
Off-exchange market, financial instruments

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Off-exchange market

- Off-exchange market exists in organized or unorganized form.
 - Its operations are limited by directions or rules but there are more moderate than in exchange market.
 - Off-exchange market is a competitor of exchange market.
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Off-exchange market

- Existence and function of off-exchange market is determined by several circumstance:
 - Strict conditions for quotation of financial instruments in exchange market. For instruments that do not fulfill quotation in exchange market is off-exchange market alternative way for trading, liquidity and pricing of issued instruments.
 - Trading in stock exchange is determined by schedule. After exchange hours is possible to trade only in off-exchange markets (some of them trading 24/7).
 - Off-exchange market uses as a competitive tool
 - lower transactional payments, or
 - favorable trading conditions for particular investors (ARIEL, TRADEPOINT, etc. – trading system for institutional investors with lower transactional costs).

NASDAQ

- Organized off-exchange market in USA is supported by electronic system NASDAQ (*National Association of Security Dealers Automated Quotations*) –quote driven system.
- Nowadays in NASDAQ is traded with
 - More than 3000 stock emissions
 - More than 2000 debt emissions
- There is more than 500.000 traders and about 500 market makers.

NASDAQ

- Trading system in NASDAQ works in several levels.
 - Lower level (the cheapest) – offers the flow of information through information agencies Reuters or Quatron. There are no to disposal of information about quotation of market makers.
 - Upper level – information about quotations of market makers. It is possible to trade with them.
 - Top level (the most expensive and the larges) - function as a market maker, bids and offers in which market maker must trade.
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NASDAQ

- Conditions for quotation in NASDAQ
 - Minimal volume of emission – 4 millions USD
 - Minimal number of public trade securities in emission:
 - 100.000 securities – segment of small companies
 - 500.000 securities
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Specific market segments in NASDAQ

- Nasdaq National Market
 - More strict condition for trading
 - More traded securities – blue chips
 - SmallCap Market
 - Segment for small, new starting companies
 - SOES (*Small Order Execution System*)
 - Trading to 1000 securities
 - Guarantee of the best price in the market
 - Nasdaq International
 - Trading in standard (London) time
 - NASDAQ Canada, NASDAQ Japan, NASDAQ Europe.
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Investment instruments and their characteristic

- Investment instrument
 - Asset that brings claim for future revenue.
 - Revenue is in the form of:
 - Dividends
 - Coupon payments
 - Interests
 - Exchange rate profits
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Financial instruments

■ Stocks

- Long term security without maturity day.
- Type of stocks
 - Primary stocks
 - most widespread and most traded
 - Prior stocks
 - Limited voting rights, priority for dividends
 - In USA two types of prior stocks. Common and cumulative prior stocks.
 - Common prior stocks – dividends only if company gets profit.
 - Cumulative prior stocks – lower dividend payment but commutation of dividend payment claims in years when company get loss. Cumulated claims from bad years are paid out in good years.

Financial instruments

■ Bonds

- Debtor security with right to redemption of amount due and duty of issuer to settle a claim.
- Maturity day is fixed.
- Short-term bonds – several months
- Long-term bonds – till 30 years
- Issuer of bonds undertakes to
 - redeem face-value of bond and
 - pays coupon payments in regular intervals.
- Coupon payment has several forms:
 - Fix interest rate
 - Difference between face value and emission price
 - Variable interest rate derivates from different interest rates or revenues, foreign exchange rates, etc.

Financial instruments

- Types of bonds

- Straight Coupon Bonds

- The oldest type o bond.
 - It is also known as a Vanilla Bond.
 - Purchase of this bond investor gets right to fixed coupon payment and face value that are paid in same moment in maturity day.
 - For investor is this type of bond profitable in non-inflation settings and in time of interest rate decrease.
 - For issuer is this type of bond profitable in inflation settings and in time of interest rate increase.
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Financial instruments

- Floating Rate Notes – FRN
 - Bonds with floating coupon payment.
 - The high of coupon payment is very often derived from determine referential value (PRIBOR, LIBOR, BRIBOR, etc.).
 - Interbank referential rate is only starting point for coupon payment. To this variable level is very often crediting fixed premium (6M PRIBOR + 0,1%).
 - Coupon payment imitates with delay the development of market interest rates. Investor participate in the growth and decline in market interest rate (risk and chance).
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Financial instruments

- In same types of FRN there are strictly defined borders for movements of coupon payments.
 - Floor FRN minimal border for decline of coupon payment.
 - Cap FRN maximal border for growth of coupon payment.
 - Minimax FRN maximal and minimal border
 - Droplock FRN in interest rate decline under determine border FRA is converted into Straight Coupon Bond.

