**ABC Furniture – A Case study on how stocks are created**

Two newly-weds are going to open up a business. After borrowing money from the bank, they name their company “ABC Furniture” and go into business. The first few years, the company makes little profit because the earnings are put back into the store, buying additional inventory and adding onto the building to accommodate the increasing level of merchandise.

Ten years later, the business has grown rapidly. The couple has managed to pay off the company’s debt, and profits are over $500,000 per year. Convinced that ABC Furniture could do as well in several larger, neighboring cities, the couple decides they want to open two new branches.

After doing research, the family finds out it is going to cost over $4 million dollars to expand. Not wanting to borrow money, they decide to sell stock in the company.

**Here’s where the math comes in**:

The company approaches an “**underwriter**”, a large financial firm such as Goldman Sachs or JP Morgan, who determines the value of the business, uses the value to create stocks and then sells the stock for them to raise money.

**Step One: Value of the company**

 As mentioned before, ABC Furniture earns $500,000 after-tax profit each year. It also has a **book value** of $3 million [**the value of the capital (land, building, inventory, etc.) subtracted by the company’s debt**] The underwriter researches and discovers the average furniture stock is trading at 20 dollars.

What does this mean? Simply, you would multiply the earnings of $500,000 by 20. In ABC’s case, the answer is $10 million. Add book value, and you arrive at $13 million. This means, in the underwriter’s opinion, ABC Furniture, is worth thirteen million dollars!

**Step Two: Creating Stock**

Based on this number, the underwriter creates 650,000 stocks/shares (**which are certificates saying you own 1/650,000 of the company)** of the company (13 million divided by stock price of 20 dollars). The company can now decide how much of the 13 million or 650,000 shares they want to sell to generate money.

**Step Three: Selling the Stock and raising money**

Our young couple, now in their 30’s, must decide how much of the company they are willing to sell. Right now, they own 100% of the business. The more they sell, the more cash they’ll raise, but they will also be giving up a larger part of their ownership. As the company grows, that ownership will be worth more, so a wise entrepreneur would not sell more than he or she had to.

After discussing it, the couple decides to keep 60% of the company (390,000 shares) and sell the other 40% to the public as stock (260,000 shares). [This means that they will keep $7.8 million worth of the business. Because they own a majority of the stock, they will still be in control of the store.] The other 40% they sold to the public is worth $5.2 million. If the couple wants to own 60%, they must pay $7.8 million to the underwriters in exchange for the stock. The underwriters will give a check to the couple for remaining $5.2 million and then sell shares of the company to the public at the **Initial Public Offering.** ABC Furniture is now a publicly traded company.

Although they own less of the company, their stake will hopefully grow faster now that they have the means to expand rapidly. Using the money from their public offering, ABC Furniture successfully opens the two new stores and have $1.2 million in cash left over [remember it was going to cost $4 million for the new stores]. Business is even better in the new branches, which are in more populated cities. The two new stores both make around $800,000 a year in profit each, with the old store still making the same $500,000. Between the three stores, ABC now makes an annual profit of $2.1 million dollars.

This is great news because, although they don’t have the freedom to simply close shop anymore, the business is now valued at $51 million dollars [go back to the previous formula: multiply the new earnings of $2.1 million per year by 20 (average stock price) and add the book value of $9 million (there are three stores now, instead of one)]. The couple’s 60% stake is worth $30.6 million dollars.

With this example, it’s easy to see how small businesses seem to explode in value when they go public. The original owners of the company are, in a sense, wealthier overnight. Before, the amount they could take out of the business was limited to the profit. Now, they are free to sell their shares in the company at any time, raising cash quickly.

**Where to sell stocks?**

Before, we mentioned that the underwriter had to find investors. The underwriter would go to the **stock market** or **stock exchange**, where investors gather to buy and sell stocks.

**Stock Market/Exchange** – This is a non-profit organization that provides facility for its members to buy and sell stocks. Brokers buy memberships (seats) on the exchange to trade stocks.

