



### COMPANY UPDATE / TARGET CHANGE ESTIMATE CHANGE

#### Key Metrics

GOOGL - NASDAQ - as of 5/1/17	\$932.82
Price Target	\$1,000.00
52-Week Range	\$672.66 - \$935.82
Diluted Shares Outstanding (mil)	702.0
Market Cap. (\$mil)	\$654,873.2
1-Mo. Average Daily Volume	1,624,081
Institutional Ownership (%)	82.20
Debt/Total Capital (net)	Q1'17 0%
ROE	LTM 7.8%
Book Value / Share	\$201.12
Price / Book Value	4.6x
Dividend Yield	0.0%
LTM EBITDA Margin	33.7%

#### EPS FY 12/31 (GAAP figures)

	Prior	Current		Prior	Current
	2016A	2017E		2018E	2018E
1Q	\$6.02	\$7.73	A	\$8.51	\$ 8.54
2Q	\$7.00	\$8.25		\$9.43	\$ 9.19
3Q	\$7.25	\$8.31		\$10.54	\$ 10.58
4Q	\$7.56	\$9.38		\$10.83	\$ 11.62
Year	\$27.88	\$33.57		\$39.30	\$ 39.93
PE	30.5x	25.4x			21.3x

#### Net Revenue (\$bn)

	Prior	Current		Prior	Current
	2016A	2017E		2018E	2018E
1Q	\$16.46	\$19.48	A	\$22.28	\$ 22.90
2Q	\$17.52	\$20.83		\$24.12	\$ 25.09
3Q	\$18.26	\$21.82		\$25.85	\$ 26.53
4Q	\$21.21	\$24.90		\$29.30	\$ 30.04
Year	\$73.47	\$87.69		\$101.56	\$104.57

**Company Description:** Alphabet Inc. is the parent holding company of Google Inc. Google is the world's largest internet services company. The company maintains a vast index of websites and content made available through its online search engine. Google generates a majority of revenue from advertising, specifically AdWords-text based advertising and AdSense-display advertising, on company owned and Network sites. Also included under the Google umbrella is Android the industry's leading mobile operating system, Pixel, YouTube, Apps, and Maps. Other subsidiaries of Alphabet include Waymo, Nest, Fiber, Calico, Google X, Google Capital, and Ventures.

