

Financial Market Translation

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Introduction

- What is a financial market?
- How do they work?
- What do all those funky terms mean?
- www.trwenterprises.com/Financial_glossary.doc
- <http://de.groups.yahoo.com/group/finanztrans/files/Finance/>

- Market: the gathering of people for the purchase and sale of provisions, livestock, etc., esp. with a number of different vendors. Latin: *mercatus* (buy))
- Bourse: a money market French: purse med. Latin: *bursa/byrsa* purse fr. Greek *bursa* hide, leather)

What is a “financial” market?

- A market operating to facilitate trading (buying and selling) of a financial instruments. Financial instruments include, but are not limited to:
 - equity securities (stocks)
 - debt securities (bonds, mortgages, commercial paper)
 - money (currency)

Some markets may actually be commodities markets, i.e. they sell “things”, but often act like financial markets due to the financial nature of their commodities, e.g. precious metals, currency, even real estate.

Common Features

- Fungibility
- Liquidity
- Open
- Regulated

What all markets share in common, indeed, what is a core prerequisite for a market to exist at all, is that the “goods” must be fungible. A fungible good is a good that is identical with others of the same nature. (Fungible is also used to mean that a product has no important distinguishing characteristic that identifies it as coming from a particular supplier. Fungibility is what permits generic products.)

One barrel of oil is identical to another barrel of oil, an ounce of gold is an ounce of gold, regardless of where it came from. One share of Deutsche Telekom is the same as any other share of Deutsche Telekom.

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Equity (stock) markets

- Trade equity securities, also known as stocks, shares, equities. They also trade equity “derivatives”
- Equity = ownership
- Primary market
- Secondary market

Equity markets trade equity securities, also known as stocks, shares, equities. They also trade equity “derivatives” such as warrants, options, mutual funds, which are based on some underlying equity security.

Equity is an **ownership interest** in a corporation represented by common or preferred stock. Equity also means the difference between a corporation’s total assets and its total liabilities (debt), in which case it is also called stockholders’ or shareholders’ equity, net worth, or book value. When a corporation is founded, its corporate charter stipulates how many and what kind of shares it can issue to shareholders. Charters usually provide for far more authorized shares (shares it may issue) than the corporation will actually ever issue.

There are two kinds of equity markets, the primary market and the secondary market. The primary market is the market for new securities, where the security is purchased directly from the issuer. This is where initial public offerings or IPOs take place and the corporation raises capital.

The secondary market (also called the aftermarket) is where investors purchase securities from another investor after it has been issued on the primary market. The New York, Frankfurt, London and all the other major and regional exchanges, and the NASDAQ (OTC) are secondary markets. The corporation does not obtain anything from the trading of its stock on these markets, unless it is trading its own securities of course.

Illustration – WOZ Corp.

- **Phase One: Start-up**
- Phase Two: Venture Capital
- Phase Three: Initial Public Offering
- Phase Four: Investor Trading on the Aftermarket
- Phase Five: Issuing Debt Instruments
- Phase Six: Bankruptcy and Liquidation

Start-up

- Founding
- Raise capital
- Issue stock

WOZ Corporation is founded and its charter states it has 10 million shares of fully participating common stock with a par value of USD 1 per share and 1 million shares of non-voting preferred stock with a par value of USD 5 per share. The preferred stock has cumulative dividend preference over the common stock. The original investors contribute cash or assets (contributions in kind) to the corporation worth USD 100,000 in exchange for 100 thousand shares of common stock.

WOZ Corp. now has paid-in capital of USD 100,000 and 100,000 shares of common stock issued and outstanding.

WOZ Corp. follows a successful business model and gains customers and market share. After a few years of start-up losses, where expenses exceed revenues, the company reaches break-even and then begins to earn modest profits. Sales and production continue to increase and the company decides it must expand its production capacity. The question is whether to borrow the money or raise additional capital to fund the expansion. Interest rates are currently rather high, so the company decides to seek out venture capital instead.

Terms

- Corporate charter
- Common stock
- Participating
- Par value
- Preferred stock
- Cumulative preference
- Contributions in kind
- Paid-in capital
- Shares issued and outstanding

The charter is the legal document establishing the corporation. Among other things, it specifies the purpose of the business, its capital structure, fiscal year.

Common stock – represents an ownership interest in the company. It carries voting rights and the right to share in the company's income (dividends). Almost always has preferential right to subsequent share issues.

Participating – simply means the right to join in, either in dividends or voting.

Par value – Nominal value as printed on the certificate. This is NOT a redemption value.

