

## E-Cigs Revolutionizing The Tobacco Industry

- **Our Proprietary E-Cig Interactive Model Suggests E-Cig Margins Could Surpass Conventional Cig Margins By 2017** –Based on our in-depth analysis of the tobacco industry over the next decade, we now anticipate the e-cig market will approach \$2B in retail sales (including online) by the end of 2013 and eclipse \$10B by 2017. Importantly, our analysis indicates that e-cigs could be margin enhancing to the combined category in the near term and by 2017, we predict e-cig margins could approach the mid 40% range, higher than current conventional cig margins of approximately 40%. Furthermore, we increasingly believe the entrance of the “Big 3” tobacco manufacturers could catapult the growth of the e-cig category driving the total conventional cig and e-cig profit pool up by a CAGR of 7% over the next decade. **We reiterate our Overweight rating on the tobacco sector as the industry embarks on a new era of growth and technological innovation.**
- **Disruptive Innovation, Increased Affordability, Perceived Lower Health Risk, And Convenience Driving E-Cig Trial And Accelerated Conversion** – Our proprietary, interactive model predicts the potential volume that will be displaced from conventional cigs to e-cigs based on a number of factors over the next decade. Based on our analysis of the combined market in our interactive model, **we have increased conviction that consumption of e-cigs could surpass consumption of conventional cigs within the next decade (by 2023).** Furthermore, as volume declines of conventional cigs accelerate, the “Big 3” manufacturers’ Master Settlement Agreement (MSA) payments decrease given the volume adjustment. This results in higher margins for conventional cigs, driving total margin expansion.
- **Who Will Win The E-Cig War?** – We believe the e-cig battleground is heating up especially as the “Big 3” tobacco manufacturers push further into the category. We expect the “Big 3” to ultimately have a meaningful presence and likely accelerate growth of the category due to: **(1)** their war chests of cash to invest, further boosted by billions of dollars from the non-participating manufacturer (NPM) credits and the elimination of the Federal Buyout Fee; **(2)** their entrenchment with retailers should ensure broad, scalable distribution; and **(3)** their expertise at building successful brands and their vast marketing databases of adult tobacco consumers. **While the “Big 3” are a triple threat** - treasure troves of cash, distribution power at retail, and superior brand building capabilities – we think there is plenty of room for several of the other players including: NJOY, Mystic, Fin, Logic and Krave. We are particularly impressed with NJOY’s early entrance into e-cigs and the strong brand and business it has built within a category it played a role in creating. We believe this has given NJOY a clear competitive advantage.
- **Deeming Regulation And Taxation Of E-Cigs Likely - But This Shouldn’t Derail The Long-Term (LT) Growth Trajectory Of The Category** – We’ve long believed the e-cig category will be regulated, possibly similar to the conventional cig category, and that e-cigs will likely be taxed, but in a way that better reflects the potential relative risk. Despite this, we still believe the long-term growth trajectory of the category will be robust. Furthermore, regulation may actually be positive since it ultimately entrenches existing e-cig players as it increases barriers to entry.

Tobacco

**Bonnie Herzog, Senior Analyst**

(212) 214-5051 /

bonnie.herzog@wellsfargo.com

**Jessica Gerberi, CFA, Associate Analyst**

(212) 214-5029 /

jessica.gerberi@wellsfargo.com

**Please see page 13 for rating definitions, important disclosures and required analyst certifications**

**All estimates/forecasts are as of 06/12/13 unless otherwise stated.**

Wells Fargo Securities, LLC does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of the report and investors should consider this report as only a single factor in making their investment decision.