## Alphabet Inc.

GOOGL - NASDAQ – Neutral -1

### Alphabet Reports Strong Q1'17 Results; Raising PT to \$1000

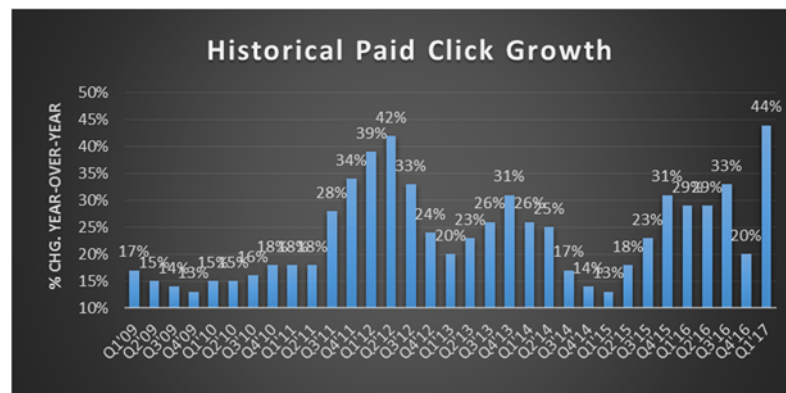
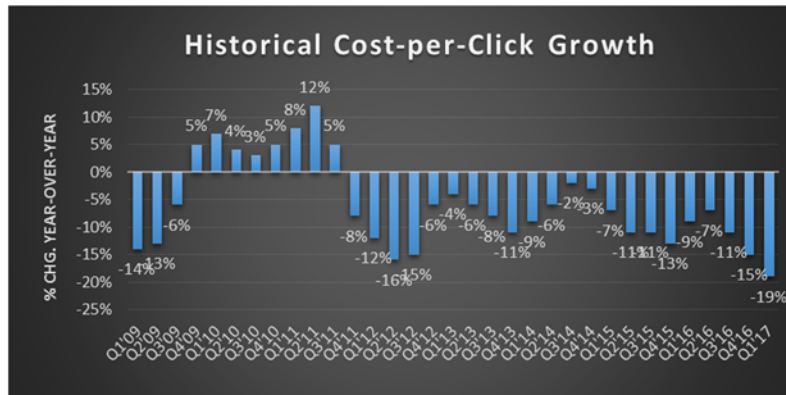
- Results.** Alphabet reported Q1'17 GAAP EPS of \$7.73, beating our estimate of \$7.45 and the consensus estimate of \$7.39. Net revenue increased a better than expected 24% y/y on a constant currency basis to \$20.1 billion vs. our view of \$19.5 billion and the consensus analyst estimate of \$19.7 billion. Mobile search, programmatic advertising, and YouTube continued to benefit top-line results. Other Bets revenue was \$244 million while segment operating losses increased to \$855 million vs. \$774 million last year. The other revenue segment which includes mostly Google Play, hardware, and cloud revenue increased 49% y/y to \$3.1 billion, well above our \$2.6 billion view. Google sites paid-click-growth increased a very strong 53% y/y, boosted by YouTube ads, mobile search, and Shopping ads. Google Network sites paid click growth was up 10%. Traffic acquisition costs of \$4.63 billion represented 22% of total advertising revenue, up 22% y/y, as mobile TAC rates are above that of traditional TAC costs. Cost-per-clicks (ad prices) declined 19% y/y, which was steeper than expected due to higher mobile usage, which is monetized at a lower rate. Alphabet produced the strongest Q1 revenue growth since Q1'13. And unlike in recent quarters, this high level of revenue growth did not negatively impact Google's profitability. The company was able to offset minor gross margin declines with cuts to operating expense growth of about 200 bps y/y. Net income improved 110 bps y/y despite a higher tax rate.
- Outlook.** We marginally increase our Q2'17 EPS to \$8.25 from \$8.11 on net revenue of \$20.8 billion, up from our previous view of \$20.3 billion. Our FY'17 EPS estimate increases to \$33.57 vs. our prior estimate of \$33.23. Our FY'18 EPS estimate of \$39.93 increases from our prior view of \$39.30. We estimate FY'18 revenue of \$104.5 billion as we forecast continued strength in mobile Search, Google Preferred for YouTube, Doubleclick's programmatic advertising, and continued strength from other revenue including Play, hardware, and cloud.
- Opinion.** We maintain our Neutral rating on shares of GOOGL. We believe Alphabet remains one of the best positioned companies to benefit from the cloud, video, A.I., machine learning, and the transition of ad dollars to digital/mobile and as a result we expect Alphabet to gain total advertising dollars across its platforms. We increase our price target to \$1,000 and view Alphabet as a core technology holding. We suggest investors maintain positions but use increasing discretion as valuation metrics have increased to the high end of its ten year range.

**Note Important Disclosures on Pages 7-8**  
**Note Analyst Certification on Page 7**

**FIRST QUARTER RESULTS**

Google segment revenue was \$24.5 billion, up 22% y/y. Core Google website ad revenue increased a healthy 21.5% y/y to \$17.4 billion, representing 81% of core Google ad revenue. Google site paid clicks increased 53% y/y from another strong quarter of mobile search and YouTube. Google site cost per click (CPC) rates declined 21% y/y, reflecting the lower monetizing higher growth products. However, longer term, we expect CPC rates to rise as the transition to mobile search matures and higher engagement ads/functionality, and services are provided. We also believe CPCs continue to be negatively impacted by the higher growth of revenue from emerging markets vs. developed economies, which have lower ad rates and currency conversion. Network website revenue increased 8.5% to \$4 billion, 16% of Google segment ad revenue. Network paid-clicks were up 10% on strength from programmatic advertising, while cost-per-clicks decreased 17% y/y. Aggregate paid clicks and CPCs are charted below. The other revenue segment, which includes Google Play, cloud, and devices, increased a better than expected 49% y/y to \$3.1 billion. Play store, Pixel, Google Home, and Cloud revenue boosted y/y growth. The company began a new geographic reporting structure including: U.S. revenue of \$11.7 billion, which increased 25% y/y; EMEA region increased 13% to \$8.1 billion; APAC was up 29% to \$3.6 billion; Other Americas jumped 34% to \$1.2 billion. The U.K. region which will no longer be reported separately but rather is included in EMEA, increased 5% or 16% on constant currency basis.

