W12453

FACEBOOK, INC: THE INITIAL PUBLIC OFFERING (A)[1]

Ken Mark wrote this case under the supervision of Professors Deborah Compeau, Craig Dunbar and Michael R. King solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

INTRODUCTION

"The entire market is waiting for the emergence of Facebook as a publicly traded company," said Jonathan McNeil, lead analyst at CXTechnology Fund (CXT), as he spoke to the fund's investment committee on May 16, 2012. The highly anticipated pricing of the Facebook initial public offering (IPO) was underway, and in three hours, McNeil was scheduled to provide the lead underwriter, Morgan Stanley, with CXT's final indication of his interest in the deal. Gesturing to Facebook's preliminary prospectus ("Red Herring"), McNeil continued, "We have done our analysis, and we would like to present our recommendation on whether or not to buy shares in Facebook's IPO."

Having been marketed with an initial price range in the high \$20s to mid-\$30s per share, the price talk for Facebook's IPO had been increased to \$34 to \$38, valuing the eight-year-old company at over \$100 billion. This price would make it the largest IPO of the year and the second largest IPO in U.S. history. The deal appeared to be oversubscribed with heavy interest from institutional and retail investors alike. But the valuation — at nearly 100 times trailing 12-month earnings and 26 times trailing 12-month sales — seemed expensive, even by technology standards. Yet, Facebook had changed the way consumers interacted online, spearheading the rise of social media. This explosive growth seemed poised to alter the way firms spent their advertising dollars, and Facebook was well-positioned to capture a growing share.

COMPANY HISTORY AND OVERVIEW

> Facebook was not originally created to be a company. It was built to accomplish a social mission — to make the world more open and connected.
>
> Mark Zuckerberg, Facebook preliminary prospectus, May 16, 2012

Facebook was launched in February 2004 by Mark Zuckerberg and four roommates at Harvard University. The site was named after the popular directories circulated by different Harvard residences that featured a student's picture beside his or her face. Facebook was designed as a social utility to allow friends to

[1] *This case has been written on the basis of published sources only. Consequently, the interpretation and perspective presented in this case are not necessarily those of Facebook or any of its employees.*

connect with each other over the Internet. After an initial run-in with the university administration, the Harvard site took off, leading Zuckerberg to expand to other U.S. and Canadian universities. By mid-2004, Zuckerberg had dropped out of Harvard, incorporated Facebook and moved operations to Palo Alto, California, where the company attracted its first investor, PayPal co-founder Peter Thiel. By year-end 2006, Facebook was open to anyone over 13 years old, had attracted an estimated 12 million users and was the seventh most heavily trafficked site on the Internet.

In March 2006, Zuckerberg declined an offer to sell the company for $750 million, arguing it was worth $2 billion.[2] His optimism was confirmed in October 2007 when Microsoft bought a 1.6 per cent stake for $240 million, valuing Facebook at $15 billion.[3] Facebook continued its rapid growth, doubling its active users to 200 million between August 2008 and April 2009.[4] To help manage the firm's growth, Zuckerberg brought in seasoned executives Sheryl Sandberg as chief operating officer and David Ebersman as chief financial officer. In September 2009, Zuckerberg blogged that Facebook had reached 300 million users and was cash flow positive. Facebook's users continued to grow at an extraordinary pace, passing 500 million users by July 2010, 800 million by September 2011 and 900 million by April 2012. Exhibit 1 provides a timeline that tracks Facebook's growth.

Over this period, Facebook had raised capital from angel investors such as Mark Andreessen, Reid Hoffman and Mark Pincus, and venture capitalists such as Accel Partners, Greylock Partners and Meritech Capital Partners. Based on transactions reported on SecondMarket Inc. and SharesPost — both online platforms for trading shares privately pre-IPO — Facebook's implied value in December 2010 was between $41 billion to $57 billion, triple the amount since the Microsoft investment.[5]

Given the rising popularity and visibility of social media companies, financial market participants knew it was only a matter of time before Facebook went public. The initial Red Herring circulated by the underwriters in February 2012 announced Facebook's plans to sell an unspecified amount of Class A common stock. The principal purposes of the IPO were to create a public market for the existing shareholders and to enable future access to the public equity markets. The proceeds would be used for working capital and other general corporate purposes.

FACEBOOK'S BUSINESS MODEL

Facebook provided an Internet platform that allowed its users to share comments, upload photos and recommend experiences (likes) to friends and family. Citing an industry report from August 2011, Facebook's prospectus boldly stated that its goal was to connect all two billion global Internet users. For the fiscal year ending December 31, 2011, Facebook generated $1 billion in net income on total revenues of $3.7 billion, an increase of 65 per cent and 88 per cent respectively from a year earlier. Exhibit 2 provides Facebook's consolidated financial statements.

Advertising accounted for 98 per cent of Facebook's revenues in 2009, 95 per cent in 2010 and 85 per cent in 2011. Facebook offered advertisers the opportunity to segment and target its users based on their demographic information, expressed interests and social connections. Facebook required users to disclose their authentic identity online. Any information uploaded to Facebook became the property of the firm.

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[2] *http://www.businessweek.com/stories/2006-03-27/facebooks-on-the-block, accessed October 20, 2012.*
[3] *http://blog.facebook.com/blog.php?post=72353897130, accessed October 20, 2012.*
[4] *Ibid*
[5] *http://www.bloomberg.com/news/2010-12-17/facebook-groupon-lead-54-rise-in-value-of-private-companies-report-find.html, accessed November 3, 2012.*

Facebook mapped the connections between users and their friends and recorded the products or services that they had "liked" in an extensive, proprietary database. Using this database, advertisers could target customized services and products based on users' preferences and connections. Facebook called this feature "social context" and believed that advertising based on social context would be better received by consumers. Global advertising spending was estimated at $588 billion in 2011 and projected to reach $691 billion by 2015.[6] Online advertising was projected to rise from $68 billion in 2010 to $120 billion in 2015.

The balance of Facebook's revenue was generated by its payments business, which came almost exclusively from the sale of virtual goods used in social games sold through the online gaming company, Zynga. Fees generated by these payments were $13 million in 2009, $106 million in 2010 and $557 million in 2011. In 2011, consumers purchased $9 billion worth of virtual goods from gaming and social networking sites and this market was forecast to grow to $14 billion by 2016.

Facebook's site was available in more than 70 different languages, and the company had offices or data centres in more than 20 countries. Geographically, about 56 per cent of Facebook's 2011 revenues originated in the United States, down from 62 per cent in 2010. The majority of non-U.S. revenue came from Western Europe, Canada and Australia.