Together we'll go far



Tobacco

Our Interactive E-Cig Industry Model Version 1.0 - Summary

	2011	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	10-Yr CAGR
<b>Volume (in billions)</b>														
Conventional Cigarettes (in packs)	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2	-10.3%
% Growth		-2.2%	-5.9%	-3.9%	-4.1%	-6.1%	-12.3%	-10.2%	-9.3%	-12.3%	-13.7%	-13.4%	-16.6%	
E-Cigarettes (in equivalent packs)	0.1	0.1	0.3	0.4	0.4	0.7	1.7	2.4	2.8	3.4	4.1	4.5	5.1	31.8%
% Growth		2.7%	336.3%	13.3%	18.5%	71.2%	135.6%	36.0%	18.7%	22.4%	18.0%	11.8%	12.3%	
<b>Total Conv. Cig &amp; E-Cig Volume (in equivalent packs)</b>	<b>0.8</b>	<b>0.8</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.3</b>	<b>2.2</b>	<b>2.8</b>	<b>3.2</b>	<b>3.8</b>	<b>4.4</b>	<b>4.8</b>	<b>5.3</b>	<b>18.3%</b>
% Growth		-1.8%	26.2%	1.7%	4.0%	25.7%	70.5%	25.5%	14.2%	18.0%	15.0%	10.0%	10.6%	
<b>Total Pro Forma Industry Revenue (Manufacturer) (in \$ billions)</b>														
Conventional Cigarettes	\$29.1	\$29.2	\$28.7	\$28.9	\$28.6	\$27.8	\$25.4	\$23.7	\$22.4	\$20.4	\$18.3	\$16.5	\$14.3	-6.7%
% Growth		0.4%	-1.6%	0.4%	-0.8%	-2.8%	-8.8%	-6.7%	-5.6%	-8.8%	-10.2%	-9.9%	-13.3%	
E-Cigarettes	\$0.5	\$0.5	\$1.4	\$1.6	\$2.0	\$3.4	\$8.3	\$11.5	\$13.9	\$17.3	\$20.8	\$23.8	\$27.2	34.2%
% Growth		3%	205%	14%	20%	75%	140%	39%	21%	25%	20%	14%	14%	
<b>Total Manufacturer Revenue (conv. cigs and e-cigs)</b>	<b>\$29.6</b>	<b>\$29.7</b>	<b>\$30.2</b>	<b>\$30.5</b>	<b>\$30.6</b>	<b>\$31.3</b>	<b>\$33.6</b>	<b>\$35.1</b>	<b>\$36.2</b>	<b>\$37.7</b>	<b>\$39.2</b>	<b>\$40.3</b>	<b>\$41.5</b>	<b>3.2%</b>
% Growth		0.4%	1.7%	1.1%	0.3%	2.2%	7.6%	4.5%	3.1%	4.1%	3.8%	2.8%	3.1%	
<b>Total Pro Forma Manufacturer Operating Profit (in \$ billions)</b>														
Conventional Cigarettes	\$11.0	\$11.7	\$12.4	\$13.3	\$14.6	\$14.3	\$13.3	\$12.6	\$12.1	\$11.2	\$10.3	\$9.4	\$8.2	-4.0%
% Growth		5.6%	6.2%	7.4%	9.9%	-1.9%	-7.2%	-5.0%	-4.0%	-7.3%	-8.8%	-8.6%	-12.0%	
E-Cigarettes	\$0.2	\$0.2	\$0.3	\$0.5	\$0.7	\$1.5	\$4.0	\$5.9	\$7.6	\$9.9	\$12.3	\$14.6	\$17.2	50.9%
% Growth		9.7%	59.5%	75.0%	44.7%	104.9%	172.3%	49.0%	28.9%	29.9%	24.8%	17.9%	18.1%	
<b>Total Manufacturer Operating Profit (conv. cigs and e-cigs)</b>	<b>\$11.2</b>	<b>\$11.8</b>	<b>\$12.7</b>	<b>\$13.8</b>	<b>\$15.3</b>	<b>\$15.8</b>	<b>\$17.3</b>	<b>\$18.5</b>	<b>\$19.7</b>	<b>\$21.1</b>	<b>\$22.6</b>	<b>\$23.9</b>	<b>\$25.4</b>	<b>7.2%</b>
% Growth		5.7%	7.0%	8.9%	11.1%	3.0%	9.4%	7.4%	6.5%	7.1%	6.9%	5.9%	6.3%	
<b>Manufacturer Operating Profit Margin</b>														
Conventional Cigarettes	37.9%	39.9%	43.1%	46.0%	51.0%	51.5%	52.4%	53.3%	54.2%	55.1%	56.0%	56.8%	57.6%	
% Growth														
E-Cigarettes	35.0%	37.4%	19.5%	29.9%	36.1%	42.4%	48.1%	51.6%	54.9%	57.1%	59.2%	61.2%	63.1%	
% Growth														
<b>Total Manufacturer Operating Profit (conv. cigs and e-cigs)</b>	<b>37.9%</b>	<b>39.8%</b>	<b>41.9%</b>	<b>45.2%</b>	<b>50.0%</b>	<b>50.5%</b>	<b>51.3%</b>	<b>52.8%</b>	<b>54.5%</b>	<b>56.0%</b>	<b>57.7%</b>	<b>59.4%</b>	<b>61.3%</b>	
% Growth														
<b>E-Cigarette Mix</b>														
Total Industry Equivalent Volume	0.5%	0.5%	2.3%	2.7%	3.4%	6.0%	14.6%	20.6%	25.3%	32.1%	39.2%	45.5%	52.9%	
Total Industry Revenue	1.5%	1.6%	4.8%	5.4%	6.4%	11.0%	24.5%	32.6%	38.3%	45.9%	53.2%	59.0%	65.5%	
Total Industry Operating Profit	1.4%	1.5%	2.2%	3.6%	4.6%	9.2%	23.0%	31.9%	38.6%	46.8%	54.6%	60.8%	67.6%	
<b>Conventional Cig Industry Pro Forma</b>														
Total Industry Conventional Cig Volume (in billions of packs)	14.7	14.3	13.7	13.3	12.8	12.3	11.9	11.5	11.1	10.7	10.3	10.0	9.6	-3.5%
Conventional Cigs Displaced (in billions of packs)	0.1	0.1	0.3	0.4	0.4	0.7	1.7	2.4	2.8	3.4	4.1	4.5	5.1	31.8%
<b>Total Industry Conventional Cig Vol Assuming E-Cigs (in billions of packs)</b>	<b>14.6</b>	<b>14.3</b>	<b>13.4</b>	<b>12.9</b>	<b>12.4</b>	<b>11.6</b>	<b>10.2</b>	<b>9.1</b>	<b>8.3</b>	<b>7.3</b>	<b>6.3</b>	<b>5.4</b>	<b>4.5</b>	<b>-10.3%</b>
% Growth			-2%	-6%	-4%	-4%	-6%	-12%	-10%	-9%	-12%	-14%	-17%	
<b>Total Industry Net Revenue (or Wholesale Price) per Pack</b>	<b>\$2.00</b>	<b>\$2.05</b>	<b>\$2.14</b>	<b>\$2.24</b>	<b>\$2.32</b>	<b>\$2.40</b>	<b>\$2.49</b>	<b>\$2.59</b>	<b>\$2.70</b>	<b>\$2.80</b>	<b>\$2.92</b>	<b>\$3.03</b>	<b>\$3.16</b>	<b>3.9%</b>
% Growth		2.6%	4.5%	4.5%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Total Industry Revenue (at Retail) (in \$ billions)	\$77.5	\$76.8	\$80.9	\$81.2	\$80.6	\$78.3	\$75.4	\$70.3	\$68.3	\$64.2	\$59.4	\$53.5	\$47.9	-5.1%
Total Industry Net Revenue (Manufacturer) (in \$ billions)	\$29.1	\$29.2	\$28.7	\$28.9	\$28.6	\$27.8	\$25.4	\$23.7	\$22.4	\$20.4	\$18.3	\$16.5	\$14.3	-6.7%
% Growth		0.4%	-1.6%	0.4%	-0.8%	-2.8%	-8.8%	-6.7%	-5.6%	-8.8%	-10.2%	-9.9%	-13.3%	
<b>Total Industry Costs (Manufacturer) per Pack</b>	<b>\$1.24</b>	<b>\$1.23</b>	<b>\$1.22</b>	<b>\$1.21</b>	<b>\$1.14</b>	<b>\$1.19</b>	<b>\$1.21</b>	<b>\$1.23</b>	<b>\$1.23</b>	<b>\$1.26</b>	<b>\$1.28</b>	<b>\$1.31</b>	<b>\$1.34</b>	<b>0.9%</b>
% Growth		-0.6%	-1.0%	-1.0%	-6.0%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Total Industry Costs (Manufacturer) (in \$ billions)	\$18.1	\$17.6	\$16.4	\$15.6	\$14.0	\$13.5	\$12.1	\$11.1	\$10.2	\$9.2	\$8.5	\$7.1	\$6.1	-9.5%
% Growth		-2.8%	-6.8%	-4.9%	-9.9%	-3.8%	-10.6%	-8.5%	-7.4%	-10.5%	-11.9%	-11.7%	-15.0%	
<b>Total Industry Operating Income (Manufacturer) per Pack</b>	<b>\$0.76</b>	<b>\$0.82</b>	<b>\$0.92</b>	<b>\$1.03</b>	<b>\$1.18</b>	<b>\$1.23</b>	<b>\$1.31</b>	<b>\$1.38</b>	<b>\$1.46</b>	<b>\$1.55</b>	<b>\$1.63</b>	<b>\$1.72</b>	<b>\$1.82</b>	<b>7.0%</b>
% Growth		8.0%	12.8%	11.8%	14.6%	4.5%	5.9%	5.8%	5.8%	5.7%	5.6%	5.6%	5.5%	
Total Industry Operating Income (Manufacturer) (in \$ billions)	\$11.0	\$11.7	\$12.4	\$13.3	\$14.6	\$14.3	\$13.3	\$12.6	\$12.1	\$11.2	\$10.3	\$9.4	\$8.2	-4.0%
% Growth		5.6%	6.2%	7.4%	9.9%	-1.9%	-7.2%	-5.0%	-4.0%	-7.3%	-8.8%	-8.6%	-12.0%	
<b>Total Industry Operating Income Margin (Manufacturer) (in \$ billions)</b>	<b>37.9%</b>	<b>39.9%</b>	<b>43.1%</b>	<b>46.0%</b>	<b>51.0%</b>	<b>51.5%</b>	<b>52.4%</b>	<b>53.3%</b>	<b>54.2%</b>	<b>55.1%</b>	<b>56.0%</b>	<b>56.8%</b>	<b>57.6%</b>	
<b>E-Cigarette Industry</b>														
Conventional Packs Displaced (in billions) aka Volume Moving to E-Cigs	0.1	0.1	0.3	0.4	0.4	0.7	1.7	2.4	2.8	3.4	4.1	4.5	5.1	31.8%
E-cigs/pack	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	
E-cig Volume (in billions in Conv Cig Pack Equivalence)	0.1	0.1	0.3	0.3	0.3	0.6	1.4	1.9	2.2	2.7	3.2	3.6	4.1	31.8%
<b>Total Industry Net Revenue (or Wholesale Price) per Cartomizer</b>	<b>\$7.99</b>	<b>\$7.99</b>	<b>\$5.59</b>	<b>\$5.65</b>	<b>\$5.71</b>	<b>\$5.82</b>	<b>\$5.94</b>	<b>\$6.05</b>	<b>\$6.18</b>	<b>\$6.30</b>	<b>\$6.43</b>	<b>\$6.55</b>	<b>\$6.68</b>	
Industry Average Net Price Realization		0.0%	-30.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.8%
Retail Price per Cartomizer	\$9.99	\$9.99	\$6.99	\$7.53	\$8.15	\$8.31	\$9.13	\$9.31	\$10.29	\$10.50	\$10.71	\$10.92	\$11.14	4.8%
Taxes per cartomizer				0.38	0.82	0.83	1.37	1.40	2.06	2.10	2.14	2.18	2.23	
Taxes as % of Retail Price		0.0%	0.0%	5.0%	10.0%	10.0%	15.0%	15.0%	20.0%	20.0%	20.0%	20.0%	20.0%	
Retail/Wholesale Markup as % of Retail Price		20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	
<b>Total Industry Net Revenue (at Retail) (in \$ billions)</b>	<b>\$0.6</b>	<b>\$0.6</b>	<b>\$1.8</b>	<b>\$2.2</b>	<b>\$2.8</b>	<b>\$4.9</b>	<b>\$12.7</b>	<b>\$17.6</b>	<b>\$23.1</b>	<b>\$28.9</b>	<b>\$34.7</b>	<b>\$39.6</b>	<b>\$45.4</b>	<b>38.1%</b>
Total Industry Net Revenue (Manufacturer) (in \$ billions)	\$0.5	\$0.5	\$1.4	\$1.6	\$2.0	\$3.4	\$8.3	\$11.5	\$13.9	\$17.3	\$20.8	\$23.8	\$27.2	34.2%
% Growth		2.7%	205.4%	14.4%	19.7%	74.6%	140.3%	38.7%	21.1%	24.9%	20.3%	14.0%	14.5%	
<b>Total Industry Costs (Manufacturer) per Cartomizer</b>	<b>\$5.19</b>	<b>\$5.00</b>	<b>\$4.50</b>	<b>\$3.96</b>	<b>\$3.64</b>	<b>\$3.35</b>	<b>\$3.08</b>	<b>\$2.93</b>	<b>\$2.78</b>	<b>\$2.70</b>	<b>\$2.62</b>	<b>\$2.54</b>	<b>\$2.46</b>	<b>-5.8%</b>
% Growth		-3.7%	-10.0%	-12.0%	-8.0%	-8.0%	-8.0%	-5.0%	-5.0%	-3.0%	-3.0%	-3.0%	-3.0%	
Total Industry Costs (Manufacturer) (in \$ billions)	\$0.3	\$0.3	\$1.2	\$1.2	\$1.3	\$2.0	\$4.3	\$5.5	\$6.2	\$7.4	\$8.5	\$9.2	\$10.0	24.1%
% Growth		-1.1%	292.6%	-0.3%	9.0%	57.5%	116.7%	29.2%	12.8%	18.8%	14.4%	8.5%	8.9%	
<b>Total Industry Operating Income (Manufacturer) per Cartomizer</b>	<b>\$2.80</b>	<b>\$2.99</b>	<b>\$1.09</b>	<b>\$1.69</b>	<b>\$2.06</b>	<b>\$2.47</b>	<b>\$2.85</b>	<b>\$3.13</b>	<b>\$3.39</b>	<b>\$3.60</b>	<b>\$3.81</b>	<b>\$4.01</b>	<b>\$4.22</b>	<b>14.5%</b>
% Growth		6.8%	-63.4%	54.5%	22.1%	19.7%	15.6%	9.6%	8.6%	6.1%	5.7%	5.4%	5.2%	
<b>Industry Average Operating Margin</b>														
Total Industry Operating Income (Manufacturer) (in \$ billions)	\$0.2	\$0.2	\$0.3	\$0.5	\$0.7	\$1.5	\$4.0	\$5.9	\$7.6	\$9.9	\$12.3	\$14.6	\$17.2	50.9%
% Growth		9.7%	59.5%	75.0%	44.7%	104.9%	172.3%	49.0%	28.9%	29.9%	24.8%	17.9%	18.1%	
<b>Total Industry Operating Income Margin (Manufacturer) (in \$ billions)</b>	<b>35.0%</b>	<b>37.4%</b>	<b>19.5%</b>	<b>29.9%</b>	<b>36.1%</b>	<b>42.4%</b>	<b>48.1%</b>	<b>51.6%</b>	<b>54.9%</b>	<b>57.1%</b>	<b>59.2%</b>	<b>61.2%</b>	<b>63.1%</b>	

Source: Company reports and Wells Fargo Securities, LLC estimates

E-Cigs Revolutionizing The Tobacco Industry

Our Interactive E-Cig Industry Model Version 1.0 – Drivers

Key Inputs - Industry Level	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	10-Yr CAGR
<b>Conventional Cigs Assumptions</b>													
Total Industry Secular Vol Growth Rate (Displaced Conv Cig Vol C)	-4.1%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	0.0%
Big 3 Mfrs' Volume as a % of Total Industry Volume	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%	
Taxes as a % of the Retail Price	46%	46%	46%	46%	46%	48%	48%	49%	50%	51%	51%	52%	
Retail and Wholesale Markup as a % of Retail Price	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
Net Price Realization	4.5%	4.5%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	3.9%
Total Costs per Pack Growth	-1.0%	-1.0%	-6.0%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	0.9%
<b>Growth Factors to Determine Cig Displacement to E-Cigs</b>													
Affordability	5%	45%	45%	45%	45%	45%	45%	45%	50%	50%	50%	50%	
Health	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	
Convenience	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	
Novelty	45%	5%	5%	5%	5%	5%	5%	5%	0%	0%	0%	0%	
Total (will add up to 100%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
<b>E-Cigs Assumptions</b>													
E-cigs in Conventional Pack Equivalence	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	
Taxes as a % of Retail Price	0.0%	0.0%	5.0%	10.0%	10.0%	15.0%	15.0%	20.0%	20.0%	20.0%	20.0%	20.0%	
Retail and Wholesale Markup as a % of Retail Price	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	
Net Price Realization	0.0%	-30.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.8%
Manufacturer Costs per Cartomizer	-3.7%	-10.0%	-12.0%	-8.0%	-8.0%	-8.0%	-5.0%	-5.0%	-3.0%	-3.0%	-3.0%	-3.0%	-5.8%

