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Pivotal Research Group

Ad Market: Updating 2017 Forecast To +4.4% Underlying Growth

Sept. 25, 2017 Brian Wieser, CFA 212-514-4682

BOTTOM LINE: We are refining our expectations for total US advertising growth for 2017 and beyond. We call for +4.4% underlying expansion this year, which is similar to the +4-5% range we published in August. In this note we review some of the key challenges ahead, especially for TV and digital advertising, which account for the bulk of the industry's activity. Our forecast model is included in the appendix to this report.

Advertising is facing challenges on many fronts, especially within the two largest media, digital and television. Among the large packaged goods marketers and big brands who dominate television, we have market-share losses to smaller brands driving reduced spending for many who budget for advertising as a percentage of revenue and zero-based budgeting tactics for others. Further, there do not seem to be many significant new categories of marketers whose constituents are large, consumer focused, differentiated themselves on the basis of awareness of attributes, budget on a share-of-voice basis and operate in nationally oriented and oligopolistic sectors. As those categories emerged in the past, they drove up pricing for all and revenues for owners of national television properties in particular. Increasingly fragmented and often unmeasured viewing makes it harder, if not more expensive to use television efficiently. So while it remains the "least inefficient" medium for many, it's difficult to see a path to growth. We generally see ad revenue growth at national TV media outlets declining by around -2% each year going forward, excluding incremental spending associated with the Olympics, similar to our expectation for this year.

Meanwhile, digital advertising is having a moment, and not a good one. Beyond ad quality issues, we have concerns that marketers will concern themselves more with basic trustworthiness of media owners, the capacity to use personal data going forward as well as the underlying effectiveness of digital media more generally. Ad quality issues of viewability, brand safety, fraud and bots are problematic of course, but ultimately seem relatively manageable for marketers vs. the latter group of problems. Facebook's recently publicized issues around mis-matches between audience data provided for planning purposes vs. data from global census bureaus and its initial inability to find ads from Russian propogandists follow on several other incidents over the past year, all of which compromise claims Facebook makes to marketers. This has tangible implications. A significant share of spending on advertising occurs simply because it is perceived to be effective, or because tools used to assess spending effectiveness are really used to justify a choice or refine pre-existing budgets. Whether a collection of media and creative choices are actually the most effective is a subjective question, even in a world awash with data, which is why marketer trust matters

This has been laid bare in recent comments and actions from executives at companies as diverse as Procter & Gamble, Uber and Restoration Hardware. P&G eliminated \$140mm in digital advertising in the second quarter. As conveyed in a lawsuit with one of its advertising agencies, Uber eliminated spending on app installs earlier this year. Restoration Hardware eliminated most of the keywords it was buying from search engines. In each instance, each company indicated there was no negative business impact. While digital advertising *can* be incredibly effective, these three cases are very public examples of the heightened scrutiny that is being applied to digital advertising from the highest levels of marketers' organizations, whereas relatively little rigor was applied before. On top of this, with looming regulations in Europe around the use of personal data – with few marketers fully aware of related implications, including the global fines associated with violations – and Apple's new restrictions on cookies within its Safari browsers, marketers must begin looking at new approaches to use digital media more generally.

Still, for all the risks that follow from these issues, we don't think they will observably impact digital ad growth at this time. This is largely because performance-based marketing is increasingly common, as businesses with digital-centric business models take share (as with Dollar Shave Club vs. Gillette) and concentrate spending on digital media. In total we forecast +21% growth for the medium in 2017.

Additional data associated with the growth of different types of advertising including local TV, radio, outdoor, magazines, newspapers, directories and direct mail follows in our model, which accounts for the remainder of this note. We highlight a methodological modification which we expect to refine over time: we have derived a crude estimate for app install ad spending, backing that figure out of national mass media advertising and placing it within our Direct and SMB category. We think this revised baseline provides a better estimate of historical growth and absolute size of brand-oriented advertising vs. purer performance-based advertising budgets, although we recognize that there are still performance-based elements in our national and local groupings of spending much as there are branding elements in our direct total.