Financial instruments

■ Zero Coupon Bonds

- Bonds without coupon payment.
- This type of bond is issued with discount it means that issue price is lower than face value.
- In the maturity day is paid back face value.
- The profit for investor is difference between issue price and face value.

■ Index-Linked Bonds

- Coupon payment is determined by development of some index - wages, prices, oil or some market index.
 - With real indexing
 - Development of index-linked bonds is determined by changes in real asset prices.
 - During growth of inflation the price of most real assets is growing this bonds retain value in high inflation conditions.
 - With financial indexing
 - Development of index-linked bonds is determined by changes in financial instruments prices e.g. stock index.
 - Example – bear and bull index linked bond – in German capital market

Financial instruments

- Mortgages bonds
 - Municipal bonds
 - Convertible bonds
 - This bond links classical bonds rights with right to convert this bond into another
 - Bond or
 - stock of the same issuing company
 - Investor into this convertible bond must decide in particular day if
 - converts bond into another instrument or
 - retains bond till maturity when takes face value and regular coupon payments.
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Financial instruments

- The coupon payments of this bond are lower than in case of standard bonds.
 - In situation when investors assume that stocks of issuing company are underestimated and expected growth in their price.
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Financial instruments

- Subordinated bonds special type of bonds in case of liquidation or bankrupt the claims of owner of subordinated bonds will be satisfied after satisfaction of all other claims.
 - The best know subordinated bonds are follows:
 - Junk Bonds
 - Bonds of poor quality
 - Rating in level of speculative (Ba, BB, B)
 - Issued by
 - companies where occur decline in financial situation – Fallen Angels or
 - young, starting companies with high risk profile
 - Junk Bonds
 - High risk but also above-average revenue
 - The value of Junk Bonds reacts to sensitive in economy cycle
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Financial instruments

- ❑ Callable Bond

- According to predefined conditions can be withdraw in undetermined day by issuer or investors.

- ❑ Perpetuity Bond

- Without maturity
 - Coupon payments for unlimited period
 - Issued usually by government
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Rating

- Revenue that is expected from particular bond is derive from level of risk related with particular bond.
- For appreciation of credit risk is used rating.
- Credit risk – depends on issuer and his possibility to repay obligation.
- Rating offer information how is particular subject able to fulfill one's engagements in time and in full extent.

Rating

- First rating is related with debenture bonds of railway companies in USA. Made in 1909 by John Moody.
 - In 1914 first rating company Moody's Investor Service.
 - In 1916 rating company Standard & Poor's.
 - The development of rating from the 1960's-70's in USA and 1970's – 1980's in Europe.
 - The first activities was related with rating of debenture bonds and bill of exchange.
 - Nowadays rating companies carry out rating of
 - Bonds, mortgages, derivatives or instruments as a result of securitization.
 - Companies, cities, countries, etc.
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List of Ratings