The continued mix shift to Google sites is benefiting results despite higher TAC rates from lower margin mobile search ads. COGS increased to 40% of gross revenue as TAC increased 22% in line with revenue growth while other costs increased 35% y/y. **Other costs increased more than we expected due to higher content acquisition costs at YouTube.** Operating expenses grew less than expected, up 15% y/y. Other Bets revenue increased to \$244 million vs. \$166 million last year. **However, the Other Bets segment operating loss increased to \$855 million vs. \$774 million last year.** We believe while not a direct cost to core Google results, Other Bets will contribute to the future growth of Google, and therefore we view these investment expenses as related to future core operations.



Source: Company reports

**CASH MANAGEMENT**

Alphabet reported a record cash balance of \$92.4 billion and net cash of \$88.5 billion. Net cash per share totaled \$126. Cash flow from operations was \$9.5 billion during the quarter, up 25% y/y. Capital expenditures were \$2.5 billion, only slightly above last year's \$2.4 billion. As a result, free cash flow totaled \$7 billion, an increase of 35%. We expect capex spending to reaccelerate in coming quarters as Cloud, hardware and Other Bet initiatives require significant continued investment. Alphabet also repurchased \$1.1 billion of shares in the quarter, a figure they could increase meaningfully in future periods.

**OUTLOOK**

We marginally increase our Q2'17 EPS to \$8.25 from \$8.11 on net revenue of \$20.8 billion, up from our previous view of \$20.3 billion. **Q2 results will reflect any negative impacts from the YouTube advertising ban due to objectionable video placed next to partner ads. We expect a minimal impact to Q2 revenue; however, ongoing costs could rise to help minimize these missteps in the future.** Our FY'17 EPS estimate increases slightly to \$33.57 vs. our prior estimate of \$33.23. Our FY'18 EPS estimate of \$39.93 increases from our prior view of \$39.30. We estimate FY'18 revenue of \$104.5 billion as we forecast continued strength in mobile Search, YouTube, programmatic advertising, and continued strength from other revenue including Play, hardware, and cloud.

**VALUATION & OPINION**

**We maintain our Neutral investment rating on shares of GOOGL and maintain our suitability rating of 1.** We forecast GAAP EPS growth improving from 18% in FY'16 to 20% in FY'17 and 19% in FY'18. **We raise our FYE'18 price target to \$1,000 from \$865, which represents a forward multiple of 25x our 2018 EPS estimate of \$39.93.** A two year target price of \$1,000 represents price appreciation of 7%. Our forward multiple of 25x is below the current 28x forward multiple but well above that of many large cap technology peers. We believe our increased forward multiple is appropriate near term based on our forecast of continued upper-teens revenue growth through FYE'18. We note in 2011 when Google was noticeably beginning to benefit from Android and the shift to mobile devices, GOOGL shares traded at an 11x forward P/E. We now believe Alphabet's valuation appropriately reflects these market shifts and in fact over the coming 2-3 year time period may underperform the market as the global smartphone market matures.

Our Neutral rating is based on our opinion of a lower long-term level of profitability and our questioning of Google's ability to continue to produce upper-teen revenue growth year after year. We note the company's high level of optionality in regards to the usage of its cash balance and future product and service introductions could allow for high levels of growth beyond our current line of thinking. We reiterate our Neutral rating and continue to recommend GOOGL shareholders maintain their positions. **Our price target currently offers investors 7% two-year potential upside: not enough, in our view, to warrant a buy recommendation. In our view, Google remains one of the best positioned companies to benefit from the cloud, A.I., machine learning, and the continued transition of advertising dollars to digital and mobile, and as a result we expect Google to gain total advertising dollars across platforms for many years.** Our chief concern lies in our longer-term investment timeframe, when capital from Google's highly profitable ad business is reinvested in potentially lower rate of return projects that could meaningfully reduce the company's profitability, in our view. However, as we previously noted we expect Alphabet's cash balance and other levers could be used to offset a slowdown in earnings growth at that time.

