Facebook

Expecting Strong Advertising Traction to Build Toward Year-End & Into '14; Reiterate Overweight, PT to $53

Overweight

FB, FB US
Price: $45.04

▲ **Price Target: $53.00**
Previous: $44.00

We are incrementally positive on Facebook shares as we believe advertising traction across both Mobile and Desktop continues to build into year-end and 2014. 2Q13 marked an inflection point in advertiser demand and ad quality for Facebook, which enabled the company to increase inventory while simultaneously realizing higher pricing. We believe that momentum in the ad platform continues as marketer feedback around Mobile, News Feed, and FBX continues to improve along with ROI. **We are raising our Mobile and Desktop News Feed estimates going forward, and we project Mobile will surpass 50% of Facebook's ad revenue in 4Q13 and represent 60% of ad revenue in 2014. We reiterate our Overweight rating and are raising our price target from $44 to $53.**

- **Seeing a broader advertiser base in 3Q.** During 3Q we believe Facebook has expanded its advertiser base, with a **notable pick-up in Entertainment industry ads across TV shows, movies, and console game launches.** These ads often feature click-to-play video—which bodes well for Facebook's likely more formal launch of News Feed video ads in coming months—and they likely command premium pricing based on guaranteed timing and the more advanced format.

- **FBX ramping up. The Facebook Exchange (FBX) was a small contributor in 2Q, but we believe it will become an increasingly important part of Facebook's ad platform as re-targeted ads move further into the Desktop and Mobile News Feeds.** Our anecdotal checks suggest that FBX ads have increased notably in the Desktop Right Rail—often representing the majority of ads shown—and marketer feedback after a few months of FBX in the Desktop News Feed is positive. Triggit data across 90 campaigns and 4.9B impressions suggests increased FBX ads in the Desktop News Feed and increased adoption of dynamic ads are driving a 27x increase in CTRs and a 50% decrease in eCPC (implying a 13-14x increase in CPMs) since the end of 2012.

- **Estimate and PT increases.** Mobile estimates in our bottom-up model increase to $2.96B in 2013 and $5.95B in 2014, up from $2.83B and $5.09B previously, increases of 3% and 12%. We now project 2013 and 2014 non-GAAP EPS of $0.76 and $1.09. **We reiterate our Overweight rating and are raising our price target from $44 to $53 based on the average of our DCF analysis ($56), 17x 2015E EBITDA ($56), and 33x 2015 non-GAAP EPS ($47).**

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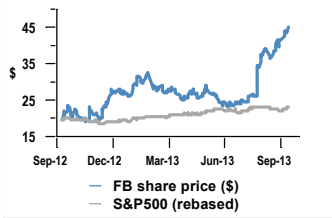
Price Performance



	YTD	1m	3m	12m
Abs	60.9%	17.0%	87.4%	131.8 %
Rel	45.4%	17.1%	83.5%	114.0 %

Facebook Inc. (FB;FB US)

FYE Dec	2012A	2013E (Prev)	2013E (Curr)	2014E (Prev)	2014E (Curr)	2015E (Prev)	2015E (Curr)
EPS - Reported ($)							
Q1 (Mar)	0.12	0.12A	0.12A	-	-	-	-
Q2 (Jun)	0.12	0.19A	0.19A	-	-	-	-
Q3 (Sep)	0.12	0.19	0.20	-	-	-	-
Q4 (Dec)	0.17	0.23	0.24	-	-	-	-
FY	0.54	0.74	0.76	0.98	1.09	1.25	1.43
CONSENSUS_EPS							
Bloomberg EPS FY ($)	0.51	-	0.71	-	0.95	-	1.26

Source: Company data, Bloomberg, J.P. Morgan estimates.

Company Data	
Price ($)	45.04
Date Of Price	11 Sep 13
52-week Range ($)	45.09-18.80
Market Cap ($ mn)	110,393.00
Fiscal Year End	Dec
Shares O/S (mn)	2,451
Price Target ($)	53.00
Price Target End Date	31-Dec-14

See page 17 for analyst certification and important disclosures.

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Expecting Strong Advertising Traction to Build Toward Year-End and Into 2014; Reiterate Overweight, Price Target to $53

We are incrementally positive on Facebook shares as we believe advertising traction across both Mobile and Desktop continues to build into year-end and 2014. 2Q13 marked an inflection point in advertiser demand and ad quality for Facebook, which enabled the company to increase inventory while simultaneously realizing higher pricing. **We believe that momentum in the ad platform continues as marketer feedback around Mobile, News Feed, and FBX continues to improve along with ROI.** We do not believe ongoing strength is attributable to one single driver, but rather the combined impact of stronger sales efforts, improved advertiser education, better tracking and measurement, and simplified ad formats.

During 3Q we believe Facebook has expanded its advertiser base, with a notable pick-up in Entertainment industry ads across TV shows, movies, and console game launches. These ads often feature click-to-play video—which bodes well for Facebook's likely more formal launch of News Feed video ads in coming months—and they likely command premium pricing based on guaranteed timing and the more advanced format.

The Facebook Exchange (FBX) was a small contributor in 2Q, but we believe it will become an increasingly important part of Facebook's ad platform as re-targeted ads move further into the Desktop and Mobile News Feeds. Our anecdotal checks suggest that FBX ads have increased notably in the Desktop Right Rail—often representing the majority of ads shown—and marketer feedback after a few months of FBX in the Desktop News Feed is positive. Triggit data across 90 campaigns and 4.9B impressions suggests increased FBX ads in the Desktop News Feed and increased adoption of dynamic ads are driving a 27x increase in click-through rates (CTR) and a 50% decrease in eCPC (implying a 13-14x increase in CPMs) since the end of 2012. Desktop News Feed FBX ads began in May of this year and they are becoming more prevalent, but we would also expect them to extend into the Mobile News Feed in coming months, thereby increasing the relevance and quality of mobile ads. Advertiser targeting should also improve going forward as Custom Audiences becomes easier to use.

We are raising our Mobile and Desktop News Feed estimates going forward, and we project Mobile will surpass 50% of Facebook's ad revenue in 4Q13 and represent 60% of ad revenue in 2014. Mobile estimates in our bottom-up model increase to $2.96B in 2013 and $5.95B in 2014, up from $2.83B and $5.09B previously, increases of 3% and 12%. We remain positive on Facebook shares as user engagement remains strong with mobile more than offsetting desktop declines, and Facebook still early in its overall advertising trajectory. **We reiterate our Overweight rating and are raising our price target from $44 to $53 based on the average of our DCF analysis ($56), 17x 2015E EBITDA ($56), and 33x 2015 non-GAAP EPS ($47).**

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Adjusting Estimates

Overall: We are raising our overall Facebook revenue, EBITDA, and EPS estimates as we are increasingly optimistic on Facebook's ability to monetize the News Feed, particularly in Mobile. **Overall, our 2013 and 2014 estimates for revenue increase by 2-3% and EBITDA increases by 12%.** See Figure 1 below for more details**.**

Figure 1: J.P. Morgan's Revised Facebook Estimates

Facebook	3Q13 JPME		4Q13 JPME		2013 JPME		2014 JPME		2015 JPME	
($ in millions)	Old	New	Old	New	Old	New	Old	New	Old	New
Advertising Revenue	1,693	1,752	1,952	2,097	6,489	6,693	8,830	9,898	11,161	12,826
Y/Y Growth	*55.9%*	*61.3%*	*46.9%*	*57.8%*	*51.6%*	*56.4%*	*36.1%*	*47.9%*	*26.4%*	*29.6%*
% chg vs. old		3.5%		7.4%		3.1%		12.1%		14.9%
Mobile Revenue	804	842	996	1,091	2,829	2,961	5,092	5,953	7,587	8,903
Y/Y Growth	*429.1%*	*453.6%*	*225.7%*	*256.8%*	*502.5%*	*530.7%*	*80.0%*	*101.0%*	*49.0%*	*49.6%*
% chg vs. old		4.6%		9.5%		4.7%		16.9%		17.4%
Desktop Total Rev	888	910	957	1,006	3,660	3,732	3,738	3,945	3,575	3,923
Y/Y Growth	*-4.9%*	*-2.5%*	*-6.5%*	*-1.7%*	*-3.9%*	*-2.0%*	*2.1%*	*5.7%*	*-4.4%*	*-0.6%*
% chg vs. old		2.5%		5.2%		2.0%		5.5%		9.7%
Desktop Right Rail Rev	628	628	646	646	2,666	2,666	2,289	2,289	1,972	1,972
Y/Y Growth	*-26.8%*	*-26.8%*	*-24.3%*	*-24.3%*	*-24.6%*	*-24.6%*	*-14.2%*	*-14.2%*	*-13.9%*	*-13.9%*
% chg vs. old		0.0%		0.0%		0.0%		0.0%		0.0%
Desktop News Feed Rev	261	283	311	361	994	1,065	1,450	1,657	1,603	1,952
Y/Y Growth	*241.7%*	*270.6%*	*82.7%*	*112.0%*	*260.9%*	*286.9%*	*45.9%*	*55.5%*	*10.6%*	*17.8%*
% chg vs. old		8.4%		16.0%		7.2%		14.3%		21.7%
Payments Revenue	203	203	201	201	831	831	788	788	762	762
Y/Y Growth	*15.3%*	*15.3%*	*-21.4%*	*-21.4%*	*2.6%*	*2.6%*	*-5.2%*	*-5.2%*	*-3.2%*	*-3.2%*
% chg vs. old		0.0%		0.0%		0.0%		0.0%		0.0%
Total Revenue	1,896	1,955	2,153	2,298	7,320	7,524	9,618	10,686	11,924	13,589
Y/Y Growth	*50.2%*	*54.9%*	*35.9%*	*45.0%*	*43.8%*	*47.9%*	*31.4%*	*42.0%*	*24.0%*	*27.2%*
% chg vs. old		3.1%		6.7%		2.8%		11.1%		14.0%
EBITDA	1,045	1,071	1,182	1,247	4,055	4,145	5,102	5,727	6,392	7,333
Y/Y Growth	*49.1%*	*52.7%*	*23.1%*	*29.9%*	*39.4%*	*42.5%*	*25.8%*	*38.2%*	*25.3%*	*28.0%*
Margin (%)	55.1%	54.8%	54.9%	54.3%	55.4%	55.1%	53.0%	53.6%	53.6%	54.0%
% chg vs. old		2.4%		5.5%		2.2%		12.2%		14.7%
PF EPS	$0.19	$0.20	$0.23	$0.24	$0.74	$0.76	$0.98	$1.09	$1.25	$1.43
Y/Y Growth	*58.5%*	*63.5%*	*33.9%*	*42.7%*	*38.0%*	*41.9%*	*32.2%*	*43.8%*	*27.6%*	*30.5%*
% chg vs. old		3.1%		6.6%		2.8%		11.9%		14.4%

Source: J.P. Morgan estimates, Company data.

