical good) selling the commodity for Z future delivery in order to hedge their exposure to price risk. The Hedging Pressure Hypothesis extends the insurance perspective to include consumers who hedge long positions, not solely producers with short positions. The Theory of Storage links convenience yields to inventory levels.

(Module 34.1, LOS 34.f)

Related Material

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10. (A) **If the market stays in backwardation, the roll return will be positive regardless of the movement in spot price.**

Explanation

Roll return reflects the convergence of the futures price to the spot price. When the market is in backwardation (futures price below spot) the roll yield is always positive.

(Module 34.2, LOS 34.h)

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11. (A) **+$1,000,000**

Explanation

An oil refiner would be concerned about oil prices rising (i.e. input costs going up) and hence would hedge their exposure by choosing to receive the return on oil (i.e., the difference between the market price and $50) and pay the fixed $1. In this instance the net payoff is ($52-$50)-$1 = $1 per barrel (recall that the notional is 1 million barrels).

(Module 34.2, LOS 34.i)

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12. (C) **Wheat farmer looking to sell wheat forward.**

Explanation

The wheat farmer is looking to lock in the sales price of his product. This is a short hedge as the farmer will sell contracts. The airline is looking to undertake a long hedge and the hedge fund is looking to make an arbitrage trade.

(Module 34.1, LOS 34.d)

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13. (A) Coffee.

Explanation

Political risk is an important concern affecting the supply of oil. Political risk (especially union strikes and restrictive environmental regulations) affects the supply of industrial metals. Softs such as coffee are more affected by weather and disease.

(Module 34.1, LOS 34.a)

Related Material

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14. (C) Producers concerned about a potential drop in price of the commodity are taking hedging positions to lock in a sales price.

Explanation

Producers taking short hedges will force the futures price down and may well lead to backwardation. If manufacturers are taking out long hedges the term structure is likely to be in contango. High convenience yields would lead to backwardation.

(Module 34.1, LOS 34.f)

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15. (C) lower weight to oil.

Explanation

Production value weighted indexes have higher weight to energy (e.g., oil) as compared to equal weighted index.

(Module 34.2, LOS 34.j)

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