Pivotal Advertising Forecast September 2017: Summary Totals

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	2010A	2011A	2012A	2013A	2014A	2015A	1Q16A	2Q16A	3Q16A	4Q16A	2016A	1Q17A	2Q17A	3Q17E	4Q17E	2017E	2018E	2019E	2020E	2021E	5-YR CAGE
TOTAL NATIONAL	\$61,737.8	\$65,206.8	\$65,538.7	\$69,327.6	\$69,282.8	\$70,287.3	\$18,484.7	\$18,130.0	\$16,259.0	\$20,271.1	\$73,144.8	\$18,649.5	\$18,361.8	\$16,459.9	\$20,429.2	\$73,900.4	\$74,369.9	\$74,689.7	\$74,847.1	\$74,828.7	0.5%
Annual Growth / Decline	7.7%	5.6%	0.5%	5.8%	-0.1%	1.4%	6.3%	3.2%	1.8%	4.7%	4.1%	0.9%	1.3%	1.2%	0.8%	1.0%	0.6% 57.3%	0.4%	0.2%	0.0%	
% of Mass Advertising	48.5%	50.2%	50.4%	51.9%	52.7%	53.7%	57.2%	54.5%	52.0%	57.5%	55.3%	58.6%	55.6%	53.0%	58.0%	56.3%		58.3%	59.3%	60.3%	
TOTAL LOCAL • Annual Growth / Decline	\$65,428.8 1.4%	\$64,704.3 -1.1%	\$64,473.1 -0.4%	\$64,183.1 -0.4%	\$62,104.4 -3.2%	\$60,574.0 -2.5%	\$13,826.8 -0.8%	\$15,161.9 -1.7%	\$15,036.9 -1.4%	\$15,005.4 -6.0%	\$59,030.9 -2.5%	\$13,202.3 -4.5%	\$14,660.2 -3.3%	\$14,624.4 -2.7%	\$14,783.6 -1.5%	\$57,270.5 -3.0%	\$55,332.1 -3.4%	\$53,337.3 -3.6%	\$51,287.6 -3.8%	\$49,185.0 -4.1%	-3.6%
% of Mass Advertising	51.5%	49.8%	49.6%	48.1%	47.3%	46.3%	42.8%	45.5%	48.0%	42.5%	44.7%	41.4%	44.4%	47.0%	42.0%	43.7%	42.7%	41.7%	40.7%	39.7%	
TOTAL NATIONAL AND LOCAL	\$127,166.6	\$129,911.2	\$130,011.8	\$133,510.7	\$131,387.2	\$130,861.3	\$32,311.5	\$33,291.8	\$31,295.8	\$35,276.5	\$132,175.7	\$31,851.8	\$33,021.9	\$31,084.3	\$35,212.8	\$131,170.9	\$129,702.0	\$128,027.0	\$126,134.7	\$124,013.7	-1.3%
Annual Growth / Decline	4.3%	2.2%	0.1%	2.7%	-1.6%	-0.4%	3.1%	0.9%	0.3%	-0.1%	1.0%	-1.4%	-0.8%	-0.7%	-0.2%	-0.8%	-1.1%	-1.3%	-1.5%	-1.7%	
% of Normalized Advertising	75.7%	75.0%	74.2%	73.5%	71.1%	68.5%	67.3%	67.3%	64.4%	64.2%	65.8%	63.9%	64.0%	61.2%	61.2%	62.5%	60.0%	57.5%	55.0%	52.5%	
TOTAL DIRECT + SMB ADVERTISING	\$40,815.1	\$43,340.4	\$45,265.8	\$48,028.8	\$53,324.3	\$60,178.1	\$15,704.2	\$16,163.8	\$17,273.7	\$19,701.1	\$68,842.9	\$18,031.9	\$18,610.1	\$19,719.5	\$22,331.1	\$78,692.5	\$86,457.3	\$94,617.1	\$103,188.7	\$112,189.5	10.3%
Annual Growth / Decline	-0.5%	6.2%	4.4%	6.1%	11.0%	12.9%	14.4%	11.2%	16.4%	15.4%	14.4%	14.8%	15.1%	14.2%	13.3%	14.3%	9.9%	9.4%	9.1%	8.7%	
% of Normalized Advertising	24.3%	25.0%	25.8%	26.5%	28.9%	31.5%	32.7%	32.7%	35.6%	35.8%	34.2%	36.1%	36.0%	38.8%	38.8%	37.5%	40.0%	42.5%	45.0%	47.5%	
NORMALIZED DIRECT AND MASS	\$167,981.7	\$173,251.6	\$175,277.6	\$181,539.5	\$184,711.5	\$191,039.4	\$48,015.8	\$49,455.6	\$48,569.6	\$54,977.7	\$201,018.6	\$49,883.7	\$51,632.1	\$50,803.8	\$57,543.9	\$209,863.4	\$216,159.3	\$222,644.1	\$229,323.4	\$236,203.1	3.3%
Annual Growth / Decline	3.1%	3.1%	1.2%	3.6%	1.7%	3.4%	6.5%	4.1%	5.4%	4.9%	5.2%	3.9%	4.4%	4.6%	4.7%	4.4%	3.0%	3.0%	3.0%	3.0%	