Simplified Ad Formats and Broader Advertiser Base

We think Facebook's efforts to simplify its ad formats have removed friction for marketers and helped create more News Feed-eligible ads, thereby spurring the advertising auction process. **Beyond moving from 27 to 13 ad formats, the company recently announced it was standardizing image sizes for ads, making them consistent across all types of formats, across Desktop and Mobile.** Facebook has also increased the image sizes for its Page Post link ads on desktop which we think should drive higher click-through rates and engagement.

We believe Facebook's advertiser base continues to widen and think advertisers in the Entertainment category have increased their Facebook ad spend in 3Q, likely due to the heavy summer movie season as well as advertisements around the fall TV lineup. Examples of entertainment advertisers in 3Q include ads for the movies *Getaway* and *Lone Ranger,* TV shows *The Million Second Quiz* and *Masters of Sex,* as well as Take Two's upcoming release of the console game *Grand Theft Auto V*.

We also expect Facebook's 4Q revenue growth to be bolstered by the retail vertical as we believe large retailers likely made significant strides in terms of measuring the ROI of their Facebook ad spend over the last year.

Expect FBX To Drive Continued Yield Improvements On Desktop… Mobile Next?

While Facebook has indicated that FBX represents a relatively small percentage of its ad revenue, we expect FBX to drive meaningful yield improvements – particularly on Desktop Right Rail – over time. We believe FBX remains relatively underpenetrated even among direct response advertisers and we expect additional advertiser adoption to drive yield increases as FBX ads offer higher ROI than many other direct response channels. According to Triggit, a Facebook Preferred Marketing Developer (PMD), **FBX ads are currently adopted by just 9% of the Internet Retailer Top 500 sites and less than 7% of the top 10k Alexa sites.** We note that Facebook currently requires PMDs (Preferred Marketing Developers) to individually approve clients for FBX ads and we expect further streamlining of its ad-buying process.

Triggit data across 90 campaigns and 4.9B impressions suggests increased FBX ads in the Desktop News Feed and increased adoption of dynamic ads are driving a 27x increase in CTRs and a 50% decrease in eCPC (implying a 13-14x increase in CPMs) since the end of 2012. Note that FBX ads in the Desktop News Feed went live in early May 2013, after an initial test phase. We believe Facebook's Desktop Right Rail ads have CPMs of ~$0.40 in the U.S though our checks suggest that industry CPMs for re-targeting are closer to ~$2.00, a significant gap that we believe FBX can help tighten over time as more advertisers shift to FBX and FBX ads increasingly appear in the News Feed going forward.

Based on our anecdotal checks, we believe FBX ads now represent the majority of Desktop Right Rail ads, up significantly over the last few quarters. We also believe FBX ads are becoming more prevalent in the Desktop News Feed with sites like Booking.com and other OTAs increasing their ad exposure in the Desktop News Feed. We believe Facebook is also working on adding Mobile News Feed ads into its exchange.

Video Ads A Potential Upside Driver in 2014

We believe video ads can be a significant driver of growth for Facebook over time. According to eMarketer, digital video ad spend will reach $4.1B in 2013, up 41% Y/Y, and it will continue be one of the fastest growing segments of online advertising. While video ads already exist in both the desktop and mobile News Feeds, they are primarily click-to-play Page Post ads. Industry publications such as AdAge have suggested that Facebook is working with advertisers to launch auto-play video ads in the Desktop and Mobile News Feed for up to $1M-$2.4M per day. Advertiser demand for Facebook video ads appears to be strong, though the launch of auto-play video ads has seemingly been repeatedly delayed as Facebook ensures it has the necessary technology backbone in place to support higher-bandwidth video ads while maintaining the user experience on the site. **We think it is critical that Facebook maintains the user experience, and recent delays do not change our view that video ads will drive increased demand and higher pricing.**

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Revisiting Our Bottom-Up Advertising Build

In this section, we walk through revised estimates in our bottom-up advertising build which is based on three segments: 1) Mobile News Feed; 2) Desktop News Feed; and 3) Desktop Right Rail. While overall ad revenue remains key, we believe the bottom-up build is useful for capturing the ongoing mix-shift from web to mobile that generally results in fewer impressions, but higher overall eCPMs.

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Figure 2: Facebook Bottom-Up Advertising Build

$ in millions except per user figures

(in Millions except per user figures)	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
Mobile News Feed													
Average MAUs	339	460	516	574	642	556	716	785	847	902	804	1,033	1,231
Visits/User/Day	0.7	0.70	0.80	0.95	1.00	0.86	1.07	1.12	1.20	1.28	1.17	1.40	1.55
Impressions/Visit/User		0.00	0.17	0.55	1.00	0.63	1.05	1.18	1.25	1.30	1.20	1.35	1.42
Total Impressions/Day		0	72	300	642	241	801	1037	1271	1501	1,155	1953	2710
Total Impressions in Period		**-**	**1,722**	**27,568**	**59,064**	**88,354**	**72,077**	**94,668**	**116,908**	**138,057**	**421,710**	**712,884**	**989,264**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*5397%*	*324%*	*134%*	*377%*	*69%*	*39%*
Q/Q Growth		*NM*	*NM*	*1501%*	*114%*		*22%*	*31%*	*23%*	*18%*			
eCPM		**$0.00**	**$6.88**	**$5.52**	**$5.18**	**$5.31**	**$5.18**	**$6.93**	**$7.20**	**$7.90**	**$7.02**	**$8.35**	**$9.00**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*1%*	*31%*	*53%*	*32%*	*19%*	*8%*
Q/Q Growth		*NM*	*NM*	*-20%*	*-6%*		*0%*	*34%*	*4%*	*10%*			
Revenue/MAU		$0.00	$0.02	$0.27	$0.48	$0.84	$0.52	$0.84	$0.99	$1.21	$3.68	$5.76	$7.23
Period ending revenue/day (millions)			$0.50	$3.00	$3.65	$3.65	$4.66	$9.71	$8.58	$15.13	$12.58	$20.03	$28.75
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*1843%*	*186%*	*315%*	*245%*	*59%*	*44%*
Q/Q Growth		*NM*	*NM*	*500%*	*22%*		*28%*	*109%*	*-12%*	*76%*			
Avg Period Revenue/Day (millions)		--	$0.49	$1.65	$3.32	$1.28	$4.15	$7.18	$9.15	$11.85	$8.11	$16.31	$24.39
Mobile News Feed Revenue		**$0.0**	**$11.8**	**$152.0**	**$305.7**	**$469.6**	**$373.5**	**$655.6**	**$841.7**	**$1,090.6**	**$2,961.5**	**$5,952.6**	**$8,903.4**
Y/Y Growth							*NM*	*NM*	*454%*	*257%*	*531%*	*101%*	*50%*
Q/Q Growth				*1183%*	*101%*		*22%*	*76%*	*28%*	*30%*			
% of Total Ad Revenue			1%	14%	23%	11%	30%	41%	48%	52%	44%	60%	69%
Desktop News Feed													
Average MAUs		803	836	867	890	843	910	929	945	962	935	995	1,039
Visits/User/Day	1.04	1.07	1.03	1.02	1.00	1.03	0.96	0.90	0.85	0.78	0.87	0.80	0.70
Impressions/Visit/User		0.05	0.17	0.35	0.60	0.30	0.70	0.80	0.85	0.90	0.85	0.95	1.05
Total Impressions/Day		44	145	310	534	257	612	669	682	676	660	756	764
Total Impressions in Period		**3,981**	**13,168**	**28,166**	**48,594**	**93,909**	**55,037**	**61,002**	**62,790**	**62,158**	**240,987**	**276,101**	**278,800**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*363%*	*123%*	*28%*	*157%*	*15%*	*1%*
Q/Q Growth		*NM*	*NM*	*114%*	*73%*		*13%*	*11%*	*3%*	*-1%*			
eCPM		**$1.50**	**$1.75**	**$2.71**	**$3.50**	**$2.93**	**$3.35**	**$3.90**	**$4.50**	**$5.80**	**$4.42**	**$6.00**	**$7.00**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*123%*	*66%*	*66%*	*51%*	*36%*	*17%*
Q/Q Growth		*NM*	*NM*	*55%*	*29%*		*-4%*	*16%*	*15%*	*29%*			
Revenue/MAU		$0.01	$0.03	$0.09	$0.19	$0.33	$0.20	$0.26	$0.30	$0.37	$1.14	$1.66	$1.88
Period ending revenue/day (millions)			$0.50	$1.00	$2.74	$2.74	$1.36	$3.86	$2.29	$5.55	$3.10	$5.98	$4.72
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*671%*	*129%*	*103%*	*13%*	*93%*	*-21%*
Q/Q Growth		*NM*	*NM*	*100%*	*174%*		*-50%*	*184%*	*-41%*	*143%*			
Avg Period Revenue/Day (millions)		--	$0.25	$0.84	$1.87	$0.75	$2.05	$2.61	$3.07	$3.92	$2.92	$4.54	$5.35
Desktop News Feed Revenue		**$6.0**	**$23.0**	**$76.2**	**$170.1**	**$275.3**	**$184.4**	**$237.9**	**$282.6**	**$360.5**	**$1,065.4**	**$1,656.6**	**$1,951.6**
Y/Y Growth							*NM*	*932%*	*271%*	*112%*	*287%*	*55%*	*18%*
Q/Q Growth			*286%*	*231%*	*123%*		*8%*	*29%*	*19%*	*28%*			
% of Total Ad Revenue			2%	7%	13%	6%	15%	15%	16%	17%	16%	17%	15%
Total News Feed Revenue (Mobile + Desktop)		**$6.0**	**$34.9**	**$228.3**	**$475.7**	**$744.9**	**$557.9**	**$893.5**	**$1,124.3**	**$1,451.2**	**$4,026.8**	**$7,609.2**	**$10,855.0**
Y/Y Growth							*NM*	*NM*	*392%*	*205%*	*441%*	*89%*	*43%*
Q/Q Growth			*484%*	*554%*	*108%*		*17%*	*60%*	*26%*	*29%*			
Desktop Right Rail													
Average MAUs	690	803	836	867	890	843	910	929	945	962	935	995	1,039
Visits/User/Day	1.04	1.07	1.03	1.02	1.00	1.03	0.96	0.90	0.85	0.78	0.87	0.80	0.70
Impressions/Visit/User	64.5	58.9	59.2	61.9	77.8	64.5	79.7	83.0	85.0	85.0	83.2	75.0	75.0
Total Impressions/Day	43,119	50,506	50,864	54,728	69,269	56,034	69,632	69,359	68,250	63,810	68,222	59,719	54,560
Total Impressions in Period	**15,738,369**	**4,596,019**	**4,628,594**	**4,980,291**	**6,303,482**	**20,508,386**	**6,266,886**	**6,484,512**	**6,278,966**	**5,870,521**	**24,900,885**	**21,797,414**	**19,914,303**
Y/Y Growth		*34%*	*17%*	*26%*	*44%*	*30%*	*36%*	*40%*	*26%*	*-7%*	*21%*	*-12%*	*-9%*
Q/Q Growth		*5%*	*1%*	*8%*	*27%*		*-1%*	*3%*	*-3%*	*-7%*			
eCPM	**$0.20**	**$0.19**	**$0.21**	**$0.17**	**$0.14**	**$0.17**	**$0.11**	**$0.11**	**$0.10**	**$0.11**	**$0.11**	**$0.11**	**$0.10**
Y/Y Growth		*2%*	*5%*	*-14%*	*-37%*	*-14%*	*NM*	*-47%*	*-42%*	*-19%*	*-38%*	*-2%*	*-6%*
Q/Q Growth		*-12%*	*10%*	*-17%*	*-21%*		*-19%*	*-1%*	*-8%*	*10%*			
Revenue/MAU	$4.57	$1.08	$1.15	$0.99	$0.96	$4.19	$0.76	$0.76	$0.66	$0.67	$2.85	$2.30	$1.90
Avg Period Revenue/Day (millions)	$8.64	$9.52	$10.52	$9.43	$9.38	$9.66	$7.63	$7.73	$6.82	$7.02	$7.30	$6.27	$5.40
Desktop Right Rail Revenue	**$3,154.0**	**$866.0**	**$957.1**	**$857.7**	**$853.3**	**$3,534.1**	**$687.1**	**$705.5**	**$627.9**	**$645.8**	**$2,666.3**	**$2,288.7**	**$1,971.5**
Y/Y Growth	*69%*	*36%*	*23%*	*7%*	*-10%*	*12%*	*-21%*	*-26%*	*-27%*	*-24%*	*-25%*	*-14%*	*-14%*
Q/Q Growth		*-8%*	*11%*	*-10%*	*-1%*		*-19%*	*3%*	*-11%*	*3%*			
% of Total Ad Revenue			96%	79%	64%	83%	55%	44%	36%	31%	40%	23%	15%
Total Desktop Revenue (News Feed +	**$3,154.0**	**$872.0**	**$980.2**	**$934.0**	**$1,023.3**	**$3,809.4**	**$871.5**	**$943.4**	**$910.5**	**$1,006.3**	**$3,731.6**	**$3,945.3**	**$3,923.1**
Y/Y Growth	*69%*	*37%*	*26%*	*17%*	*9%*	*21%*	*0%*	*-4%*	*-3%*	*-2%*	*-2%*	*6%*	*-1%*
Q/Q Growth		*-8%*	*12%*	*-5%*	*10%*		*-15%*	*8%*	*-3%*	*11%*			
% of Total Ad Revenue	100%	100%	99%	86%	77%	89%	70%	59%	52%	48%	56%	40%	31%
Revenue/MAU	$4.57	$1.09	$1.17	$1.08	$1.15	$4.52	$0.96	$1.02	$0.96	$1.05	$3.99	$3.96	$3.78
Y/Y Growth		*7%*	*3%*	*-1%*	*-6%*	*-1%*	*-12%*	*-13%*	*-11%*	*-9%*	*-12%*	*-1%*	*-5%*
TOTAL ADVERTISING													
Average MAUs	727	873	928	981	1,032	951	1,083	1,133	1,177	1,218	1,147	1,322	1,482
Visits/User/Day	1.31	1.35	1.37	1.46	1.49	1.42	1.51	1.51	1.55	1.56	1.53	1.70	1.78
Impressions/Visit/User	45	43	40	39	46	42	43	42	39	35	40	28	22
Total Impressions/Day	43,119	50,549	51,027	55,341	70,452	56,532	71,044	72,769	70,203	65,986	70,037	62,428	58,034
Total Impressions in Period	**15,738,369**	**4,600,000**	**4,643,484**	**5,036,026**	**6,411,140**	**20,690,649**	**6,394,000**	**6,640,182**	**6,458,664**	**6,070,737**	**25,563,583**	**22,786,399**	**21,182,367**
Y/Y Growth		*34%*	*18%*	*27%*	*46%*	*31%*	*39%*	*43%*	*28%*	*-5%*	*24%*	*-11%*	*-7%*
Q/Q Growth		*5%*	*1%*	*8%*	*27%*		*0%*	*4%*	*-3%*	*-6%*			
eCPM	**$0.20**	**$0.19**	**$0.21**	**$0.22**	**$0.21**	**$0.21**	**$0.19**	**$0.24**	**$0.27**	**$0.35**	**$0.26**	**$0.43**	**$0.61**
Y/Y Growth		*2%*	*9%*	*7%*	*-4%*	*3%*	*3%*	*13%*	*26%*	*67%*	*27%*	*66%*	*39%*
Q/Q Growth		*-12%*	*13%*	*1%*	*-4%*		*-6%*	*24%*	*13%*	*27%*			
TOTAL ADVERTISING REVENUE	**$3,154.0**	**$872.0**	**$992.0**	**$1,086.0**	**$1,329.0**	**$4,279.0**	**$1,245.0**	**$1,599.0**	**$1,752.2**	**$2,096.9**	**$6,693.1**	**$9,897.9**	**$12,826.5**
Y/Y Growth	*69%*	*37%*	*28%*	*36%*	*41%*	*36%*	*43%*	*61%*	*61%*	*58%*	*56%*	*48%*	*30%*
ex-FX Y/Y Growth	*0%*	*38%*	*33%*	*43%*	*43%*	*0%*	*43%*	*63%*	*61%*	*58%*	*56%*	*48%*	*30%*
Q/Q Growth		*-8%*	*14%*	*9%*	*22%*		*-6%*	*28%*	*10%*	*20%*			
% of Total Ad Revenue	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
News Feed as a % of total Impressions		0.09%	0.32%	1.11%	1.68%	1%	1.99%	2.34%	2.78%	3.30%	2.59%	4.34%	5.99%
News Feed as a % of total Revenue		0.7%	3.5%	21.0%	35.8%	17.4%	44.8%	55.9%	64.2%	69.2%	60.2%	76.9%	84.6%