**SUITABILITY**

We assign shares of GOOGL a suitability rating of 1 on our scale of 1-4 (1 = most conservative, 4 = most aggressive). A 1 rating is given based on Alphabet's dominant global online advertising position with several products and services having an active user base of over 1 billion on a global basis. While we believe Alphabet's core platforms have significant growth potential remaining, we expect the company's new products and services to require significant investment, which could weigh on profitability. We consider the company to have a superior balance sheet and free cash flow generating ability. We believe a suitability rating of 1 incorporates these attributes. Shares of GOOGL are suitable for growth oriented investors seeking long-term capital appreciation, in our view.

**RISKS & CONSIDERATIONS**

Risks to our valuation include but are not limited to:

- Increased expense growth and capex spending resulting from Other Bets
- Negative rulings out of Europe, including Antitrust and tax related fines and/or penalties
- Macroeconomic issues including a substantial decline in ad budgets or consumer spending
- Changes in internet user behavior, including ways in which internet users seek information. Ad Blockers, Social Media, Applications "apps" or other sources garnering more user time
- Rapid technological advances, leading to a risk of excessive spending on R&D or lack of timely innovation. Alphabet must ensure a timely flow of competitive products and services to compete
- Increased competition from global competitors
- Continued legal disputes involving patent infringement lawsuits