A stock exchange is very similar to a large flea market. Today, exchanges are places where buyers and sellers meet to trade stock – the stock price is a negotiated price on how much a person is willing to sell and how much a person is willing to buy for (much like prices in a market economy). The stock exchanges do not own the stocks being traded and do not set the prices of the stocks, but exchanges do determine what stocks can be listed. After a stock is listed on an exchange, buyers and sellers can use that exchange to trade the stock.

**Why the Price of Stocks Still Matter to Companies and Ownership**

Typically, companies issue shares to the public and receive their money up front. Investors then either make profits or suffer losses depending on the performance of the stocks. The original company has already made its immediate profit from the stock; future stock transactions will not affect the company’s profit. Why then does a company, or more specifically its management, care about a stock's performance in the secondary market when this company has already received its money in the IPO? Read on to find out.

### Those in Management are Often Shareholders Too

The first and most obvious reason why those in management care about [the stock market](http://www.investopedia.com/slide-show/why-companies-care/) is that they typically have a monetary interest in the company. It's not unusual for the founder of a public company to own a significant number the **outstanding shares (shares offered to the public)**, and it's also not unusual for the management of a company to have salary incentives or [**stock options**](http://www.investopedia.com/terms/s/stockoption.asp) tied to the company's [stock prices](http://www.investopedia.com/slide-show/why-companies-care/); in which they can earn more shares of stock and/or collect the **dividend (payout as a form of the company’s profit as a percentage of the stock price)** from owning the stock. Thus the stock of the company can both directly be connected to their net wealth and salary; making the price of the stock worth paying attention to.

### Wrath of the Shareholders

Too often investors forget that stock means ownership. The job of management is to produce gains for the shareholders. Although a manager has little or no control of share price in the short run, poor stock performance could, over the long run, be attributed to mismanagement of the company. If the [stock price](http://www.investopedia.com/slide-show/why-companies-care/) consistently underperforms the shareholders' expectations, the shareholders are going to be unhappy with the management and look for changes.

In extreme cases shareholders can band together and try to oust current management in a [**proxy fight**](http://www.investopedia.com/terms/p/proxyfight.asp). To what extent shareholders can control management is debatable. Nevertheless, executives must always factor in the desires of shareholders since these shareholders are part owners of the company.

### Financing

Another main role of the stock market is to act as a barometer for [financial](http://www.investopedia.com/slide-show/why-companies-care/) health. [Analysts](http://www.investopedia.com/terms/a/analyst.asp) are constantly scrutinizing companies and reflecting this information onto its traded securities. Because of this, [creditors](http://www.investopedia.com/terms/c/creditor.asp) tend to look favorably upon companies whose shares are performing strongly. This preferential treatment is in part due to the tie between a company's earnings and its share price. Over the long term, strong earnings are a good indication that the company will be able to meet debt requirements. As a result, the company will receive cheaper financing through a lower interest rate, which in turn increases the amount of value returned from a capital project.

### The Hunters and the Hunted

Unlike [**private companies**](http://www.investopedia.com/terms/p/privatecompany.asp), [**publicly traded companies**](http://www.investopedia.com/terms/p/publiccompany.asp) stand vulnerable to [takeover](http://www.investopedia.com/terms/t/takeover.asp) by another company if they allow their share price to decline substantially. This exposure is a result of the nature of ownership in the company. Private companies are usually managed by the owners themselves, and the shares are [**closely held**](http://www.investopedia.com/terms/c/closelyheldshares.asp). If private owners don't want to sell, the company cannot be taken over.

Publicly-traded companies, on the other hand, have shares distributed over a large base of owners who can easily sell at any time. To accumulate shares for the purpose of takeover, potential bidders are better able to make offers to shareholders when they are [trading](http://www.investopedia.com/slide-show/why-companies-care/) at lower prices. For this reason, companies would want their stock price to remain relatively stable, so that they remain strong and deter interested corporations from taking them.