Source: Company reports and J.P. Morgan estimates.

As shown in Figure 3 below, we expect Facebook to continue to benefit from overall user (MAUs) and engagement (visits/user/day) growth as mobile drives users and frequency of visits. Impressions per visit and overall impression volume is likely to come down, but **we expect higher eCPMs on mobile and improving yield on desktop to more than offset the negative impacts of declining overall impressions in 2014 and 2015**. We think further upside to our estimates could come from: 1) increases in mobile and ad load in overseas markets; 2) if the Facebook Exchange and other new targeting tools drive a rebound in Desktop Right Rail CPMs and stabilize Desktop revenue; and 3) video ads.

Figure 3: Facebook Total Ad Revenue Growth Drivers

$ in millions except per user figures

(in Millions except per user figures)	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
TOTAL ADVERTISING													
Average MAUs	727	873	928	981	1,032	951	1,083	1,133	1,177	1,218	1,147	1,322	1,482
Visits/User/Day	1.31	1.35	1.37	1.46	1.49	1.42	1.51	1.51	1.55	1.56	1.53	1.70	1.78
Impressions/Visit/User	45	43	40	39	46	42	43	42	39	35	40	28	22
Total Impressions/Day	43,119	50,549	51,027	55,341	70,452	56,532	71,044	72,769	70,203	65,986	70,037	62,428	58,034
Total Impressions in Period	**15,738,369**	**4,600,000**	**4,643,484**	**5,036,026**	**6,411,140**	**20,690,649**	**6,394,000**	**6,640,182**	**6,458,664**	**6,070,737**	**25,563,583**	**22,786,399**	**21,182,367**
Y/Y Growth		*34%*	*18%*	*27%*	*46%*	*31%*	*39%*	*43%*	*28%*	*-5%*	*24%*	*-11%*	*-7%*
Q/Q Growth		*5%*	*1%*	*8%*	*27%*		*0%*	*4%*	*-3%*	*-6%*			
eCPM	**$0.20**	**$0.19**	**$0.21**	**$0.22**	**$0.21**	**$0.21**	**$0.19**	**$0.24**	**$0.27**	**$0.35**	**$0.26**	**$0.43**	**$0.61**
Y/Y Growth		*2%*	*9%*	*7%*	*-4%*	*3%*	*3%*	*13%*	*26%*	*67%*	*27%*	*66%*	*39%*
Q/Q Growth		*-12%*	*13%*	*1%*	*-4%*		*-6%*	*24%*	*13%*	*27%*			
TOTAL ADVERTISING REVENUE	**$3,154.0**	**$872.0**	**$992.0**	**$1,086.0**	**$1,329.0**	**$4,279.0**	**$1,245.0**	**$1,599.0**	**$1,752.2**	**$2,096.9**	**$6,693.1**	**$9,897.9**	**$12,826.5**
Y/Y Growth	*69%*	*37%*	*28%*	*36%*	*41%*	*36%*	*43%*	*61%*	*61%*	*58%*	*56%*	*48%*	*30%*
ex-FX Y/Y Growth	*0%*	*38%*	*33%*	*43%*	*43%*	*0%*	*43%*	*63%*	*61%*	*58%*	*56%*	*48%*	*30%*
Q/Q Growth		*-8%*	*14%*	*9%*	*22%*		*-6%*	*28%*	*10%*	*20%*			
% of Total Ad Revenue	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
News Feed as a % of total Impressions		0.09%	0.32%	1.11%	1.68%	1%	1.99%	2.34%	2.78%	3.30%	2.59%	4.34%	5.99%
News Feed as a % of total Revenue		0.7%	3.5%	21.0%	35.8%	17.4%	44.8%	55.9%	64.2%	69.2%	60.2%	76.9%	84.6%

Source: Company reports and J.P. Morgan estimates.