Annual Growth / Decline Political ^{vv}	3.1% \$2,086.5	3.1% \$445.1	1.2% \$2,864.6	3.6% \$304.9	1.7% \$2,437.0	3.4% \$433.7	6.5% \$373.1	4.1% \$266.3	5.4% \$846.0	4.9% \$1,465.6	5.2% \$2,950.9	3.9% \$28.4	4.4% \$55.2	4.6% \$128.1	4.7% \$323.0	4.4% \$534.8	3.0% \$3,541.1	3.0% \$641.7	3.0% \$4,249.3	3.0% \$770.1	
Political ^{**} • Bi-Annual Growth / Decline	\$2,086.5 20.8%	\$445.1 30.7%	\$2,864.6 37.3%	\$304.9 -31.5%	\$2,437.0 -14.9%	\$433.7 42.2%	\$373.1 190.0%	10.2%	\$846.0 21.9%	\$1,465.6 6.8%	\$2,950.9 21.1%	\$28.4 4.9%	\$55.2 -7.4%	\$128.1 30.0%	\$323.0 30.0%	\$534.8 23.3%	\$3,541.1 20.0%	\$641.7 20.0%	\$4,249.3 20.0%	\$770.1 20.0%	
Political ¹¹⁷ •Bi-Annual Growth / Decline Olympics ¹⁹⁷	\$2,086.5 20.8% \$605.0	\$445.1 30.7% \$0.0	\$2,864.6 37.3% \$619.6	\$304.9 -31.5% \$0.0	\$2,437.0 -14.9% \$628.9	\$433.7 42.2% \$0.0	\$373.1 190.0% \$0.0	10.2% \$0.0	\$846.0 21.9% \$604.8	\$1,465.6 6.8% \$0.0	\$2,950.9 21.1% \$604.8	\$28.4 4.9% \$0.0	\$55.2 -7.4% \$0.0	\$128.1 30.0% \$0.0	\$323.0 30.0% \$0.0	\$534.8 23.3% \$0.0	\$3,541.1 20.0% \$750.0	\$641.7 20.0% \$0.0	\$4,249.3 20.0% \$950.0	\$770.1 20.0% \$0.0	
Political ^{IVI} • Bi-Annual Growth / Decline Olympics ^{WI} • Quadri-Annual Growth / Decline	\$2,086.5 20.8%	\$445.1 30.7%	\$2,864.6 37.3%	\$304.9 -31.5%	\$2,437.0 -14.9%	\$433.7 42.2%	\$373.1 190.0%	10.2% \$0.0	\$846.0 21.9%	\$1,465.6 6.8%	\$2,950.9 21.1%	\$28.4 4.9%	\$55.2 -7.4%	\$128.1 30.0%	\$323.0 30.0%	\$534.8 23.3%	\$3,541.1 20.0%	\$641.7 20.0%	\$4,249.3 20.0% \$950.0 57.1%	\$770.1 20.0%	
Political ¹¹⁷ •Bi-Annual Growth / Decline Olympics ¹⁹⁷	\$2,086.5 20.8% \$605.0	\$445.1 30.7% \$0.0	\$2,864.6 37.3% \$619.6	\$304.9 -31.5% \$0.0	\$2,437.0 -14.9% \$628.9	\$433.7 42.2% \$0.0	\$373.1 190.0% \$0.0	10.2% \$0.0	\$846.0 21.9% \$604.8	\$1,465.6 6.8% \$0.0	\$2,950.9 21.1% \$604.8	\$28.4 4.9% \$0.0	\$55.2 -7.4% \$0.0	\$128.1 30.0% \$0.0	\$323.0 30.0% \$0.0	\$534.8 23.3% \$0.0	\$3,541.1 20.0% \$750.0	\$641.7 20.0% \$0.0	\$4,249.3 20.0% \$950.0 57.1%	\$770.1 20.0% \$0.0	3.0%
Political [®] Bi-Annual Growth / Decline Olympics ^{®®} - Quadri-Annual Growth / Decline TOTAL ADVERTISING REVENUES	\$2,086.5 20.8% \$605.0 -6.9% \$170,673.2 4.6%	\$445.1 30.7% \$0.0 \$173,696.7	\$2,864.6 37.3% \$619.6 3.3% \$178,761.8	\$304.9 -31.5% \$0.0 0.0% \$181,844.4	\$2,437.0 -14.9% \$628.9 4.0% \$187,777.4	\$433.7 42.2% \$0.0 \$191,473.1	\$373.1 190.0% \$0.0 \$48,388.8	10.2% \$0.0 \$49,721.9	\$846.0 21.9% \$604.8 -2.4% \$50,020.3	\$1,465.6 6.8% \$0.0 \$56,443.2	\$2,950.9 21.1% \$604.8 \$204,574.3	\$28.4 4.9% \$0.0 \$49,912.1	\$55.2 -7.4% \$0.0 \$51,687.3	\$128.1 30.0% \$0.0 \$50,931.9	\$323.0 30.0% \$0.0 \$57,866.9	\$534.8 23.3% \$0.0 \$210,398.2	\$3,541.1 20.0% \$750.0 19.3% \$220,450.4	\$641.7 20.0% \$0.0 \$223,285.8	\$4,249.3 20.0% \$950.0 57.1% \$234,522.7	\$770.1 20.0% \$0.0 \$236,973.2	3.0%