### Ego

Finally, a company may aim to increase share simply to increase their prestige and exposure to the public. Managers are human too, and like anybody they are always thinking ahead to their next job. The larger the [market capitalization](http://www.investopedia.com/terms/m/marketcapitalization.asp) of a company, the more analyst coverage the company will receive. Essentially, analyst coverage is a form of free publicity advertising and allows both senior managers and the company itself to introduce themselves to a wider audience.

### Conclusion

For these reasons, a company's stock price is a matter of concern. If performance of their stock is ignored, the life of the company and its management may be threatened with adverse consequences, such as the unhappiness of individual investors and future difficulties in raising capital.

**Questions**

1. **What is a stock?**
2. **Put in your own words: how did ABC Furniture create stock?**
3. **What is a publicly traded company? What are the positives and negatives of going public?**
4. **What is a stock exchange?**

 **5) Why is it important for companies to be listed on a stock exchange?**

**6) Are the any alternatives for a company like ABC Furniture to raise money besides “going public” and selling stock better or worse alternatives? Explain.**

 **7) How can we make money off of businesses trying to make money?**

**8) Which reason for management’s paying attention to the price of the stock after going public is most important? Explain.**

**Footnotes:**

1) **stock option:** A privilege, sold by one party to another, that gives the buyer the right, but not the obligation, to buy (call) or sell (put) a [stock](http://www.investopedia.com/terms/s/stockoption.asp) at an agreed-upon price within a certain period or on a specific date.

2) **proxy fight**: When a group of shareholders are persuaded to join forces and gather enough [shareholder](http://www.investopedia.com/terms/p/proxyfight.asp) proxies (votes) to win a corporate vote. This is referred to also as a proxy battle. This term is used mainly in the context of takeovers. The acquirer will persuade existing shareholders to vote out company management so that the company will be easier to takeover.

3) **private company:** Private companies may issue stock and have shareholders. However, their shares do not trade on public exchanges and are not issued through an initial public offering. In general, the shares of these businesses are less liquid and the values are difficult to determine.

4) **Public Company:** A company that has issued securities through an initial public offering (IPO) and is traded on at least one stock exchange or in the over the counter market. Although a small percentage of shares may be initially "floated" to the public, the act of becoming a public company allows the market to determine the value of the entire company through daily trading. Public companies have inherent advantages over private companies, including the ability to sell future [equity](http://www.investopedia.com/terms/p/publiccompany.asp) stakes and increased access to the debt markets.  With these advantages, however, comes increased regulatory scrutiny and less control for majority owners and company founders.  Once a company goes public, it has to answer to its shareholders. For example, certain corporate structure changes and amendments must be brought up for shareholder vote. Shareholders can also vote with their dollars by bidding up the company to a premium valuation or selling it to a level below its [intrinsic value](http://www.investopedia.com/terms/p/publiccompany.asp).  Public companies must meet stringent reporting requirements set out by the Securities and Exchange Commission (SEC), including the public disclosure of financial statements and annual 10-k reports discussing the state of the company. Each stock exchange also has specific financial and reporting guidelines that govern whether a stock is allowed to be listed for trading.

5) **Closely Held:** The [shares](http://www.investopedia.com/terms/c/closelyheldshares.asp) in a publicly traded company held by a small number of shareholders, who are either directly affiliated with the company or management, or are majority stakeholder.  Closely held shares are not publicly traded in the same manner as common shares. These companies may trade under light volume, since the majority of the shares can be held by a small group of shareholders. Companies that are closely held tend to be resistant to hostile takeovers, since the majority of shares are held within a small, interested group of shareholders. Closely held companies may be more stable than other companies, since share prices are determined by the company's value and not by investor sentiment. Closely held companies may not have access to the same levels of working capital as widely traded corporations, because of low trading volume. However, many companies implement both common and closely held shares