Source: Company reports and Wells Fargo Securities, LLC estimates

Key Outputs - Industry Level	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	10-Yr CAGR
<b>Volume</b>													
Conventional Cigs (in billions of packs)	14.3	13.4	12.9	12.4	11.6	10.2	9.1	8.3	7.3	6.3	5.4	4.5	-10.3%
E-Cigs (in Conventional Pack Equivalence)	0.1	0.3	0.4	0.4	0.7	1.7	2.4	2.8	3.4	4.1	4.5	5.1	31.8%
<b>Total</b>	<b>14.3</b>	<b>13.7</b>	<b>13.3</b>	<b>12.8</b>	<b>12.3</b>	<b>11.9</b>	<b>11.5</b>	<b>11.1</b>	<b>10.7</b>	<b>10.3</b>	<b>10.0</b>	<b>9.6</b>	<b>-3.5%</b>
<i>Growth</i>	-2.2%	-4.1%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	-3.5%	
<b>Relative Price Gap between Conventional Cigs and E-Cigs</b>													
Gap in \$ per Pack	-\$2.60	\$0.43	\$0.27	\$0.00	\$0.09	\$0.10	\$0.25	\$0.01	\$0.43	\$0.90	\$1.10	\$1.65	
Relative Gap	-32.6%	7.7%	4.5%	-0.1%	1.4%	1.4%	3.3%	\$0.00	5.1%	10.5%	12.6%	18.5%	
<b>Total Industry Revenue (at Retail) (in \$ billions)</b>													
Conventional Cigs	\$76.8	\$80.9	\$81.2	\$80.6	\$78.3	\$75.4	\$70.3	\$68.3	\$64.2	\$59.4	\$53.5	\$47.9	-5.1%
E-Cigs	\$0.6	\$1.8	\$2.2	\$2.8	\$4.9	\$12.7	\$17.6	\$23.1	\$28.9	\$34.7	\$39.6	\$45.4	38.1%
<b>Total</b>	<b>\$77.4</b>	<b>\$82.7</b>	<b>\$83.4</b>	<b>\$83.4</b>	<b>\$83.2</b>	<b>\$88.1</b>	<b>\$88.0</b>	<b>\$91.4</b>	<b>\$93.0</b>	<b>\$94.2</b>	<b>\$93.1</b>	<b>\$93.3</b>	<b>1.2%</b>
<i>Growth</i>	-0.9%	6.8%	0.9%	0.0%	-0.2%	5.8%	-0.1%	3.9%	1.8%	1.2%	-1.1%	0.1%	
<b>Total Industry Net Revenue (Manufacturer) (in \$ billions)</b>													
Conventional Cigs	\$29.2	\$28.7	\$28.9	\$28.6	\$27.8	\$25.4	\$23.7	\$22.4	\$20.4	\$18.3	\$16.5	\$14.3	-6.7%
E-Cigs	\$0.5	\$1.4	\$1.6	\$2.0	\$3.4	\$8.3	\$11.5	\$13.9	\$17.3	\$20.8	\$23.8	\$27.2	34.2%
<b>Total</b>	<b>\$29.7</b>	<b>\$30.2</b>	<b>\$30.5</b>	<b>\$30.6</b>	<b>\$31.3</b>	<b>\$33.6</b>	<b>\$35.1</b>	<b>\$36.2</b>	<b>\$37.7</b>	<b>\$39.2</b>	<b>\$40.3</b>	<b>\$41.5</b>	<b>3.2%</b>
<i>Growth</i>	0.4%	1.7%	1.1%	0.3%	2.2%	7.6%	4.5%	3.1%	4.1%	3.8%	2.8%	3.1%	
<b>Total Industry Operating Profit (Manufacturer) (in \$ billions)</b>													
Conventional Cigs	\$11.7	\$12.4	\$13.3	\$14.6	\$14.3	\$13.3	\$12.6	\$12.1	\$11.2	\$10.3	\$9.4	\$8.2	-4.0%
E-Cigs	\$0.2	\$0.3	\$0.5	\$0.7	\$1.5	\$4.0	\$5.9	\$7.6	\$9.9	\$12.3	\$14.6	\$17.2	50.9%
<b>Total</b>	<b>\$11.8</b>	<b>\$12.7</b>	<b>\$13.8</b>	<b>\$15.3</b>	<b>\$15.8</b>	<b>\$17.3</b>	<b>\$18.5</b>	<b>\$19.7</b>	<b>\$21.1</b>	<b>\$22.6</b>	<b>\$23.9</b>	<b>\$25.4</b>	<b>7.2%</b>
<i>Growth</i>	5.7%	7.0%	8.9%	11.1%	3.0%	9.4%	7.4%	6.5%	7.1%	6.9%	5.9%	6.3%	
<b>Total Industry Operating Profit Margin (Manufacturer) (in %)</b>													
Conventional Cigs	39.9%	43.1%	46.0%	51.0%	51.5%	52.4%	53.3%	54.2%	55.1%	56.0%	56.8%	57.6%	
E-Cigs	37.4%	19.5%	29.9%	36.1%	42.4%	48.1%	51.6%	54.9%	57.1%	59.2%	61.2%	63.1%	
<b>Total</b>	<b>39.8%</b>	<b>41.9%</b>	<b>45.2%</b>	<b>50.0%</b>	<b>50.5%</b>	<b>51.3%</b>	<b>52.8%</b>	<b>54.5%</b>	<b>56.0%</b>	<b>57.7%</b>	<b>59.4%</b>	<b>61.3%</b>	
<b>E-Cig Mix</b>													
Volume	0.5%	2.3%	2.7%	3.4%	6.0%	14.6%	20.6%	25.3%	32.1%	39.2%	45.5%	52.9%	
Revenue	1.6%	4.8%	5.4%	6.4%	11.0%	24.5%	32.6%	38.3%	45.9%	53.2%	59.0%	65.5%	
Operating Profit	1.5%	2.2%	3.6%	4.6%	9.2%	23.0%	31.9%	38.6%	46.8%	54.6%	60.8%	67.6%	

Source: Company reports and Wells Fargo Securities, LLC estimates

## Methodology & Assumptions Behind Our Interactive E-Cig Model

- Our proprietary, interactive model predicts the potential volume that will be displaced from conventional cigs to e-cigs based on a number of factors over the next decade.
- We assume the secular rate of conventional cigarette decline remains -3.5% and that MO, RAI and LO maintain an 85% combined market share of the conventional cig market.
- Our factors (or growth rates) that predict the amount of conventional cigarette volume that will be displaced to e-cigs include: affordability, health, convenience and novelty. Our affordability factor incorporates the relative price gap between conventional cigs and e-cigs as well as a factor we derived by regressing the historical relationship (impact on downtrading) on the relative price gap of traditional cigs vs. deep discount cigs. **A key row in our interactive model is row 89 as this drives the displacement of conventional cigs into e-cigs.**
- Our e-cigarette assumptions include both traditional retail as well as online retail and assumes a relationship of 1.25 packs of conventional cigs = one e-cig cartridge or cartomizer on average. We then made assumptions on both the manufacturer (wholesale) and retail price – assuming taxes and retail/wholesale markup as a percentage of retail price. We took these prices and volume estimates to project our revenue, then projected costs per unit (either per pack or per cartomizer) and calculated an operating income and operating margin for both conventional cigs and e-cigs at the industry level.
- Once we projected the combined conventional cig and e-cig revenue, cost and operating profits, we made market share assumptions on e-cig share for MO, RAI, and LO. For simplicity's sake, we assumed conventional cig market share for the big three will remain in line with our 2013 estimates through 2023. We then used our industry-level forecasts for net price realization and cost **growth** for MO, RAI and LO's cigs and e-cigs.
- **Finally**, once we made our forecasts, we examined revenue, costs, operating income (profit pool) and operating margins for both conventional cigs and e-cigs each year for the next decade by the individual company level.

### Other Considerations:

- Since we did not distinguish between online and traditional retail sales of e-cigs, we acknowledge that there are likely different financial dynamics between these two distribution channels.
- E-cig packaging and consumer buying behavior is rapidly changing and we believe as more consumers try the product, there will be a **mix shift** – penetration of rechargeable e-cigs and starter kits should increase while disposables decrease as a part of the overall mix. We believe the industry will evolve to a **razor/razorblade model**, in which less margin is made on starter kits and rechargeable e-cigs and more margin on “refill” cartridges or cartomizers and sales of these cartomizers will drive industry profitability.
- While we assume the secular conventional cig decline rate of -3.5% holds, this could moderate for two key reasons: **(1)** people who would otherwise leave the category may be more inclined to stay given a better alternative is now available (e-cigs); and **(2) dual use** could drive increased usage overall (of conventional cigs and e-cigs) since e-cigs are allowed in many places where conventional smoking is prohibited.
- Our model doesn't consider new consumer entrants into the tobacco category. In other words, all of our e-cig volume consumption is driven by existing conventional cig consumers.
- We believe technology is a competitive advantage but ultimate winners of the e-cig category will be those that create successful brands. Undoubtedly, technology is a crucial part of driving e-cig consumption, but building compelling brands is equally, if not more important, in our view. Also, given that marketing and advertising are likely playing a larger role for e-cigs given fewer restrictions vs. conventional cigs, these costs are likely greater for e-cigs, but we believe they are offset by lower taxes.
- We expect further segmentation of the tobacco or nicotine delivery category and e-cigs will play a large roll. We believe companies will ultimately have portfolios of e-cig brands with different price points and capabilities as the market evolves and the consumer base expands.

- Given likely regulation of the e-cig category, we are not surprised with the proliferation of brands hitting the market before a potential substantial equivalence (SE) process could end up being a bottleneck for companies. Regulation ultimately entrenches existing e-cig players as the barriers to entry increase. Furthermore, it's been no surprise that millions of dollars are being spent on advertising e-cig brands given the potential that the current advertising and marketing freedoms may be restricted with potential regulation.

