

Question 1

First of all, to answer the question why are financial intermediaries useful we need to define the term. Financial intermediaries - are such institutions that accumulate surplus resources of economic agents and provide those agents, who have a shortage of financial resources, with them in the form of various kinds of debt obligations. For example, banks, credit unions, insurance companies, pension funds, stock exchanges, etc. are considered to be financial intermediaries.

A highly developed system of financial intermediaries can perform the role of an internal market regulator and stabilizer of the economy. The higher the level of development of the financial system, the more noticeable this role can be. If we are talking about the globalization of the financial system, financial institutions can play their economic role on a global scale.

But why exactly financial intermediaries are so important in regulating and stabilizing the economy? First, financial intermediaries allows to implement risk diversification through the distribution of investments in various types of financial instruments. Second, they allow to reduce credit risk by verifying the solvency of the borrower. They also simplify the process of finding creditors who can provide a loan on acceptable terms, which leads to the accumulation of funds and borrowers' demand for the large amounts being satisfied. Third, usage of an advanced system of financial intermediaries leads to the economies of scope and scale, meaning that these institutions reduce the costs of information production and transaction costs of lending and borrowing. Fourth, financial intermediaries also facilitate such processes like maturity transformation, which is conversion of short-term liabilities (deposits) to long-term assets (loans), or asset transformation, which refers to the process of risk sharing or turning risky assets to safer ones, that also stabilizes the economy.

It all means, that creating an effective infrastructure of financial intermediaries will provide an efficient system with fair pricing with low-risks, secure system of control and proper funding.

Question 2

In the table "Primary Assets and Liabilities of financial intermediaries" we see how different types of financial intermediaries raise and use their funds. Banks (o depository institutions), for example, make different kinds of loans and accept deposits. Over time the distinction between subtypes of depository institutions have blurred, because their functions are quite alike, since they provide business and consumers with funds, while collecting resources in the form of deposits. Contractual savings institutions, like insurance companies and pension funds, acquire funds on a contractual basis periodically. Since insurance companies and pension funds usually have enough information to predict the amount of benefits they will have to pay out, liquidity of the assets is less important to them than to banks and that's why they invest in long-term securities. Most of investment intermediaries (finance companies, mutual and hedge funds) raise funds by issuing or purchasing stocks and bonds, they use invest their resources in financial instruments, foreign currencies and other assets.

Today financial intermediaries' role is becoming more and more important. Data shows that since 1980 value of asset for each type of financial intermediaries grew increasingly over the years. That can be easily explained if we recollect the functions they perform, which are reduction of transaction costs including through economy of scale, maturity and liquidity transformation, risk sharing and diversification, reduction of asymmetry of information, etc. Each of these functions helps to facilitate the operation of financial markets and economy on the whole.

Question 3

To see the difference between bonds and stocks, we need the definitions of the terms. Stock is a type of security, which fixes the rights of its owner (or shareholder) to receive part of the profits of the company which issued them in the form of dividends, and/or participate in the management of this company, and even receive a portion of the property after company goes bankrupt. Bond is a type of a debt security, which gives its owner the right to receive from the issuer of the bond within the agreed period of time its nominal value in cash or another asset, and/or receive interest from its face value (coupon), or other property rights.

These securities differ, especially from the purchaser point of view. First, the holder of a share is a co-owner of a joint-stock company, while the holder of a bond is a creditor. Thus the shareholder has a right to vote at the general meeting of shareholders, while the owner of the bond does not, though in most of the cases a shareholder has none or insignificant power in company management unless he has a large proportion of shares.

Second, stock is an irredeemable or undated asset, it exists while the joint-stock company is working, but bond is a term security and is issued for a strictly fixed period of time. Also earnings on shares are not fixed and depend on the profit of the joint-stock company, when for bonds a strictly established amount is paid. For a purchaser of these securities it means that the amount of money he can benefit will be calculated differently.

Thus, shares are one of the most risky and profitable investment products. Their acquisition does not guarantee a stable income, usually a purchaser benefit more from reselling a share that increased in price more than from dividends that share gives him a right for. At the same time investments in bonds are reliable and can be recommended for those who are interested in safety of capital with a low level of income.