*Additional information is available upon request.*

## Alphabet Inc. - Consolidated Statement of Operations (in millions except per share data and percentages)

	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	3/31/2017	06/30/2017E	09/30/2017E	12/31/2017E	FY17E	FY18E
Total revenue (gross)	16,594	21,796	23,651	29,321	37,905	51,379	59,825	66,001	74,989	90,272	24,750	25,397	26,608	30,445	107,200	127,531
Traffic Acquisition Costs (TAC)	4,934	5,939	6,169	7,317	8,816	10,960	12,250	13,493	14,343	16,793	4,629	4,562	4,781	5,539	19,510	22,952
Net Revenue	11,660	15,857	17,482	22,004	29,089	40,419	47,575	52,508	60,646	73,479	20,121	20,835	21,828	24,906	87,690	104,579
Other cost of revenue	1,715	2,683	2,675	3,100	4,383	6,216	9,743	12,198	13,821	18,345	5,166	5,338	5,719	7,011	23,302	28,448
Gross profit	9,945	13,174	14,807	18,904	24,706	29,810	33,967	40,310	46,825	55,134	14,955	15,497	16,108	17,895	64,388	76,131
Research and Development	2,120	2,793	2,843	3,762	5,162	6,970	7,952	9,832	12,282	13,948	3,942	3,900	4,200	4,450	16,492	19,650
Sales and Marketing	1,461	1,946	1,984	2,799	4,589	6,213	7,253	8,131	9,047	10,485	2,644	2,675	2,900	3,350	11,569	13,300
General and Administrative	1,280	1,803	1,668	1,962	2,724	3,905	4,796	5,851	6,136	6,985	1,801	1,950	2,150	2,300	8,201	9,700
Total expenses	4,861	6,542	6,495	8,523	12,975	17,088	20,001	23,814	27,465	31,418	8,387	8,525	9,250	10,100	36,262	42,650
Income from Operations	5,084	6,632	8,312	10,381	11,731	12,722	13,966	16,496	19,360	23,716	6,568	6,972	6,858	7,795	28,126	33,481
Interest and other income, net	590	(779)	69	415	584	625	530	763	291	434	251	250	300	275	1,076	1,125
Income before income taxes	5,674	5,853	8,381	10,796	12,315	13,347	14,496	17,259	19,651	24,150	6,819	7,222	7,158	8,070	29,202	34,606
Provision for income taxes	1,470	1,626	1,861	2,291	2,589	2,589	2,282	3,331	3,232	4,672	1,393	1,444	1,360	1,533	5,731	6,656
Net Income	\$ 4,204	\$ 4,227	\$ 6,520	\$ 8,505	\$ 9,726	\$ 10,758	\$ 12,214	\$ 13,928	\$ 16,419	\$ 19,478	\$ 5,426	\$ 5,778	\$ 5,798	\$ 6,536	\$ 23,471	\$ 27,950
<b>Earnings per common share GAAP:</b>																
Basic	6.76	6.73	10.31	13.34	15.07	16.44	18.35	20.61	23.97	28.12	7.85	8.31	8.37	9.47	33.90	40.46
Diluted	\$ 6.65	\$ 6.66	\$ 10.21	\$ 13.16	\$ 14.86	\$ 16.19	\$ 18.02	\$ 20.27	\$ 23.70	\$ 27.88	\$ 7.73	\$ 8.25	\$ 8.31	\$ 9.38	\$ 33.57	\$ 39.93
<b>Shares outstanding:</b>																
Diluted	632.420	635.028	638.832	646.502	654.428	664.610	677.619	687.070	692.930	698.705	702.036	700.000	698.000	697.000	699.259	700.000
<b>% Year Over Year Change:</b>																
Total gross revenue	56.5%	31.3%	8.5%	24.0%	29.3%	35.5%	16.4%	10.3%	13.6%	20.4%	22.2%	18.1%	18.5%	16.8%	18.8%	19.0%
Traffic acquisition costs (TAC)	49.1%	20.4%	3.9%	18.6%	20.5%	24.3%	11.8%	10.1%	6.3%	17.1%	22.2%	14.8%	14.3%	14.2%	16.2%	17.6%
Net revenue	59.8%	36.0%	10.2%	25.9%	32.2%	38.9%	17.7%	10.4%	15.5%	21.2%	22.2%	18.9%	19.5%	17.4%	19.3%	19.3%
Gross profit	55.9%	32.5%	12.4%	27.7%	30.7%	20.7%	13.9%	18.7%	16.2%	17.7%	18.6%	15.9%	17.1%	16.2%	16.8%	18.2%
Total operating expenses	71.8%	34.6%	-0.7%	31.2%	52.2%	31.7%	17.0%	19.1%	15.3%	14.4%	15.4%	15.2%	15.8%	15.2%	15.4%	17.6%
Operating income	43.2%	30.4%	25.3%	24.9%	13.0%	8.4%	9.8%	18.1%	17.4%	22.5%	23.0%	16.8%	18.9%	17.4%	18.6%	19.0%
Net income	36.6%	0.5%	54.2%	30.4%	14.4%	10.6%	13.5%	14.0%	17.9%	18.6%	29.0%	18.5%	14.6%	23.4%	20.5%	19.1%
Earnings Per Share	33.7%	0.1%	53.3%	28.9%	13.0%	8.9%	11.4%	12.5%	16.9%	17.7%	28.5%	17.9%	14.6%	24.0%	20.4%	19.0%
Diluted Shares Outstanding	2.2%	0.4%	0.6%	1.2%	1.2%	1.6%	2.0%	1.4%	0.9%	0.8%	0.4%	0.5%	-0.1%	-0.5%	0.1%	0.1%
<b>% of Revenue:</b>																
Traffic Acquisition Costs (TAC)/ Google rev	29.7%	27.2%	26.1%	25.0%	23.2%	23.8%	22.1%	20.5%	19.2%	18.8%	18.6%	18.1%	18.2%	18.4%	18.3%	18.2%
Gross Profit	59.9%	60.4%	62.6%	64.5%	65.2%	58.0%	56.8%	61.1%	62.4%	61.1%	60.4%	61.0%	60.5%	58.8%	60.1%	59.7%
Operating expenses	29.3%	30.0%	27.5%	29.1%	34.2%	33.3%	33.4%	36.1%	36.6%	34.8%	33.9%	33.6%	34.8%	33.2%	33.8%	33.4%
Operating Income	30.6%	30.4%	35.1%	35.4%	30.9%	24.8%	23.3%	25.0%	25.8%	26.3%	26.5%	27.5%	25.8%	25.6%	26.2%	26.3%
Net Income	25.3%	19.4%	27.6%	29.0%	25.7%	20.9%	20.4%	21.1%	21.9%	21.6%	21.9%	22.7%	21.8%	21.5%	21.9%	21.9%

