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IPOs and their Effects on Firms and Investors

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Introduction

The stock market is an incredibly volatile instrument. It can return huge amounts of money, or send an investor to bankruptcy. It's impossible to perfectly predict the future of a company's performance, even experts are wrong a lot of the time. All we can do is analyze the past and use this information to take an educated guess about their future. Everybody is trying to get an edge in the stock market because of its impossibility to predict. Everybody wants to be a step ahead. There are plenty of illegal ways to do this, especially when it comes to insider trading. But, there are also ways to make money without any illegitimacy. Hedge funds earn a living by finding flaws in the market, but this is very difficult for an amateur investor. There must be ways for novice investors to earn some money in the stock market, and there absolutely are. There are plenty of methods for an investor to make some money, but we are going to focus on Initial Public Offerings throughout this paper, and how companies and investors use this to their advantage

What is an Initial Public Offering?

Let's begin with the most obvious question. What exactly is an Initial Public Offering? An Initial Public Offering, more commonly called an IPO, occurs when a private company decides to go public. More specifically, an IPO is the first issuance of common stock for the public to buy. There are many reasons why companies decide to go public. The number one reason why firms go public is to raise money for expansion, but there are plenty more reasons such as lowering their cost of capital, spreading the risk of ownership, and increased brand recognition solely from being listed on a stock exchange. (Business Dictionary) Companies are able to increase their capital by spreading ownership to investors who buy their securities. In other words, investors pay in exchange for partial ownership in a company. This additional capital for the company can be used by management to increase funding for areas such as research and development, marketing, paying off liabilities, and many other expenses. There are some disadvantages, however, with going public, mainly due to the Securities and Exchange Commission (SEC). The SEC has enormous amounts of rules and regulations that publicly traded companies must adhere to. In order to follow these regulations, companies must withstand added costs including the creation of financial statements, auditing fees, and other accounting regulations that private companies do not have to endure. These costs are very minor, though, for a company that undergoes a successful IPO.

Process of Going Public

Going public is a very important part of a company's lifespan. We've already discussed why a company would go public, now we'll get into how it works. Management and the board of directors must first discuss past results and future expectations and decide whether or not they should go public. Once they agree that an IPO should move forward, the company must hire a securities lawyer and an investment firm to make sure they abide by the regulations of the SEC. Next, the company must find one or more investment banking firms that will offer shares to the public. We will delve deeper into this topic shortly. The company must then file a *prospectus* with the SEC, which mainly includes company details as well as financial statements. Once the SEC approves the prospectus, the company determines the price and offering size of the IPO. Finally, the IPO can go through and shares are offered to the public. This is a brief summary of how IPOs are formed, but there are many intermediate steps and costs that the company must follow in order to gain approval from the SEC. Once the IPO is approved, investment-banking firms begin to offer shares of the company to the public. The only firms allowed to sell IPO shares to the public are those agreed upon by the company. Investment firms collect a fee for each share sold to the public, usually a portion of the share price. Instead of using the investment banks as underwriters, companies may choose to offer their shares to the public directly through a Direct Public Offering (DPO). DPOs are more useful for smaller firms that don't want to have the underwriter costs and probably aren't offering a lot of shares to the public. Most companies use underwriters though, because investment firms have a much larger network of potential investors. Not only can underwriters create more sales revenue for a company, but they can also increase brand recognition from pitching the company to their clients. Regardless of which method the company uses with their IPO, at this point, the company is officially publicly traded on the stock exchange. (Finelaw, Chronology)

History of IPOs

The history of public shares goes back to the ancient Romans, when some businesses decided to split their ownership. The very first IPO in the global history was the Dutch East India Company in 1602, becoming the first company to offer public stock. The ownership of the company was split between competing merchants in the spice market of the East Indies. These merchants came together and offered stock to the public in order to gain capital to fund the building and maintaining of fleets. Believe it or not, this was actually a legitimate stock, as it even gave dividend payouts to its shareholders. The Dutch East India Company was also the main cause of the very first stock market crash. The world's first stock was very volatile, but still provided a great template for future companies. (Beattie, *What was the first...*)

Since the first IPO by the Dutch East India Company, every single publicly traded company has issued an IPO. As of February 2014, there are just over 5,000 publicly traded companies in the United States. This means that over 5,000 U.S. companies have had IPOs at some point. The sizes of IPOs have been increasing over time, with some of the most popular being Alibaba Group Holding (NYSE:BABA) and Facebook (NYSE:FB). Below is a list of the 25 largest IPOs in U.S. history, including the offering date, exchange, industry, underwriter, and deal size of each company (Renaissance Capital, *Largest US IPOs*):