## Assumptions & Forecasts for Our Interactive E-Cig Model

Key Inputs - Industry Level	Our Estimates	Drivers/Comments
<b>Conventional Cigarettes</b>		
Secular Decline Rate	-3.5%	We believe the secular decline rate will remain at -3.5% - in line with historical trend. We note that this could accelerate if the technology behind e-cigs improves at a rapid pace, thus driving trial and conversion.
'Big 3' Combined Market Share (MO, RAI, LO)	85%	We assume MO, RAI and LO will retain a combined 85% market share for the next decade.
Taxes as a % of Retail Price	46% currently increasing to 52% by 2023	Currently ~46% of average retail price or about \$2.42 (\$1.01 federal and \$1.41 weighted-average state taxes per pack), we believe taxes as a % of retail price will increase modestly over time. Possibly to encourage smokers to switch.
Retail and Wholesale Markup as a % of Retail Price	20%	We believe the current rate of 20% will hold for the next decade.
Net Price Realization	3.9% 10-Year CAGR	We believe long-term net price realization may be at the low end of the long-term historical trend. This is due to e-cigs which may limit conventional cigs' ability to take the same levels of net pricing they had in the past.
Costs per Pack	0.9% 10-Year CAGR	In 2015, we have costs declining ~6% due to the federal buyout fee going away in October 2014. We then have costs per pack increasing ~2% annually to account for inflation and increased regulation costs due to compliance with FDA rules and regulations such as Substantial Equivalence. Our cost growth is partially offset by the favorable effect of MSA payments declining as overall cigarette volume declines.
<b>E-Cigarettes</b>		
'Big 3' Combined Market Share (MO, RAI, LO)	32% in FY13 moving to 75% by 2023	We believe MO, RAI and LO will comprise the bulk of the e-cig market by 2023 through owned and/or acquired brands. We envision each company ultimately offering a portfolio of e-cig brands, similar to conventional cigarettes.
Taxes as a % of Retail Price	0% moving to 20% by 2023	We have e-cig taxes at currently nearly 0% (e-cigs are not federally taxed and Minnesota is the only state that taxes e-cigs). We believe e-cigs will eventually be more highly taxed, but at rates reflecting the relative risk (potentially lower) than conventional cigs.
Retail and Wholesale Markup as a % of Retail Price	20%	We have applied the current 20% retail and wholesale markup (as a % of retail price) to e-cigs.
Net Price Realization	-30% net price realization for FY13, -5.0% price realization for FY14 and then increasing to 2% by 2023 for a 10-Year CAGR of 1.8%	We believe near-term net price realization will decline significantly in 2013 as several new products hit the market and manufacturers try to drive trial and awareness of their brands. However, we envision prices stabilizing by 2015 and should then grow from there.
Costs per Cartomizer or Cartridge	-5.8% 10-Year CAGR	We believe near-term, e-cig costs per unit will decrease as manufacturers realize greater scale, though this may be partially offset by increased advertising and marketing costs. We believe longer-term that costs will continue to decrease as advertising regulations potentially become more restrictive.

Source: Wells Fargo Securities, LLC estimates

Company Level Output – Lorillard (LO)

Lorillard Pro Forma (Conventional Cigs & E-Cigs)	2011	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	10-Yr CAGR
<b>Volume &amp; Market Share</b>														
Conventional Cig Market Share	14.1%	14.4%	14.5%	14.8%	15.2%	15.2%	15.2%	15.2%	15.2%	15.2%	15.2%	15.2%	15.2%	
Conventional Cig Volume (billions of packs)	2.04	2.01	1.99	1.96	1.88	1.76	1.56	1.39	1.26	1.11	0.95	0.83	0.69	
% Growth		-1.4%	-0.7%	-1.6%	-4.2%	-6.1%	-12.3%	-10.2%	-9.3%	-12.3%	-13.7%	-13.4%	-16.6%	-10.1%
E-Cig Market Share - Retail and Online		20.0%	30.0%	30.0%	28.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	
E-Cig Volume (in Conv Cig Pack Equivalence)		0.0	0.1	0.1	0.1	0.1	0.3	0.5	0.6	0.7	0.8	0.9	1.0	
% Growth			554.4%	13.3%	10.6%	52.9%	135.6%	36.0%	18.7%	22.4%	18.0%	11.8%	12.3%	29.4%
<b>Net Revenue</b>														
Conventional Cig Net Revenue per Pack	\$2.19	\$2.28	\$2.38	\$2.49	\$2.57	\$2.66	\$2.77	\$2.88	\$3.00	\$3.11	\$3.24	\$3.37	\$3.50	
% Growth		4.2%	4.4%	4.5%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	3.9%
Conventional Cig Net Revenue (in \$ billions)	\$4.5	\$4.6	\$4.7	\$4.9	\$4.8	\$4.7	\$4.3	\$4.0	\$3.8	\$3.4	\$3.1	\$2.8	\$2.4	-6.5%
E-Cig Net Revenue per Cartomizer		\$6.45	\$3.19	\$4.79	\$4.84	\$4.94	\$5.04	\$5.14	\$5.24	\$5.34	\$5.45	\$5.56	\$5.67	
% Growth				50.1%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	5.9%
E-Cig Net Revenue (in \$ billions)		\$0.1	\$0.2	\$0.4	\$0.5	\$0.7	\$1.8	\$2.4	\$2.9	\$3.7	\$4.4	\$5.0	\$5.8	37.1%
Total Net Revenue (in \$ billions)	\$4.5	\$4.7	\$5.0	\$5.3	\$5.3	\$5.4	\$6.0	\$6.4	\$6.7	\$7.1	\$7.5	\$7.8	\$8.2	
% Growth		4.4%	7.3%	6.1%	0.2%	2.4%	11.2%	6.5%	4.5%	6.0%	5.6%	4.2%	4.6%	5.1%
<b>Total Costs</b>														
Conventional Cig Costs per Pack	\$1.27	\$1.34	\$1.39	\$1.44	\$1.35	\$1.38	\$1.41	\$1.44	\$1.47	\$1.50	\$1.53	\$1.56	\$1.59	
% Growth		-0.6%	-1.0%	-1.0%	-6.0%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.4%
Conventional Cig Total Costs (in \$ billions)	\$2.6	\$2.7	\$2.8	\$2.8	\$2.5	\$2.4	\$2.2	\$2.0	\$1.9	\$1.7	\$1.5	\$1.3	\$1.1	
% Growth				2.0%	-9.9%	-3.8%	-10.6%	-8.5%	-7.4%	-10.5%	-11.9%	-11.7%	-15.0%	-8.8%
E-Cig Costs per Cartomizer		\$6.28	\$2.75	\$4.07	\$3.75	\$3.45	\$3.17	\$3.01	\$2.86	\$2.78	\$2.69	\$2.61	\$2.53	
% Growth				48.4%	-8.0%	-8.0%	-8.0%	-5.0%	-5.0%	-3.0%	-3.0%	-3.0%	-3.0%	-0.8%
E-Cig Total Costs (in \$ billions)		0.1	\$0.2	\$0.4	\$0.4	\$0.5	\$1.1	\$1.4	\$1.6	\$1.9	\$2.2	\$2.4	\$2.6	
% Growth				68.1%	1.7%	40.6%	116.7%	29.2%	12.8%	18.8%	14.4%	8.5%	8.9%	28.4%
Total Costs (in \$ billions)	\$2.6	\$2.8	\$3.0	\$3.2	\$2.9	\$3.0	\$3.3	\$3.4	\$3.5	\$3.6	\$3.6	\$3.7	\$3.7	
% Growth		7.0%	7.5%	6.7%	-8.6%	1.8%	11.4%	4.2%	1.0%	3.1%	2.2%	0.4%	0.5%	2.1%
<b>Operating Profits</b>														
Conventional Cig Operating Profit Per Pack	\$0.92	\$0.94	\$0.99	\$1.05	\$1.22	\$1.28	\$1.36	\$1.44	\$1.53	\$1.62	\$1.71	\$1.81	\$1.91	
% Growth				5.6%	16.5%	4.6%	6.2%	6.1%	6.0%	5.9%	5.9%	5.6%	5.7%	6.8%
Conventional Cig Total Operating Profit (in \$ billions)	\$1.9	\$1.9	\$2.0	\$2.1	\$2.3	\$2.3	\$2.1	\$2.0	\$1.9	\$1.8	\$1.6	\$1.5	\$1.3	
% Growth		0.7%	5.2%	3.9%	11.7%	-1.8%	-6.9%	-4.8%	-3.8%	-7.1%	-8.6%	-8.4%	-11.9%	-4.0%
E-Cig Operating Profit per Cartomizer			\$0.45	\$0.72	\$1.09	\$1.49	\$1.86	\$2.12	\$2.38	\$2.57	\$2.76	\$2.95	\$3.14	
% Growth				60.1%	52.0%	36.3%	25.2%	13.9%	11.9%	8.0%	7.4%	6.9%	6.4%	21.5%
E-Cig Total Operating Profit (in \$ billions)			\$0.03	\$0.06	\$0.11	\$0.22	\$0.65	\$1.00	\$1.33	\$1.76	\$2.24	\$2.67	\$3.19	
% Growth				81.4%	68.1%	108.3%	194.8%	54.9%	32.9%	32.2%	26.7%	19.5%	19.5%	57.2%
Total Operating Profit (in \$ billions)	\$1.9	\$1.9	\$2.0	\$2.1	\$2.4	\$2.5	\$2.7	\$3.0	\$3.3	\$3.6	\$3.9	\$4.2	\$4.5	
% Growth		0.7%	7.1%	5.3%	13.3%	3.1%	11.0%	9.3%	8.5%	9.0%	9.0%	7.7%	8.2%	8.4%
<b>Operating Profit Margins</b>														
Conventional Cigarettes	41.9%	41.1%	41.7%	42.2%	47.5%	48.0%	49.0%	50.0%	50.9%	51.9%	52.8%	53.7%	54.6%	
E-Cigarettes		0.0%	14.1%	15.0%	22.6%	30.2%	37.0%	41.3%	45.4%	48.0%	50.6%	53.0%	55.3%	
Total Operating Profit Margins	41.9%	40.4%	40.4%	40.0%	45.3%	45.6%	45.5%	46.7%	48.5%	49.9%	51.5%	53.3%	55.1%	
Net Interest Expense (in \$ billions)	\$0.1	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.3	\$0.3	\$0.4	\$0.5	\$0.5	\$0.5	\$0.5	
Pretax Income (in \$ billions)	\$1.7	\$1.7	\$1.9	\$2.0	\$2.2	\$2.2	\$2.4	\$2.7	\$2.9	\$3.1	\$3.4	\$3.7	\$4.0	
Income Taxes	\$0.65	\$0.63	\$0.69	\$0.73	\$0.82	\$0.83	\$0.90	\$0.99	\$1.06	\$1.14	\$1.26	\$1.37	\$1.49	
Net Income	\$1.1	\$1.1	\$1.2	\$1.2	\$1.4	\$1.4	\$1.5	\$1.7	\$1.8	\$1.9	\$2.1	\$2.3	\$2.5	8.0%
EPS	\$2.63	\$2.82	\$3.16	\$3.52	\$4.14	\$4.42	\$5.11	\$5.94	\$6.78	\$7.83	\$9.31	\$10.99	\$13.13	
EPS Growth		7.1%	12.3%	11.1%	17.9%	6.6%	15.6%	16.3%	14.1%	15.5%	19.0%	18.1%	19.4%	15.3%
Diluted Shares Outstanding (in millions)	418.1	380.1	370.9	352.8	335.3	317.8	300.3	282.8	265.3	247.8	229.8	211.8	193.8	

Source: Company reports, Wells Fargo Securities, LLC estimates

Note: Total Net Revenue for 2012 based on run-rate for E-Cig sales vs. actual reported figures

