



Equity Trading

Jan Oplatek



Stock

- Share ownership in a company
- Claim on the company's assets and earnings
- Shares / stock / equity



Stock types

- Common stock
- Preferred stock
- Different classes of stock
- Treasury stock



Common stock

- Equity ownership
- Voting rights
 - Corporate policy
 - Members of Board of Directors



Preferred stock

- Equity ownership
- Rights:
 - Preference in dividends
 - Before a dividend can be declared on the common shares, any dividend obligation to the preferred shares must be satisfied.
 - Dividends rights are often cumulative
 - Usually fixed dividend amount



Preferred stock

- Claim on liquidation

- par value or liquidation value associated with it
- claim is senior to that of common stock

- Protective provisions

- prevent the issuance of new preferred shares with a senior claim
- Individual series of preferred shares may have a senior, pari-passu or junior relationship with other series issued by the same corporation



Preferred stock

- Voting right

- Usually no voting rights associated
- Special voting rights to approve certain extraordinary events
 - issuance of new shares or
 - the approval of the acquisition of the company
 - elect directors



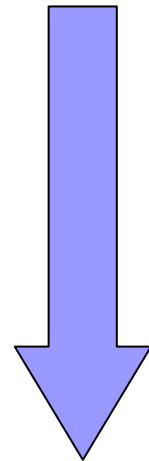
Preferred stock

- **Callable**

- Issuer has the option to purchase the shares from shareholders at anytime for any reason (usually for a premium)

Common & Preferred stock

	Class
Debt	Secured Debt
	Unsecured Senior Debt
	Unsecured Subordinated Debt
Equity	Preferred Stock
	Common Stock





Why issue preferred stock?

- Balance Sheet management
 - Keep low debt-to-equity ratio
- Ratings
- Investor preferences
- Capital Adequacy ratio
 - Cheaper issue than common
 - Tier 1 = common eq. + reserves + pref. Eq.