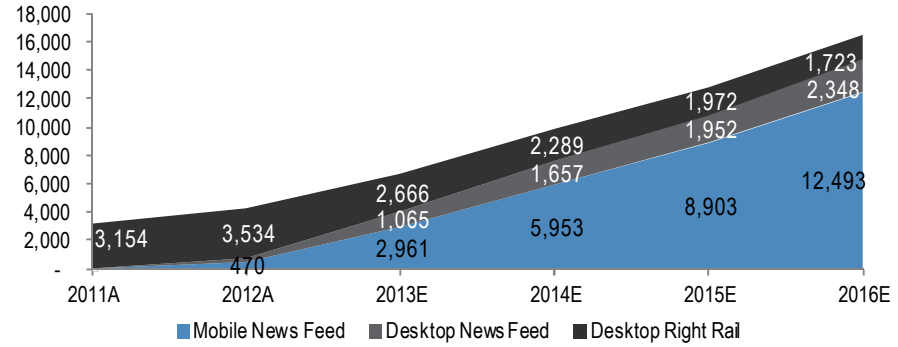
Facebook posted strongly accelerating ad revenue growth in 2Q13, driven primarily by mobile ads. While increasing Facebook's overall share of ad budgets across both desktop and mobile is critical, we expect mobile to remain the primary focus. **Facebook also sometimes has discretion around directing certain campaigns across formats, and we believe the highest quality ads and especially those that point to strong mobile sites will be pushed toward the Mobile News Feed.**

Mobile benefiting from several growth drivers

As shown in Figure 4 below, **we expect Mobile to surpass Desktop ad revenue in 4Q13.** We remain optimistic on Mobile ad formats including Sponsored Stories, Promoted Posts, App-Install Ads, and others as Mobile ads have higher CTRs and significantly higher eCPMs relative to Desktop.

Figure 4: Facebook Ad Revenue by Format

$ in millions



Source: Company reports and J.P. Morgan estimates.

As shown in Figure 5 below, we expect mobile to continue witnessing very strong growth driven by increases in users, visit frequency, and ad load (impressions per user visit). **We believe newer ad formats have been adopted more quickly by U.S. advertisers but international mobile ad load should increase over time.** The mix-shift toward international markets such as Asia and Rest Of World could drive lower overall mobile eCPMs, but also greater impression volume.

Figure 5: Facebook Mobile Ad Revenue Build

$ in millions except per user figures

(in Millions except per user figures)	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
Mobile News Feed													
Average MAUs	339	460	516	574	642	556	716	785	847	902	804	1,033	1,231
Visits/User/Day	0.7	0.70	0.80	0.95	1.00	0.86	1.07	1.12	1.20	1.28	1.17	1.40	1.55
Impressions/Visit/User		0.00	0.17	0.55	1.00	0.63	1.05	1.18	1.25	1.30	1.20	1.35	1.42
Total Impressions/Day		0	72	300	642	241	801	1037	1271	1501	1,155	1953	2710
Total Impressions in Period		**-**	**1,722**	**27,568**	**59,064**	**88,354**	**72,077**	**94,668**	**116,908**	**138,057**	**421,710**	**712,884**	**989,264**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*5397%*	*324%*	*134%*	*377%*	*69%*	*39%*
Q/Q Growth		*NM*	*NM*	*1501%*	*114%*		*22%*	*31%*	*23%*	*18%*			
eCPM		**$0.00**	**$6.88**	**$5.52**	**$5.18**	**$5.31**	**$5.18**	**$6.93**	**$7.20**	**$7.90**	**$7.02**	**$8.35**	**$9.00**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*1%*	*31%*	*53%*	*32%*	*19%*	*8%*
Q/Q Growth		*NM*	*NM*	*-20%*	*-6%*		*0%*	*34%*	*4%*	*10%*			
Revenue/MAU		$0.00	$0.02	$0.27	$0.48	$0.84	$0.52	$0.84	$0.99	$1.21	$3.68	$5.76	$7.23
Period ending revenue/day (millions)			$0.50	$3.00	$3.65	$3.65	$4.66	$9.71	$8.58	$15.13	$12.58	$20.03	$28.75
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*1843%*	*186%*	*315%*	*245%*	*59%*	*44%*
Q/Q Growth		*NM*	*NM*	*500%*	*22%*		*28%*	*109%*	*-12%*	*76%*			
Avg Period Revenue/Day (millions)		--	$0.49	$1.65	$3.32	$1.28	$4.15	$7.18	$9.15	$11.85	$8.11	$16.31	$24.39
Mobile News Feed Revenue		**$0.0**	**$11.8**	**$152.0**	**$305.7**	**$469.6**	**$373.5**	**$655.6**	**$841.7**	**$1,090.6**	**$2,961.5**	**$5,952.6**	**$8,903.4**
Y/Y Growth							*NM*	*NM*	*454%*	*257%*	*531%*	*101%*	*50%*
Q/Q Growth				*1183%*	*101%*		*22%*	*76%*	*28%*	*30%*			
% of Total Ad Revenue			1%	14%	23%	11%	30%	41%	48%	52%	44%	60%	69%

Source: Company reports and J.P. Morgan estimates.

Desktop yields should improve over time

We expect Facebook's desktop ad revenue to continue facing headwinds as users shift their usage towards mobile. While desktop users are likely to continue growing, we think a greater proportion of each user's Facebook usage is likely to shift toward mobile, resulting in declining desktop engagement metrics such as visits/user or minutes/user.

We expect Facebook's desktop impressions to decline beginning in 2014 as increasing adoption of Desktop News Feed ads is more than offset by declining usage of Facebook on the desktop. However, **we are more optimistic on improvements in desktop yield or eCPM** as: **1)** Facebook improves targeting capability; 2) third-party data through FBX and Custom Audiences pushes Facebook further down the purchase funnel, driving higher ROI and ad spend; and **3)** social

still represents a small fraction of most advertiser budgets. Our checks suggest that advertisers such as Zappos are having success with Desktop Right Rail ads at low CPMs. We note that improvements in desktop yield in more mature markets may be somewhat offset by impression growth in lower eCPM developing markets and as a result our overall Desktop Right Rail eCPMs are essentially down for the next few years. Higher yield through FBX and Custom Audiences could make our numbers conservative.

Figure 6: Facebook's Desktop Advertising Revenue (News Feed and Right Rail)

(in Millions except per user figures)	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
Desktop News Feed													
Average MAUs		803	836	867	890	843	910	929	945	962	935	995	1,039
Visits/User/Day	1.04	1.07	1.03	1.02	1.00	1.03	0.96	0.90	0.85	0.78	0.87	0.80	0.70
Impressions/Visit/User		0.05	0.17	0.35	0.60	0.30	0.70	0.80	0.85	0.90	0.85	0.95	1.05
Total Impressions/Day		44	145	310	534	257	612	669	682	676	660	756	764
Total Impressions in Period		**3,981**	**13,168**	**28,166**	**48,594**	**93,909**	**55,037**	**61,002**	**62,790**	**62,158**	**240,987**	**276,101**	**278,800**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*363%*	*123%*	*28%*	*157%*	*15%*	*1%*
Q/Q Growth		*NM*	*NM*	*114%*	*73%*		*13%*	*11%*	*3%*	*-1%*			
eCPM		**$1.50**	**$1.75**	**$2.71**	**$3.50**	**$2.93**	**$3.35**	**$3.90**	**$4.50**	**$5.80**	**$4.42**	**$6.00**	**$7.00**
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*123%*	*66%*	*66%*	*51%*	*36%*	*17%*
Q/Q Growth		*NM*	*NM*	*55%*	*29%*		*-4%*	*16%*	*15%*	*29%*			
Revenue/MAU		$0.01	$0.03	$0.09	$0.19	$0.33	$0.20	$0.26	$0.30	$0.37	$1.14	$1.66	$1.88
Period ending revenue/day (millions)			$0.50	$1.00	$2.74	$2.74	$1.36	$3.86	$2.29	$5.55	$3.10	$5.98	$4.72
Y/Y Growth		*NM*	*NM*	*NM*	*NM*		*NM*	*671%*	*129%*	*103%*	*13%*	*93%*	*-21%*
Q/Q Growth		*NM*	*NM*	*100%*	*174%*		*-50%*	*184%*	*-41%*	*143%*			
Avg Period Revenue/Day (millions)		--	$0.25	$0.84	$1.87	$0.75	$2.05	$2.61	$3.07	$3.92	$2.92	$4.54	$5.35
Desktop News Feed Revenue		**$6.0**	**$23.0**	**$76.2**	**$170.1**	**$275.3**	**$184.4**	**$237.9**	**$282.6**	**$360.5**	**$1,065.4**	**$1,656.6**	**$1,951.6**
Y/Y Growth							*NM*	*932%*	*271%*	*112%*	*287%*	*55%*	*18%*
Q/Q Growth			*286%*	*231%*	*123%*		*8%*	*29%*	*19%*	*28%*			
% of Total Ad Revenue			2%	7%	13%	6%	15%	15%	16%	17%	16%	17%	15%
Total News Feed Revenue (Mobile + Desktop)		**$6.0**	**$34.9**	**$228.3**	**$475.7**	**$744.9**	**$557.9**	**$893.5**	**$1,124.3**	**$1,451.2**	**$4,026.8**	**$7,609.2**	**$10,855.0**
Y/Y Growth							*NM*	*NM*	*392%*	*205%*	*441%*	*89%*	*43%*
Q/Q Growth			*484%*	*554%*	*108%*		*17%*	*60%*	*26%*	*29%*			
Desktop Right Rail													
Average MAUs	690	803	836	867	890	843	910	929	945	962	935	995	1,039
Visits/User/Day	1.04	1.07	1.03	1.02	1.00	1.03	0.96	0.90	0.85	0.78	0.87	0.80	0.70
Impressions/Visit/User	64.5	58.9	59.2	61.9	77.8	64.5	79.7	83.0	85.0	85.0	83.2	75.0	75.0
Total Impressions/Day	43,119	50,506	50,864	54,728	69,269	56,034	69,632	69,359	68,250	63,810	68,222	59,719	54,560
Total Impressions in Period	**15,738,369**	**4,596,019**	**4,628,594**	**4,980,291**	**6,303,482**	**20,508,386**	**6,266,886**	**6,484,512**	**6,278,966**	**5,870,521**	**24,900,885**	**21,797,414**	**19,914,303**
Y/Y Growth		*34%*	*17%*	*26%*	*44%*	*30%*	*36%*	*40%*	*26%*	*-7%*	*21%*	*-12%*	*-9%*
Q/Q Growth		*5%*	*1%*	*8%*	*27%*		*-1%*	*3%*	*-3%*	*-7%*			
eCPM	**$0.20**	**$0.19**	**$0.21**	**$0.17**	**$0.14**	**$0.17**	**$0.11**	**$0.11**	**$0.10**	**$0.11**	**$0.11**	**$0.11**	**$0.10**
Y/Y Growth		*2%*	*5%*	*-14%*	*-37%*	*-14%*	*NM*	*-47%*	*-42%*	*-19%*	*-38%*	*-2%*	*-6%*
Q/Q Growth		*-12%*	*10%*	*-17%*	*-21%*		*-19%*	*-1%*	*-8%*	*10%*			
Revenue/MAU	$4.57	$1.08	$1.15	$0.99	$0.96	$4.19	$0.76	$0.76	$0.66	$0.67	$2.85	$2.30	$1.90
Avg Period Revenue/Day (millions)	$8.64	$9.52	$10.52	$9.43	$9.38	$9.66	$7.63	$7.73	$6.82	$7.02	$7.30	$6.27	$5.40
Desktop Right Rail Revenue	**$3,154.0**	**$866.0**	**$957.1**	**$857.7**	**$853.3**	**$3,534.1**	**$687.1**	**$705.5**	**$627.9**	**$645.8**	**$2,666.3**	**$2,288.7**	**$1,971.5**
Y/Y Growth	*69%*	*36%*	*23%*	*7%*	*-10%*	*12%*	*-21%*	*-26%*	*-27%*	*-24%*	*-25%*	*-14%*	*-14%*
Q/Q Growth		*-8%*	*11%*	*-10%*	*-1%*		*-19%*	*3%*	*-11%*	*3%*			
% of Total Ad Revenue			96%	79%	64%	83%	55%	44%	36%	31%	40%	23%	15%

Source: Company reports, JP Morgan estimates.