Company Name	Offer Date	Exchange	Industry	Underwriter	Deal Size (US\$MM)
Alibaba Group Holding	09/18/2014	NYSE	Technology	Credit Suisse	\$21,767
Visa	03/18/2008	NYSE	Financial	J.P. Morgan	\$17,864
ENEL SpA	11/01/1999	NYSE	Utilities	Merrill Lynch	\$16,452
Facebook	05/17/2012	NASDAQ	Technology	Morgan Stanley	\$16,007
General Motors	11/17/2010	NYSE	Capital Goods & Services	Morgan Stanley	\$15,774
Deutsche Telekom	11/17/1996	NYSE	Communications	Goldman Sachs	\$13,034
AT&T Wireless Group	04/26/2000	NYSE	Communications	Goldman Sachs	\$10,620
Kraft Foods	06/12/2001	NYSE	Consumer	Credit Suisse	\$8,680
France Telecom	10/17/1997	NYSE	Communications	Merrill Lynch	\$7,289
Telstra Corporation	11/17/1997	NYSE	Communications	Credit Suisse	\$5,646
Swisscom	10/04/1998	NYSE	Communications	Warburg Dillon Read	\$5,582
United Parcel Service	11/09/1999	NYSE	Transportation	Morgan Stanley	\$5,470
Infineon	03/12/2000	NYSE	Technology	Goldman Sachs	\$5,230
China Unicom Ltd	06/16/2000	NYSE	Communications	Morgan Stanley	\$4,916
CIT Group	07/01/2002	NYSE	Financial	Goldman Sachs	\$4,600
Conoco	10/21/1998	NYSE	Energy	Morgan Stanley	\$4,403
Blackstone Group L.P.	06/21/2007	NYSE	Financial	Morgan Stanley	\$4,133
Banco Santander Brasil	10/06/2009	NYSE	Financial	Santander Investment	\$4,025
China Mobile Limited	10/15/1997	NYSE	Communications	Goldman Sachs	\$3,965
Travelers Property Casualty	03/21/2002	NYSE	Financial	Citi	\$3,885
HCA Holdings	03/09/2011	NYSE	Health Care	BofA Merrill Lynch	\$3,786
Telecom Eireann	07/07/1999	NYSE	Communications	Merrill Lynch	\$3,758
Alstom	06/19/1998	NYSE	Technology	Credit Suisse	\$3,732
Goldman Sachs Group	05/03/1999	NYSE	Financial	Goldman Sachs	\$3,657
Agere Systems	03/27/2001	NYSE	Technology	Morgan Stanley	\$3,600

As we can see, Alibaba had the largest U.S. IPO of all time, registering in at over \$21 billion. We can also see that Credit Suisse was the primary underwriter of this IPO. There were other large investment banks involved with the Alibaba IPO, but Credit Suisse was the leading underwriter. Alibaba paid out a total of \$300 million (1.2% of total IPO revenue) in underwriter fees. (Forbes, *Alibaba Hands Out...*) This is a ridiculous amount of income for the investment banks involved in this IPO. The underwriting banks generate most of the capital raised by an IPO, so the steep fees paid out are very worthwhile.

Alibaba, Visa, Facebook, and GM are some of the most successful IPOs in U.S. history. But, there are always two sides of every story. Alongside the successful IPOs are failures. One of the most famous failed IPOs was TheGlobe.com, a social media giant that decided to go public in 1998. The stock boomed upwards 606% in the first

day, but bottomed out due to a sharp decline in online advertising and became the biggest representative of dot-com bubble in 2000. (Roos, *10 Biggest IPO Flops...*) There have been plenty of failed IPOs, which is why companies must be absolutely positive about going public before doing so.

The sizes of IPOs have been increasing throughout history, with some of the biggest IPOs of all time happening in recent years. This is an encouraging fact for private companies that are debating whether they should go public. There are so many giant private companies that investors are licking their lips waiting for them to go public. Technology giants such as SnapChat, DropBox, and Square are still privately owned companies. It's only a matter of time before these companies either decide to go public or are bought out by a publicly traded company. SnapChat will likely IPO in the near future, considering they turned down a \$3 billion buyout offer from Facebook in 2013. Some of the most well-known, up and coming companies today, including Uber, Airbnb, Box, Spotify, Pinterest, and many others, are still privately held. (Forrest, 10 IPOs to...) It's very likely that most, if not all, of these companies go public at some point, but there's no guarantee. There are extremely successful companies that have remained private throughout their lifespans, such as Dell, Cargill, Bloomberg and all of the Big Four Accounting Firms (PricewaterhouseCoopers, Ernst & Young, KPMG, and Deloitte). (Forbes, America's Largest Private Companies) There's no guarantee that a company will be more successful after going public.