Preferred stock – has preferential treatment with respect to distributions of income

Cumulative – old outstanding dividends due must be paid before any distributions to other shareholders

Contributions in kind – capital contributions of assets other than cash. Goods or services

Paid-in-capital = amount received from investors for stock, share capital. Any premium paid for stock is posted to "additional paid-in capital".

Authorized shares = # of shares authorized in the charter

Issued shares is the number of shares actually issued

Outstanding shares is the number of shares held by shareholders

Treasury shares is the number of shares previously issued but which have been redeemed by and are held by the company (often for employee compensation)

Types of Capital

Paid-in capital (par value x # of shares issued)

Additional paid-in capital (premium paid on issued shares)

Retained earnings (net income not distributed to shareholders)

Provisions/reserves (retained earnings with a restricted use)

Shares on the books

- Authorized – Total # of shares permitted to be issued under the charter
- Issued – Total # of shares ever given to shareholders
- Outstanding – Total # of issued shares held by shareholders
- Treasury stock – Total # of issued shares redeemed and held by the company

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Venture Capital

- Venture = a risky enterprise
- VC = Risk capital
- Used when conventional funding is not available
- Gamble – ergo, venture capitalists want concessions

Venture capital is also called “risk capital” because it is an investment in a venture, i.e. a risky enterprise. It is typically used by companies that do not have an extensive track record and thus cannot obtain conventional financing such as bank loans, but which are expected to see substantial growth and profitability. Venture capitalists, sometimes called angels if they invest in the very early stages of a company, are gambling on huge returns. They may also require they be granted concessions in return for their investment.

WOZ Corp needs 10 million dollars to expand its plant, buy new equipment, and expand its labor force. It doesn't have the resources to self-finance, i.e. to fund these capital expenditures using its own assets and profits. Banks are unwilling to lend given WOZ Corp's short history. So the company finds a venture capital firm to provide the 10 million dollars. In return, the VC firm wants all 1 million shares of preferred stock, 10 million shares of common stock, and the right to buy another 2 million shares of common stock in the future at a fixed price. The VC firm also wants to be able to sell this right to the additional 2 million shares. WOZ Corp agrees to these terms. An independent analysis of the company's enterprise value shows that the fair value of the company's stock is between \$ 0.60 and \$0.80 per share.

To meet these terms, an extraordinary shareholders' meeting resolves the following:

1. A capital increase of USD 10 million by way of the issuance of the 1 million shares of authorized but unissued preferred stock, 10 million shares of authorized but unissued common stock and
2. The authorization to issue 2 million warrants with a 1;1 conversion ratio for the purchase of common stock for a period of 5 years at an exercise price of \$5 per share.

These transactions are carried out in a private placement and WOZ Corp gets the funds it needed to expand.

VC Terms

- Self-finance
- Capital expenditures
- Enterprise value
- Extraordinary shareholders' meeting
- Capital increase
- Warrants
- Conversion ratio
- Exercise price
- Private placement

Self-financing – use of internal resources to finance capital expenditures

Capital expenditures = investments in plant, property, and equipment (long term assets), generally production assets

Enterprise value = What the market thinks a company's ongoing operations are worth. $EV = \text{market capitalization} - \text{cash and cash equivalents} + \text{preferred stock} - \text{debt}$.

Warrant - The right, but not the obligation, to buy (call) or sell (put) a particular quantity of a underlying security, at a fixed price (strike price), within a fixed period

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Business improves continually and the company develops long-term plans for further expansion. The original shareholders and the venture capitalists decide it's time to cash in on their investment by going public.

Phase Three: Initial Public Offering

WOZ Corp commissions an investment bank to form a syndicate and handle the underwriting. The lead bank obtains syndicate partners, handles the due diligence and book building, places the tombstone, including the Greenshoe. The decision is made to seek listing on the NASDAQ, rather than the NYSE or AMEX. The venture capitalists intend to exercise their warrants in conjunction with the IPO and include this in the placement. i.e. get another 2 million shares of common, which they will immediately sell as part of the IPO.. The plan is to issue 500,000 shares of unissued common stock, 5 million of the VC's common shares and 50 thousand shares of the original investors' holdings. The estimated issue price is \$8 per share.

The market greets the IPO enthusiastically and issue is actually two-and-a-half times oversubscribed and the actual issue price is fixed at \$8.50 per share. The IPO is successfully completed and WOZ Corp. cashes in to the tune of \$ 4.25 million on the common shares issued and \$10 million from the VC's warrants. The original investors gets \$425,000 million (50,000 * 8.5) and the venture capitalists get \$42.5 million (5 million * 8.5) from the placement of their common shares plus \$7 million from the exercise of their warrants (2 million * 3.5) . WOZ Corp. begins trading in the aftermarket under the symbol WOZ.