Pivotal Advertising Forecast September 2017: National Media

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	2010A	2011A	2012A	2013A	2014A	2015A	1Q16A	2Q16A	3Q16A	4Q16A	2016A	1Q17A	2Q17A	3Q17E	4Q17E	2017E	2018E	2019E	2020E	2021E	5-YR C
NATIONAL MASS MEDIA ADVERTISING REVENUES																					
National Television																					
National Cable [™]	\$20,424.4	\$22,137.8	\$23,106.3	\$24,622.0	\$25,039.0	\$25,651.7	\$6,537.3	\$6,906.1	\$6,037.2	\$6,759.6	\$26,240.3	\$6,504.6	\$6,823.2	\$5,922.9	\$6,355.3	\$25,606.1	\$24,853.7	\$24,372.5	\$23,699.0	\$22,964.2	-2.6%
Annual Growth / Decline	12.5%	8.4%	4.4%	6.6%	1.7%	2.4%	4.0%	4.0%	-1.0%	2.0%	2.3%	-0.5%	-1.2%	-1.9%	-6.0%	-2.4%	-2.9%	-1.9%	-2.8%	-3.1%	
• % of National TV	55.6%	56.4%	57.2%	57.6%	57.6%	58.2%	53.4%	61.5%	63.0%	55.7%	58.1%	54.3%	61.6%	62.7%	53.7%	57.8%	57.3%	57.3%	57.0%	56.7%	
National Broadcast - English ^(a)	13,094.9	13,691.6	13,606.0	14,222.5	14,223.5	14,360.0	4,766.3	3,231.7	2,546.2	4,231.9	14,776.1	4,575.6	3,202.7	2,519.4	4,240.5	14,538.1	14,277.6	14,043.7	13,769.2	13,453.4	-1.9%
Annual Growth / Decline % of National TV	1.3% 35.6%	4.6% 34.9%	-0.6% 33.7%	4.5% 33.3%	0.0% 32.7%	1.0% 32.6%	8.0% 39.0%	1.0% 28.8%	-2.0% 26.6%	2.0% 34.9%	2.9% 32.7%	-4.0% 38.2%	-0.9% 28.9%	-1.1% 26.7%	0.2% 35.9%	-1.6% 32.8%	-1.8% 32.9%	-1.6% 33.0%	-2.0% 33.1%	-2.3% 33.2%	
National Broadcast - Spanish	1,093.4	1,171.7	1,259.1	1,381.6	1,589.8	1,449.0	325.6	447.1	283.0	476.2	1,532.0	290.8	387.1	283.7	563.3	1,524.9	1,601.5	1,464.1	1,451.9	1,434.6	-1.39
Annual Growth / Decline	8.3%	7.2%	7.5%	9.7%	15.1%	-8.9%	10.1%	17.4%	-8.1%	2.6%	5.7%	-10.7%	-13.4%	0.2%	18.3%	-0.5%	5.0%	-8.6%	-0.8%	-1.2%	
% of National TV National Syndication + Long-Form/Pro Video	3.0% 2,127.3	3.0% 2.271.5	3.1% 2.419.1	3.2% 2.500.3	3.7% 2.587.2	3.3% 2.610.8	2.7% 603.4	4.0% 645.3	3.0% 722.9	3.9% 674.0	3.4% 2.645.7	2.4% 600.4	3.5% 666.3	3.0% 726.8	4.8% 668.1	3.4% 2.661.7	3.7% 2.671.1	3.4% 2,683.2	3.5% 2,685.3	3.5% 2.676.6	0.29
Annual Growth / Decline	2,127.3	6.8%	6.5%	2,500.3	2,387.2	2,010.8	2.9%	1.1%	1.2%	0.4%	2,045.7	-0.5%	3.3%	0.5%	-0.9%	2,001.7	2,071.1	2,003.2	2,005.3	-0.3%	0.2
% of National TV	5.8%	5.8%	6.0%	5.9%	6.0%	5.9%	4.9%	5.7%	7.5%	5.6%	5.9%	5.0%	6.0%	7.7%	5.6%	6.0%	6.2%	6.3%	6.5%	6.6%	
Total National Television	\$36,739.8	\$39,272.6	\$40,390.6	\$42,726.4	\$43,439.6	\$44,071.5	\$12,232.6	\$11,230.4	\$9,589.3	\$12,141.7	\$45,194.0	\$11,971.4	\$11,079.3	\$9,452.7	\$11,827.3	\$44,330.7	\$43,403.8	\$42,563.5	\$41,605.4	\$40,528.8	-2.2%
Annual Growth / Decline % of National Advertising	8.1% 59.5%	6.9% 60.2%	2.8% 61.6%	5.8% 61.6%	1.7% 62.7%	1.5% 62.7%	5.6% 66.2%	3.4% 61.9%	-1.3% 59.0%	1.9% 59.9%	2.5% 61.8%	-2.1% 64.2%	-1.3% 60.3%	-1.4% 57.4%	-2.6% 57.9%	-1.9% 60.0%	-2.1% 58.4%	-1.9% 57.0%	-2.3% 55.6%	-2.6% 54.2%	
Total Magazines ^(D)	\$13,865.2	\$13,747,5	\$12,645.6	\$12,003.9	\$10,651.0	\$9,290.4	\$2,028,4	\$2.401.0	\$1,934,5	\$2,117,1	\$8,481.0	\$1,768.7	\$2,111.3	\$1,629.2	\$1,766.2	\$7,275.3	\$6,206.0	\$5,112.3	\$4,000.4	\$2,877.0	-19.4
Annual Growth / Decline	0.1%	-0.8%	-8.0%	-5.1%	-11.3%	-12.8%	-4.0%	-11.0%	-9.1%	-9.9%	-8.7%	-12.8%	-12.1%	-15.8%	-16.6%	-14.2%	-14.7%	-17.6%	-21.7%	-28.1%	
% of National Advertising	22.5%	21.1%	19.3%	17.3%	15.4%	13.2%	11.0%	13.2%	11.9%	10.4%	11.6%	9.5%	11.5%	9.9%	8.6%	9.8%	8.3%	6.8%	5.3%	3.8%	
National Digital ^(c)																					