MAUs, DAUs and ARPU

Facebook categorized its users into monthly active users (MAUs), who visited the website in the last 30 days, and daily active users (DAUs), who were daily visitors. As of year-end 2011, Facebook reported 845 million MAUs, of which 161 million were based in the United States. While growth of U.S. MAUs was slowing, growth was picking up in emerging market economies such as Brazil and India. Facebook viewed DAUs and the ratio of DAUs to MAUs as a measure of user engagement. During December 2011, Facebook reported 483 million DAUs worldwide, an increase of 48 per cent versus a year earlier. DAUs as a percentage of MAUs increased from 54 per cent in December 2010 to 57 per cent in December 2011.

Facebook also tracked users who accessed the site via a mobile app or mobile-optimized version of the website (mobile users). Increased mobile usage was a key contributor of growth with more than 425 million mobile MAUs in December 2011. Growth was driven by greater smartphone penetration in the United States and product enhancements across several mobile platforms. At the time of its IPO, Facebook could not display ads to mobile users. Increased use of this medium therefore threatened to cannibalize Facebook's online advertising revenues unless it found a way around this obstacle.

Facebook's success in monetizing its customer base was measured by the average revenue per user (ARPU). Facebook defined ARPU as total revenue divided by the average of the MAUs at the beginning and the end of the year. Facebook's ARPU was $5.11 in 2011. Exhibit 3 plots the growth of Facebook's DAUs, MAUs, mobile MAUs and ARPUs over time.

COMPETITIVE LANDSCAPE

In the social networking space, Facebook competed on a global scale with MySpace, Google+, Twitter and LinkedIn. Facebook also faced stiff regional competition from Tencent, Renren and Sina Weibo in China;

[6] http://www.sfgate.com/business/article/Global-Advertising-Industry-to-Reach-US-691-6-2455969.php, accessed October 12, 2012

mixi in Japan; Cyworld in Korea; Orkut (owned by Google) in Brazil and India; and vKontakte in Russia. Each company had a different business model and targeted specific customer segments.

From 2005 until early 2008, MySpace had been the most visited social networking site in the world. The company was founded in late 2003 and bought by News Corporation less than two years later for US$580 million. In June 2006, MySpace had surpassed Google as the most visited website in the United States. By 2008, MySpace generated revenues of $800 million. Facebook overtook MySpace in the number of unique worldwide visitors in April 2008 and in the number of unique U.S. visitors in May 2009. The number of MySpace users had been declining steadily ever since. The lesson from MySpace's rise and fall was not lost on McNeil, who had seen how easily a market leader could relinquish its lead.

Google was started in early 1996 by two Stanford PhD students and went public in August 2004. Google had an advertising-based business model and generated almost all of its $38 billion in 2011 revenues from selling pay-per-click and site-specific advertising. With over 53,000 employees and a huge cash pile, Google could move rapidly. It had launched its own social networking service, Google+, in June 2011 and had already attracted 100 million active users by March 2012.[7]

Founded in 2006, Twitter's microblogging service allowed users to send messages of up to 140 characters and had attracted over 500 million active users by year-end 2012.[8] Twitter earned revenues from advertisers wanting to appear as part of a user's Twitter feed.[9] By December 2011 Twitter was valued at $8.4 billion although it remained privately owned. Twitter had forecast revenues of $110 million in 2011, up from $100 million in 2010.[10]

LinkedIn provided a social networking website for professionals that allowed them to post their employment history, then link their profile to other users with whom they had a professional connection. Founded in December 2002, LinkedIn had 175 million registered users by 2012, with revenues of $522 million and net income of $12 million.[11] Users could access a basic version for free or pay $25 to $50 a month to access a premium version that allowed them to exchange messages and request introductions.

Outside the social networking space, Facebook competed for advertisers' dollars against leading online businesses such as Microsoft, Yahoo!, Amazon and eBay.

ECONOMIC AND MARKET CONDITIONS

Facebook's IPO was moving forward during an improving — but still fragile — global economic environment. The world economy was still recovering from the 2007–09 global financial crisis, which had morphed by 2010 into a European sovereign debt crisis. The U.S. economy was slowly recovering with gross domestic product (GDP) forecast to grow by 2.2 per cent in 2012, up from 1.7 per cent in 2011, but still below the 3.3 per cent annual average from the 1980s and 1990s. U.S. unemployment remained stubbornly high above 8 per cent, while political partisanship in Washington ahead of the November 2012 presidential election threatened to derail the recovery. In particular, there were concerns that Democrats and Republicans would not be able to reach a consensus to fix the "fiscal cliff" — a series of tax and

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[7] http://google-plus.com/5746/google-crosses-100-million-active-users-in-march-2012-according-to-larry-page/, accessed October 20, 2012.
[8] http://www.mediabistro.com/alltwitter/500-million-registered-users_b18842, accessed October 20, 2012.
[9] http://news.cnet.com/8301-1023_3-57394477-93/the-$1-per-month-twitter-business-model/, accessed October 20, 2012.
[10] http://online.wsj.com/article/SB10001424052748703716904576134543029279426.html?KEYWORDS=twitter, accessed November 7, 2012.
[11] http://press.linkedin.com/about, accessed November 7, 2012.

spending cuts that would automatically take effect at year-end. The picture abroad looked no better with Europe falling back into a recession while the powerhouse emerging market economies of China, Brazil and India showed signs of faltering.

The U.S. stock markets had seen a strong run-up over the year to May 2012, with the S&P 500 Index rising 21 per cent from its lows in November 2011. Faced with the deteriorating economic outlook and political gridlock in the United States and Europe, investors had turned bearish, with the S&P 500 Index falling by 5 per cent in the first half of May. The tech-heavy NASDAQ 100 Index rose 17 per cent from mid-December 2011 to mid-May 2012 but seemed to have stalled recently. Exhibit 4 charts the recent performance of the NASDAQ 100 Index, the S&P 500 Index and the Internet Software & Services segment. The market volatility and continuing economic uncertainty had left the global IPO markets in the doldrums. During the first quarter of 2012, global IPO activity fell to $14.3 billion, down significantly from $46.6 billion during the first quarter of 2011. Exhibit 5 charts the number of IPOs from 2004 to 2012.

McNeil and his team had carefully analyzed the performance of recent IPOs by LinkedIn, Groupon and Zynga (see Exhibit 6).

In May 2011, LinkedIn had issued 7.84 million shares at $45 each for gross proceeds of $353 million, valuing the firm at $4.3 billion.[12] Due to the popularity of the deal, LinkedIn had increased its price talk from a range of $32 to $35 to a range of $42 to $45 on the day before the pricing.[13] Despite pricing the deal at the high end of the range, LinkedIn's shares rose by 109 per cent on the first day of trading to close at $94.25. LinkedIn's shares rose over the next year to $110.56 for a total gain of 146 per cent.

