Stock Market Game Test

Answer Key and Rationale

1. A. Stocks and corporate bonds are riskier than guaranteed savings account and U.S government bonds, so it is only prudent to invest in stocks and bonds when the expected return on these securities is higher than the expected return on the less risky assets.

2. C. The $400 of dividends are added to the capital appreciation of $500, and that $900 is divided by the initial investment of $2,000 ($20 per share x 100 shares) to get the 45 % annual rate of return.

3. B. A basic definition. Earning profits and paying dividends may or may not cause stock prices to rise—depending on what investors expected profits and dividends to be. A stock split does not affect the overall value of the stock people hold.

4. B. Although stockholders accept risk by holding or purchasing stocks, they only do so because they expect the return they earn to be high enough to compensate them for taking that risk, relative to returns on sage forms of investment and savings instruments. The riskier a company is perceived to be, the higher the rate of return it will have to offer to attract stockholders.

5. D. Employees (including managers), suppliers, and bondholders are all paid off before stockholder if a firm declares bankruptcy and goes out of business.

6. D. The most basic idea of the efficient market hypothesis is that stock prices are set in very competitive markets and reflect all of the information that is publicly known about a company. That means, on average, even experts will not be able to pick portfolios that pay higher returns than those chosen at random. Stock prices will change over time, and some will rise while others fall, but only as a result of unknown and unexpected events, which even the experts do not know about in advance. The historical evidence on this theory, as it applies to the U.S. stock market, is mixed. Bt even if it is true, experts are still important in such functions as helping investors choose portfolios that march their individual investment objectives and financial circumstances, and in monitoring the performance of the top management at large corporations, this protecting stockholders' interests.

7. A. A tombstone advertisement announces new issues and the firms underwriting it, but details of the issue, the financial condition of the issuing firm, and how the funds secured with the issue are to be used, are by law provided in the prospectus.

8. D. Most investors are risk averse, but willing to accept some level of risk if the expected return is high enough. The level and kind of risk a person chooses to accept may well be influenced by such factors as their age, income level, and family size.

9. B. Stock prices are affected by expected future earnings and the overall condition of the firm, because stocks represent an ownership claim to a share of future earnings. A company policy that increased current profits by not maintaining buildings, equipment, or other assets might well lead to a decrease in stock prices, and not be in the stockholders' best interests.

10. D. This is the basic definition of insider trading, which is illegal in the U.S. Economists and financial analysts continue to debate over whether insider trading is good or bad in terms of the efficient operation of firms and the stock market

11. A. The owners of a corporation are the common stockholders (although in some cases preferred stockholders are also given some ownership rights, such as voting on the Board of Directors). Retained earnings are profits not distributed to stockholders as dividends, but instead reinvested is a business. That increases stockholder's equity, or what the stockholders stand to lost if the business should fail.

12. B. There is a time value of money, reflected by the fact that money received today can be deposited and earn interest, growing to a larger sum over time. Therefore, as long as the return on such deposits or other investment opportunities is greater than the expected rate of inflation, a dollar received or paid out sooner is worth more than a dollar received or paid out later. In real terms, having money sooner lets people buy and use goods and services sooner, rather than waiting. Apart from saving some funds to cover unexpected expenses ("rainy days"), and to prepare for large future expenditures such as the down payment on a house, children's college expenses, or retirement, most people are not willing to defer current consumption unless they expect to receive interest payments or profits that are high enough to compensate them for waiting. Those who borrow money to spend ore now have to pay interest to those who reduce their current consumption and lend the funds.

13. C. Corporations are net borrowers of funds, which they use to build factories, purchase equipment, etc. Therefore, other things being equal, higher interest rates represent a higher cost of doing business and reduce investment spending, which lowers expected future earnings and stock prices. Bond prices will also fall, but payments on savings accounts increase when interest rates rise.

14. C. Greater risk aversion implies that more funds will move into relatively safer options, such as federally guaranteed savings accounts, and out of riskier options, such as the stock and bond markets. That will cause stock and bond prices to fall, increasing the rate of return to investors who are still willing to accept these risks. The lower prices for stocks and bonds also reduce what corporations can expect to receive I f they offer new issues of these securities.

15. A. Repairing a machine to make existing products to be sold in existing markets is less risky and usually much less expensive than trying to expand market share for a current product. But in turn, working with a known product in known markets is usually much less risky than introducing an entirely new products, especially in foreign markets and countries with turbulent economies and unstable political systems, such as the former Soviet bloc.

16. C. The major stock exchanges are secondary markets, where existing securities are traded. Investment bankers—companies such as Goldman Sachs—negotiate a price with companies making new issues, then form syndicates with other companies to resell those new securities in much smaller blocks, at a slightly higher price, to individual investors and financial investment companies such as insurance companies and pension funds.