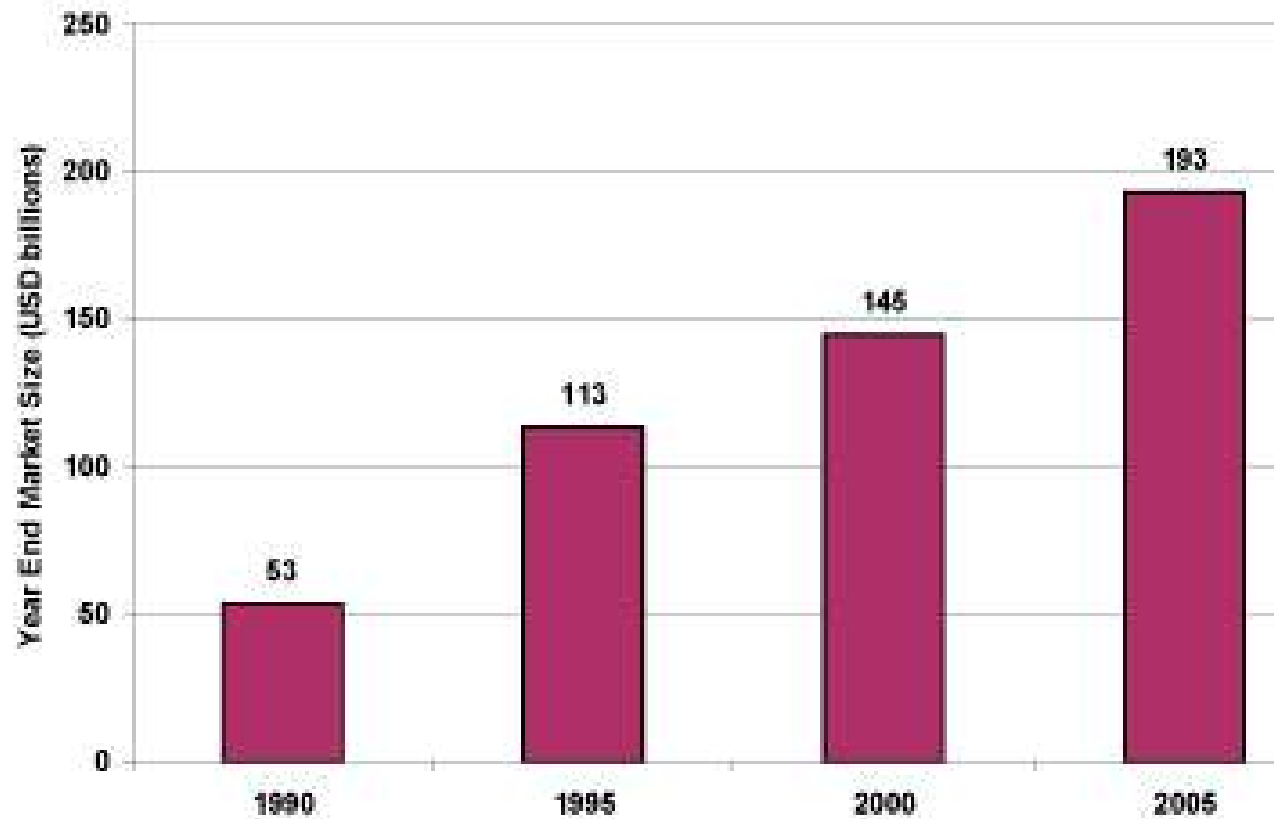


Preferred stock market

- US market

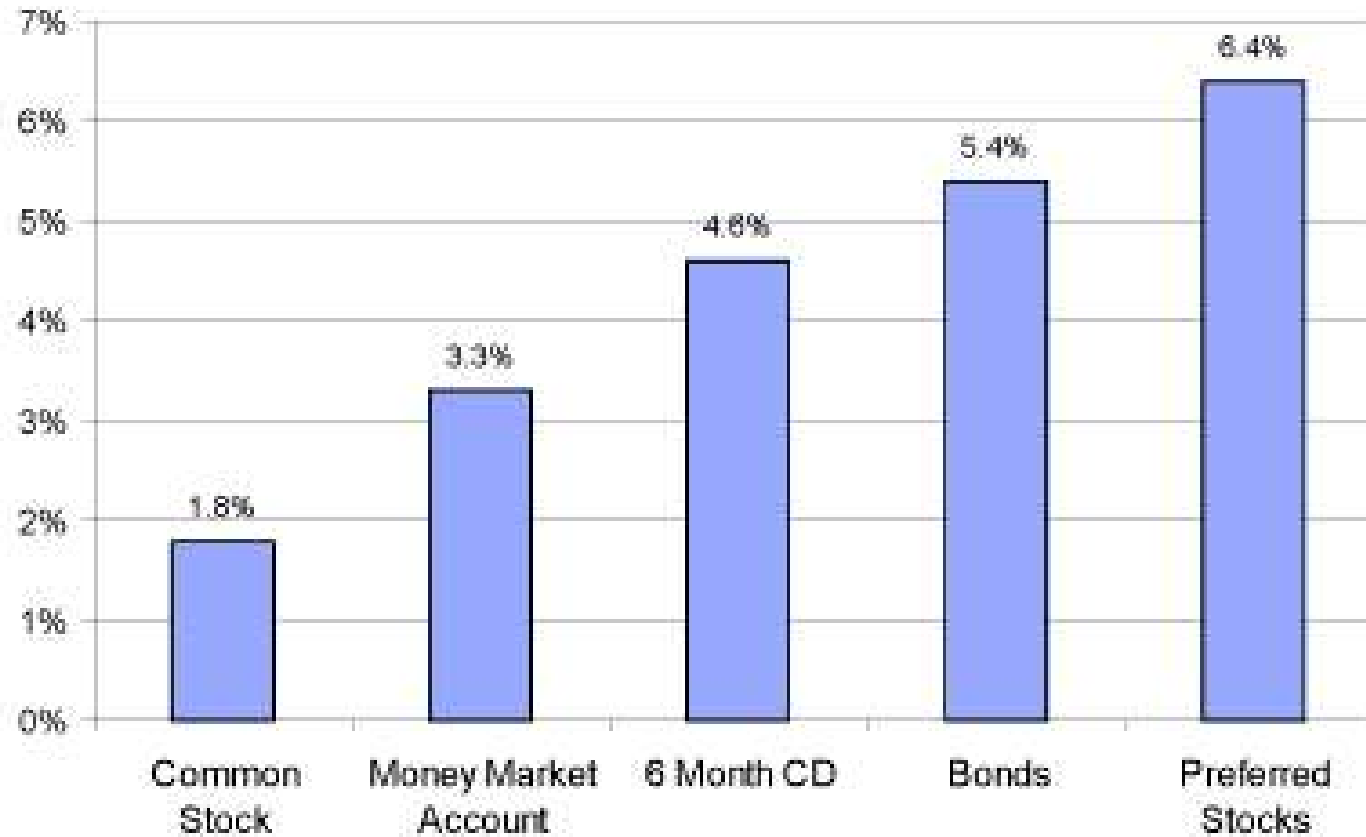
- 200 bill. USD
- vs. US Corporate bond market 5 trill. USD
- vs. US Common stock mkt 16 trill. USD