The "deal-of-the-day" coupon company Groupon went public in November 2011, raising $700 million in the largest U.S. tech IPO since Google. Due to strong investor demand, Groupon's underwriters had increased the number of shares offered from 30 million to 35 million and had priced the shares at $20, above the initial range of $16 to $18.[14] This price valued the three-year-old company at $12.7 billion.[15] Groupon's shares rose 43 per cent on its first day of trading. After one week, its shares were still up by 21.3 per cent, but by mid-May its shares had fallen to $12.17, a loss of about 39 per cent post-IPO.

Finally, the online gaming company Zynga went public in December 2011, selling 100 million shares at $10.00 per share. The deal was priced at the high end of the price talk of $8.50 to $10.00 and valued the four-year-old company at $7 billion.[16] Zynga's share price fell by 5 per cent on the first day of trading, and by mid-May its shares were trading at $8.56, 14.4 per cent below the IPO price.

OTHER DEAL TERMS

McNeil and his team pored over Facebook's Red Herring to gain vital information about the offering (see Exhibit 7). A number of items caught their attention.

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[12] http://blogs.computerworld.com/18311/linkedin_ipo_stock_price_45_valuation_4_3b_date_5_19_symbol_lnkd, accessed November 7, 2012.
[13] http://socialtimes.com/linkedin-ipo-7-84m-shares-at-32-35-each_b61483, accessed October 20, 2012.
[14] http://www.reuters.com/article/2011/11/04/us-groupon-idUSTRE7A352020111104, accessed October 20, 2012.
[15] http://digital-stats.blogspot.ca/2011/11/groupons-ipo-values-company-at-1265bn.html, accessed November 7, 2012.
[16] http://money.cnn.com/2011/12/14/technology/zynga_ipo_price/index.htm, accessed November 7, 2012.

Sales By Current Shareholders

The Red Herring dated May 15 stated that Facebook was planning to sell 421,233,615 shares of Class A common stock. Of this amount, Facebook was issuing 180,000,000 shares with the remaining 241,233,615 shares sold by existing stockholders. As a result, Facebook would raise $6.1 billion to $6.8 billion while insiders would receive $8.1 billion to $9.1 billion.

While McNeil knew an IPO was the moment for venture capitalists to take some money off the table, the sales by Zuckerberg and other insiders had to be taken into consideration. Exhibit 8 provides a list of shareholders and how many shares each was selling in the IPO (not including shares to be sold if the underwriters' option was exercised in full). McNeil noted that there were five "lock-up" periods specifying when insiders could sell additional shares, ranging from 91 days to 366 days after the IPO. These lock-ups affected a total of 1.872 billion shares out of the 2.138 billion that would be outstanding post-IPO (see Exhibit 9).

Dual-Class Share Structure

Facebook had two classes of common shares, Class A and Class B, which had the same claim on the firm's earnings but different voting rights. Each Class A share was entitled to one vote while a Class B share was entitled to 10 votes. Not surprisingly, the Class A shares were being sold in the IPO while the Class B shares were held exclusively by Facebook insiders and would remain unlisted. Assuming that 180,000,000 new Class A shares were issued in the IPO, Facebook would have 635,881,796 Class A shares and 1,502,203,241 Class B shares outstanding, with Class A shareholders controlling 4 per cent of the votes and Class B shareholders controlling the remainder. Through his ownership of Class B shares, Zuckerberg would directly and indirectly control 56 per cent of the votes. The Red Herring explained what this meant:

> Mr. Zuckerberg has the ability to control the outcome of matters submitted to Facebook's stockholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of our assets. This concentrated control could delay, defer, or prevent a change of control, merger, consolidation, or sale of all or substantially all of our assets that other stockholders support, or conversely this concentrated control could result in the consummation of such a transaction that other stockholders do not support.[17]

Zuckerberg had shown his willingness to use this control in the month prior to the IPO when he purchased Instagram — a popular online photo service — for $1 billion in cash and Facebook stock. Facebook's board of directors had not been aware of the purchase until after the agreement had been reached.[18]

Fees Payable To The Underwriters

Morgan Stanley was acting as lead underwriter for Facebook's IPO, with J.P. Morgan and Goldman Sachs as joint leads, with 30 other co-managers. The lead underwriters managed the entire IPO process, from the preparation of the filing documents, organization of the roadshow, coordination of the book building, negotiation of the final pricing and distribution of the shares to their new owners. While the typical underwriting fee for an equity IPO was 3 per cent to 7 per cent of the amount being raised, Facebook would only pay 1.1 per cent reflecting both the size of the IPO and the prestige of Facebook.

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[17] *"Facebook FORM S-1/A," Red Herring, May 16, 2012, .p. 22.*
[18] *http://www.informationweek.com/security/privacy/facebooks-history-from-dorm-to-ipo-darli/240000615?pgno=12, accessed October 20, 2012.*

Underwriters had to manage numerous potential conflicts of interest in an IPO. They sought to build relationships with companies such as Facebook in the hopes of advising them on additional capital raisings or potential mergers and acquisitions. Facebook would want a successful IPO that raised as much capital as possible with the share price rising afterwards, setting the stage for future secondary offerings. The underwriters often had equity analysts who would initiate coverage of the company and issue price targets for the stock as well as an investment recommendation. The underwriters earned their fees by selling stock to their institutional and retail customers who wanted to buy the shares for as low a price as possible. Customers were particularly anxious to buy shares in "hot" IPOs where the shares were expected to "pop" on the first day by up to 35 per cent. In the event the issue did not "pop," underwriters were expected to offer price support, which meant maintaining a floor price for the issue.

The underwriters had an overallotment option ("greenshoe") that allowed them to sell up to an additional 15 per cent of the offering. The underwriters could sell a total of 484 million shares even though they only had an allotment for 421 million. This greenshoe meant that the underwriters could effectively short 63 million shares. If the IPO was successful and the issue price rose beyond the offering price, the underwriters would exercise the greenshoe option with Facebook to cover their short position. If the issue was unsuccessful and the trading price threatened to fall below the IPO price, the underwriters would buy up shares in the market to cover their short position, providing price support for the issue. The underwriters would earn fees of 1.1 per cent on any shares sold in the IPO.

FACEBOOK'S PRICE TALK

Facebook had filed its first Red Herring on February 1, 2012, but the underwriters did not go out to investors with a formal price range until early May. At that time, the talk was in the range from the high $20s to mid-$30s per share. As momentum picked up and market conditions continued to improve, the underwriters launched the roadshow on May 7 with an eye to pricing the deal during the week of May 14. The amended preliminary prospectus filed on May 9 indicated that Facebook would sell 337,415,352 shares at a price between $28 and $35 per share. The amendment also indicated that the trend of Facebook's DAU growth outpacing growth in the number of ads delivered had continued during the start of the second quarter of 2012. This trend was due to the increased usage of Facebook on mobile devices, in which display advertising was limited. As was customary, the preliminary prospectus contained no projections or other forward-looking information.