## Company Level Outputs – Reynolds American (RAI)

Reynolds Pro Forma (Conventional Cigs & E-Cigs)	2011	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	10-Yr CAGR
<b>Volume &amp; Market Share</b>														
Conventional Cig Market Share	24.9%	24.0%	23.5%	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	23.3%	
Conventional Cig Volume (billions of packs)	3.7	3.4	3.2	3.1	2.9	2.7	2.4	2.1	1.9	1.7	1.5	1.3	1.1	
% Growth		-5.6%	-6.3%	-4.3%	-6.7%	-6.1%	-12.3%	-10.2%	-9.3%	-12.3%	-13.7%	-13.4%	-16.6%	-10.6%
E-Cig Market Share - Retail and Online	-	-	2.0%	5.0%	15.0%	20.0%	20.0%	20.0%	20.0%	25.0%	25.0%	25.0%	25.0%	
E-Cig Volume (in Conv Cig Pack Equivalence)			0.01	0.0	0.1	0.1	0.3	0.4	0.4	0.7	0.8	0.9	1.0	69.7%
% Growth				183.2%	255.5%	128.3%	135.6%	36.0%	18.7%	53.0%	18.0%	11.8%	12.3%	
<b>Net Revenue</b>														
Conventional Cig Net Revenue per Pack	\$1.87	\$1.92	\$1.99	\$2.06	\$2.13	\$2.20	\$2.29	\$2.38	\$2.48	\$2.58	\$2.68	\$2.79	\$2.90	
% Growth		2.5%	3.5%	3.5%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	3.9%
Conventional Cig Net Revenue (in \$ billions)	\$6.8	\$6.6	\$6.4	\$6.4	\$6.1	\$6.0	\$5.4	\$5.1	\$4.8	\$4.4	\$3.9	\$3.5	\$3.1	
E-Cig Net Revenue per Cartomizer			\$4.25	\$4.29	\$4.34	\$4.42	\$4.51	\$4.60	\$4.69	\$4.79	\$4.88	\$4.98	\$5.08	
% Growth				1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.8%
E-Cig Net Revenue (in \$ billions)			\$0.0	\$0.1	\$0.2	\$0.5	\$1.3	\$1.7	\$2.1	\$3.3	\$4.0	\$4.5	\$5.2	
Total Net Revenue (in \$ billions)	\$6.8	\$6.6	\$6.4	\$6.4	\$6.4	\$6.5	\$6.7	\$6.8	\$6.9	\$7.7	\$7.9	\$8.1	\$8.2	
% Growth			-2.7%	-0.3%	-0.9%	2.0%	3.2%	1.8%	1.2%	11.0%	2.9%	2.1%	2.3%	2.5%
<b>Total Costs</b>														
Conventional Cig Costs per Pack	\$1.23	\$1.25	\$1.26	\$1.29	\$1.21	\$1.24	\$1.27	\$1.29	\$1.32	\$1.34	\$1.37	\$1.40	\$1.43	
% Growth			0.3%	2.4%	-6.0%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	1.3%
Conventional Cig Total Costs (in \$ billions)	\$4.5	\$4.3	\$4.1	\$4.0	\$3.5	\$3.4	\$3.0	\$2.8	\$2.5	\$2.3	\$2.0	\$1.8	\$1.5	
% Growth				-2.0%	-12.3%	-3.8%	-10.6%	-8.5%	-7.4%	-10.5%	-11.9%	-11.7%	-15.0%	-9.4%
E-Cig Costs per Cartomizer			\$4.50	\$3.96	\$3.64	\$3.35	\$3.08	\$2.93	\$2.78	\$2.70	\$2.62	\$2.54	\$2.46	
% Growth				-12.0%	-8.0%	-8.0%	-8.0%	-5.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	-5.8%
E-Cig Total Costs (in \$ billions)			\$0.02	\$0.06	\$0.19	\$0.40	\$0.86	\$1.11	\$1.25	\$1.86	\$2.12	\$2.30	\$2.51	
% Growth				149.2%	227.0%	110.0%	116.7%	29.2%	12.8%	48.4%	14.4%	8.5%	8.9%	59.8%
Total Costs (in \$ billions)	\$4.5	\$4.3	\$4.1	\$4.0	\$3.7	\$3.8	\$3.9	\$3.9	\$3.8	\$4.1	\$4.1	\$4.1	\$4.0	
% Growth			-3.8%	-5.5%	-1.1%	-8.9%	2.1%	2.8%	-0.1%	-1.6%	8.9%	-0.1%	-1.3%	-0.2%
<b>Operating Profits</b>														
Conventional Cig Operating Profit Per Pack	\$0.64	\$0.67	\$0.73	\$0.77	\$0.92	\$0.96	\$1.03	\$1.09	\$1.16	\$1.24	\$1.31	\$1.39	\$1.48	
% Growth				5.4%	19.4%	4.8%	6.6%	6.5%	6.4%	6.3%	6.2%	6.1%	6.0%	7.3%
Conventional Cig Total Operating Profit (in \$ billions)	\$2.3	\$2.3	\$2.4	\$2.4	\$2.6	\$2.6	\$2.4	\$2.3	\$2.2	\$2.1	\$1.9	\$1.8	\$1.6	
% Growth			-2.2%	2.6%	0.9%	11.4%	-1.6%	-6.6%	-4.4%	-3.5%	-6.8%	-8.3%	-8.1%	-4.0%
E-Cig Operating Profit per Cartomizer			(\$0.25)	\$0.33	\$0.69	\$1.07	\$1.43	\$1.67	\$1.91	\$2.09	\$2.26	\$2.44	\$2.62	
% Growth				-233.2%	108.1%	54.6%	33.3%	17.1%	14.3%	9.3%	8.5%	7.8%	7.2%	13.6%
E-Cig Total Operating Profit (in \$ billions)			\$0.00	\$0.00	\$0.04	\$0.13	\$0.40	\$0.63	\$0.86	\$1.43	\$1.84	\$2.21	\$2.66	
% Growth					639.7%	252.9%	214.1%	59.3%	35.7%	67.2%	28.0%	20.5%	20.3%	54.6%
Total Operating Profit (in \$ billions)	\$2.3	\$2.3	\$2.4	\$2.4	\$2.7	\$2.7	\$2.8	\$3.0	\$3.1	\$3.5	\$3.8	\$4.0	\$4.2	
% Growth			-2.2%	2.6%	1.1%	12.7%	1.8%	3.6%	4.9%	13.7%	6.4%	5.9%	6.2%	6.0%
<b>Operating Profit Margins</b>														
Conventional Cigarettes	34.3%	34.7%	36.7%	37.4%	43.1%	43.7%	44.8%	45.8%	46.9%	47.9%	48.9%	49.9%	50.8%	
E-Cigarettes			-5.9%	7.8%	16.0%	24.2%	31.6%	36.3%	40.7%	43.6%	46.4%	49.0%	51.5%	
Total Operating Profit Margins	34.3%	34.7%	36.6%	37.1%	42.2%	42.1%	42.3%	43.4%	45.0%	46.1%	47.6%	49.4%	51.3%	
<b>Operating Profits from Other segments (in \$ billions)</b>														
Smokeless (American Snuff)	\$0.6	\$0.6	\$0.7	\$0.8	\$0.8	\$0.9	\$1.0	\$1.1	\$1.2	\$1.3	\$1.3	\$1.4	\$1.5	
Santa Fe	\$0.3	\$0.4	\$0.4	\$0.4	\$0.5	\$0.5	\$0.5	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$0.8	
Other	\$0.2	\$0.2	\$0.3	\$0.3	\$0.3	\$0.4	\$0.4	\$0.4	\$0.5	\$0.5	\$0.6	\$0.6	\$0.6	
Other	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	
Other Expense (in \$ billions)	\$0.1	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Net Interest Expense (in \$ billions)	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.3	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	
Pretax Income (in \$ billions)	\$2.6	\$2.596	\$2.8	\$2.9	\$3.3	\$3.4	\$3.6	\$3.8	\$4.0	\$4.6	\$4.8	\$5.1	\$5.5	
Income Taxes	\$1.0	\$0.91	\$1.04	\$1.07	\$1.22	\$1.26	\$1.32	\$1.41	\$1.49	\$1.69	\$1.79	\$1.90	\$2.02	
Net Income (in \$ billions)	\$1.65	\$1.68	\$1.77	\$1.83	\$2.08	\$2.14	\$2.25	\$2.40	\$2.54	\$2.87	\$3.06	\$3.24	\$3.43	6.9%
EPS	\$2.81	\$2.97	\$3.25	\$3.46	\$4.02	\$4.23	\$4.51	\$4.92	\$5.30	\$6.11	\$6.62	\$7.15	\$7.75	
EPS Growth		5.4%	9.6%	6.5%	15.9%	5.3%	6.8%	9.0%	7.8%	15.1%	8.4%	8.0%	8.3%	9.1%
Diluted Shares Outstanding (in millions)	585.4	567.9	543.7	528.2	518.0	507.4	498.1	488.0	479.1	470.4	461.4	452.4	443.4	

Source: Company reports, Wells Fargo Securities, LLC estimates



Company Level Outputs – Altria Group (MO)