Credit Quality	DBRS		Moody's		S&P		
	Long Term	Short Term	Long Term	Short Term	Long Term	Global CP Scale	Canadian CP Scale
Superior	AAA	R-1 high	Aaa	P-1	AAA	A-1+	A-1 (high)
	AA high	R-1 high	Aa1	P-1	AA+	A-1+	A-1 (high)
	AA	R-1 mid	Aa2	P-1	AA	A-1+	A-1 (high)
	AA low	R-1 mid	Aa3	P-1	AA-	A-1+	A-1 (high)
Good	A high	R-1 low	A1	P-1	A+	A-1	A-1 (mid)
	A	R-1 low	A2	P-1	A	A-1	A-1 (mid)
	A low	R-1 low	A3	P-2	A-	A-2	A-1 (low)
Adequate	BBB high	R-2 high	Baa1	P-2	BBB+	A-2	A-1 (low)
	BBB	R-2 mid	Baa2	P-2	BBB	A-2	A-2
	BBB low	R-2 low	Baa3	P-3	BBB-	A-3	A-3
Speculative	BB high	R-3 high	Ba1	Not Prime	BB+	B	B
	BB	R-3 high	Ba2	Not Prime	BB	B	B
	BB low	R-3 high	Ba3	Not Prime	BB-	B	B
Highly Speculative	B high	R-3 mid	B1	Not Prime	B+	C	C
	B	R-3 mid	B2	Not Prime	B	C	C
	B low	R-3 low	B3	Not Prime	B-	C	C
	CCC	R-3 low	Caa	Not Prime	CCC	C	C

Financial instruments

- Options

Options are financial instrument which give the holder the right, but not the obligation, to buy (call) or to sell (put) an underlying asset at a predetermined price (exercise price or strike price) on or up to a certain date (European or American exercise style).

Financial instruments

- Underlying assets
 - The option derives its price from the value of an underlying asset. This can be a
 - stock,
 - index,
 - basket or any other financial asset.
 - A basket is a group of two or more assets, such as shares or indices.
 - Usually baskets have an investment theme, commonly a region or a sector (such as shares of banking or telecommunications companies).
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Financial instruments

- European and American style
 - Options can be classified as a European or American style according to holder may use its right to receive payment.
 - European style holder can use its right only in particular predetermined maturity day.
 - American style holder can use its right on any business day till particular predetermined maturity day.
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Financial instruments

- First option exchange was established in 1973 in Chicago.
 - Chicago Board Options Exchange
 - About 60 % of all option trades is in North America
 - About 30 % in Europe and the rest is Asia
- According to embodied right
 - Call Option – right to buy underlying
 - Put Option – right to sell underlying
- Premium
 - The price of option

Financial instruments

- **Motions to use options**
 - Speculation
 - bear or bull market trend
 - Hedging, especially
 - Interest rate risk
 - Exchange rate risk
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Financial instruments

- Call option

- A call option is an financial instrument which gives the holder the right, but not the obligation, to buy an underlying asset at a predetermined price (exercise price or strike price) on or up to a specified date (European or American style).
 - A call option gives the holder the possibility to benefit from an increase in the value of the underlying asset, while limiting potential losses to the premium paid.
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Financial instruments

- A put option is a financial instrument which gives the holder the right, but not the obligation, to sell an underlying asset at a predetermined price (exercise price or strike price) on or up to a specified date (European or American style).
 - A put option gives the holder the possibility to benefit from a decrease in the value of the underlying asset, while limiting potential losses to the premium paid.
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Financial instruments

- In case of put or call options there are different expectations between buyer and seller.
- According to character of trade:
 - Exchange trading options
 - Off-exchange trading options
- Exchange trading options are traded together with financial futures in derivative exchanges from the 1970's. All options parameters are standardized:
 - Underlying, exercise price, maturity day
- Off-exchange trading options are designed according to investor requirements, esp. to hedge against risks.

Financial instruments

- Warrants

A call warrant is a tradable security which gives the holder the right, but not the obligation, to buy an underlying asset at a predetermined price (exercise price or strike price) .

- A put warrant is a tradable security which gives the holder the right, but not the obligation, to sell an underlying asset at a predetermined price (exercise price or strike price).

Financial instruments

- Warrants are in some characteristics similar to options but there are also differences:
 - Warrant is security issued by one issuer
 - Option is not security and it is issued by more persons.
 - Warrants are traded in spot markets, are not under strong standardization and offer several types of underlying.
 - Options are traded in future exchanges, are under strong regulations and types of underlying are limited.
 - Warrants has duration several years
 - Option has duration several months
 - Number of issued warrants is fixed determined
 - Number of options is daily changeable.
 - According to right dominates call warrants
 - Number of call and put options are almost similar
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Financial instruments