Question 4

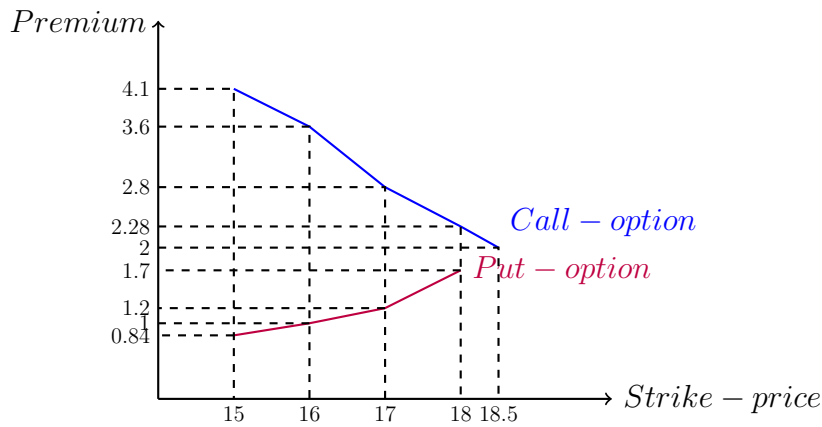
Starting with the definitions of these terms, we have:

A call option is a financial agreement between two parties, a buyer, who can purchase the agreed amount of securities in the future at a price specified in the contract (strike-price) or to refuse such a purchase, and a seller, who must sell these securities at strike-price if the buyer so decides.

A put option is a contract, that gives the buyer the right (but not the obligation) to sell a certain amount of the underlying asset to the option seller at a fixed price (strike-price).

A European, put or call, option gives a right to purchase or sell an asset at expiration date, while a holder of an American option may exercise the option at any time before the expiration date. The yield on an option for parties depends on the change in the market price of the underlying asset.

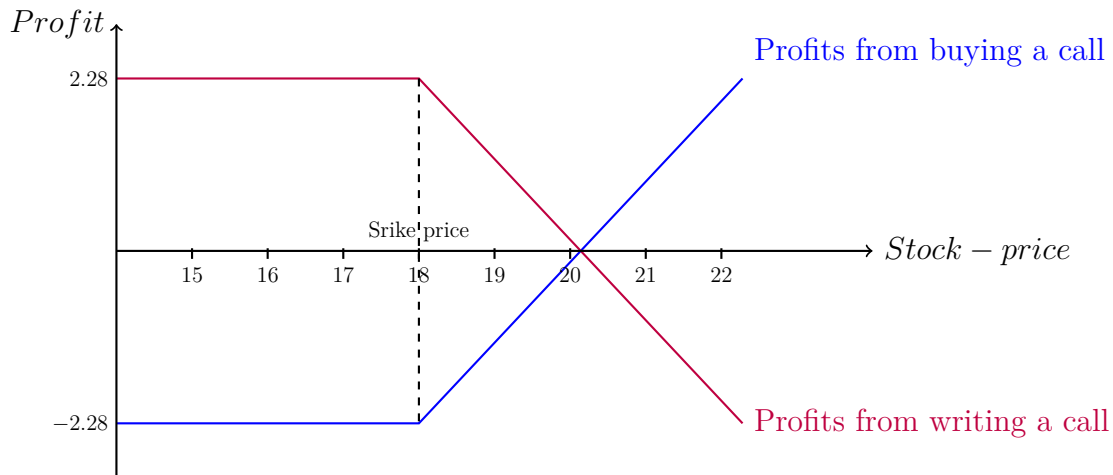
1. In our case we have European options on Ford Motor Company, with call option premium and put option premium as a function of the strike price represented on a graph:



2. Assume that an investor buys call options 18 for 2.28 premium.

Now an investor has a right to purchase, let's say, 100 shares of Ford in the end of January, 2014 at 18 USD or to refuse to do that, depending on a market situation, while Ford must sell these securities at 18 USD if the buyer decides so.

That situation can be shown on a graph:



The call option is beneficial for a buyer in a situation where the price of the underlying asset grows in the future, approaching the estimated value. The financial risk is limited by the the premium paid. The buyer of the call option hopes, that the price of Ford shares will grow higher than 18 USD by end of January, 2014. When the current value of securities exceeds the estimated value, the option is executed, or "converted" into money.