The roadshow kicked-off with an investor presentation at the Sheraton Hotel in New York City featuring Zuckerberg, Ebersman and Sandberg. Led by Morgan Stanley, the road show included cross-country stops in cities where major institutional investors were located, including Boston, Chicago, Denver and Palo Alto. Facebook also released a YouTube video targeting retail investors. The roadshow wrapped up on Friday, May 11.

The lead underwriters were actively soliciting investor interest through their sales teams. McNeil had been contacted by all three underwriters asking for his participation and interest. McNeil noted that the proposed price range was below the high of $44 per share that had been reached in March, based on a private deal posted on SharesPost.[19] McNeil heard that there was significant institutional and retail demand for the deal, which he knew was only a preamble to the underwriters trying to raise the price range. At the same time, the lead managers seemed keen to keep the firm's final IPO price conservative enough so that the shares could see a "pop" on the first day of trading. It was well documented that companies typically left money on the table, particularly when the price range was increased during the marketing of the IPO (see Exhibit 10).

[19] *http://blog.sfgate.com/pender/2012/05/18/see-where-facebook-stock-traded-before-the-ipo/, accessed October 20, 2012.*

On May 11, CNBC reported that Facebook's IPO was "many, many" times oversubscribed, setting the stage for a push to price the shares at the high end of the range.[20] Not everyone was convinced. One Morningstar analyst stated that "the valuation at the proposed offer price leaves limited upside for long-term fundamental investors."[21] Despite such skeptical comments, on May 14 the lead underwriters had raised Facebook's IPO range to $34 to $38, citing "overwhelming demand by investors."[22] At the same time, the number of shares being sold had been increased to 421,233,615 shares, with all of the additional shares being sold by Facebook insiders.

VALUATION

McNeil's team relied on two basic approaches to value companies: a discounted cash flow (DCF) analysis and the use of market multiples from comparable firms and recent transactions. DCF analysis was a tool familiar to all equity analysts, but McNeil knew from experience how sensitive it could be to the assumptions used. It was difficult to apply to fast-growing companies where much of their value was tied up in patents and other intangibles. Not wanting to rely solely on the underwriters' valuation, McNeil had been following the blog of a well-known academic, Professor Aswath Damodaran of the NYU Stern School of Business.[23] Damodaran's DCF for Facebook is shown in Exhibit 11.

On his blog, Damodaran stated that he believed Facebook had the opportunity to dominate its market. If it did, he suggested his price estimate could be "too low." But he added two caveats. First, at a valuation of $75 billion, the market would expect Facebook to become a phenomenal success with anything less viewed as a failure. Second, he was concerned that Zuckerberg's controlling stake in the company meant that other shareholders would not have meaningful input into Facebook's strategic choices.

Not wanting to go into his briefing unprepared, McNeil had asked his team to put together the market multiples of a broad set of publicly traded companies (see Exhibit 12). The list ranged from social networking to Internet services to online retailers to mobile phone manufacturers. McNeil knew from experience that using multiples was part art and part science. The key was to identify the right set of comparables and the right set of ratios.

MAKING A DECISION

McNeil knew that CXT's investment committee wanted to hear about the potential for Facebook to deliver above average total returns. Given that Facebook did not pay any dividends, this return would have to come from capital appreciation. Ultimately, Facebook had to increase its sales and manage its costs to grow its bottom line while fending off competitors and building barriers to entry. Even if he was enthusiastic about Facebook's long-term prospects, McNeil wondered about the risk of overpaying for Facebook's stock. On the other hand, he did not want to miss out on what seemed like a great opportunity to buy into the premier social networking site. Facebook was undoubtedly an important player in the U.S. technology sector. The only question was whether it was also a good investment.

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[20] "Facebook IPO Said 'Many, Many' Times Oversubscribed — CNBC," Dow Jones News Service, May 9, 2012.
[21] "Curb Your Facebook IPO Enthusiasm, Morningstar Says," Dow Jones News Service, May 11, 2012.
[22] "Facebook Raises Price Range to $34 to $38," Dow Jones News Service, May 14, 2012.
[23] Aswath Damodaran's DCF valuation is taken from his website at: http://aswathdamodaran.blogspot.com/, accessed October 20, 2012.

Exhibit 1

FACEBOOK — TIMELINE

Year	Highlights	Monthly Active Users (MAUs) at year-end
2004	• *February*. Founded under the name thefacebook.com at Harvard University • *September*. Introduced the Facebook Wall, a forum for users to post messages to their friends • Began to expand to colleges and universities around the country • Recorded $382,000 in revenue	1 million
2005	• *May*. Grew to support more than 800 college networks • *September*. Added high school networks • *October*. Added international school networks and introduced photos • Recorded $9 million in revenue	6 million
2006	• *April*. Launched Facebook Mobile • *May:* Expanded Facebook's availability to workplace networks • *August:* Rolled out the first version of Facebook API • *September*: Opened registration broadly; introduced News Feed • *November*: Launched Share features on 20 partner sites • Recorded $48 million in revenue	12 million
2007	• *May*. Launched the Facebook Platform with 65 developers and 85 applications • *November*. Launched self-service ad platform and Facebook Pages • Recorded $153 million revenue	58 million
2008	• *April*. Introduced Chat for users to instant message with their friends. • *December*. Launched Facebook Connect, the next iteration of the Facebook Platform. • Expanded to 23 languages offered including French, German, and Spanish. • Recorded $272 million in revenues.	145 million
2009	• *February*. Introduced the Like button, which lets users connect with things they care about both on and off Facebook • *May*. Launched Facebook Payments • Recorded $777 million in revenue	360 million
2010	• *April*. Introduced Graph API, a new programming interface for the Facebook Platform, and Social plugins, a set of easy-to-use modules allowing anyone to integrate with the Facebook Platform • *October*. Launched Groups, a shared space for users to discuss common interests • Recorded $1,974 million in revenue	608 million
2011	• *September*. Introduced Timeline, an enhanced and updated version of the Facebook Profile • *September*. Launched the next iteration of Open Graph • Recorded $3,711 million in revenue	845 million

Source: Facebook FORM S-1/A, Red Herring, May 16, 2012.