Source: Company reports and Hilliard Lyons estimates

## Alphabet Inc. - Consolidated Balance Sheet (in millions except per share data and percentages)

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	3/31/2016	6/30/2016	9/30/2016	12/31/2016	FY16	3/31/2017
<b>Current assets:</b>																
Cash and Cash Equivalents	\$ 3,545	\$ 6,082	\$ 8,657	\$ 10,198	\$ 13,630	\$ 9,983	\$ 14,778	\$ 18,898	\$ 18,347	\$ 16,549	\$ 15,111	\$ 13,627	\$ 9,406	\$ 12,918	\$ 12,918	\$ 18,132
Short-Term Marketable Securities	7,699	8,137	7,189	14,287	21,345	34,643	33,310	39,819	46,048	56,517	60,153	64,833	73,650	73,415	73,415	74,307
Total Cash, cash equivalents and marketable sec.	11,244	14,219	15,846	24,485	34,975	44,626	48,088	58,717	64,395	73,066	75,264	78,460	83,056	86,333	86,333	92,439
Accounts receivables	1,322	2,163	2,642	3,178	4,252	5,427	7,885	8,882	9,383	11,556	10,818	11,686	11,979	14,137	14,137	12,913
Inventories							505	426	-	-			559	268	268	280
Receivable under reverse repurchase agreements					750	745	700	100	875	450	350	500	-	-	-	-
Deferred income taxes, net	30	69	286	644	259	215	1,144	1,526	1,322	-	-	-	-	-	-	-
Income taxes receivable	-	145	-	23	-	-	-	408	1,298	1,903	1,804	576	416	95	95	56
Prepaid revenue share, expenses and other asset	444	694	1,404	836	1,326	1,745	2,132	2,827	3,412	3,139	2,719	3,016	2,536	4,575	4,575	3,106
Assets held for sale																
Total current assets	13,040	17,289	20,178	29,167	41,562	52,758	60,454	72,886	80,685	90,114	90,955	94,238	98,546	105,408	105,408	108,794
Prepaid revenue share, expenses and other assets	114	169	434	416	442	499	2,011	1,976	3,280	3,181	3,297	3,275	3,276	1,819	1,819	1,846
Deferred income taxes, net	-	33	-	263	265	-	-	-	-	251	233	253	273	383	383	365
Non-marketable equity securities	1,032	1,060	85	129	523	790	1,469	1,976	3,079	5,183	5,577	5,820	5,705	5,878	5,878	6,131
Property and equipment, net	2,395	4,039	5,234	4,845	7,759	9,603	11,854	16,524	23,883	29,016	30,162	31,413	32,753	34,234	34,234	35,936
Intangible assets, net	347	447	997	775	1,044	1,578	7,473	6,066	4,607	3,847	3,657	3,452	3,367	3,307	3,307	3,137
Goodwill	1,545	2,299	4,840	4,903	6,256	7,346	10,537	11,492	15,599	15,869	15,866	15,841	16,028	16,468	16,468	16,547
Total assets	18,473	25,336	31,768	40,497	57,851	72,574	93,798	110,920	131,133	147,461	149,747	154,292	159,948	167,497	167,497	172,756
<b>Current liabilities:</b>																
Accounts payable	211	282	178	216	483	588	2,012	2,453	1,715	1,931	1,667	1,716	2,175	2,041	2,041	2,306
Short-term debt					3,465	1,218	2,549	3,009	2,009	3,225	3,221	2,219	-	-	-	-
Accrued compensation and benefits	352	588	812	982	1,410	1,818	2,239	2,502	3,069	3,539	2,618	3,409	3,672	3,976	3,976	2,673
Accrued expenses	266	465	480	570	961	1,370	3,258	3,755	4,434	4,768	4,517	4,502	4,840	6,144	6,144	5,438
Accrued revenue share	370	522	533	694	885	1,168	1,471	1,729	1,952	2,329	2,227	2,345	2,542	2,942	2,942	2,888
Securities lending payable					2,361	2,007	1,673	1,374	2,778	2,428	2,171	2,065	-	-	-	-
Deferred revenue	105	178	218	285	394	547	895	1,062	752	788	933	900	923	1,099	1,099	1,148
Liabilities held for sale																
Income taxes payable, net	-	-	82	-	37	197	240	24	96	302	330	185	171	554	554	803
Total current liabilities	1,305	2,036	2,302	2,747	9,996	8,913	14,337	15,908	16,805	19,310	17,684	17,341	14,323	16,756	16,756	15,256
Long-term debt						2,986	2,988	2,236	3,228	1,995	1,987	1,984	3,938	3,935	3,935	3,937
Deferred revenue-non-current	20	30	30	42	35	44	100	139	104	151	131	151	169	202	202	323
Deferred income taxes, net	40	-	13	-	-	1,693	2,046	1,947	1,971	189	599	651	393	226	226	604
Income taxes payable, long term	-	478	890	1,392	1,200	287	1,872	2,638	3,407	3,663	3,812	4,135	4,461	4,677	4,677	4,924
Other non-current liabilities	68	102	294	311	379	506	740	743	1,118	1,822	1,965	2,151	2,561	2,665	2,665	2,763
Commitments and contingencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total long term liabilities	129	611	1,227	1,745	1,614	5,516	7,746	7,703	9,828	7,820	8,494	9,072	11,522	11,705	11,705	12,551
Total liabilities	1,434	2,646	3,529	4,493	11,610	14,429	22,083	23,611	26,633	27,130	26,178	26,413	25,845	28,461	28,461	27,807
<b>Shareholders' Equity:</b>																
Common Stock and Additional paid-in capital	11,883	13,241	14,450	15,817	18,235	20,264	22,835	25,922	28,767	32,982	33,695	34,293	35,337	36,307	36,307	37,698
Accumulated other comprehensive income	23	113	227	105	138	276	538	125	27	(1,874)	(1,294)	(1,151)	(1,032)	(2,402)	(2,402)	(2,169)
Retained earnings	5,133	9,335	13,562	20,082	27,868	37,605	48,342	61,262	75,706	89,223	91,168	94,737	99,798	105,131	105,131	109,420
Total shareholders equity	17,040	22,690	28,239	36,004	46,241	58,145	71,715	87,309	104,500	120,331	123,569	127,879	134,103	139,036	139,036	144,949
Total liabilities and shareholders equity	18,473	25,336	31,768	40,497	57,851	72,574	93,798	110,920	131,133	147,461	149,747	154,292	159,948	167,497	167,497	172,756