Preferred stock



Source: Standard & Poor's

Preferred stock - yield



Source: Standard & Poor's, Lehman, BankRate. Yields for common stocks are for the S&P 500, yields for bonds are for the Lehman Aggregate Index, yields for preferred stocks are for the S&P U.S. Preferred Stock index, money market account yields refers to nationwide average as per www.bankrate.com and 6 month CD yield refers to nationwide average as per www.bankrate.com. Data as of September 8, 2006.

Preferred stock –yield index

Historical Yield of S&P U.S. Preferred Stock Index





Preferred stock - Risks

- Little appreciation potential
- Call or mandatory conversion feature
- Can default – rare, but possible
 - Default rate 0,2 %
- Lower liquidity
- Rating related price changes



Different Classes of Stock

- „Customization“ of stock issues
- Different classes of shares are given different voting rights



Treasury stock

- Stock which is bought back by the issuing company
- Reduces the number of outstanding stocks on the open market
- On the balance sheet, treasury stock is listed under shareholder equity as a negative number




Treasury stock

- „Buy back“
 - Stock retirement
 - Hold the shares for later resale
- Signal for investors
- Limitations of treasury stock
 - Does not pay a dividend
 - Has no voting rights
 - Total treasury stock can not exceed 10% of total capitalization



Why might a company buy back its stock?

- To stop stock options given to executives from diluting the stock.
- The management believes the stock is low.
- To prevent a hostile takeover.
 - If the company owns a high percentage of the shares, then it is more difficult for another company to buy a majority of their stock.
- To boost confidence in the companies stock.
 - Buying your own stock is telling the rest of the world that you believe in your future prospects.
- The company has a lot of cash and wants to invest back in the company



What are the benefits of stock buybacks?

- If they destroy the shares, it decreases the number of total shares outstanding, thus increasing the company's EPS.
- The increased buying can raise the stock price.
- It shows the executives' confidence in the future prospects of the company and that they think the stock is undervalued.



Why might a buyback be bad?

- The shares could be bought with debt.
- It could show that the management can't invest the money to better their revenues.
- It might be a PR stunt to try to artificially better the image of their stock.



How Stocks Trade

- Most stocks are traded on exchanges, which are places where buyers and sellers meet and decide on a price
- Exchanges
 - Physical
 - Virtual
- OTC



Type of Orders

- Market order
- Limit order
- Stop order
- Market-if-touched order
- Time specific orders
- Size related orders



Market Order

- Executed at the best available price on the market
- Risk: price movement between order placement & execution



Limit Order

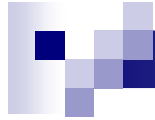
- Buy limit order
- Sell limit order

- Risk: price does not reach appropriate level
- Costs: limit orders are more expensive



Stop Order

- Stop order
 - Sell order for price fall
 - Buy order for price rise
- Stop limit order



Market-if-Touched Order

- „bottom fishing“
- Buy order for market fall
- Sell order for market rise

TABLE 5.1**Stock Market Order Types**

Order Type	Buy	Sell
Market order	Buy at best price available for immediate execution.	Sell at best price available for immediate execution.
Limit order	Buy at best price available, but not more than the preset limit price. Forgo purchase if limit is not met.	Sell at best price available, but not less than the preset limit price. Forgo sale if limit is not met.
Stop order	Convert to a market order to buy when the stock price crosses the stop price from below.	Convert to a market order to sell when the stock price crosses the stop price from above. Also known as a "stop-loss."
Stop-limit order	Convert to a limit order to buy when the stock price crosses the stop price from below.	Convert to a limit order to sell when the stock price crosses the stop price from above.