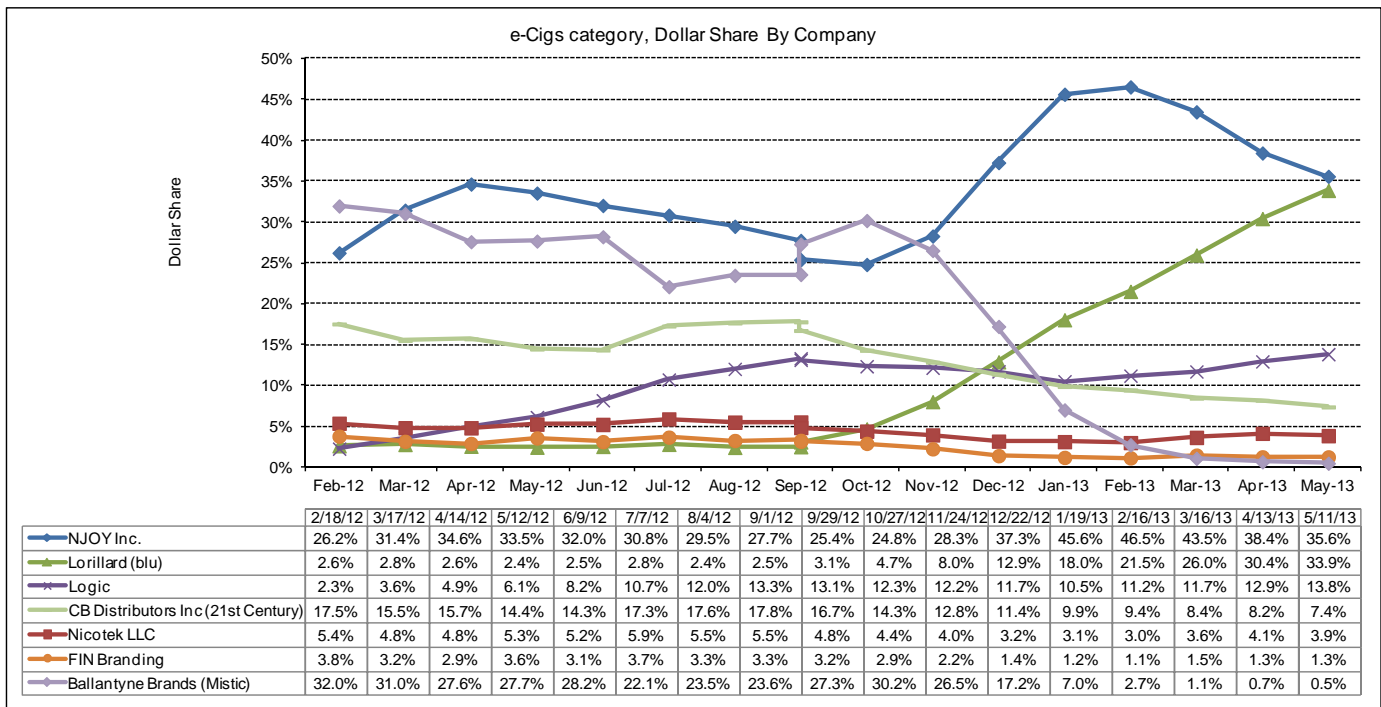
Altria Pro Forma (Conventional Cigs & E-Cigs)	2011	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	10-Yr CAGR
<b>Volume &amp; Market Share</b>														
Conventional Cig Market Share	46.1%	47.1%	47.3%	47.9%	47.9%	47.9%	47.9%	47.9%	47.9%	47.9%	47.9%	47.9%	47.9%	
Conventional Cig Volume (billions of packs)	6.8	6.7	6.5	6.4	5.9	5.6	4.9	4.4	4.0	3.5	3.0	2.6	2.2	
% Growth														
E-Cig Market Share - Retail and Online	-	-	0.0%	2.0%	5.0%	15.0%	20.0%	20.0%	20.0%	25.0%	25.0%	25.0%	25.0%	
E-Cig Volume (in Conv Cig Pack Equivalence)			-	0.0	0.0	0.1	0.3	0.4	0.4	0.7	0.8	0.9	1.0	
% Growth														
<b>Net Revenue</b>														
Conventional Cig Net Revenue per Pack	\$2.16	\$2.21	\$2.30	\$2.42	\$2.50	\$2.59	\$2.69	\$2.80	\$2.91	\$3.03	\$3.15	\$3.28	\$3.41	4.0%
% Growth	2.3%	4.3%	5.1%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Conventional Cig Net Revenue (in \$ billions)	\$14.6	\$14.9	\$14.9	\$15.4	\$14.8	\$14.4	\$13.1	\$12.3	\$11.6	\$10.6	\$9.5	\$8.5	\$7.4	
E-Cig Net Revenue per Cartomizer				\$4.29	\$4.34	\$4.42	\$4.51	\$4.60	\$4.69	\$4.79	\$4.88	\$4.98	\$5.08	
% Growth				1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
E-Cig Net Revenue (in \$ billions)				\$0.0	\$0.1	\$0.4	\$1.3	\$1.7	\$2.1	\$3.3	\$4.0	\$4.5	\$5.2	
Total Net Revenue (in \$ billions)	\$14.6	\$14.9	\$14.9	\$15.4	\$14.9	\$14.8	\$14.4	\$14.0	\$13.7	\$13.8	\$13.4	\$13.1	\$12.6	
% Growth		2.2%	0.5%	2.9%	-3.1%	-0.7%	-2.8%	-2.7%	-2.3%	1.2%	-2.9%	-2.9%	-3.7%	
<b>Total Costs</b>														
Conventional Cig Costs per Pack	\$1.29	\$1.29	\$1.31	\$1.35	\$1.27	\$1.30	\$1.32	\$1.35	\$1.38	\$1.40	\$1.43	\$1.46	\$1.49	1.3%
% Growth		0.4%	1.4%	2.7%	-6.0%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Conventional Cig Total Costs (in \$ billions)	\$8.7	\$8.7	\$8.5	\$8.6	\$7.5	\$7.2	\$6.5	\$5.9	\$5.5	\$4.9	\$4.3	\$3.8	\$3.2	-9.2%
% Growth		0.3%	-2.3%	0.4%	-12.3%	-3.8%	-10.6%	-8.8%	-7.4%	-10.5%	-11.9%	-11.7%	-15.0%	
E-Cig Costs per Cartomizer				3.96	3.64	3.35	3.08	2.93	2.78	2.70	2.62	2.54	2.46	-5.1%
% Growth				-8.0%	-8.0%	-8.0%	-5.0%	-5.0%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%	
E-Cig Total Costs (in \$ billions)			\$0.00	\$0.02	\$0.06	\$0.30	\$0.86	\$1.11	\$1.25	\$1.86	\$2.12	\$2.30	\$2.51	68.4%
% Growth				172.5%	372.5%	189.0%	292.2%	12.8%	48.4%	14.4%	8.5%	8.9%		
Total Costs (in \$ billions)	\$8.7	\$8.7	\$8.5	\$8.6	\$7.6	\$7.5	\$7.3	\$7.0	\$6.7	\$6.8	\$6.4	\$6.1	\$5.7	-3.9%
% Growth		0.3%	-2.3%	0.7%	-11.8%	-0.6%	-2.7%	-4.0%	-4.2%	0.4%	-4.7%	-5.0%	-6.0%	
<b>Operating Profits</b>														
Conventional Cig Operating Profit Per Pack	\$0.87	\$0.91	\$0.99	\$1.07	\$1.23	\$1.29	\$1.37	\$1.45	\$1.53	\$1.62	\$1.72	\$1.81	\$1.92	6.8%
% Growth				8.3%	15.5%	4.5%	6.0%	5.9%	5.9%	5.8%	5.7%	5.7%	5.7%	
Conventional Cig Total Operating Profit (in \$ billions)	\$5.9	\$6.1	\$6.4	\$6.8	\$7.3	\$7.2	\$6.7	\$6.3	\$6.1	\$5.7	\$5.2	\$4.7	\$4.2	-4.2%
% Growth		5.0%	4.5%	5.9%	7.7%	-1.9%	-7.1%	-4.9%	-3.9%	-7.2%	-8.7%	-8.5%	-12.0%	
E-Cig Operating Profit per Cartomizer			\$0.00	\$0.33	\$0.69	\$1.07	\$1.43	\$1.67	\$1.91	\$2.09	\$2.26	\$2.44	\$2.62	25.7%
% Growth				108.1%	54.6%	33.3%	17.1%	14.3%	9.3%	8.5%	7.8%	7.2%		
E-Cig Total Operating Profit (in \$ billions)			\$0.00	\$0.01	\$0.09	\$0.40	\$0.63	\$0.86	\$1.43	\$1.84	\$2.21	\$2.66	\$3.26	123.2%
% Growth				516.4%	694.1%	318.7%	59.3%	35.7%	67.2%	28.0%	20.5%	20.3%		
Total Operating Profit from Cigs and E-cigs (in \$ billions)	\$5.9	\$6.1	\$6.4	\$6.8	\$7.3	\$7.3	\$7.1	\$7.0	\$7.0	\$7.1	\$7.0	\$6.9	\$6.8	0.6%
% Growth		5.0%	4.5%	5.9%	7.8%	-0.7%	-2.8%	-1.3%	-0.3%	2.0%	-1.3%	-0.9%	-1.7%	
<b>Operating Profit Margins</b>														
Conventional Cigarettes	40.2%	41.3%	43.0%	44.3%	49.4%	49.9%	50.8%	51.8%	52.7%	53.6%	54.5%	55.4%	56.2%	
E-Cigarettes				7.8%	16.0%	24.2%	31.6%	36.3%	40.7%	43.6%	46.4%	49.0%	51.5%	
Total Operating Profit Margins	40.2%	41.3%	43.0%	44.2%	49.2%	49.2%	49.2%	49.9%	50.9%	51.2%	52.1%	53.2%	54.3%	
<b>Operating Profit from Other Businesses (in \$ billions)</b>														
Cigars	\$2.1	\$2.3	\$2.5	\$2.4	\$2.6	\$2.7	\$2.9	\$3.2	\$3.4	\$3.6	\$3.8	\$3.9	\$4.1	
Smokeless	\$0.2	\$0.1	\$0.1	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	
Other (Wine & Financial Services)	\$0.9	\$1.0	\$1.0	\$1.1	\$1.2	\$1.3	\$1.4	\$1.5	\$1.6	\$1.7	\$1.8	\$1.9	\$2.0	
SAB Miller	\$0.2	\$0.2	\$0.3	\$0.1	\$0.1	\$0.1	\$0.1	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	
Other Costs (general corporate)	\$0.8	\$1.0	\$1.0	\$1.1	\$1.2	\$1.2	\$1.2	\$1.3	\$1.3	\$1.3	\$1.4	\$1.5	\$1.6	
Net Interest Expense (in \$ billions)	\$0.3	\$0.2	\$0.3	\$0.1	\$0.3	\$0.3	\$0.3	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	
Net Interest Expense (in \$ billions)	\$1.2	\$1.1	\$1.0	\$0.9	\$0.8	\$0.8	\$0.7	\$0.7	\$0.7	\$0.8	\$0.8	\$0.8	\$0.8	
Pretax Income (in \$ billions)	\$6.5	\$7.1	\$7.6	\$8.3	\$8.7	\$8.9	\$8.9	\$9.1	\$9.2	\$9.5	\$9.6	\$9.7	\$9.8	
Income Taxes (in \$ billions)	\$2.3	\$2.6	\$2.8	\$3.0	\$3.1	\$3.2	\$3.2	\$3.3	\$3.3	\$3.4	\$3.5	\$3.5	\$3.5	
Net Income (in \$ billions)	\$4.2	\$4.5	\$4.9	\$5.3	\$5.6	\$5.7	\$5.7	\$5.8	\$5.9	\$6.1	\$6.1	\$6.2	\$6.2	2.6%
EPS	\$2.05	\$2.21	\$2.44	\$2.68	\$2.86	\$2.95	\$2.97	\$3.09	\$3.16	\$3.29	\$3.35	\$3.43	\$3.49	3.6%
EPS Growth		7.7%	10.5%	9.8%	6.6%	3.3%	0.7%	4.0%	2.5%	4.1%	1.8%	2.2%	1.8%	
Diluted Shares Outstanding (in millions)	2,064	2,024	1,997	1,981	1,959	1,935	1,912	1,891	1,870	1,851	1,831	1,811	1,791	