Source: Company reports

### Analyst Certification

I, Stephen Turner, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company(ies) and its (their) securities. I also certify that I have not been, am not, and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendation(s) in this report.

### Important Disclosures

Hilliard Lyons' analysts receive bonus compensation based on Hilliard Lyons' profitability. They do not receive direct payments from investment banking activity.

### Suitability Ratings

- 1** - A large cap, core holding with a solid history
- 2** - A historically secure company which could be cyclical, has a shorter history than a "1" or is subject to event driven setbacks
- 3** - An above average risk/reward ratio could be due to small size, lack of product diversity, sporadic earnings or high leverage
- 4** - Speculative, due to small size, inconsistent profitability, erratic revenues, volatility, low trading volume or a narrow customer or product base

### Investment Ratings

**Buy** - We believe the stock has significant total return potential in the coming 12 months.

**Long-term Buy** - We believe the stock is an above average holding in its sector, and expect solid returns to be realized over a longer time frame than our Buy rated issues, typically 2-3 years.

**Neutral** - We believe the stock is an average holding in its sector, is currently fully valued, and may be used as a source of funds if better opportunities arise.

**Underperform** - We believe the stock is vulnerable to a price setback in the next 12 months.



	Hilliard Lyons Recommended Issues		Investment Banking Provided in Past 12 Mo.	
	# of Stocks Covered	% of Stocks Covered	Banking	No Banking
<b>Rating</b>				
<b>Buy</b>	36	30%	14%	86%
<b>Hold/Neutral</b>	71	58%	6%	94%
<b>Sell</b>	15	12%	7%	93%

As of 5 April 2017

#### Other Disclosures

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