Time specific Orders

- Opening/closing order
- Time specification - Day
- Fill-or-kill order - All or None (AON)
- Good-till-canceled order (GTC)



Size-related Orders

- Round lot
- Odd lot
- Block trade



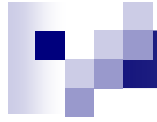
Order specification

- Stock identification
- Position - side
- Price
- Other specification



Stock specification

- Ticker
 - Exchange specific
 - Reuters / Bloomberg
- ISIN
- Sedol



Position

- Buy / Sell
- Long / Short



Settlement

- Process whereby securities or interests in securities are delivered, usually against payment, to fulfill contractual obligations, such as those arising under securities trades.



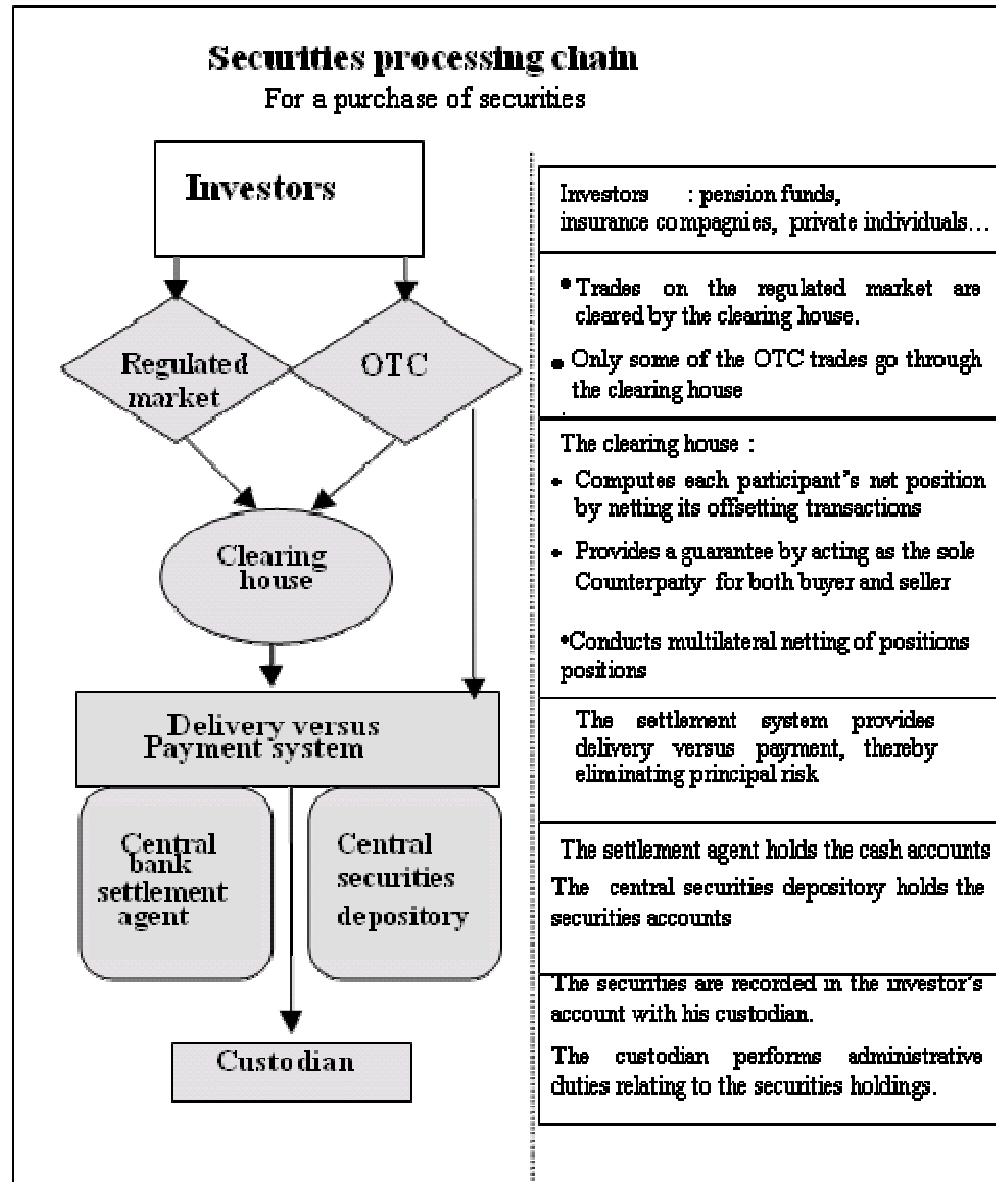
Settlement

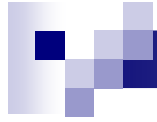
- Immobilisation and dematerialisation
- Netting
- Delivery vs. Payment / delivery free of payment
- Settlement cycle (t+3)