National Digital Display (Including Mobile)	\$7,171.9	\$7,950.7	\$7,997.7	\$9,549.9	\$9,456.9	\$9,259.4	\$1,969.6	\$2,075.9	\$1,953.0	\$2,739.6	\$8,738.1	\$1,782.6	1,868.3	\$1,688.0	\$2,503.8	\$7,842.8	\$6,807.6	\$6,018.0	\$5,757.0	\$5,641.6	-8.4
Annual Growth / Decline	19.4%	10.9%	0.6%	19.4%	-1.0%	-2.1%	-3.7%	-5.6%	-14.6%	0.4%	-5.6%	-9.5%	-10.0%	-13.6%	-8.6%	-10.2%	-13.2%	-11.6%	-4.3%	-2.0%	
% of National Digital	85.9%	84.2%	81.4%	79.8%	74.3%	64.1%	53.2%	53.4%	47.0%	51.4%	51.2%	40.2%	40.7%	35.0%	40.5%	39.2%	30.2%	24.2%	21.2%	19.2%	
Video Excluding Long-Form Professional Content Annual Growth / Decline	1,172.6 31.7%	1,487.0 26.8%	1,822.9 22.6%	2,420.9 32.8%	3,269.3 35.0%	5,176.9 58.4%	1,730.5 54.5%	1,814.2 55.7%	2,204.0 79.4%	2,593.3 56.0%	8,342.1 61.1%	2,648.1 53.0%	2,721.3 50.0%	3,137.6 42.4%	3,678.1 41.8%	12,185.1 46.1%	15,764.6 29.4%	18,891.9 19.8%	21,450.8 13.5%	23,804.3 11.0%	23.39
% of National Digital	14.1%	15.8%	18.6%	20.2%	25.7%	35.9%	46.8%	46.6%	53.0%	48.6%	48.8%	59.8%	59.3%	65.0%	59.5%	60.8%	69.8%	75.8%	78.8%	80.8%	
Total National Digital	\$8,344.5	\$9,437.7	\$9,820.6	\$11,970.8	\$12,726.2	\$14,436.3	\$3,700.2	\$3,890.1	\$4,157.0	\$5,332.9	\$17,080.1	\$4,430.8	\$4,589.6	\$4,825.6	\$6,181.9	\$20,027.9	\$22,572.1	\$24,909.9	\$27,207.8	\$29,445.9	11.59
Annual Growth / Decline % of National Advertising	21.0% 13.5%	13.1% 14.5%	4.1% 15.0%	21.9% 17.3%	6.3% 18.4%	13.4% 20.5%	16.9% 20.0%	15.6% 21.5%	18.2% 25.6%	21.5% 26.3%	18.3% 23.4%	19.7% 23.8%	18.0% 25.0%	16.1% 29.3%	15.9% 30.3%	17.3% 27.1%	12.7% 30.4%	10.4% 33.4%	9.2% 36.4%	8.2% 39.4%	
							\$278.6												\$1,223.8	\$1,223.5	0.50
Total Network and Satellite Radio • Annual Growth / Decline	\$1,166.5 4.2%	\$1,209.7 3.7%	\$1,245.0 2.9%	\$1,211.3 -2.7%	\$1,173.0 -3.2%	\$1,208.3 3.0%	\$278.6	\$305.3 -2.4%	\$301.9 -1.3%	\$310.1 -2.0%	\$1,196.0 -1.0%	\$262.4 -5.8%	\$320.2 4.9%	\$305.6 1.2%	\$320.1 3.2%	\$1,208.3 1.0%	\$1,216.0 0.6%	\$1,221.2 0.4%	\$1,223.8	\$1,223.5 0.0%	0.5%
% of National Advertising	1.9%	1.9%	1.9%	1.7%	1.7%	1.7%	1.5%	1.7%	1.9%	1.5%	1.6%	1.4%	1.7%	1.9%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	
Total National Newspapers ^(b)	\$963.6	\$895.0	\$800.7	\$737.3	\$661.1	\$564.4	\$122.7	\$118.0	\$94.2	\$140.5	\$475.5	\$100.8	\$105.6	\$78.9	\$121.2	\$406.5	\$334.7	\$261.4	\$205.8	\$168.4	-18.7
Annual Growth / Decline	5.0%	-7.1%	-10.5%	-7.9%	-10.3%	-14.6%	-9.0%	-14.1%	-18.5%	-20.4%	-15.8%	-17.9%	-10.5%	-16.2%	-13.8%	-14.5%	-17.7%	-21.9%	-21.3%	-18.2%	1 1
% of National Advertising	1.6%	1.4%	1.2%	1.1%	1.0%	0.8%	0.7%	0.7%	0.6%	0.7%	0.7%	0.5%	0.6%	0.5%	0.6%	0.6%	0.5%	0.4%	0.3%	0.2%	
Total Cinema • Annual Growth / Decline	\$658.3 12.7%	\$644.3 -2.1%	\$636.4 -1.2%	\$678.0 6.5%	\$631.9 -6.8%	\$716.4 13.4%	\$122.3 -0.9%	\$185.2 -5.0%	\$182.1 1.6%	\$228.6 4.5%	\$718.2 0.2%	\$115.4 -5.6%	\$155.8 -15.9%	\$167.9 -7.8%	\$212.6 -7.0%	\$651.7 -9.3%	\$637.3 -2.2%	\$621.3 -2.5%	\$603.9 -2.8%	\$585.1 -3.1%	-4.0%
% of National Advertising	12.7%	-2.1%	-1.2%	1.0%	-0.8%	1.0%	-0.9%	-5.0%	1.1%	4.5%	1.0%	-5.6%	-15.9%	1.0%	1.0%	-9.3%	0.9%	0.8%	-2.8%	0.8%	
TOTAL NATIONAL	\$61.737.8	\$65.206.8	\$65.538.7	\$69.327.6	\$69.282.8	\$70.287.3	\$18,484,7	\$18.130.0	\$16.259.0	\$20.271.1	\$73.144.8	\$18.649.5	\$18.361.8	\$16,459.9	\$20,429,2	\$73.900.4	\$74.369.9	\$74.689.7	\$74.847.1	\$74.828.7	0.5%
Annual Growth / Decline	7.7%	5.6%	0.5%	5.8%	-0.1%	1.4%	6.3%	3.2%	1.8%	4.7%	4.1%	0.9%	1.3%	1.2%	0.8%	1.0%	0.6%	0.4%	0.2%	0.0%	0.5%
% of Mass Advertising	48.5%	50.2%	50.4%	51.9%	52.7%	53.7%	57.2%	54.5%	52.0%	57.5%	55.3%	58.6%	55.6%	53.0%	58.0%	56.3%	57.3%	58.3%	59.3%	60.3%	1 1