Investment Thesis, Valuation and Risks

Facebook *(Overweight; Price Target: $53.00)*

Investment Thesis

We believe Facebook's virtual ownership of the social graph, strong competitive moat, and focus on the user experience position the company to significantly improve monetization over time and to become an enduring, blue-chip company built for the long term. Facebook's massive reach and engagement continue to drive network effects and its targeting abilities provide significant value to advertisers, though it is still early. We believe Facebook's ad platform is just beginning to shift

toward more social ads with higher-quality formats, and it will become increasingly valuable to advertisers.

Valuation

$53 Price Target. Our 2014 December year-end price target of $53 employs an average of a DCF and multiples (EV/EBITDA and P/E) based valuation. We're using this valuation approach as we believe it appropriately balances Facebook's valuation relative to its growth and industry peers, while a DCF gives the company some credit for the opportunity to improve monetization over the long term.

Our DCF results in a $56 price per share and employs an 11% WACC and 3% long term growth rate. We expect Facebook to generate $32.16B in revenue in 2020 with a 54.2% EBITDA margin.

Our EV/EBITDA valuation results in a $56 price per share and employs a 17x target EV/EBITDA multiple on our 2015 EBITDA of $7.33B. We note that our 17x 2015E EBITDA target multiple is at a discount to its high-growth industry peers such as Netflix (25.5x) and TripAdvisor (18x) but at a premium to other online advertising peers such as Google (7x).

Our P/E valuation results in a $47 price per share and employs a 33x P/E multiple on our 2015 PF EPS estimate of $1.43, which is below Facebook's 39% 2012-15E PF EPS CAGR.

Risks to Rating and Price Target

Downside risks include: 1) user-first mentality could create short-term revenue risk and volatility; 2) competition from purpose-driven social services; 3) advertiser ROI on Facebook may remain difficult to measure; 4) privacy, security, and regulatory risks; 5) competition for online and mobile ad dollars from Google, Yahoo!, and other online advertising companies; and 6) dual-class share structure and Mark Zuckerberg's control.

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Figure 7: Facebook Income Statement

	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E
Revenue	**3,711**	**1,058**	**1,184**	**1,262**	**1,585**	**5,089**	**1,458**	**1,813**	**1,955**	**2,298**	**7,524**	**10,686**
Cost of Revenue	851	273	295	317	387	1,272	404	454	489	563	1,910	2,682
Gross Profit	**2,860**	**785**	**889**	**945**	**1,198**	**3,817**	**1,054**	**1,359**	**1,466**	**1,735**	**5,614**	**8,004**
Operating Expenses												
Marketing and Sales	383	136	135	149	162	582	175	235	260	306	976	1,389
Research and Development	273	93	112	142	157	504	165	186	225	257	833	1,261
General and Administrative	225	72	127	129	143	471	151	144	156	177	628	876
Stock-based Compensation	217	103	1,106	179	184	1,572	170	224	235	276	904	962
Payroll Tax Related to SBC	6		152	(31)	29	150	20	8				
Total Operating Expenses	1,104	404	1,632	568	675	3,279	681	797	876	1,016	3,342	4,488
Operating Income	**1,756**	**381**	**(743)**	**377**	**523**	**538**	**373**	**562**	**590**	**719**	**2,273**	**3,516**
PF Operating Income	**1,979**	**484**	**515**	**525**	**736**	**2,260**	**563**	**794**	**825**	**995**	**3,177**	**4,477**
Other income (expense), net	(61)	1	(22)	(5)	(18)	(44)	(20)	(17)	0	21	(16)	103
Pre-tax Income	1,695	382	(765)	372	505	494	353	545	590	741	2,257	3,618
Income Taxes	695	177	(608)	431	441	441	134	212	260	326	932	1,520
Effective Tax Rate	41%	46%	N/A	116%	87%	89%	38%	39%	44%	44%	41%	42%
GAAP Net Income	**1,000**	**205**	**(157)**	**(59)**	**64**	**53**	**219**	**331**	**331**	**415**	**1,325**	**2,099**
GAAP EPS	**$0.43**	**$0.09**	**($0.08)**	**($0.02)**	**$0.03**	**$0.02**	**$0.09**	**$0.13**	**$0.13**	**$0.16**	**$0.53**	**$0.82**
Diluted Shares Out	2,332	2,361	2,451	2,579	2,506	2,474	2,499	2,502	2,511	2,515	2,507	2,557
Non-GAAP Pre-tax Income	**1,918**	**485**	**493**	**520**	**718**	**2,216**	**543**	**777**	**825**	**1,016**	**3,161**	**4,580**
Income Taxes	732	192	198	209	292	891	231	289	330	407	1,257	1,786
Effective Tax Rate	38%	40%	40%	40%	41%	40%	43%	37%	40%	40%	40%	39%
Non-GAAP Net Income	**1,186**	**293**	**295**	**311**	**426**	**1,325**	**312**	**488**	**495**	**610**	**1,905**	**2,794**
Non-GAAP EPS	**$0.51**	**$0.12**	**$0.12**	**$0.12**	**$0.17**	**$0.54**	**$0.12**	**$0.19**	**$0.20**	**$0.24**	**$0.76**	**$1.09**
EBITDA Calculation												
Operating Income	1,756	381	(743)	377	523	538	373	562	590	719	2,273	3,516
Stock-based compensation	217	103	1,106	179	184	1,572	170	224	235	276	904	962
Payroll Tax Related to SBC	6		152	(31)	29	150	20	8				
Depreciation and Amortization	323	110	139	176	224	649	241	230	246	252	968	1,250
EBITDA	**2,302**	**594**	**654**	**701**	**960**	**2,909**	**804**	**1,024**	**1,071**	**1,247**	**4,145**	**5,727**

	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E
Y/Y Growth												
Revenue	***88%***	***45%***	***32%***	***32%***	***40%***	***37%***	***38%***	***53%***	***55%***	***45%***	***48%***	***42%***
Cost of Revenue	*73%*	*63%*	*43%*	*36%*	*59%*	*49%*	*48%*	*54%*	*54%*	*45%*	*50%*	*40%*
Gross Profit	*93%*	*39%*	*29%*	*31%*	*35%*	*33%*	*34%*	*53%*	*55%*	*45%*	*47%*	*43%*
Marketing and Sales	*110%*	*100%*	*48%*	*38%*	*40%*	*52%*	*29%*	*74%*	*75%*	*89%*	*68%*	*42%*
Research and Development	*102%*	*75%*	*78%*	*89%*	*91%*	*85%*	*77%*	*66%*	*58%*	*64%*	*65%*	*51%*
General and Administrative	*101%*	*50%*	*123%*	*139%*	*120%*	*109%*	*110%*	*13%*	*21%*	*24%*	*33%*	*39%*
Stock-based Compensation	*985%*	*1371%*	*1628%*	*156%*	*142%*	*624%*	*65%*	*-80%*	*31%*	*50%*	*-42%*	*6%*
Total Operating Expenses	*146%*	*130%*	*481%*	*85%*	*99%*	*197%*	*69%*	*-51%*	*54%*	*50%*	*2%*	*34%*
Total Operating Expenses (Ex-SBC)	***88%***	***71%***	***60%***	***57%***	***67%***	***63%***	***56%***	***52%***	***53%***	***53%***	***54%***	***43%***
Operating Income	***70%***	***-2%***	***-283%***	***-9%***	***-5%***	***-69%***	***-2%***	***NM***	***57%***	***38%***	***322%***	***55%***
PF Operating Income	***88%***	***23%***	***8%***	***8%***	***18%***	***14%***	***16%***	***54%***	***57%***	***35%***	***41%***	***41%***
GAAP Net Income	*65%*	*-12%*	*-165%*	*-139%*	*-79%*	*-95%*	*7%*	*NM*	*NM*	*548%*	*NM*	*58%*
GAAP EPS		*-13%*	*-179%*	*-125%*	*-80%*	*-95%*	*1%*	*NM*	*NM*	*546%*	*NM*	*55%*
Non-GAAP EPS		***20%***	***-1%***	***4%***	***2%***	***5%***	***1%***	***62%***	***63%***	***43%***	***42%***	***44%***
EBITDA	***93%***	***33%***	***19%***	***21%***	***32%***	***26%***	***35%***	***57%***	***53%***	***30%***	***43%***	***38%***
Q/Q Growth												
Revenue		*-6%*	*12%*	*7%*	*26%*		*-8%*	*24%*	*8%*	*18%*		
Operating Income		*-30%*	*-295%*	*-151%*	*39%*		*-29%*	*51%*	*5%*	*22%*		
PF Operating Income		*-22%*	*6%*	*2%*	*40%*		*-24%*	*41%*	*4%*	*21%*		
EBITDA		*-18%*	*10%*	*7%*	*37%*		*-16%*	*27%*	*5%*	*16%*		
% of Revenue												
Cost of Revenue	22.9%	25.8%	24.9%	25.1%	24.4%	25.0%	27.7%	25.0%	25.0%	24.5%	25.4%	25.1%
Gross Profit	77.1%	74.2%	75.1%	74.9%	75.6%	75.0%	72.3%	75.0%	75.0%	75.5%	74.6%	74.9%
Marketing and Sales	10.3%	12.9%	11.4%	11.8%	10.2%	11.4%	12.0%	13.0%	13.3%	13.3%	13.0%	13.0%
Research and Development	7.4%	8.8%	9.5%	11.3%	9.9%	9.9%	11.3%	10.3%	11.5%	11.2%	11.1%	11.8%
General and Administrative	6.1%	6.8%	10.7%	10.2%	9.0%	9.3%	10.4%	7.9%	8.0%	7.7%	8.4%	8.2%
Stock-based Compensation	5.8%	9.7%	93.4%	14.2%	11.6%	30.9%	11.7%	12.4%	12.0%	12.0%	12.0%	9.0%
Operating Income	47.3%	36.0%	-62.8%	29.9%	33.0%	10.6%	25.6%	31.0%	30.2%	31.3%	30.2%	32.9%
PF Operating Income	**53.3%**	**45.7%**	**43.5%**	**41.6%**	**46.4%**	**44.4%**	**38.6%**	**43.8%**	**42.2%**	**43.3%**	**42.2%**	**41.9%**
EBITDA	**62.0%**	**56.1%**	**55.2%**	**55.5%**	**60.6%**	**57.2%**	**55.1%**	**56.5%**	**54.8%**	**54.3%**	**55.1%**	**53.6%**

Source: J.P. Morgan estimates, Company data.