Exhibit 2

FACEBOOK — CONSOLIDATED FINANCIAL STATEMENTS

US dollars in millions	Year Ended December 31,			Three Months Ended March 31,	
Consolidated Statements of Operations:	**2009**	**2010**	**2011**	**2011**	**2012**
Revenue	$777	$1,974	$3,711	$731	$1,058
Costs and expenses:					
Cost of revenue	223	493	860	167	277
Marketing and sales	115	184	427	68	159
Research and development	87	144	388	57	153
General and administrative	90	121	280	51	88
Total costs and expenses	515	942	1955	343	677
Income from operations	262	1,032	1,756	388	381
Interest and other income (expense), net	(8)	(24)	(61)	10	1
Income before provision for income taxes	254	1,008	1,695	398	382
Provision for income taxes	25	402	695	165	177
Net income	$229	$606	$1,000	$233	$205
Net income (loss) attributable to Class A and Class B common stockholders	$122	$372	$668	$153	$137
Number of shares used for EPS (millions):					
Basic	1,020	1,107	1,294	1,240	1,347
Diluted	1,366	1,414	1,508	1,488	1,526
Earnings (loss) per share attributable to Class A and Class B common stockholders					
Basic	$0.12	$0.34	$0.52	$0.12	$0.10
Diluted	$0.10	$0.28	$0.46	$0.11	$0.09
Consolidated Balance Sheets:	**As of March 31, 2012**	**Pro forma for stock options**	**Pro forma for stock options + IPO**		
Cash and marketable securities	$3,910	$3,910	$10,311		
Working capital	3,655	3,980	10,381		
Property and equipment, net	1,855	1,855	1,855		
Total assets	6,859	7,184	13,585		
Total liabilities	1,587	1,587	1,587		
Total stockholders’ equity	5,272	5,597	11,998		

Source: Facebook FORM S-1/A, Red Herring, May 16, 2012.

Exhibit 3

FACEBOOK — KEY OPERATING STATISTICS

Quarter	Q1 2009	Q2 2009	Q3 2009	Q4 2010	Q1 2010	Q2 2010	Q3 2010	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Q4 2011	Q1 2012
Daily average users (DAUs):													
US & Canada	35	40	53	64	82	85	92	99	105	117	124	126	129
Europe	35	39	50	63	79	85	94	107	120	127	135	143	152
Asia	9	13	20	29	39	45	54	64	72	85	98	105	119
Rest of World	14	16	22	29	35	42	54	58	74	87	100	109	126
Worldwide	92	108	144	185	234	257	293	327	372	417	457	483	526
Total	93	108	145	185	235	257	294	328	371	416	457	483	526
Monthly average users (MAUs):													
US & Canada	68	81	99	112	130	137	144	154	163	169	176	179	188
Europe	71	85	101	117	138	151	167	183	201	212	221	229	241
Asia	22	32	48	62	81	96	113	138	156	174	196	212	230
Rest of World	35	44	57	69	83	98	126	133	161	183	207	225	242
Worldwide	197	242	305	360	431	482	550	608	680	739	800	845	901
Total	196	242	305	360	432	482	550	608	681	738	800	845	901
Mobile MAUs:	35	50	75	101	129	155	196	245	288	325	376	432	488
Average revenue per user (ARPU):													
US & Canada					1.77	1.87	1.93	2.77	2.49	2.84	2.80	3.20	2.86
Europe					0.76	0.9	0.84	1.25	1.19	1.33	1.34	1.60	1.40
Asia					0.31	0.36	0.36	0.46	0.43	0.50	0.56	0.56	0.53
Rest of World					0.16	0.23	0.22	0.33	0.31	0.38	0.40	0.41	0.37
Worldwide					0.87	0.94	0.90	1.26	1.14	1.26	1.24	1.38	1.21

Note: ARPU = total revenue divided by the average of the MAUs at the beginning and the end of the year.

Source: Facebook FORM S-1/A, Red Herring, May 16, 2012.

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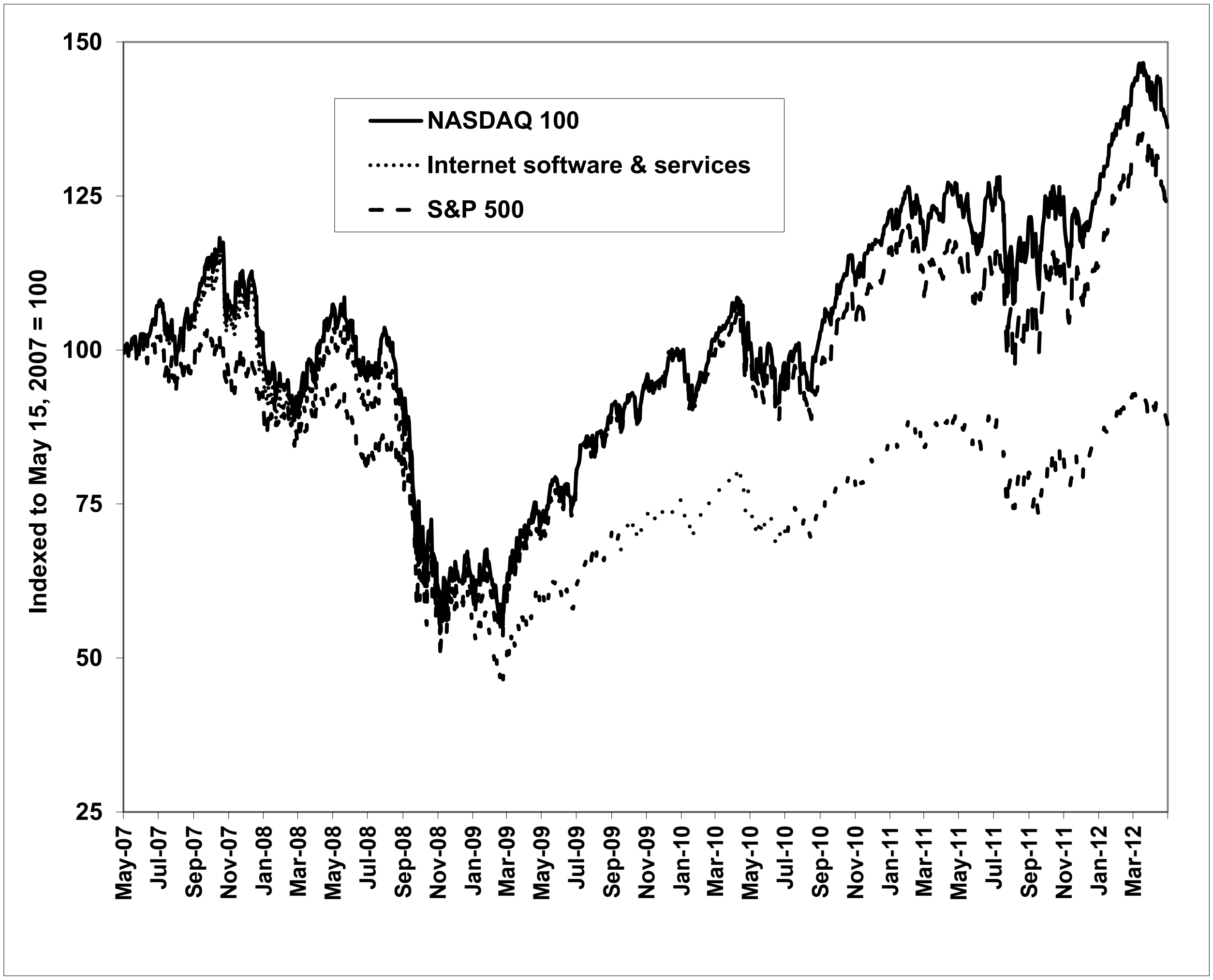
Exhibit 4