- The Depository Trust Company
- Clearstream
- Euroclear

- Custody

Settlement





Stock exchanges

- NYSE
- NASDAQ



New York Stock Exchange

- Can be traced to May 17, 1795, when the Buttonwood Agreement was signed by twenty-four stock brokers outside of 68 Wall Street in New York under a buttonwood tree



NYSE Euronext

- Holding groupe formed by combination of NYSE & Euronext on April 4th, 2007
- Continuous auction format
 - the current price is the highest amount any buyer is willing to pay and the lowest price at which someone is willing to sell
- Specialists
- Various trading systems
- DJI index



NYSE Euronext

- NYSE
- NYSE Arca
- NYSE Euronext
- NYSE Alternext



NYSE Trading systems

- Floor Brokers

- Independent brokers
- House Brokers

- Specialists

- Hybrid Market

- SuperDOT
- Broker Booth Support System



Specialists

- Accepts obligation to make a fair and orderly market by
- Selling shares out of their own inventory if there are more buy orders than sell orders (or by raising the price of the security they control)
- Buying shares for their own inventory if there are more sell orders than buy orders (or by lowering the price of the stock)
- Keeps a limit order book (LOB) for each stock in which they make a market



NASDAQ

- First US Electronic Exchange
- Founded in 1971 by the National Association of Securities Dealers (NASD)
- 1998 – merger with AMEX
- 2006 – battle for LSE
- 2007 – alliance with Borse Dubai
 - Take over OMX
- Market-Makers

NASDAQ Level II

MSFT C: 25.730 N: H: 25.950 L: 25.950

MSFT Best Price MM Size Close

MMID	C	Bid	Size	Time	MMID	C	Ask	Size	Time
BRUT		25.720	11700	10:05	LEHM		25.730	3400	10:05
SIZE		25.720	6200	10:05	SIZE		25.730	1900	10:05
GVRC		25.720	1000	10:05	BRUT		25.730	1800	10:05
SCHB		25.710	4000	10:05	NOCI	-	25.730	1000	10:05
CANT		25.710	3300	09:55	WCHV		25.730	100	09:55
LEHM		25.710	2000	10:05	JPMS		25.750	1000	10:05
NOCI	-	25.710	1000	10:05	CDWN		25.750	100	10:05
TDCM		25.710	1000	09:34	BOFA		25.750	100	09:57
NATY		25.710	700	09:57	FBCD		25.750	100	09:34
PERT		25.710	500	09:55	SCHB		25.770	4000	09:55
JPMS		25.710	100	10:04	TDCM		25.780	4700	10:04
LEGG		25.700	1000	09:38	PERT		25.780	1000	10:04
PRUS		25.700	100	10:04	GVRC		25.780	1000	09:38
SBSH		25.700	100	09:59	ITEC		25.790	500	09:59
UBSW		25.700	100	09:53	BAMM		25.790	300	09:53
MADF		25.700	100	09:45	SBSH		25.790	100	09:45
BARD		25.700	100	09:33	RBCM		25.790	100	09:33
TMBR		25.690	3000	10:05	BTRD		25.800	1500	10:05
BOFA		25.690	100	10:04	STFG		25.800	500	10:04
FBCD		25.680	100	10:04	PRUS		25.800	100	10:04

6/7/8/9/10/11/12/13/14/15/16/17/DELL/MSFT



Electronic Communication Networks

- Connect major brokerages and individual traders so that they can trade directly between themselves without having to go through a middleman.
- Island (merged with NASDAQ), ARCA (merged with NYSE), Instinet (Nomura)



Europe

- London Stock Exchange
- Deutsche Börse
 - Xetra
- Euronext



Central & Eastern Europe

- Warsaw Stock Exchange
- Prague Stock Exchange
- Russian Trading System

WSE

- Giełda Papierów Wartościowych w Warszawie
- <http://www.gpw.pl>
- Re-open in April 1991
- 333 listed companies
- Market value of listed companies 336 bil. USD
- Indices:
 - WIG
 - WIG 20



PSE

- Prague Stock Exchange
- <http://www.pse.cz>
- <http://www.pse.cz/Obchodovani/SPAD/>



RTS

- Russian Trading System
- <http://www.rts.ru/en/>
- “NASDAQ like” system





Stock Exchange Farm

- Bulls
- Bears
- Chicken
- Pig



Margin Trading

- Buying on margin is borrowing money from a broker to purchase stock.
- Margin trading allows you to buy more stock than you'd be able to normally