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Figure 8: Facebook Revenue Segment Summary

	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
Summary													
Advertising	**3,154**	**872**	**992**	**1,086**	**1,329**	**4,279**	**1,245**	**1,599**	**1,752**	**2,097**	**6,693**	**9,898**	**12,826**
Y/Y Growth	*69%*	*37%*	*28%*	*36%*	*41%*	*36%*	*43%*	*61%*	*61%*	*58%*	*56%*	*48%*	*30%*
Ex-FX Revenue (Y/Y)		*38%*	*33%*	*43%*	*43%*		*43%*	*63%*					
Q/Q Growth		*-8%*	*14%*	*9%*	*22%*		*-6%*	*28%*	*10%*	*20%*			
% of Total Revenues	85%	82%	84%	86%	84%	84%	85%	88%	90%	91%	89%	93%	94%
Payments and Other Fees	**557**	**186**	**192**	**176**	**256**	**810**	**213**	**214**	**203**	**201**	**831**	**788**	**762**
Y/Y Growth	*425%*	*98%*	*61%*	*13%*	*36%*	*45%*	*15%*	*11%*	*15%*	*-21%*	*3%*	*-5%*	*-3%*
Q/Q Growth		*-1%*	*3%*	*-8%*	*45%*		*-17%*	*0%*	*-5%*	*-1%*			
% of Total Revenues	15%	18%	16%	14%	16%	16%	15%	12%	10%	9%	11%	7%	6%
Total Revenue	**3,711**	**1,058**	**1,184**	**1,262**	**1,585**	**5,089**	**1,458**	**1,813**	**1,955**	**2,298**	**7,524**	**10,686**	**13,589**
Y/Y Growth	*88%*	*45%*	*32%*	*32%*	*40%*	*37%*	*38%*	*53%*	*55%*	*45%*	*48%*	*42%*	*27%*
FX Impact		(11)	(36)	(57)	(23)								
Ex-FX Revenue (Y/Y)	3,681	1,069	1,220	1,319	1,608	5,216							
Y/Y Growth (Ex-FX)	*86%*	*46%*	*36%*	*38%*	*42%*	*41%*							
Q/Q Growth		*-6%*	*12%*	*7%*	*26%*		*-8%*	*24%*	*8%*	*18%*			
Seasonality		21%	23%	25%	31%		19%	24%	26%	31%			
Revenue per MAU (ARPU) Summary													
US & Canada	$11.50	$2.90	$3.20	$3.40	$4.08	$13.61	$3.50	$4.32	$4.24	$4.83	$16.95	$19.59	$22.64
Europe	$5.61	$1.40	$1.43	$1.37	$1.71	$5.94	$1.60	$1.87	$1.82	$1.99	$7.33	$8.84	$10.43
Asia	$2.08	$0.53	$0.55	$0.58	$0.69	$2.37	$0.64	$0.75	$0.78	$0.76	$2.96	$3.39	$3.86
Rest of World	$1.56	$0.37	$0.44	$0.47	$0.56	$1.88	$0.50	$0.63	$0.96	$1.34	$3.54	$6.68	$8.03
Total	**$5.11**	**$1.21**	**$1.28**	**$1.29**	**$1.54**	**$5.35**	**$1.35**	**$1.60**	**$1.66**	**$1.89**	**$6.56**	**$8.09**	**$9.17**
Y/Y Growth													
US & Canada	*33%*	*17%*	*13%*	*22%*	*28%*	*18%*	*21%*	*35%*	*25%*	*18%*	*25%*	*16%*	*16%*
Europe	*46%*	*18%*	*7%*	*2%*	*7%*	*6%*	*14%*	*31%*	*33%*	*16%*	*23%*	*21%*	*18%*
Asia	*40%*	*25%*	*11%*	*3%*	*22%*	*14%*	*21%*	*36%*	*36%*	*11%*	*25%*	*14%*	*14%*
Rest of World	*468%*	*18%*	*13%*	*18%*	*38%*	*21%*	*36%*	*44%*	*106%*	*138%*	*89%*	*88%*	*20%*
Total	***25%***	***7%***	***1%***	***4%***	***12%***	***5%***	***11%***	***25%***	***29%***	***23%***	***23%***	***23%***	***13%***
Q/Q Growth													
US & Canada		*-9%*	*10%*	*6%*	*20%*		*-14%*	*23%*	*-2%*	*14%*			
Europe		*-13%*	*2%*	*-4%*	*25%*		*-7%*	*17%*	*-2%*	*9%*			
Asia		*-6%*	*4%*	*5%*	*19%*		*-7%*	*18%*	*4%*	*-3%*			
Rest of World		*-9%*	*19%*	*6%*	*21%*		*-11%*	*26%*	*52%*	*40%*			
Total		***-12%***	***5%***	***1%***	***19%***		***-12%***	***19%***	***4%***	***14%***			
Geographic Revenue Breakdown													
Based on User Location													
US & Canada	1,914	525	590	637	780	2,532	679	848	840	963	3,330	3,957	4,649
Europe	1,155	328	346	341	440	1,455	423	505	499	552	1,979	2,518	3,090
Asia	363	118	135	154	198	605	197	247	274	280	998	1,397	1,863
Rest of World	278	87	113	130	167	497	159	213	342	503	1,217	2,813	3,987
Total	**3,711**	**1,058**	**1,184**	**1,262**	**1,585**	**5,089**	**1,458**	**1,813**	**1,955**	**2,298**	**7,524**	**10,686**	**13,589**
% of Total													
US & Canada	52%	50%	50%	50%	49%	50%	47%	47%	43%	42%	44%	37%	34%
Europe	31%	31%	29%	27%	28%	29%	29%	28%	26%	24%	26%	24%	23%
Asia	10%	11%	11%	12%	12%	12%	14%	14%	14%	12%	13%	13%	14%
Rest of World	8%	8%	10%	10%	11%	10%	11%	12%	17%	22%	16%	26%	29%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y/Y Growth													
US & Canada	67%	33%	25%	32%	38%	32%	29%	44%	32%	23%	32%	19%	17%
Europe	100%	43%	26%	18%	22%	26%	29%	46%	46%	25%	36%	27%	23%
Asia	145%	90%	65%	48%	72%	67%	67%	83%	78%	41%	65%	40%	33%
Rest of World	907%	89%	69%	68%	90%	79%	83%	88%	163%	201%	145%	131%	42%
Total	95%	45%	32%	32%	40%	37%	38%	53%	55%	45%	48%	42%	27%

Source: J.P. Morgan estimates, Company data.

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Figure 9: Facebook Revenue Drivers -- Advertising