Pivotal Advertising Forecast September 2017: Local Media and Mass Media Total

PIVOTAL

Contact: Brian Wieser

Contact: Brian Wieser																					
(e) Brian@Pvtl.com (t) 212 514 4682 (m) 917 734 198	0																				
	2010A	2011A	2012A	2013A	2014A	2015A	1Q16A	2Q16A	3Q16A	4Q16A	2016A	1Q17A	2Q17A	3Q17E	4Q17E	2017E	2018E	2019E	2020E	2021E	5-YR C
LOCAL MASS MEDIA ADVERTISING REVENUES																					
Local Television																					
Local Broadcast TV ^(u)	\$14,994.9	\$15,433.3	\$16,082.4	\$16,650.6	\$16,210.9	\$15,855.3	\$3,943.7	\$3,504.1	\$4,386.7	\$3,532.2	\$15,366.7	\$3,691.1	\$3,330.5	\$4,284.9	\$3,721.0	\$15,027.6	\$14,423.1	\$13,810.7	\$13,191.1	\$12,565.2	-3.9%
Annual Growth / Decline	7.8%	2.9%	4.2%	3.5%	-2.6%	-2.2%	-0.7%	-2.0%	3.0%	-12.8%	-3.1%	-6.4%	-5.0%	-2.3%	5.3%	-2.2%	-4.0%	-4.2%	-4.5%	-4.7%	1
% of Local TV	79.5%	78.9%	78.7%	78.7%	78.0%	77.1%	77.8%	74.3%	78.6%	73.8%	76.2%	77.0%	73.5%	78.1%	74.0%	75.7%	75.2%	74.7%	74.2%	73.7%	
Local Cable TV ^(d)	3,855.9	4,137.6	4,347.6	4,511.7	4,566.5	4,721.7	1,126.9	1,211.5	1,195.7	1,254.8	4,788.8	1,104.4	1,201.1	1,202.8	1,304.9	4,813.2	4,746.2	4,667.4	4,576.9	4,474.5	-1.39
Annual Growth / Decline	14.1%	7.3%	5.1%	3.8%	1.2%	3.4%	7.6%	1.5%	-0.4%	-2.0%	1.4%	-2.0%	-0.9%	0.6%	4.0%	0.5%	-1.4%	-1.7%	-1.9%	-2.2%	
% of Local TV	20.5%	21.1%	21.3%	21.3%	22.0%	22.9%	22.2%	25.7%	21.4%	26.2%	23.8%	23.0%	26.5%	21.9%	26.0%	24.3%	24.8%	25.3%	25.8%	26.3%	
Total Local Television	\$18,850.8	\$19,570.9	\$20,430.1	\$21,162.3	\$20,777.4	\$20,577.0	\$5,070.6	\$4,715.6	\$5,582.4	\$4,787.0	\$20,155.5	\$4,795.5	\$4,531.7	\$5,487.7	\$5,025.9	\$19,840.8	\$19,169.3	\$18,478.2	\$17,768.1	\$17,039.6	-3.39
Bi-Annual Growth / Decline	-5.6%	13.2%	8.4%	8.1%	1.7%	-2.8%	-5.1%	-1.9%	4.0%	-9.0%	-3.0%	-4.4%	-5.0%	0.5%	-5.7%	-3.6%	-4.9%	-6.9%	-7.3%	-7.8%	
Annual Growth / Decline	9.0%	3.8%	4.4%	3.6%	-1.8%	-1.0%	1.0%	-1.2%	2.3%	-10.2%	-2.0%	-5.4%	-3.9%	-1.7%	5.0%	-1.6%	-3.4%	-3.6%	-3.8%	-4.1%	
% of Local Advertising	28.8%	30.2%	31.7%	33.0%	33.5%	34.0%	36.7%	31.1%	37.1%	31.9%	34.1%	36.3%	30.9%	37.5%	34.0%	34.6%	34.6%	34.6%	34.6%	34.6%	
Total Local Newspapers ^(b)	\$22,795.2	\$20,691.8	\$18,944.2	\$17,462.5	\$15,401.1	\$13,449.7	\$2,801.4	\$3,196.9	\$2,704.6	\$3,133.4	\$11,836.3	\$2,383.1	\$2,759.7	\$2,228.3	\$2,537.3	\$9,908.4	\$8,189.7	\$6,561.0	\$5,026.7	\$3,591.0	-21.2
Annual Growth / Decline	-8.2%	-9.2%	-8.4%	-7.8%	-11.8%	-12.7%	-9.8%	-11.0%	-12.0%	-14.9%	-12.0%	-14.9%	-13.7%	-17.6%	-19.0%	-16.3%	-17.3%	-19.9%	-23.4%	-28.6%	
 % of Local Advertising 	34.8%	32.0%	29.4%	27.2%	24.8%	22.2%	20.3%	21.1%	18.0%	20.9%	20.1%	18.1%	18.8%	15.2%	17.2%	17.3%	14.8%	12.3%	9.8%	7.3%	
Total Local Radio ⁽⁰⁾	\$14,181.0	\$14.060.0	\$14.205.0	\$14.054.0	\$13.633.0	\$13,231.0	\$2,772,8	\$3,369,3	\$3,324.4	\$3,359,7	\$12.826.1	\$2,661,9	\$3,206,8	\$3.320.9	\$3.307.1	\$12,586,8	\$12.437.4	\$12.255.7	\$12.041.2	\$11,793.5	-1.79
Annual Growth / Decline	4.9%	-0.9%	1.0%	-1.1%	-3.0%	-2.9%	-3.0%	-2.1%	-4.1%	-3.0%	-3.1%	-4.0%	-2.2%	-0.1%	-1.6%	-1.9%	-1.2%	-1.5%	-1.8%	-2.1%	-1.77
% of Local Advertising	21.7%	21.7%	22.0%	21.9%	22.0%	21.8%	20.1%	22.2%	22.1%	22.4%	21.7%	20.2%	22.5%	22.7%	22.4%	22.0%	22.5%	23.0%	23.5%	24.0%	
Total Outdoor	\$5.512.0	\$5,828.2	\$6.091.4	\$6,343,4	\$6,438,8	\$6.749.3	\$1,560.6	\$2,152,9	\$1.628.8	\$1.667.5	\$7.009.7	\$1.572.5	\$2,217,3	\$1.620.7	\$1.676.5	\$7.087.0	\$7.123.8	\$7.133.7	\$7.116.0	\$7.070.2	0.2%
Annual Growth / Decline	\$5,512.0	\$0,828.2 5.7%	\$6,091.4	\$0,343.4 4.1%	\$0,438.8	\$6,749.3 4.8%	\$1,000.6 4.0%	\$2,152.9	2.6%	\$1,007.5	\$7,009.7	\$1,572.5 0.8%	\$2,217.3	-0.5%	0.5%	\$7,087.0	0.5%	37,133.7 0.1%	-0.2%	-0.6%	0.2%
% of Local Advertising	8.4%	9.0%	9.4%	9.9%	10.4%	11.1%	11.3%	14.2%	10.8%	11.1%	11.9%	11.9%	15.1%	11.1%	11.3%	12.4%	12.9%	13.4%	13.9%	14.4%	
Total Local Digital	\$4,089.7	\$4,553.5	\$4,802.4	\$5,160.9	\$5,854.1	\$6,567.0	\$1,621.4	\$1,727.2	\$1,796.7	\$2,057.9	\$7,203.3	\$1,789.3	\$1,854.6	\$1,966.8	\$2,236.8	\$7,847.5	\$8,411.9	\$8,908.7	\$9,335.6	\$9,690.7	6.1%
Annual Growth / Decline	14.6%	11.3%	5.5%	7.5%	13.4%	12.2%	10.9%	9.6%	7.8%	10.6%	9.7%	10.4%	7.4%	9.5%	8.7%	8.9%	7.2%	5.9%	4.8%	3.8%	
% of Local Advertising	6.3%	7.0%	7.4%	8.0%	9.4%	10.8%	11.7%	11.4%	11.9%	13.7%	12.2%	13.6%	12.7%	13.4%	15.1%	13.7%	15.2%	16.7%	18.2%	19.7%	
TOTAL LOCAL	\$65,428,8	\$64,704,3	\$64,473,1	\$64.183.1	\$62,104,4	\$60.574.0	\$13.826.8	\$15.161.9	\$15.036.9	\$15.005.4	\$59.030.9	\$13.202.3	\$14.660.2	\$14.624.4	\$14,783,6	\$57.270.5	\$55.332.1	\$53.337.3	\$51,287,6	\$49.185.0	-3.69
Annual Growth / Decline	1.4%	-1.1%	-0.4%	-0.4%	-3.2%	-2.5%	-0.8%	-1.7%	-1.4%	-6.0%	-2.5%	-4.5%	-3.3%	-2.7%	-1.5%	-3.0%	-3.4%	-3.6%	-3.8%	-4.1%	
% of Mass Advertising	51.5%	49.8%	49.6%	48.1%	47.3%	46.3%	42.8%	45.5%	48.0%	42.5%	44.7%	41.4%	44.4%	47.0%	42.0%	43.7%	42.7%	41.7%	40.7%	39.7%	1
TOTAL NATIONAL AND LOCAL	\$127,166.6	\$129,911.2	\$130,011.8	\$133,510.7	\$131,387.2	\$130,861.3	\$32,311.5	\$33,291.8	\$31,295.8	\$35,276.5	\$132,175.7	\$31,851.8	\$33,021.9	\$31,084.3	\$35,212.8	\$131,170.9	\$129,702.0	\$128,027.0	\$126,134.7	\$124,013.7	-1.39
Annual Growth / Decline	4.3%	2.2%	0.1%	2.7%	-1.6%	-0.4%	3.1%	0.9%	0.3%	-0.1%	1.0%	-1.4%	-0.8%	-0.7%	-0.2%	-0.8%	-1.1%	-1.3%	-1.5%	-1.7%	
% of Normalized Advertising	75.7%	75.0%	74.2%	73.5%	71.1%	68.5%	67.3%	67.3%	64.4%	64.2%	65.8%	63.9%	64.0%	61.2%	61.2%	62.5%	60.0%	57.5%	55.0%	52.5%	