Margin Trading

- **Minimum margin**

- Minimum amount for margin account opening

- **Initial margin**

- The percentage of the purchase price of securities (that can be purchased on margin) that the investor must pay for with his or her own cash or marginable securities



Margin Trading

- Maintenance margin
 - the minimum amount of equity that must be maintained in a margin account

Example:

1. 10 000 cash + 10 000 loan = 20 000 USD
2. Price slide to 15 000 USD
3. Equity = mkt value – debt = 15 000 – 10 000 = 5 000 USD
4. Maintenance margin requirement 25 % = 15 000 x 0,25=3,750 USD



Margin Trading

■ Margin call

- A broker's demand on an investor using margin to deposit additional money or securities so that the margin account is brought up to the minimum maintenance margin.
- This is sometimes called a "fed call" or "maintenance call".
- Add money or liquidate position

■ Margin trading is extremely risky

■ Not all shares could be used as a collateral



Short Selling

- Selling of a stock that the seller doesn't own
- Short sale is the sale of a security that isn't owned by the seller, but that is promised to be delivered
- „zero uptick“ rule



Short Interest

- Short interest is the total number of shares of a particular stock that have been sold short by investors but have not yet been covered or closed out.
- Expressed as a number or as a percentage.
- When expressed as a percentage short interest is the number of shorted shares divided by the number of shares outstanding.
- For example, a stock with 1.5 million shares sold short and 10 million shares outstanding has a short interest of 15% ($1.5 \text{ million} / 10 \text{ million} = 15\%$)
- http://www.nasdaqtrader.com/asp/short_interest.asp



Short Interest Ratio

- A sentiment indicator that is derived by dividing the short interest by the average daily volume for a stock.
- This indicator is used by both fundamental and technical traders to identify the prevailing sentiment the market has for a specific stock.
- Also known as the "short ratio".

$$\text{Short Interest Ratio} = \frac{\text{Short Interest}}{\text{Average Daily Trading Volume}}$$



Short selling - Risks

- Over the long run, most stocks appreciate in price
- Losses can be infinite
- Shorting stocks involves using borrowed money, so you have to keep maintenance margin
- Short squeeze
- Timing



American Depositary Receipt

- A depositary receipt (DR) is a type of negotiable (transferable) financial security that is traded on a local stock exchange but represents a security, usually in the form of equity, that is issued by a foreign publicly-listed company.
- The DR, which is a physical certificate, allows investors to hold shares in equity of other countries.
- One of the most common types of DRs is the American depositary receipt (ADR), which has been offering companies, investors and traders global investment opportunities since the 1920s.



ADR – Benefits for Issuer

- Issuing DRs has the added benefit of increasing the share's liquidity while boosting the company's prestige on its local market ("the company is traded internationally").
- Depositary receipts encourage an international shareholder base, and provide expatriates living abroad with an easier opportunity to invest in their home countries.
- In many countries, especially those with emerging markets, obstacles often prevent foreign investors from entering the local market. By issuing a DR, a company can still encourage investment from abroad without having to worry about barriers to entry that a foreign investor might face.



ADR – Benefits for Investor

- DR immediately turns an investors' portfolio into a global one. Investors gain the benefits of diversification, while trading in their own market under familiar settlement and clearance conditions.
- More importantly, DR investors will be able to reap the benefits of these usually higher-risk, higher-return equities, without having to endure the added risks of going directly into foreign markets, which may pose lack of transparency or instability resulting from changing regulatory procedures.
- It is important to remember that an investor will still bear some foreign-exchange risk, stemming from uncertainties in emerging economies and societies.



ADR issues

- Level 1
 - Most basic type of ADR where foreign companies either don't qualify or don't wish to have their ADR listed on an exchange. Level 1 ADRs are found on the over-the-counter market and are an easy and inexpensive way to gauge interest for its securities in North America. Level 1 ADRs also have the loosest requirements from the Securities and Exchange Commission (SEC).

- Level 2
 - is listed on an exchange or quoted on Nasdaq. Level 2 ADRs have slightly more requirements from the SEC, but they also get higher visibility trading volume.

- Level 3
 - issuer floats a public offering of ADRs on a U.S. exchange. Level 3 ADRs are able to raise capital and gain substantial visibility in the U.S. financial markets.