	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
Global Summary													
Global Advertising													
Advertising Impressions (in billions)	15,500	4,600	4,643	5,036	6,411	20,691	6,394	6,640	6,459	6,071	25,564	22,786	21,182
Y/Y Growth	*41%*	*35%*	*18%*	*27%*	*46%*	*33%*	*39%*	*43%*	*28%*	*-5%*	*24%*	*-11%*	*-7%*
Q/Q Growth		*5%*	*1%*	*8%*	*27%*		*0%*	*4%*	*-3%*	*-6%*			
Average Cost Per Thousand (CPM)	$0.20	$0.19	$0.21	$0.22	$0.21	$0.21	$0.19	$0.24	$0.27	$0.35	$0.26	$0.43	$0.61
Y/Y Growth	*20%*	*1%*	*9%*	*7%*	*-4%*	*4%*	*3%*	*13%*	*26%*	*67%*	*27%*	*66%*	*39%*
Q/Q Growth		*-12%*	*13%*	*1%*	*-4%*		*-6%*	*24%*	*13%*	*27%*			
Global Advertising Revenue	**3,154**	**872**	**992**	**1,086**	**1,329**	**4,279**	**1,245**	**1,599**	**1,752**	**2,097**	**6,693**	**9,898**	**12,826**
Y/Y Growth	*69%*	*37%*	*28%*	*36%*	*41%*	*36%*	*43%*	*61%*	*61%*	*58%*	*56%*	*48%*	*30%*
Q/Q Growth		*-8%*	*14%*	*9%*	*22%*		*-6%*	*28%*	*10%*	*20%*			
Regional Breakdown													
US & Canada													
Advertising Impressions (in billions)	4,455	1,200	1,103	1,212	1,337	4,852	1,265	1,169	1,175	1,283	4,893	4,697	4,509
Y/Y Growth		*8%*	*-2%*	*14%*	*16%*	*9%*	*5%*	*6%*	*-3%*	*-4%*	*1%*	*-4%*	*-4%*
Q/Q Growth		*4%*	*-8%*	*10%*	*10%*		*-5%*	*-8%*	*1%*	*9%*			
Average Cost Per Thousand (CPM)	$0.36	$0.35	$0.43	$0.44	$0.47	$0.43	$0.44	$0.62	$0.63	$0.67	$0.59	$0.77	$0.96
Y/Y Growth		*16%*	*24%*	*20%*	*18%*	20%	*25%*	*42%*	*42%*	*43%*	*38%*	*30%*	*25%*
Q/Q Growth		*-13%*	*24%*	*2%*	*6%*		*-8%*	*41%*	*2%*	*7%*			
US & Canada Advertising Revenue	**1,583**	**419**	**479**	**538**	**631**	**2,067**	**552**	**721**	**741**	**866**	**2,880**	**3,595**	**4,314**
Y/Y Growth	*48%*	*26%*	*22%*	*36%*	*37%*	*31%*	*32%*	*51%*	*38%*	*37%*	*39%*	*25%*	*20%*
% of Total Advertising Revenue	*50%*	*48%*	*48%*	*50%*	*47%*	*48%*	*44%*	*45%*	*42%*	*41%*	*43%*	*36%*	*34%*
Europe													
Advertising Impressions (in billions)	5,549	1,800	1,715	1,638	2,045	7,198	2,341	2,328	2,162	2,250	9,080	9,535	9,535
Y/Y Growth		*40%*	*26%*	*27%*	*27%*	*30%*	*30%*	*36%*	*32%*	*10%*	*26%*	*5%*	*0%*
Q/Q Growth		*12%*	*-5%*	*-5%*	*25%*		*14%*	*-1%*	*-7%*	*4%*			
Average Cost Per Thousand (CPM)	$0.18	$0.15	$0.17	$0.18	$0.18	$0.17	$0.16	$0.19	$0.20	$0.22	$0.19	$0.24	$0.30
Y/Y Growth		*-5%*	*-5%*	*-5%*	*-4%*	*-5%*	*3%*	*13%*	*13%*	*20%*	*12%*	*25%*	*25%*
Q/Q Growth		*-20%*	*13%*	*5%*	*2%*		*-14%*	*24%*	*5%*	*8%*			
Europe Advertising Revenue	**1,002**	**274**	**294**	**295**	**374**	**1,237**	**367**	**451**	**440**	**494**	**1,752**	**2,299**	**2,874**
Y/Y Growth	*81%*	*33%*	*20%*	*20%*	*22%*	*23%*	*34%*	*53%*	*49%*	*32%*	*42%*	*31%*	*25%*
% of Total Advertising Revenue	*32%*	*31%*	*30%*	*27%*	*28%*	*29%*	*29%*	*28%*	*25%*	*24%*	*26%*	*23%*	*22%*
Asia													
Advertising Impressions (in billions)	2,646	650	841	953	1,315	3,760	939	1,219	1,287	1,381	4,826	5,309	5,734
Y/Y Growth		*28%*	*25%*	*30%*	*80%*	*42%*	*45%*	*45%*	*35%*	*5%*	*28%*	*10%*	*8%*
Q/Q Growth		*-11%*	*29%*	*13%*	*38%*		*-29%*	*30%*	*6%*	*7%*			
Average Cost Per Thousand (CPM)	$0.12	$0.15	$0.14	$0.14	$0.13	$0.14	$0.19	$0.18	$0.20	$0.19	$0.19	$0.24	$0.30
Y/Y Growth		*38%*	*24%*	*16%*	*-2%*	*17%*	*23%*	*35%*	*40%*	*45%*	*37%*	*28%*	*25%*
Q/Q Growth		*17%*	*-10%*	*2%*	*-8%*		*47%*	*-1%*	*6%*	*-5%*			
Asia Advertising Revenue	**313**	**99**	**115**	**133**	**168**	**515**	**176**	**225**	**251**	**256**	**908**	**1,279**	**1,726**
Y/Y Growth	*119%*	*77%*	*55%*	*51%*	*77%*	*65%*	*78%*	*96%*	*89%*	*52%*	*76%*	*41%*	*35%*
% of Total Advertising Revenue	*10%*	*11%*	*12%*	*12%*	*13%*	*12%*	*14%*	*14%*	*14%*	*12%*	*14%*	*13%*	*13%*
Rest of World													
Advertising Impressions (in billions)	3,089	950	984	1,233	1,714	4,881	1,849	1,924	1,835	1,156	6,764	3,246	1,405
Y/Y Growth		*77%*	*25%*	*41%*	*93%*	*58%*	*95%*	*95%*	*49%*	*-33%*	*39%*	*-52%*	*-57%*
Q/Q Growth		*7%*	*4%*	*25%*	*39%*		*8%*	*4%*	*-5%*	*-37%*			
Average Cost Per Thousand (CPM)	$0.08	$0.08	$0.11	$0.10	$0.09	$0.09	$0.08	$0.10	$0.17	$0.42	$0.17	$0.84	$2.79
Y/Y Growth		*5%*	*32%*	*22%*	*1%*	*14%*	*-4%*	*-1%*	*79%*	*357%*	*81%*	*393%*	*232%*
Q/Q Growth		*-6%*	*25%*	*-8%*	*-6%*		*-11%*	*29%*	*66%*	*139%*			
ROW Advertising Revenue	**256**	**80**	**104**	**120**	**156**	**460**	**150**	**202**	**320**	**481**	**1,153**	**2,726**	**3,913**
Y/Y Growth	*934%*	*86%*	*65%*	*71%*	*95%*	*80%*	*88%*	*94%*	*166%*	*208%*	*151%*	*136%*	*44%*
% of Total Advertising Revenue	*8%*	*9%*	*10%*	*11%*	*12%*	*11%*	*12%*	*13%*	*18%*	*23%*	*17%*	*28%*	*31%*

Source: J.P. Morgan estimates, Company data.

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Figure 10: Facebook Revenue Drivers – Payments and Other Fees

	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
Payment and Other Fees													
Global Payments and Other Fees													
Total Payments and Other Fees	**557**	**186**	**192**	**176**	**256**	**810**	**213**	**214**	**203**	**201**	**831**	**788**	**762**
Y/Y Growth	*425%*	*98%*	*61%*	*13%*	*36%*	*45%*	*15%*	*11%*	*15%*	*-21%*	*3%*	*-5%*	*-3%*
Q/Q Growth		*-1%*	*3%*	*-8%*	*45%*		*-17%*	*0%*	*-5%*	*-1%*			
	0.96												
Revenue per Avg. DAU	**$1.38**	**$0.37**	**$0.36**	**$0.31**	**$0.43**	**$1.47**	**$0.33**	**$0.31**	**$0.28**	**$0.27**	**$1.20**	**$1.00**	**$0.88**
Y/Y Growth	*232%*	*37%*	*18%*	*-13%*	*6%*	*7%*	*-10%*	*-12%*	*-9%*	*-37%*	*-19%*	*-17%*	*-12%*
Q/Q Growth		*-8%*	*-3%*	*-13%*	*37%*		*-22%*	*-5%*	*-10%*	*-5%*			
Revenue Per Avg. MAU (ARPU)	**$0.77**	**$0.21**	**$0.21**	**$0.18**	**$0.25**	**$0.85**	**$0.20**	**$0.19**	**$0.17**	**$0.17**	**$0.72**	**$0.60**	**$0.51**
Y/Y Growth	*250%*	*46%*	*23%*	*-12%*	*9%*	*11%*	*-8%*	*-9%*	*-4%*	*-33%*	*-15%*	*-18%*	*-14%*
Q/Q Growth		*-7%*	*-3%*	*-13%*	*38%*		*-21%*	*-4%*	*-9%*	*-4%*			

	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
Facebook Payments Revenue From Zynga (30% take)	**436**	**120**	**103**	**88**	**151**	**462**	**75**	**57**	**57**	**62**	**251**	**225**	**210**
Y/Y Growth		*35%*	*-6%*	*-24%*	*23%*	*6%*	*-38%*	*-45%*	*-35%*	*-59%*	*-46%*	*-10%*	*-6%*
Q/Q Growth		*-2%*	*-14%*	*-15%*	*72%*		*-50%*	*-25%*	*1%*	*9%*			
% of FB Payments Revenue	NA	64%	54%	50%	59%	57%	35%	26%	28%	31%	30%	29%	28%
% of FB Total Revenue	NA	11%	9%	7%	10%	9%	5%	3%	3%	3%	3%	2%	2%
Other Payments Revenue (excl. Zynga)	**121**	**66**	**89**	**88**	**105**	**348**	**138**	**157**	**146**	**139**	**580**	**563**	**552**
Y/Y Growth		*NA*	*NA*	*120%*	*105%*	*189%*	*109%*	*78%*	*65%*	*32%*	*67%*	*-3%*	*-2%*
Q/Q Growth		*0%*	*34%*	*0%*	*19%*		*31%*	*14%*	*-7%*	*-5%*			
% of FB Payments Revenue	NA	36%	46%	50%	41%	43%	65%	74%	72%	69%	70%	71%	72%
Total Facebook Payments Revenue (Bottom-up)	**557**	**186**	**192**	**176**	**256**	**810**	**213**	**214**	**203**	**201**	**831**	**788**	**762**
Y/Y Growth	*425%*	*98%*	*61%*	*13%*	*36%*	*45%*	*15%*	*11%*	*15%*	*-21%*	*3%*	*-5%*	*-3%*
Q/Q Growth		*-1%*	*3%*	*-8%*	*45%*		*-17%*	*0%*	*-5%*	*-1%*			

Source: J.P. Morgan estimates, Company data.

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Figure 11: Facebook User Metrics By Region