Pricing of IPOs

Stocks are traded at whatever price a buyer is willing to buy for and a seller is willing to sell for, simple supply and demand concepts. Stocks are typically bought and sold around the price that analysts value them at based on historical prices and performance. The pricing of an IPO is a bit trickier than securities that are already public. Typically, the price of an IPO is lower than what the stock should actually be traded at. There are a few different pricing strategies and a few different investing strategies to discuss here. We'll begin with the price that companies choose to offer shares to the public at. Companies can either set the IPO price lower than the price at which their company is valued at, or they can set a high price for their IPO. By setting a low price, there will be a high demand for the shares, so there will be a higher quantity sold, and vice versa for high-priced shares. By underpricing or overpricing an IPO, companies are leaving money on the table. The ideal price for an IPO is exactly at equilibrium. So, why would companies underprice or overprice their stock? Companies might overprice their stock if they are not expecting a lot of the shares to be sold, so they try to gain as much capital as possible. Issuers will seldom be upset about an underpriced stock shooting up because the goal for any company is to maximize their value. So, if a stock price is shooting up, this means investors are valuing the company higher than the IPO price. In summation, a low stock price causes a high demand for the stock, and increases the quantity sold to the public, even if it means leaving money on the table. This is why companies may issue an underpriced IPO. Investors have options when valuing the price of an IPO. Common analysis practices can be used to value a newly public company, but it is very difficult to predict the future of a young company based on a short history of performances. Newly public companies are often valued at prices similar to comparable companies within the industry. If an investor concludes that the value of an IPO is underpriced, he will buy the shares at IPO price and sell them in the market once the price reaches the equilibrium price that he valued the stock at.

Asymmetric Information in IPO Pricing

Companies face a few asymmetric information problems when pricing their IPO. The first issue that arises is a market for lemons problem. Better quality companies are forced to offer their shares at a lower price, because all the low-quality companies offer their shares at average prices. High-quality companies want to distinguish themselves from the rest, so they are forced to set their IPO price lower than they would've liked. As stated earlier, companies leave a lot of money on the table when they set a low IPO price. Another asymmetric information problem occurs when investors know more than the issuers about the value of the company. This moral hazard allows for arbitrage by the investors, which is the easiest way to make money as an investor. (Welch, *iposurvey.pdf*, 11)

Facebook IPO

We'll wrap this up by analyzing one of the most popular IPOs of all time, Facebook. Underwriters settled on an IPO price of \$38, valuing the company at \$104 billion. The chart below shows the significant price moves of Facebook stock since its IPO on May 18, 2012 (Wikipedia, *Inititial Public Offering of Facebook*):

Significant price moves									
Trading days after IPO	Date +	Share price at market close	Market capitalization \$	Daily change ^{\$}	Net change from offering price	Notable Event +			
Offering price	May 18, 2012	\$38.00 ^[42]	~\$90B ^[48]	N/A	N/A	IPO			
First day	May 18	\$38.23 ^[42]	~\$90B ^[48]	▲ 0.6%	▲ 0.6%				
1	May 21	\$34.03 ^[42]		v 11%	▼ 10%				
2	May 22	\$31.00 ^[42]		▼ 8.9%	▼ 18%				
6	May 29	\$28.84 ^[42]	\$69.17B ^[48]	▼ 9.6%	▼ 24%				
8	May 31	\$29.60 ^[42]		▲ 5%	▼ 22%				
9	June 1	\$27.72 ^[42]		▼ 6.4%	▼ 27%				
19	June 15	\$30.01 ^[42]		6 .1%	▼21%				
68	August 20	\$20.011 ^[42]		▲ 5.04%	v 47%				
578	December 20, 2013	\$55.12 ^[42]	\$140B	▲ 0.13%	4 5%				
642	February 19, 2014	\$68.06 ^[49]	\$173.35B	1 .13%	▲ 79%	WhatsApp Purchase Announcement			

Facebook stock closed at a price of \$78.01 on May 11, 2015. Facebook had its initial hiccups during its first couple months as a publicly traded company, but over time, it has been improving to the point where the current trading price is more than double the IPO price. Facebook is a great example of how helpful and effective it can be to become a publicly traded company. Facebook raised over \$16 billion in capital from its IPO. This IPO was beneficially to investors and Facebook alike, considering the stock price has increased over 105% and net income has increased over 9000% from \$32 million to \$2.925 during its time as a publicly traded company. (Yahoo! Finance, *FB Income Statement*)

Conclusion

Going public is a very difficult decision for companies to make. The future could go terribly wrong if predictions don't work out as planned. However, if a company uses the capital raised from an IPO correctly, becoming a publicly traded company will be infinitely beneficial. Companies can expand various areas of their operations from the extra capital. IPOs are a great too for investors too. Investors can seek underpriced IPOs to make a quick profit when the price quickly jumps up. Equity investors are not the only investors that can make a profit from IPOs, venture capitalists can use IPOs to cash in on their investments in the once private company. Venture capitalists invest money in young, growing companies, expecting them to grow to the point where they can go public. The venture capitalist then sells his shares of the company during the IPO, which typically provides huge excess returns. As we can see, IPOs are a very useful tool in the world of business, and should be used as an advantageous instrument for investors and firms alike.

Afterthoughts

I chose Initial Public Offerings as the research topic for my internship report because the senior stockbrokers at Laidlaw & Co. pitched IPOs to every single potential customer that they got on the phone. I wanted to learn more about IPOs because it seemed like a strong investment strategy. I am happy with my choice, as I learned a lot about the topic that I would've never known without my research. My interning experience was very helpful to me and will help me along my journey in finding a career.

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