Source: Company reports, Wells Fargo Securities, LLC estimates



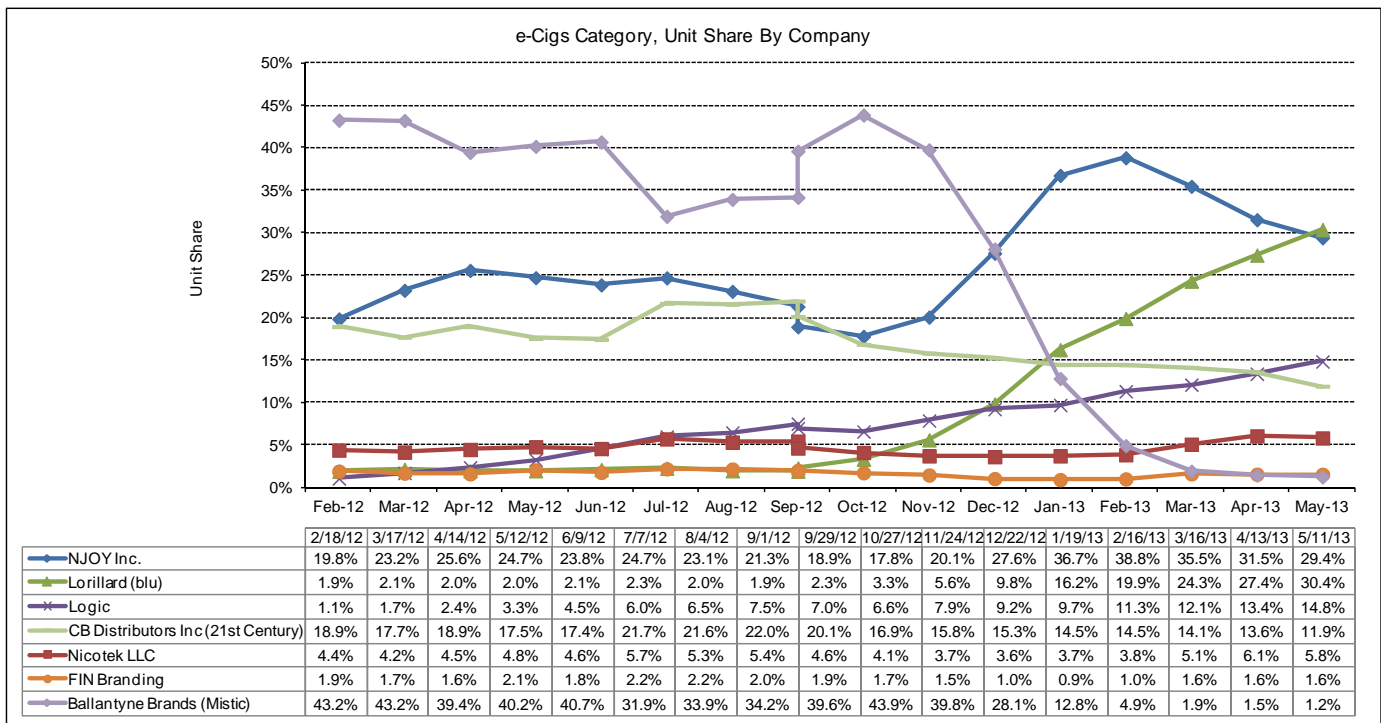
## E-Cig Brand Information – C-Stores

Exhibit 1. E-cigarette Dollar Share by Company



Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

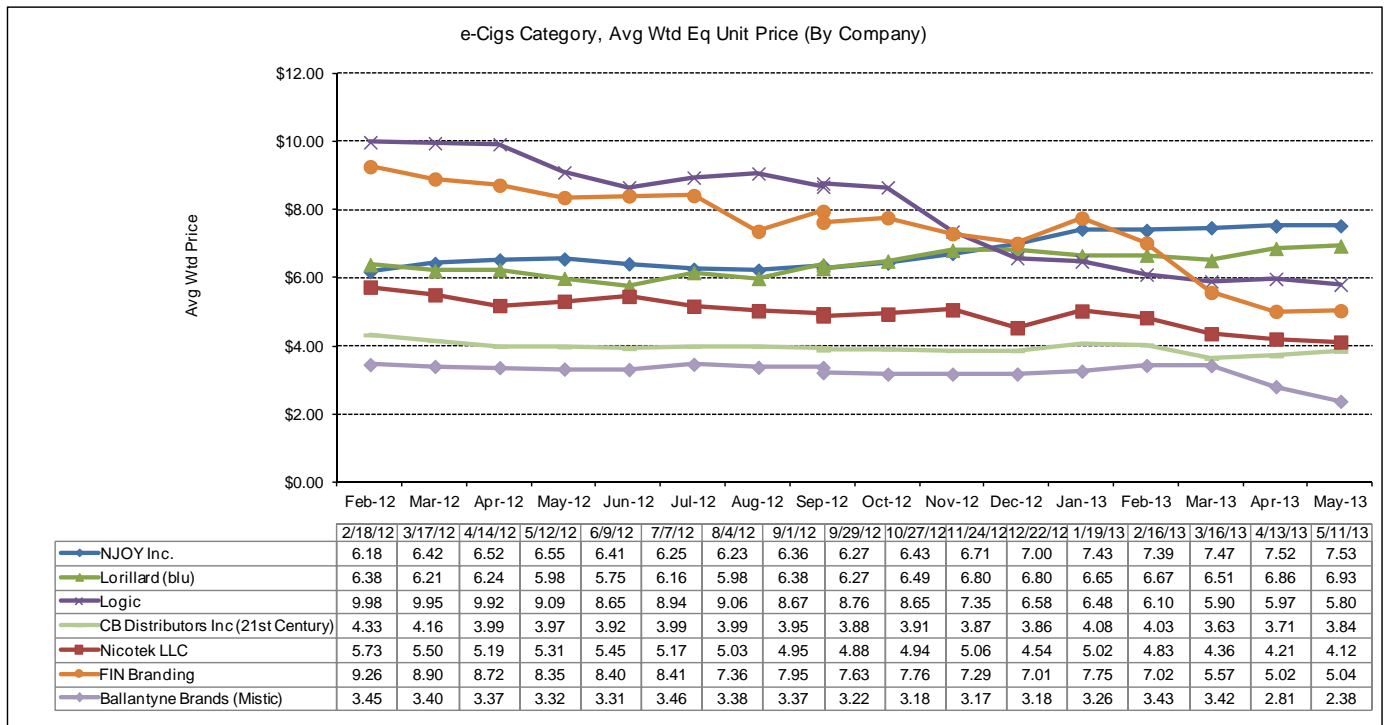
Exhibit 2. E-cigarette Unit Share by Company



Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

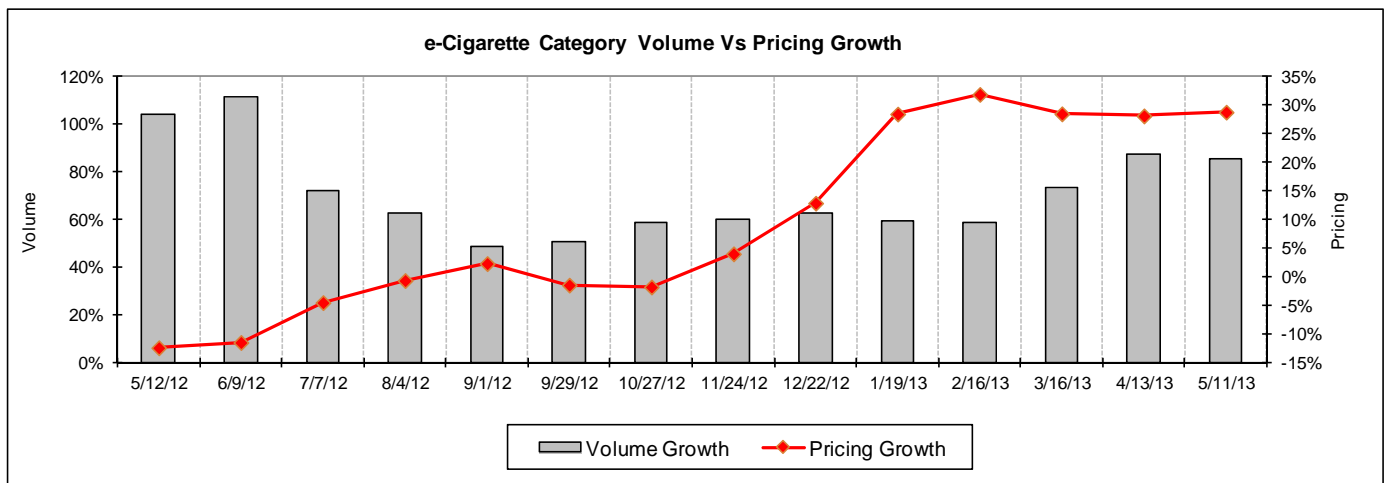
**Tobacco**

**Exhibit 3. E-cigarette Average Weighted Unit Price by Company**



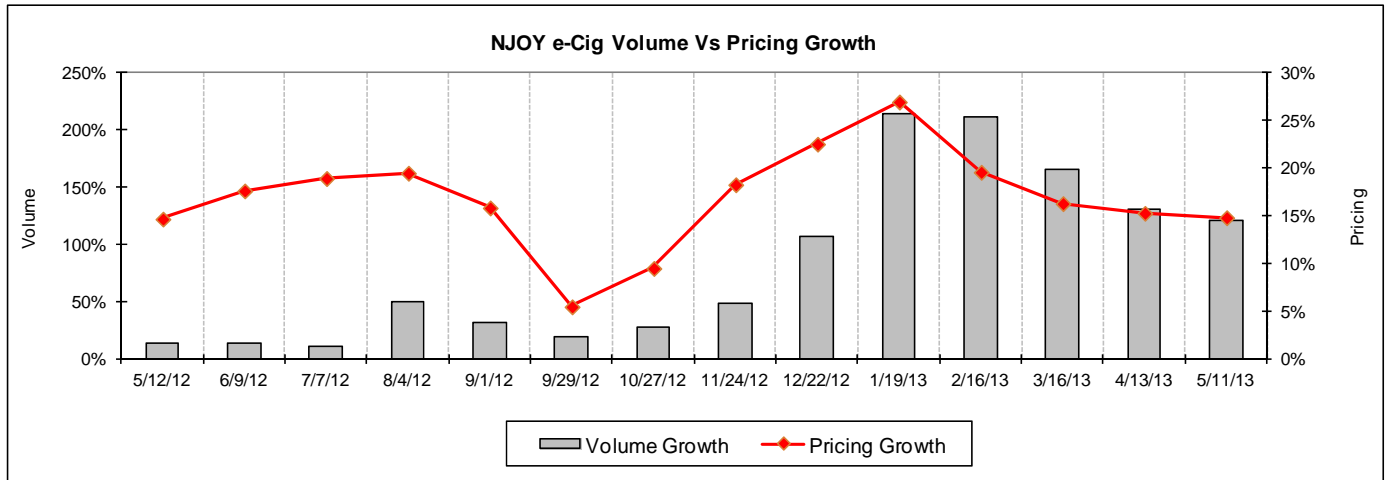
Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