IPO Terms

- Investment bank
- Syndicate
- Underwriting
- Lead bank
- Due diligence
- Book building
- Tombstone
- Green shoe
- Oversubscribed
- Issue price

Investment bank/banker – acts as an agent for a corporation in underwriting securities issues, may also be a broker/dealer and maintain a market

Syndicate = group of investment banks which jointly underwrite, aka underwriting group, purchase group, banking syndicate

Underwriting – procedure used to bring a new issue to the public. The underwriter guarantees the issuer a certain price for a certain number of securities (for a fee).

Lead underwriter – aka syndicate manager, lead manager, managing underwriter. has primary responsibility for the issuance. Finds other syndicate members, negotiates the terms with the issuer, assesses market conditions

Due diligence – basically, the process of investigating the details of an investment

Book building = the process used by an underwriter to determine the issue price of an issue. This consists of taking orders (indications of interest) from potential investors indicating the # of shares they want and the price they will pay for them.

Tombstone – an advertisement in a financial newspaper placed by the underwriter announcing the details of an issue

Green shoe: An option that allows the underwriting of additional shares if demand is high. The Green Shoe Company was the first to issue this type of option.

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Phase Four: Investor Trading on the Aftermarket

We are now going to switch perspective and look at trading on the equity market from an investor's viewpoint. WOZ Corp.'s IPO attracted primarily institutional investors. Analysts at several brokerage houses begin tracking the stock and as the results of each quarter are published, which confirms WOZ Corp.'s long-term strategy through increasing revenues and profits, interest in the stock also increases, driving up the share price. Technical analysts begin charting the stock and fundamental analysts begin examining WOZ Corp.'s financial history and outlook. Even though the overall market is bullish, some players are bearish on WOZ Corp. and take long positions and begin writing call options.

Naturally there are some contrarians who short the stock or write call options, but overall the price of WOZ Corp.'s stock continues to trend upward in response to investors' expectations for the future development of WOZ Corp itself.

Trading terms - Investors

- Institutional investors
- Corporate investors
- Private investors
- Wealthy investors (HNWI)
- Traders/players

Institutional investors – In 2003, institutional investors held about 20% of total equity assets in the US. Of this amount, pension funds held about 41%, investment companies (mutual funds) about 22%, insurance companies 23%, banks and trust companies 12%, and foundations (endowment funds) about 2.5%. Institutional investors are subject to less regulation because they are assumed to be more sophisticated.

Private investors

Corporate investors – Companies other than institutional investors

Private investors – Individual investors

Wealthy investors or high net worth individuals having at least \$1 million in financial assets (including real estate)

Traders and “players” – Individuals that speculate on short term movements rather than long term investments

Other “stakeholders”

- Regulatory agencies (SEC, state securities boards)
- Securities and economic analysts
- Financial media
- Competition

Besides actual investors, others who have an interest in following the investment markets are regulatory agencies, analysts, the financial media, and of course, the competition

Securities trading terms

- Buy, hold, sell
- Market, stop and limit orders
- Day, GTC, Fill or Kill, Immediate or Cancel, All or None, On the Open, On the Close
- Long, short
- Bulls and bears

Types of orders – market (at the market) – execute at the best available price; stop order = buy or sell if the share price reaches or falls below the specified price (stop price). Used to protect a profit or prevent further loss or to establish a position in a security to close a short position; limit order = buy at or below a specified price (limit price) or sell at or above a specified price; stop-limit order = order to buy or sell at a specified price or better, but only after a specified price has been reached (combination of a stop order and a limit order)

Order timing – Day cancelled if they cannot be filled by current day's market close; GTC or Good till cancelled (often limited to 120 days); Fill or Kill – execute immediately in full or cancel; Immediate or cancel – execute all or part immediately and cancel the rest; All or None – execute the full order at the same time or cancel it; On the Open – execute all or part as close as possible to the opening price; On the Close – execute all or part as close to the closing price as possible

Long = to own a security; short = to sell a security (or an option on a security) you don't own

Bulls and bears = The most common [etymology](#) points to [London bearskin](#) "jobbers" (brokers), who would sell bearskins before the bears had actually been caught in contradiction of the [proverb](#) *ne vendez pas la peau de l'ours avant de l'avoir tué* ("don't sell the bearskin before you've killed the bear")—an admonition against over-optimism. By the time of the [South Sea Bubble](#) of 1721, the bear was also associated with [short selling](#); jobbers would sell bearskins they did not own in anticipation of falling prices, which would enable them to buy them later for an additional profit. While another folk etymology may not be true, I like it because it's a nice mnemonic – bulls strike upward with their horns and bears strike downward with their paws.