	2011A	1Q12A	2Q12A	3Q12A	4Q12A	2012A	1Q13A	2Q13A	3Q13E	4Q13E	2013E	2014E	2015E
User Metrics													
Monthly Active Users (MAU)													
US & Canada	179	183	186	189	193	193	195	198	199	200	200	204	207
Europe	229	239	246	253	261	261	269	272	276	279	279	293	302
Asia	212	234	255	277	298	298	319	339	359	375	375	449	516
Rest of World	225	245	268	288	304	304	327	346	366	383	383	460	533
Total	**845**	**901**	**955**	**1,007**	**1,056**	**1,056**	**1,110**	**1,155**	**1,199**	**1,238**	**1,238**	**1,406**	**1,558**
Y/Y Growth													
US & Canada	*16%*	*12%*	*10%*	*7%*	*8%*	*8%*	*7%*	*6%*	*5%*	*4%*	*4%*	*2%*	*1%*
Europe	*25%*	*19%*	*16%*	*14%*	*14%*	*14%*	*13%*	*11%*	*9%*	*7%*	*7%*	*5%*	*3%*
Asia	*54%*	*50%*	*47%*	*41%*	*41%*	*41%*	*36%*	*33%*	*30%*	*26%*	*26%*	*20%*	*15%*
Rest of World	*69%*	*53%*	*46%*	*39%*	*35%*	*35%*	*33%*	*29%*	*27%*	*26%*	*26%*	*20%*	*16%*
Total	***39%***	***33%***	***29%***	***26%***	***25%***	***25%***	***23%***	***21%***	***19%***	***17%***	***17%***	***14%***	***11%***
Country Mix													
US & Canada	*21%*	*20%*	*19%*	*19%*	*18%*	*18%*	*18%*	*17%*	*17%*	*16%*	*16%*	*15%*	*13%*
Europe	*27%*	*27%*	*26%*	*25%*	*25%*	*25%*	*24%*	*24%*	*23%*	*23%*	*23%*	*21%*	*19%*
Asia	*25%*	*26%*	*27%*	*28%*	*28%*	*28%*	*29%*	*29%*	*30%*	*30%*	*30%*	*32%*	*33%*
Rest of World	*27%*	*27%*	*28%*	*29%*	*29%*	*29%*	*29%*	*30%*	*31%*	*31%*	*31%*	*33%*	*34%*
Total	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***
Mobile MAU	**432**	**488**	**543**	**604**	**680**	**680**	**751**	**819**	**875**	**928**	**928**	**1,138**	**1,324**
Y/Y Growth	*76%*	*69%*	*67%*	*61%*	*57%*	*57%*	*54%*	*51%*	*45%*	*37%*	*37%*	*23%*	*16%*
Q/Q Growth		*13%*	*11%*	*11%*	*13%*		*10%*	*9%*	*7%*	*6%*			
% of total MAUs	51%	54%	57%	60%	64%	64%	68%	71%	73%	75%	75%	81%	85%
Mobile-Only MAU	**58**	**83**	**102**	**126**	**157**	**157**	**189**	**219**	**246**	**266**	**266**	**387**	**499**
Y/Y Growth	*287%*	*277%*	*240%*	*215%*	*171%*	*171%*	*128%*	*115%*	*95%*	*69%*	*69%*	*45%*	*29%*
Q/Q Growth		*43%*	*23%*	*24%*	*25%*		*20%*	*16%*	*12%*	*8%*			
% of total MAUs	7%	9%	11%	13%	15%	15%	17%	19%	21%	22%	22%	28%	32%
Web and Mobile MAU	**374**	**405**	**441**	**478**	**523**	**523**	**562**	**600**	**630**	**662**	**662**	**752**	**826**
Y/Y Growth	*63%*	*52%*	*49%*	*42%*	*40%*	*40%*	*39%*	*36%*	*32%*	*27%*	*27%*	*14%*	10%
Q/Q Growth		*8%*	*9%*	*8%*	*9%*		*7%*	*7%*	*5%*	*5%*			
% of total MAUs	44%	45%	46%	47%	50%	50%	51%	52%	53%	54%	54%	54%	53%
Web MAU	**787**	**818**	**853**	**881**	**899**	**899**	**921**	**936**	**953**	**972**	**972**	**1,019**	**1,059**
Y/Y Growth	*33%*	*24%*	*20%*	*16%*	*14%*	*14%*	*13%*	*10%*	*8%*	*8%*	*8%*	*5%*	4%
Q/Q Growth		*4%*	*4%*	*3%*	*2%*		*2%*	*2%*	*2%*	*2%*			
% of total MAUs	93%	91%	89%	87%	85%	85%	83%	81%	80%	79%	79%	73%	68%
Web Only MAU	**413**	**413**	**412**	**403**	**376**	**376**	**359**	**336**	**324**	**309**	**309**	**267**	**234**
Y/Y Growth	*14%*	*5%*	*0%*	*-5%*	*-9%*	*-9%*	*-13%*	*-18%*	*-20%*	*-18%*	*-18%*	*-14%*	-12%
Q/Q Growth		*0%*	*0%*	*-2%*	*-7%*		*-5%*	*-6%*	*-4%*	*-4%*			
% of total MAUs	49%	46%	43%	40%	36%	36%	32%	29%	27%	25%	25%	19%	15%
Daily Active Users (DAU)													
US & Canada	126	129	130	132	135	135	139	142	143	144	144	151	155
Europe	143	152	154	160	169	169	179	182	190	195	195	211	222
Asia	105	119	129	141	153	153	167	181	194	207	207	260	310
Rest of World	109	126	139	151	161	161	180	194	208	222	222	290	352
Total	**483**	**526**	**552**	**584**	**618**	**618**	**665**	**699**	**736**	**768**	**768**	**912**	**1,039**
Mobile DAUs			**293**	**329**	**374**	**374**	**425**	**469**					
Y/Y Growth								*60%*					
Q/Q Growth				*12%*	*14%*		*14%*	*10%*					
% of Mobile MAUs			*54%*	*54%*	*55%*	*55%*	*57%*	*57%*					
DAU as % of MAU													
US & Canada	70%	70%	70%	70%	70%	70%	71%	72%	72%	72%	72%	74%	75%
Europe	62%	64%	63%	63%	65%	65%	67%	67%	69%	70%	70%	72%	74%
Asia	50%	51%	51%	51%	51%	51%	52%	53%	54%	55%	55%	58%	60%
Rest of World	48%	51%	52%	52%	53%	53%	55%	56%	57%	58%	58%	63%	66%
Total	**57%**	**58%**	**58%**	**58%**	**59%**	**59%**	**60%**	**61%**	**61%**	**62%**	**62%**	**65%**	**67%**
Y/Y Growth													
US & Canada	*27%*	*23%*	*11%*	*6%*	*7%*	*7%*	*8%*	*9%*	*8%*	*7%*	*7%*	*5%*	*3%*
Europe	*34%*	*27%*	*21%*	*19%*	*18%*	*18%*	*18%*	*18%*	*19%*	*16%*	*16%*	*8%*	*5%*
Asia	*64%*	*65%*	*52%*	*44%*	*46%*	*46%*	*40%*	*40%*	*37%*	*35%*	*35%*	*26%*	*19%*
Rest of World	*91%*	*68%*	*58%*	*51%*	*48%*	*48%*	*43%*	*40%*	*38%*	*38%*	*38%*	*30%*	*22%*
Total	***48%***	***41%***	***32%***	***28%***	***28%***	***28%***	***26%***	***27%***	***26%***	***24%***	***24%***	***19%***	***14%***
Country Mix													
US & Canada	*26%*	*25%*	*24%*	*23%*	*22%*	*22%*	*21%*	*20%*	*19%*	*19%*	*19%*	*17%*	*15%*
Europe	*30%*	*29%*	*28%*	*27%*	*27%*	*27%*	*27%*	*26%*	*26%*	*25%*	*25%*	*23%*	*21%*
Asia	*22%*	*23%*	*23%*	*24%*	*25%*	*25%*	*25%*	*26%*	*26%*	*27%*	*27%*	*29%*	*30%*
Rest of World	*23%*	*24%*	*25%*	*26%*	*26%*	*26%*	*27%*	*28%*	*28%*	*29%*	*29%*	*32%*	*34%*
Total	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***	***100%***

Source: J.P. Morgan estimates, Company data.

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Facebook: Summary of Financials

Income Statement - Annual	FY12A	FY13E	FY14E	FY15E
Revenues	5,089	7,524	10,686	13,589
Operating income	538	2,273	3,516	4,647
D&A	649	968	1,250	1,598
EBITDA	1,187	3,241	4,765	6,245
Net interest income / (expense)	(37)	0	0	0
Other income / (expense)	(44)	(16)	103	167
Pretax income	494	2,257	3,618	4,815
Income taxes	(441)	(932)	(1,520)	(1,974)
Net Income	53	1,325	2,099	2,841
Weighted average diluted shares	2,474	2,507	2,557	2,608
Diluted EPS	0.54	0.76	1.09	1.43

Income Statement - Quarterly	1Q13A	2Q13A	3Q13E	4Q13E
Revenues	1,458A	1,813A	1,955	2,298
Operating income	373A	562A	590	719
D&A	241A	230A	246	252
EBITDA	614A	792A	836	971
Net interest income / (expense)	(15)A	(14)A	0	0
Other income / (expense)	(20)A	(17)A	0	21
Pretax income	353A	545A	590	741
Income taxes	(134)A	(212)A	(260)	(326)
Net Income	219A	333A	331	415
Weighted average diluted shares	2,499A	2,502A	2,511	2,515
Diluted EPS	0.12A	0.19A	0.20	0.24

Balance Sheet and Cash Flow Data	FY12A	FY13E	FY14E	FY15E
Cash and cash equivalents	2,384	3,798	7,383	11,557
Accounts receivable	719	919	1,133	1,359
Other current assets	922	1,287	1,389	1,644
Current assets	11,267	13,255	17,156	21,811
PP&E	2,391	3,109	4,242	5,158
Total assets	15,103	18,090	23,125	28,695
Total debt	1,500	0	0	0
Total liabilities	3,348	2,196	2,475	2,736
Shareholders' equity	11,755	15,894	20,649	25,959
Net Income (including charges)	53	1,297	2,099	2,841
D&A	649	968	1,250	1,598
Change in working capital	(513)	(181)	(36)	(220)
Other	-	-	-	-
Cash flow from operations	1,614	3,547	5,413	6,687
Capex	(1,235)	(1,256)	(1,817)	(1,902)
Free cash flow	409	2,291	3,597	4,785
Cash flow from investing activities	(7,024)	(1,485)	(1,817)	(1,902)
Cash flow from financing activities	6,283	(93)	(566)	(611)
Dividends	-	-	-	-
Dividend yield	-	-	-	-

Ratio Analysis	FY12A	FY13E	FY14E	FY15E
Sales growth	37.1%	47.9%	42.0%	27.2%
EBITDA growth	26.4%	42.5%	38.2%	28.0%
EPS growth	5.3%	41.9%	43.8%	30.5%
EBITDA margin	57.2%	55.1%	53.6%	54.0%
Net margin	26.0%	25.3%	26.1%	27.4%
Debt / EBITDA	0.5	0.0	0.0	0.0
Return on assets (ROA)	12.2%	11.5%	13.6%	14.4%
Return on equity (ROE)	15.6%	13.8%	15.3%	16.0%
Enterprise value / EBITDA	37.6	25.7	18.0	13.5
Enterprise value / Free cash flow	268.0	46.5	28.6	20.7
P/E	2,102.6	85.2	54.9	41.4

Source: Company reports and J.P. Morgan estimates.
Note: $ in millions (except per-share data).Fiscal year ends Dec

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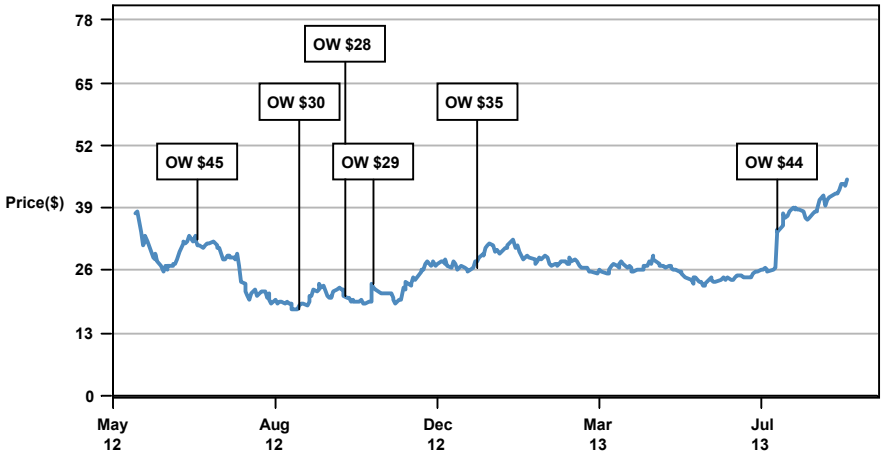
Facebook (FB, FB US) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
27-Jun-12	OW	32.23	45.00
04-Sep-12	OW	17.73	30.00
05-Oct-12	OW	20.91	28.00
24-Oct-12	OW	23.23	29.00
02-Jan-13	OW	26.62	35.00
25-Jul-13	OW	34.36	44.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Jun 27, 2012.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.
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	Overweight (buy)	Neutral (hold)	Underweight (sell)
J.P. Morgan Global Equity Research Coverage	44%	44%	12%
IB clients*	56%	50%	40%
JPMS Equity Research Coverage	42%	50%	8%
IB clients*	76%	66%	55%

*Percentage of investment banking clients in each rating category.
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