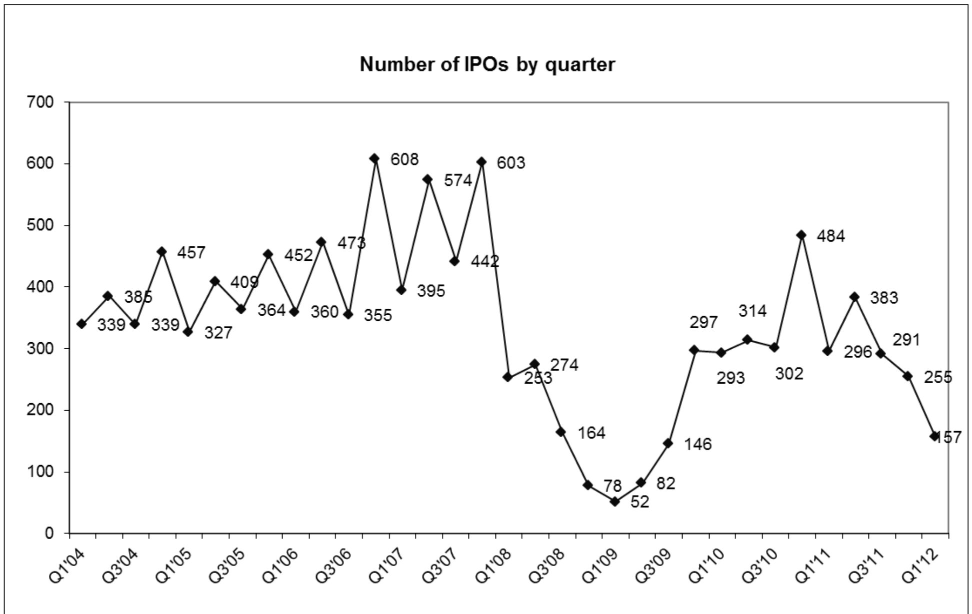
PERFORMANCE OF STOCK INDICES, 5 YEARS ENDING MAY 2012

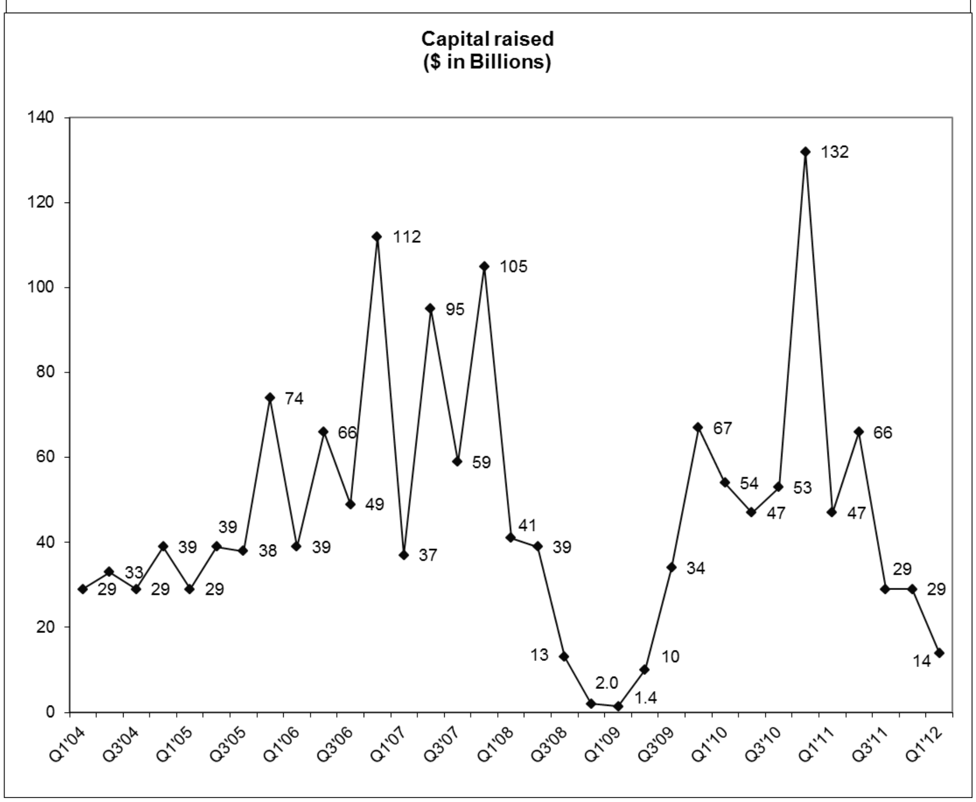


Internet Software & Services is measured by the iShares Dow Jones U.S. Technology exchange-traded fund.
Source: Yahoo Finance, ca.finance.yahoo.com/, accessed November 9, 2012.

Exhibit 5

MARKET STATISTICS ON US IPOS





Source: Dealogic, Thomson Financial, Ernst & Young, http://www.ey.com/Publication/vwLUAssets/2012_Q1_Global_IPO_update/$FILE/2012_Q1_Global_IPO_update.pdf; accessed October 2, 2012.

Exhibit 6

RECENT TECHNOLOGY IPOS

Company	Ticker	IPO date (in 2011)	Price Range	IPO price ($)	Gross Proceeds	Total Return		
						1st Day	1st Week	1st Month
LinkedIn	LNKD	May 19	$32 to $35; revised to $42 to $45	45.00	$353 million	109.4%	91.9%	45.6%
Groupon	GRPN	Nov 3	$16 to $18	20.00	$621 million	43.0%	21.3%	-5.3%
Zynga	ZYNG	Dec 16	$8.50 to $10	10.00	$1 billion	-5.0%	-6.1%	-11.3%

Sources accessed October 2, 2012:
http://www.reuters.com/article/2011/05/19/us-linkedin-ipo-risks-idUSTRE74H0TL20110519
http://www.nyse.com/press/1305802537651.html
http://articles.marketwatch.com/2011-10-21/markets/30759863_1_groupon-online-deals-zynga
http://latimesblogs.latimes.com/money_co/2011/11/groupon-ipo.html
http://articles.latimes.com/2011/dec/17/business/la-fi-ct-zynga-ipo-20111217
http://techcrunch.com/2012/12/02/zynga-sets-price-range-for-ipo-at-8-50-to-10-per-share

Exhibit 7

THE FACEBOOK OFFERING

The information in this prospectus is not complete and may be changed. Neither we nor the selling stockholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and neither we nor the selling stockholders are soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS (Subject to Completion)
Issued May 16, 2012

421,233,615 Shares

facebook

CLASS A COMMON STOCK

Facebook, Inc. is offering 180,000,000 shares of its Class A common stock and the selling stockholders are offering 241,233,615 shares of Class A common stock. We will not receive any proceeds from the sale of shares by the selling stockholders. This is our initial public offering and no public market currently exists for our shares of Class A common stock. We anticipate that the initial public offering price will be between $34.00 and $38.00 per share.