- Warrants has been traded since 1850's.
 - The interest of investors has increase since the 1980's.
 - Motivations to use warrants
 - Hedging of current low price of financial instrument for future buy.
 - Hedging of current high price of financial instrument for future sell.
 - Speculation for future bull or bear market – leverage effect.
 - Leverage effect
 - Investor profit from warrant investment can rise in some conditions quicker than profit in particular rising underlying.
 - The reason is that investor invest less money in warrant then is direct investment in underlying.
 - But leverage effect works in both ways in decline of underlying the decline in warrant price is higher.
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Financial futures

- Financial futures contract is a standardized contract, traded on a futures exchange, to buy or sell a certain underlying instrument at a certain date in the future, at a specified price. The future date is called the delivery date or final settlement date. The pre-set price is called the futures price. The price of the underlying asset on the delivery date is called the settlement price.
- A futures contract gives the holder the obligation to buy or sell which differs from an options contract.
- Financial futures contracts are not issued but it is necessary to meet buyer and sell of contract their contract is according to parameters and conditions similar.
 - This process is called as a matching.

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Financial instruments

- Real assets
 - Financial instruments in physical, material form.
 - Advantages of investment in real assets
 - Hedging against inflation
 - Diversification in portfolio
 - Hedging against political uncertainty
 - Revenues
 - Disadvantages
 - High transactional costs
 - Spread between bid and offer about 20-25% in financial assets spread about 0,5-2 %.
 - Non-existence of liquid and effective market
 - Volatility of revenues in short time period
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Financial instruments

- Precious metals, especially
 - Gold, platinum, palladium and silver
 - The revenues from precious metals are volatile and investment in precious metal is related with higher risk.
 - Investments in gold instruments
 - Nowadays in the world there is about 150 000 tonnes of gold, yearly is mined about 1600-2000 tonnes.
 - Investment in gold instruments are in form of
 - Direct investment -goldbrick, ingot
 - Indirect investment - “paper gold” - stocks of mining companies, gold bonds, etc.
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Financial instruments

- Direct investment
 - Centers: London, Zurich, NY, Hong-Kong, etc.
 - Spot or future trades
 - Spot trades
 - Physical buy of goldbrick, ingots with delivery till 2 days
 - Investor can gold takes physically or deposit in bank -> gets certificate about proprietorship.
 - With spot trading of gold are related storage and insurance costs about 2-3% per year.
 - Standard goldbrick weights 400 troy ounce (12,44 kg) and it is called bar.
 - For retail investors are created tola bars on Ten tola bars with weight about several grams.

Financial instruments

- Future trades in form of
 - Gold swaps, gold loans and gold forward sales
 - Traded in OTC markets
 - Main traders: gold producers, central banks and dealers.
 - Gold loans
 - Financing of gold mining, used since 1982. Before gold mining a mining company borrow gold that sell and moneys uses for gold mining financing.
 - Mined out gold is used as a payment for loan.
 - Forward sales are used by mining companies to sell gold that will be mined in several years.
 - Main purpose is a hedging against decline in gold price.
 - Forward sales are mediated by banks called bullion banks.
 - This bank borrows (usually from central bank) gold in volume that is expected to be mined and sell then in spot market.
 - Money from transaction are deposited in money market.
 - Several mounts later mining company returns mined gold together with interest payment to central bank.
 - Mining company bets back financial resources from activity in money market together with interest payments minus interest payments paid central bank and provision for bullion bank..
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Financial instruments

- Investing in stocks of gold mining companies
 - The value of gold mining companies is determined by development of price of gold.
 - Movements of these stocks are determined by leverage effect it means that 1% change in price of gold effect several percentage change in price of gold mining companies stocks.
 - Beside price of gold these stocks are determined by
 - Mining costs, political and economical situation in the country, labour costs, etc.
 - Gold bonds
 - Index bonds that developments related with development of price of gold.
 - The best know – France government issue – Pinay and Giscard.
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Financial instruments

- **Diamonds**
 - The most of diamond supply is under control of South African company DeBeers Consolidate Mines Limited that
 - keep 1/3 of all diamond mine.
 - Control about 75 % of world trade with not-cuttet diamonds.
 - **Real Estates**
 - **Arts**
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