17. C. Using money or other resources to do one thing means not using them to do other things. Only the one thing you would have done if you hadn't made the choice you did—that is, the next-best alternative you gave up—is defined as your opportunity cost. Sometimes opportunity cost is a direct dollar amount, but often it is not. For example, you may choose to visit one friends instead of another, or to buy one painting that you value much more than the price you paid, instead of another painting that you also valued more than it's price.

18. A. The four basic categories of economic factors of production are land (natural resources), labor (human resources), capital (factories, machines, etc.), and entrepreneurship. Money and other forms of *financial* capital, such as stocks and bonds, are not directly productive—but only used to purchase the real factors of production.

19. D. Prices increase when demand increases or supply decreases, or both. Demand decreases and supply increases lower prices. In choices A and B, one factor is working to increase price and the other to decrease price, but we don't know which of those offsetting effects will be larger. We are only sure price will increase in D.

20. D. Economists define supply and demand as *schedules* showing how much people will sell and buy, respectively, at all different prices. So when the price of a product changes, its supply and demand schedules haven't changed, because we simply move to a different point on the overall schedule. There is only a change in supply and demand when the amount people will sell and buy changes at *all* different prices. In other words, the entire schedule changes. That can happen when something other than the product price changes. For example, the demand for stocks may increase if people's income ruses, leading them to buy more shares of stock than they did before, even when stock prices don't initially changes. This terminology admittedly sounds awkward and academic, but the terms describe every different kind of event, so it is important to have terms that distinguish between them.

21. D. As noted in question 20, an increase in supply lowers price, and interest rates are the price of loanable funds. At that lower price, other things being equal, businesses will find it profitable to undertake more investment projects, so more funds will be borrowed.

22. C. As explained in the key for question 17, the major stock exchanges are where existing securities are traded. These are defined as secondary markets, while new issues of stock and other securities are traded in primary markets. In a secondary market, when one person buys stock in the ABC Corporation, those funds are paid to the person who sold the stock, not to the corporation.

23. C. This is just another way of looking at the points raised in question 12. If we pay people more for delaying their consumption and saving, so those funds can be loaned to and used by others who are willing to pay this higher price, then other things being equal, the amount of savings will increase somewhat. However, in the U.S. in recent decades, the amount saved has only been mildly responsive to increases in interest rates.

24. B. Corporations issue bonds, as well as local, state, and federal governments. Both public and private bonds are a form of legal debt, promising payments of specific amounts on specific dates. Stock prices and dividend payments are not guaranteed. They can rise and fall over time, largely as a result of changes in a company's earnings.

25. B. Profits are a return for risk taking—producing a good or service and trying to sell it at a price high enough to cover the costs of production, while facing competition from other producers and products. High profits in the market for a particular product are signals that consumers would like to have more of that product produced, even at current prices. Unless there are barriers to entering the market, other producers will start producing the products to earn the higher profits, and this increased competition will bring profits in this market down, until they are in line with other investment opportunities that entail a similar level of risk. Later, if consumers find something else they would rather buy, prices and profits for the product will fall until some or all of the current producers leave the marker, and begin using the resources they control make the other things consumers now want more.

26. C. Accountants only count as costs things that are actually paid out in cash or checks, or which represent an anticipated future cost (such as depreciation on buildings and machines that will eventually have to be replaced). Economists consider any opportunity cost as a cost of doing business. That includes all accounting costs, and adds any implicit costs, such as some payment for the risk a firm's owners accept when they put out funds into the business, rather than using those funds to earn interest on guaranteed savings accounts or on very safe government bonds. Economists consider the level of profits that is just high enough to compensate owners for accepting these risks—without attracting entry by others—a cost of doing business. Profits greater than this level are called economic profits, and can only be earned in the long run if there are barriers to entry and markets are not perfectly competitive (see discussion previous question).

27. B. In this century, technological change has been the most important source of productivity growth in the U.S economy, but investments in capital goods and in better education and training of workers (which economists refer to as investments in human capital) have also been important factors. U.S. savings rates have fallen over much of this century, especially in recent decades, and especially in the public sector, where federal deficits were extremely large.

28. A. The Federal Reserve controls the nation's money supply, and in doing that has a major influence on credit markets and interest rates.

29. A. Productivity usually refers to labor productivity, which is measured as the national output of goods and services divided by the nation's labor inputs. As that ratio increases, average living standards and income levels rise. Put differently, higher labor productivity makes labor more valuable to employers, so labor can command a higher wage rate.

30. B. Profits as a return on investment, or stockholders' equity, typically fall in the 12 – 15 % range, both for all U.S. corporations and for the very largest industrial firms. This is the profit measure that focuses on profit as a return for risk-taking, and can be used to compare firms in different industries. Another often-reported measure of profits, as a return on sales, typically averages 4 – 5 % for all U.S. manufacturing firms. But the return-on-sales measure does not focus on what owners are risking in the business, it varies widely from industry to industry (depending largely on different patterns of inventory turnover in companies such as grocery stores vs. commercial aircraft producers), and cannot be measured at all in some key industries (such as banking). Therefore, economists do not accept profits as a return on sales as good general measure of profits.