Pivotal Advertising Forecast September 2017: Direct and SMB Media

PIVOTAL Pivotal Research Group																					
Contact: Brian Wieser																					
(e) Brian@Pvtl.com (t) 212 514 4682 (m) 917 734 1980																					
	2010A	2011A	2012A	2013A	2014A	2015A	1Q16A	2Q16A	3Q16A	4Q16A	2016A	1Q17A	2Q17A	3Q17E	4Q17E	2017E	2018E	2019E	2020E	2021E	5-YR CAGE
DIRECT / SMB MEDIA ADVERTISING REVENUES																					
Direct Online																					
Total Paid Search (Incl. Mobile)	\$12,004.9	\$15,825.7	\$18,963.8	\$21,316.8	\$24,944.3	\$29,387.6	\$7,894.8	\$8,431.2	\$8,674.0	\$10,000.0	\$35,000.0	\$9,473.8	\$9,948.8	\$10,040.0	\$11,455.6	\$40,918.1	\$44,942.1	\$48,750.0	\$52,507.3	\$56,092.9	9.9%
Annual Growth / Decline	12.2%	31.8%	19.8%	12.4%	17.0%	17.8%	20.0%	18.7%	20.6%	17.4%	19.1%	20.0%	18.0%	15.7%	14.6%	16.9%	9.8%	8.5%	7.7%	6.8%	
 % of Direct Online 	89.9%	90.9%	88.1%	84.8%	82.4%	77.4%	76.1%	75.8%	71.9%	71.1%	73.5%	71.8%	71.8%	67.9%	67.1%	69.5%	66.2%	63.2%	60.5%	58.0%	
Other Direct Online ^(e)	1,342.2	1,586.2	2,558.1	3,834.2	5,328.6	8,562.3	2,483.2	2,691.0	3,397.8	4,066.8	12,638.8	3,714.4	3,902.0	4,756.6	5,609.7	17,982.7	22,926.2	28,362.2	34,325.3	40,669.7	26.3%
Annual Growth / Decline	-10.5%	18.2%	61.3%	49.9%	39.0%	60.7%	36.2%	27.4%	57.2%	64.9%	47.6%	49.6%	45.0%	40.0%	37.9%	42.3%	27.5%	23.7%	21.0%	18.5%	
 % of Direct Online 	10.1%	9.1%	11.9%	15.2%	17.6%	22.6%	23.9%	24.2%	28.1%	28.9%	26.5%	28.2%	28.2%	32.1%	32.9%	30.5%	33.8%	36.8%	39.5%	42.0%	
Total Direct + SMB Online	\$13,347.1	\$17,411.9	\$21,521.9	\$25,151.0	\$30,272.9	\$37,949.9	\$10,378.0	\$11,122.2	\$12,071.8	\$14,066.8	\$47,638.8	\$13,188.2	\$13,850.8	\$14,796.6	\$17,065.3	\$58,900.8	\$67,868.3	\$77,112.2	\$86,832.5	\$96,762.6	15.2%
Annual Growth / Decline	9.4%	30.5%	23.6%	16.9%	20.4%	25.4%	23.5%	20.7%	29.0%	28.1%	25.5%	27.1%	24.5%	22.6%	21.3%	23.6%	15.2%	13.6%	12.6%	11.4%	
 % of Total Direct Advertising 	32.7%	40.2%	47.5%	52.4%	56.8%	63.1%	66.1%	68.8%	69.9%	71.4%	69.2%	73.1%	74.4%	75.0%	76.4%	74.8%	78.5%	81.5%	84.1%	86.2%	
Total Direct Mail	\$20,615.8	\$20,424,9	\$19.509.6	\$19.654.4	\$20,594.3	\$20.364.5	\$5,043,3	\$4711.6	\$4,890.5	\$5,382.4	\$20.027.7	\$4 654 4	\$4 513 5	\$4.695.5	\$5.095.1	\$18,958.5	\$18.019.4	\$17,118.0	\$16.089.1	\$15,248.7	-5.3%
Annual Growth / Decline	3.9%	-0.9%	-4.5%	0.7%	4.8%	-1.1%	2.9%	-2.1%	-2.1%	-4.8%	-1.7%	-7.7%	-4.2%	-4.0%	-5.3%	-5.3%	-5.0%	-5.0%	-6.0%	-5.2%	0.070
 % of Total Direct Advertising 	50.5%	47.1%	43.1%	40.9%	38.6%	33.8%	32.1%	29.1%	28.3%	27.3%	29.1%	25.8%	24.3%	23.8%	22.8%	24.1%	20.8%	18.1%	15.6%	13.6%	
Total Directories ^(b)	\$6,852.2	\$5,503,7	\$4.234.3	\$3,223.4	\$2,457,1	\$1.863.7	\$283.0	\$330.0	\$311.4	\$252.0	\$1,176,4	\$189.3	\$245.9	\$227.3	\$170.7	\$833.2	\$569.6	\$386.8	\$267.1	\$178.2	-31.4%
Annual Growth / Decline	-23.5%	-19.7%	-23.1%	-23.9%	-23.8%	-24.2%	-34.3%	-35.2%	-37.1%	-41.2%	-36.9%	-33.1%	-25.5%	-27.0%	-32.3%	-29.2%	-31.6%	-32.1%	-31.0%	-33.3%	*01.470
% of Total Direct Advertising	-23.5%	12.7%	-23.1%	-23.9%	-23.6%	-24.2%	-34.3%	-35.2%	-37.1%	-41.2%	-36.9%	-33.1%	-25.5%	-27.0%	-32.3%	-29.2%	-31.6%	-32.1%	-31.0%	-33.3%	
to di total bileat havenabilg	10.070	12.776	0.470	0.770	4.070	0.170	1.0%	2.070	1.070	1.070	1.7 %	1.070	1.070	1.2.70	0.070	1.170	0.170	0.470	0.076	0.270	
TOTAL DIRECT + SMB ADVERTISING	\$40,815.1	\$43,340.4	\$45,265.8	\$48,028.8	\$53,324.3	\$60,178.1	\$15,704.2	\$16,163.8	\$17,273.7	\$19,701.1	\$68,842.9	\$18,031.9	\$18,610.1	\$19,719.5	\$22,331.1	\$78,692.5	\$86,457.3	\$94,617.1	\$103,188.7	\$112,189.5	10.3%
Annual Growth / Decline	-0.5%	6.2%	4.4%	6.1%	11.0%	12.9%	14.4%	11.2%	16.4%	15.4%	14.4%	14.8%	15.1%	14.2%	13.3%	14.3%	9.9%	9.4%	9.1%	8.7%	
 % of Normalized Advertising 	24.3%	25.0%	25.8%	26.5%	28.9%	31.5%	32.7%	32.7%	35.6%	35.8%	34.2%	36.1%	36.0%	38.8%	38.8%	37.5%	40.0%	42.5%	45.0%	47.5%	