We have two classes of common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except voting and conversion rights. Each share of Class A common stock is entitled to one vote. Each share of Class B common stock is entitled to ten votes and is convertible at any time into one share of Class A common stock. The holders of our outstanding shares of Class B common stock will hold approximately 95.9% of the voting power of our outstanding capital stock following this offering, and our founder, Chairman, and CEO, Mark Zuckerberg, will hold or have the ability to control approximately 55.8% of the voting power of our outstanding capital stock following this offering.

Our Class A common stock has been approved for listing on the NASDAQ Global Select Market under the symbol "FB."

We are a "controlled company" under the corporate governance rules for NASDAQ-listed companies, and our board of directors has determined not to have an independent nominating function and instead to have the full board of directors be directly responsible for nominating members of our board.

Investing in our Class A common stock involves risks. See "Risk Factors " beginning on page 12.

	Price to public	*Underwriting Discounts and Commissions*	*Proceeds to Facebook*	*Proceeds to Selling Stockholders*
Per share	*$*	*$*	*$*	*$*
Total	*$*	*$*	*$*	*$*

We and the selling stockholders have granted the underwriters the right to purchase up to an additional 63,185,042 shares of Class A common stock to cover over-allotments. The Securities and Exchange Commission and state regulators have not approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

MORGAN STANLEY J.P. MORGAN GOLDMAN, SACHS & CO.
BofA MERRILL LYNCH BARCLAYS ALLEN & COMPANY LLC

CITIGROUP CREDIT SUISSE DEUTSCHE BANK SECURITIES
RBC CAPITAL MARKETS WELLS FARGO SECURITIES

Source: Facebook FORM S-1/A, Red Herring, May 16, 2012.

Exhibit 8

FACEBOOK —SELLING STOCKHOLDERS IN THE IPO

Name of Beneficial Owner	Class A Shares Owned Pre-IPO	Class B Shares Owned Pre-IPO	Class A Shares Owned Post-IPO	Class B Shares Owned Post-IPO	% of Total Voting Power After Our Initial Public Offering	Number of Shares Offered in IPO	% of Holdings
Executive Officers and Directors:							
Mark Zuckerberg, Chairman and CEO	0	533,801,850		503,601,850	31.0	30,200,000	6%
Shares subject to voting proxy	42,395,203	541,994,071	5,166,794	430,293,407	27.5	95,795,713	22%
Total	42,395,203	1,075,795,921	5,166,794	933,895,257	57.5	125,995,713	13%
James W. Breyer, Director		201,378,349	144,418,008	7,929,092	1.4	49,031,249	32%
Peter A. Thiel, Director		44,724,100	18,581,901	9,297,884	<1.0	16,844,315	60%
Selling Stockholders:							
Accel Partners		201,378,349	144,418,008	7,929,092	1.4	49,031,249	32%
DST Global Limited	36,711,928	94,567,945	5,016,794	80,600,514	5.2	45,662,565	53%
Goldman Sachs	65,947,241		37,274,529		<1.0	28,672,712	77%
Elevation Partners		40,109,645		35,487,149	2.3	4,622,496	13%
Greylock Partners		36,656,372		29,049,020	1.9	7,607,352	26%
Mail.ru Group Limited	1,325,775	55,026,235		36,751,311	2.3	19,600,699	53%
Mark Pincus		5,313,920		4,304,637	<1.0	1,009,283	23%
Meritech Capital Partners		40,355,223		33,356,443	2.1	6,998,780	21%
Microsoft Corporation		32,784,626		26,227,701	1.7	6,556,925	25%
Reid Hoffman		4,713,920		3,771,136	<1.0	942,784	25%
Tiger Global Management	4,207,500	49,630,486		30,430,166	1.9	23,407,820	77%

Source: Facebook FORM S-1/A, Red Herring, May 16, 2012. The table only shows the subset of current shareholders who are selling shares in the IPO. It does not include shareholders who are not selling shares.

Exhibit 9

LOCK-UPS ENDING AFTER IPO

The price of our Class A common stock could decline if there are substantial sales of our common stock, particularly sales by our directors, executive officers, employees, and significant stockholders, or when there is a large number of shares of our common stock available for sale. After our initial public offering, we will have outstanding 635,881,796 shares of our Class A common stock and 1,502,203,241 shares of our Class B common stock, based on the number of shares outstanding as of March 31, 2012. This includes 421,233,615 shares that we and the selling stockholders are selling in our initial public offering, which shares may be resold in the public market immediately following our initial public offering, and assumes no additional exercises of outstanding options (other than the partial exercise of an outstanding stock option to purchase 120,000,000 shares of Class B common stock held by Mr. Zuckerberg, resulting in the issuance of 60,000,000 shares of our Class B common stock as described elsewhere in this prospectus). Shares of our Class B common stock are convertible into an equivalent number of shares of our Class A common stock and generally convert into shares of our Class A common stock upon transfer. The 214,648,181 shares of our Class A common stock and 1,502,203,241 shares of our Class B common stock that are not offered and sold in our initial public offering as well as the shares underlying outstanding restricted stock units (RSUs) and shares subject to employee stock options will be eligible for sale in the public market in the near future as set forth below.

Date Available for Sale into Public Market	Number of Shares of Common Stock
91 days after the date of this prospectus	268,113,248 shares held by the selling stockholders other than Mr. Zuckerberg
151 to 180 days after the date of this prospectus	Approximately 137 million shares underlying net- settled Pre-2011 RSUs held by our directors and then current employees and approximately 55 million outstanding shares subject to stock options held by then current employees other than Mr. Zuckerberg
181 days after the date of this prospectus	1,222,849,097 outstanding shares and approximately 18 million shares underlying other net-settled Pre-2011 RSUs
211 days after the date of this prospectus	123,746,921 shares held by the selling stockholders other than Mr. Zuckerberg
366 days after the date of this prospectus	47,315,862 shares held by Mail.ru Group Limited and DST Global Limited and their respective affiliates

In addition, as of March 31, 2012, options to purchase 49,390,599 shares of Class B common stock held by former employees were outstanding and fully vested and the Class B common stock underlying such options will be eligible for sale 181 days after the date of this prospectus. Furthermore, following our initial public offering, the remaining 60,000,000 shares subject to the partially exercised stock option held by Mr. Zuckerberg will be eligible for sale 181 days after the date of this prospectus. We expect an additional approximately 2 million shares of Class B common stock to be delivered upon the net settlement of RSUs between the date of the initial settlement of RSUs described above and December 31, 2012 will be eligible for sale in the public market immediately following settlement.