Strategies and Analysis

- Fundamental analysis
- Technical analysis
- Contrarians
- Buy low - sell high
- Buy on bad news – sell on good news
- Timing is everything

Fundamental analysis attempts to predict future price movements based on an assessment of the company's past, present, and future financial condition and operations. Fundamentalists look at revenue, earnings, growth potential, assets and liabilities, management, products, and the competition. In other words, they look at the company itself and not the overall market or technical analysis

Technical analysis (charting) attempts to predict price changes based on market data, e.g. price charts, trading volume, moving averages, and other (usually short term) market trends or "indicators". There are dozens and dozens of various kinds of charts used by technical analysts

Contrarians – investor who behaves the opposite of prevailing wisdom, e.g. buying when others are pessimistic or selling stocks that are in favor and whose price is rising.

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Over the course of the next several quarters, these expectations are fulfilled and WOZ Corp once again sees the need for further expansion. This time, however, the company has accumulated financial resources for capital expenditures. This, coupled with the fact that the shareholders do not wish to increase their investment by subscribing to additional shares or allow their interest to be diluted, the board decides to issue bonds.

Phase Five: Issuing Debt Instruments

Once again Churnem & Burnem Investment Bankers are selected to handle the bond issue. After examining current market conditions and issues by similar companies, a decision is made to issue \$10 million in 20-year convertible bonds at 6 ½ percent, with a \$10,000 par value. The bonds are callable after 10 years and convertible after 5 years into 500 shares of WOZ Corp common stock. (Based on a current share price of \$13.50 and an expected share price in 5 years of \$20.) The bond issue is fully subscribed and the net proceeds from the issue is \$6.8 million, based on a cash price of \$6,800.

Debt securities

- Bonds, notes and bills
- Senior, convertible, cumulative
- Interest rate (coupon rate)
- Maturity
- Face value (par value)
- Premium/discount

Bond – a debt instrument issued for more than a year to raise capital. Normally a promise to repay the principal and interest. Does not confer ownership, but the bond holder (like all creditors) has a greater claim to the issuer's income. Usually has a long term, five to 30 years.

Note – short term debt security, usually matures in five years or less

Bill – short term government security with a maturity of 1 year or less

Commercial paper – unsecured debt obligation with maturities from 2 to 270 days. Usually issued to meet short-term credit needs such as accts payable or inventory purchases.

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WOZ Corp utilizes the proceeds from the bond issue and internal resources to finance additional growth. WOZ Corp continues to gain market share, increasing revenues and its income by double digits over the next several years. The share price of WOZ Corp stock parallels this trend and continues to climb. During this period not only do the venture capitalists cash out their entire holdings, so do several of the original shareholders. News of this insider trading causes some of the analysts to worry about the company's future. The share price dips but most of the mutual funds and insurance companies that hold large blocks maintain their positions. Cash flow is not a problem and the bond holders receive their interest payments and both Moody's and S&P actually raise WOZ Corp's ratings.

Phase Six: Bankruptcy and Liquidation

Following Mr. Wozniak's abrupt departure, the board of directors begin the search for a new CEO, eventually signing a 48-year-old former CEO of Walt Disney Corp. This new executive is given an extremely lucrative compensation package, which includes bonuses on share price development, stock options and of course, a golden parachute.

Over the next two years, WOZ Corp posts record growth, tripling its revenues, doubling its net income, and the share price breaks resistance levels again and again, reaching all-time highs.

But one day, a disgruntled accountant who had been passed over for promotion visits the SEC, carrying a CD-ROM in his breast pocket. The records on the CD indicate that the new management as been cooking the books to inflate sales. The ensuing SEC investigation results in indictments of the CEO and the CFO. The scandal and loss of investor confidence causes the share price to plummet as major shareholders dump their holdings. When WOZ Corp falls below the minimum capitalization requirements of NASDAQ, trading is moved to the pink sheets and the bonds are reduced to junk status. The board seeks bankruptcy protection and after months of negotiations, the decision is made to liquidate the company. After all assets are liquidated and the attorneys take their fees upfront, the bond holders receive 10 cents on the dollar and the shareholders receive a tax write-off.

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