Appendix: Important Disclosures

Analyst Certification

I, Brian W. Wieser, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company and their securities. I further certify that I have not received and will not receive direct or indirect compensation related to specific recommendations or views contained in this research report.

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Pivotal Research Group LLC assigns one of three ratings based on an expectation of absolute total return (price change plus dividends) over a twelve month time frame. The ratings are based on the following criteria:

BUY: The security is expected to have an absolute return in excess of 15%.

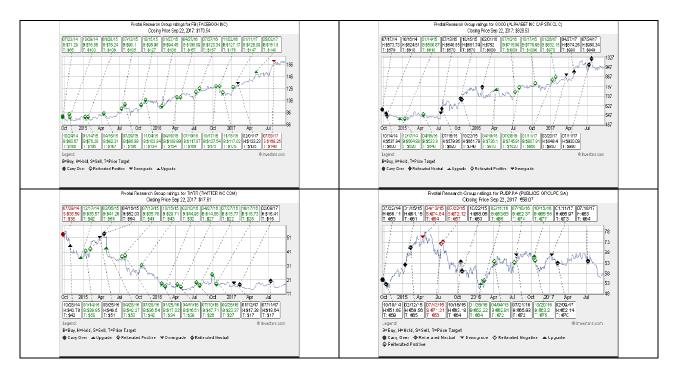
HOLD: The security is expected to have an absolute return of between plus and minus 15%.

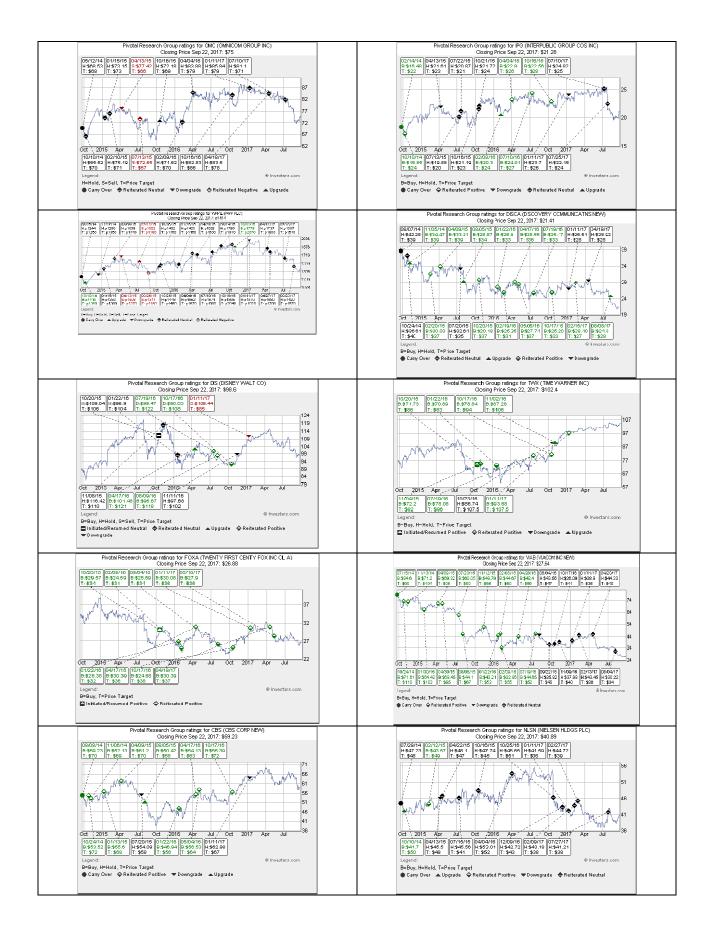
SELL: The security is expected to have an absolute return less than minus 15%.

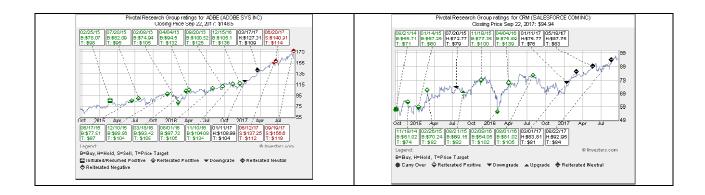
Ratings Distribution

Pivotal Research LLC currently provides research coverage of 50 companies, of which 48% are rated BUY, 34% are rated HOLD, 16% are rated SELL, and 2% are not rated. Our company does not offer investment banking services. This data is accurate as-of 9/23/17.

Price Chart and Target Price History







Other Disclaimers

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