Source: Facebook FORM S-1/A, Red Herring, dated May 16, 2012.

Exhibit 10

MEAN FIRST-DAY RETURNS OF U.S. IPOS, 1999–2011

The sample is U.S. initial public offerings (IPOs) with an offer price of at least $5.00 on US stock exchanges. Proceeds exclude overallotment options, but include the global offering size.

Year	Number of IPOs	Mean first day return: Equal-weighted	Mean first day return: Proceeds-weighted	Aggregate proceeds ($ billions)
1999	477	70.9%	57.0%	$64.8
2000	380	56.4%	45.8%	$64.8
2001	79	14.2%	8.7%	$34.2
2002	66	9.1%	5.1%	$22.0
2003	62	12.1%	10.5%	$9.5
2004	175	12.2%	12.2%	$31.7
2005	160	10.2%	9.3%	$28.3
2006	157	12.1%	13.0%	$30.5
2007	160	13.9%	13.9%	$35.7
2008	21	6.4%	24.8%	$22.8
2009	41	9.8%	11.1%	$13.3
2010	94	9.1%	6.1%	$30.7
2011	81	13.3%	12.0%	$27.0
Average first-day returns if IPO price relative to price range in filing is:				
	Below	Within	Above	
1999-2000	9%	26%	121%	
2001-2011	3%	10%	30%	
1980-2011	3%	11%	50%	

Source: Professor Jay Ritter, "Initial Public Offerings: Underpricing Statistics Through 2011," Cordell Professor of Finance, University of Florida ,http://bear.warrington.ufl.edu/ritter/ipodata.htm, accessed December 21, 2012.

Exhibit 11

DISCOUNTED CASH FLOW (DCF) ANALYSIS
(Modified based on DCF from Professor Aswath Damodaran, NYU Stern School of Business)

	2011	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	Terminal
DCF	*Base year*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	year
Assumptions:												
Revenue growth rate		40.0%	40.0%	40.0%	40.0%	40.0%	32.4%	24.8%	17.2%	9.6%	2.0%	2.0%
EBIT (Operating) margin	45.7%	44.6%	43.5%	42.5%	41.4%	40.3%	39.3%	38.2%	37.1%	36.1%	35.0%	35.0%
Tax rate	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	39.0%	38.0%	37.0%	36.0%	35.0%	35.0%
Increase in CAPEX + WC as % of sales		67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	100%
Cost of capital		11.1%	11.1%	11.1%	11.1%	11.1%	10.5%	9.8%	9.2%	8.6%	8.0%	8.0%
Free cash flow to firm ($ millions):												
Revenues	3,711	5,195	7,274	10,183	14,256	19,959	26,425	32,979	38,651	42,362	43,209	44,073
EBIT	1,695	2,318	3,167	4,325	5,903	8,051	10,377	12,599	14,353	15,279	15,123	15,426
EBIT(1-tax)	1,017	1,391	1,900	2,595	3,542	4,830	6,330	7,811	9,042	9,778	9,830	10,027
Increase in CAPEX + WC		995	1,392	1,949	2,729	3,821	4,333	4,391	3,800	2,486	568	864
FCFF		396	508	646	813	1,010	1,997	3,420	5,242	7,292	9,262	9,162
Terminal value												152,707
Present value:												
Cumulative discount factor		0.9002	0.8104	0.7296	0.6568	0.5912	0.5352	0.4872	0.4461	0.4107	0.3802	0.3802
PV of FCFF and TV		356	412	471	534	597	1,069	1,667	2,338	2,995	3,522	58,066
Value of firm	72,026.7											
- Debt	1,088.9											
+ Excess Cash	1,512.0											
Value of equity	72,449.8											
- Cost of equity options (after tax)	3,088.5		WACC		*Equity*	*Debt*	*Preferred*	*Capital*				
Value of common equity	69,361.3		Market values		$81,247.2	$1,088.9	$ -	$82,336.1				
Number of shares (millions)	2,138.1		Weights in WACC		98.7%	1.3%	0.0%	100.0%				
Estimated value /share	$ 32.44		Cost of Component		11.2%	2.4%	7.1%	11.1%				
Price talk	$ 38.00											
Price as % of value	117%											

Source: http://aswathdamodaran.blogspot.ca/2012/02/ipo-of-decade-my-valuation-of-facebook.html, accessed October 20, 2011.

Exhibit 12

MARKET COMPARABLES — MULTIPLES

			EV/Sales		Price/Earnings		Price/Sales	
Firm	Ticker	Share Price	2013E	2014E	2013E	2014E	2013E	2014E
Amazon	AMZN	$ 224.39	1.3x	0.9x	177.7x	109.5x	1.6x	1.3x
Apple	AAPL	$ 553.17	2.5x	1.8x	12.8x	11.1x	3.3x	2.8x
Cisco Systems	CSCO	$ 16.54	1.6x	1.4x	9.0x	8.5x	1.9x	1.8x
Google	GOOG	$ 611.11	4.7x	3.6x	14.5x	12.4x	5.4x	4.6x
Groupon	GRPN	$ 12.17	4.2x	2.9x	69.2x	17.9x	3.4x	2.6x
LinkedIn	LNKD	$ 110.56	10.7x	7.3x	173.4x	96.6x	12.7x	8.6x
Microsoft	MSFT	$ 30.21	2.8x	2.5x	11.2x	10.0x	3.4x	3.2x
Yahoo!	YHOO	$ 15.40	2.8x	2.6x	17.1x	15.0x	4.1x	4.0x
Zynga	ZNGA	$ 8.56	5.9x	4.9x	33.4x	25.1x	4.5x	3.7x
		Mean	4.1x	3.1x	57.6x	34.0x	4.5x	3.6x
		Median	2.8x	2.6x	17.1x	15.0x	3.4x	3.2x
Facebook	FB	$ 34.00	10.1x	7.2x	51.5x	39.1x	10.0x	7.1x
		$ 38.00	11.2x	8.0x	57.6x	43.7x	11.2x	8.0x

Facebook assumptions	2013E	2014E
EPS consensus forecast	$0.66	$0.87
Sales forecast mn (Ex. 11)	7,274	10,183
Net Debt mn (Ex. 11)	(413.0)	(413.0)
Pre-money shares (mn)	1,958.1	1,958.1

Source: Google Finance, I/B/E/S as of May 15, 2012; www.google.ca/finance accessed October 2, 2012.