**Exhibit 4. E-cigarette Category Volume vs. Pricing Growth**



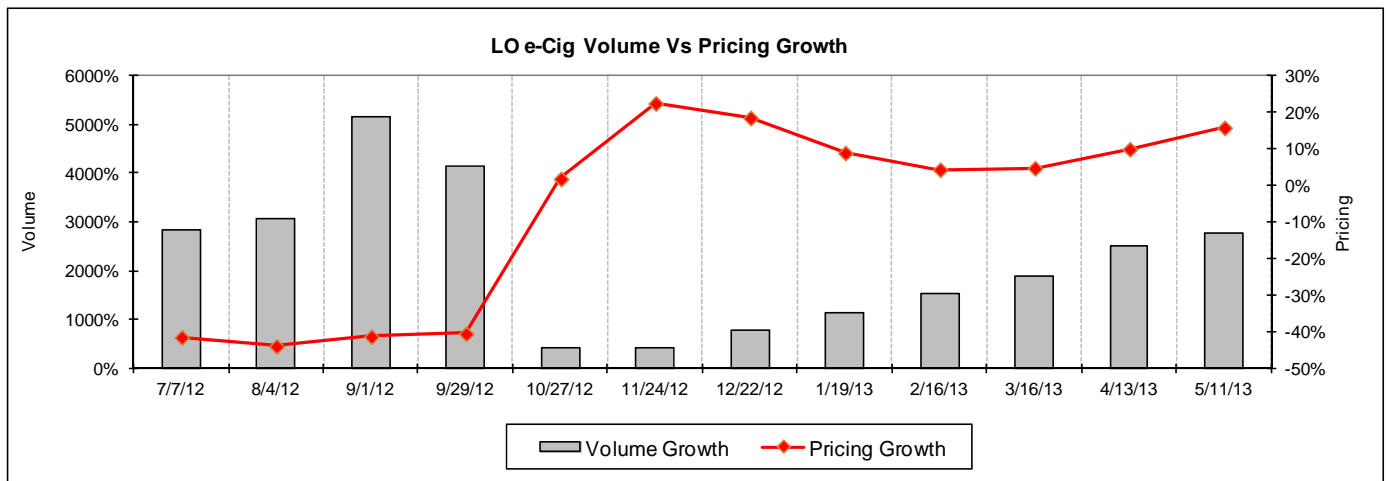
Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

**Exhibit 5. NJOY Volume vs. Pricing Growth**



Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

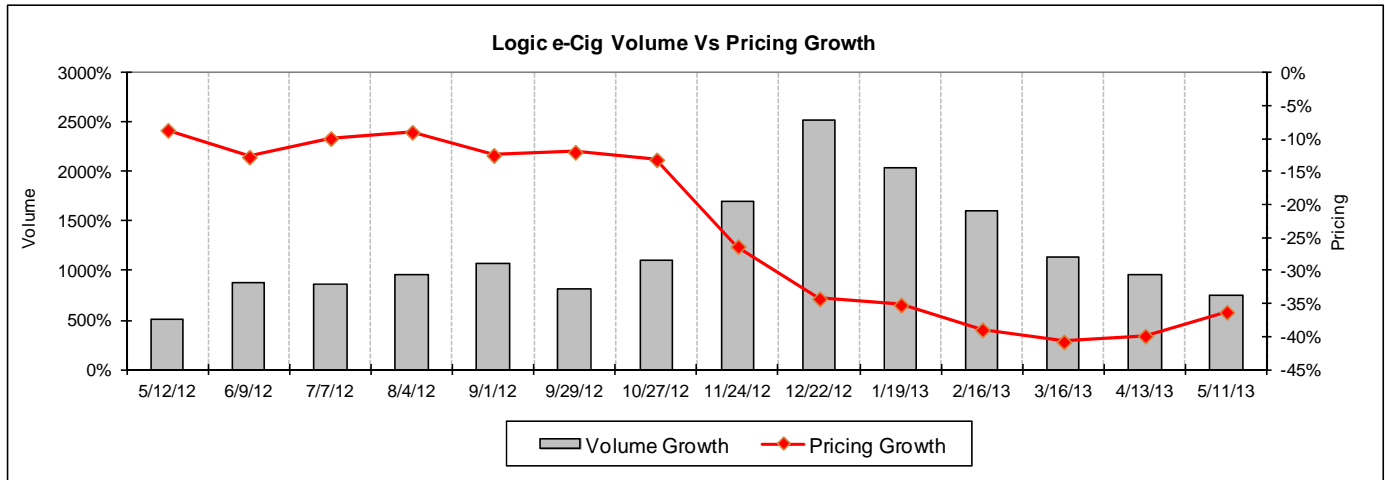
**Exhibit 6. Lorillard Volume vs. Pricing Growth**



Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

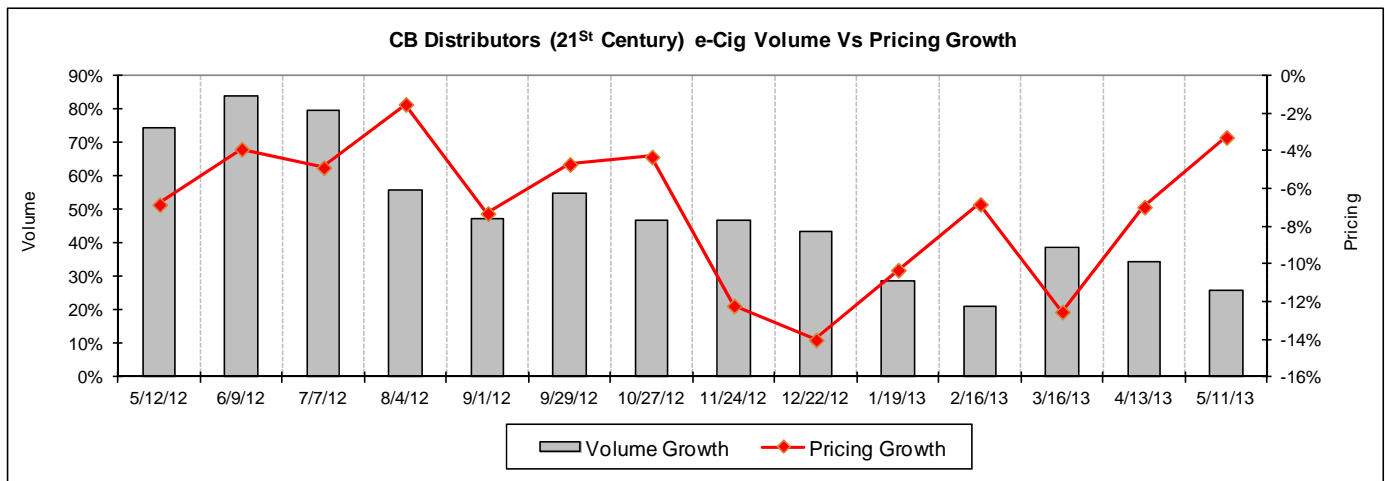
**Tobacco**

**Exhibit 7. Logic E-cig Volume vs. Pricing Growth**



Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

**Exhibit 8. CB Distributors Volume vs. Pricing Growth**



Source: Nielsen C-Track Database and Wells Fargo Securities, LLC

## Required Disclosures

### Additional Information Available Upon Request

I certify that:

- 1) All views expressed in this research report accurately reflect my personal views about any and all of the subject securities or issuers discussed; and
- 2) No part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by me in this research report.

Wells Fargo Securities, LLC does not compensate its research analysts based on specific investment banking transactions. Wells Fargo Securities, LLC's research analysts receive compensation that is based upon and impacted by the overall profitability and revenue of the firm, which includes, but is not limited to investment banking revenue.

#### STOCK RATING

**1=Outperform:** The stock appears attractively valued, and we believe the stock's total return will exceed that of the market over the next 12 months. BUY

**2=Market Perform:** The stock appears appropriately valued, and we believe the stock's total return will be in line with the market over the next 12 months. HOLD

**3=Underperform:** The stock appears overvalued, and we believe the stock's total return will be below the market over the next 12 months. SELL

#### SECTOR RATING

**O=Overweight:** Industry expected to outperform the relevant broad market benchmark over the next 12 months.

**M=Market Weight:** Industry expected to perform in-line with the relevant broad market benchmark over the next 12 months.

**U=Underweight:** Industry expected to underperform the relevant broad market benchmark over the next 12 months.

#### VOLATILITY RATING

**V** = A stock is defined as volatile if the stock price has fluctuated by +/-20% or greater in at least 8 of the past 24 months or if the analyst expects significant volatility. All IPO stocks are automatically rated volatile within the first 24 months of trading.

#### As of: June 12, 2013

48% of companies covered by Wells Fargo Securities, LLC Equity Research are rated Outperform.

Wells Fargo Securities, LLC has provided investment banking services for 47% of its Equity Research Outperform-rated companies.

49% of companies covered by Wells Fargo Securities, LLC Equity Research are rated Market Perform.

Wells Fargo Securities, LLC has provided investment banking services for 37% of its Equity Research Market Perform-rated companies.

3% of companies covered by Wells Fargo Securities, LLC Equity Research are rated Underperform.

Wells Fargo Securities, LLC has provided investment banking services for 21% of its Equity Research Underperform-rated companies.

#### Important Information for Non-U.S. Recipients

**EEA** – The securities and related financial instruments described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. For recipients in the EEA, this report is distributed by Wells Fargo Securities International Limited (“WFSIL”). WFSIL is a U.K. incorporated investment firm authorized and regulated by the Financial Services Authority. For the purposes of Section 21 of the UK Financial Services and Markets Act 2000 (“the Act”), the content of this report has been approved by WFSIL a regulated person under the Act. WFSIL does not deal with retail clients as defined in the Markets in Financial Instruments Directive 2007. The FSA rules made under the Financial Services and Markets Act 2000 for the protection of retail clients will therefore not apply, nor will the Financial Services Compensation Scheme be available. This report is not intended for, and should not be relied upon by, retail clients.

**Australia** – Wells Fargo Securities, LLC is exempt from the requirements to hold an Australian financial services license in respect of the financial services it provides to wholesale clients in Australia. Wells Fargo Securities, LLC is regulated under U.S. laws which differ from Australian laws. Any offer or documentation provided to Australian recipients by Wells Fargo Securities, LLC in the course of providing the financial services will be prepared in accordance with the laws of the United States and not Australian laws.

**Hong Kong** – This report is issued and distributed in Hong Kong by Wells Fargo Securities Asia Limited (“WFSAL”), a Hong Kong incorporated investment firm licensed and regulated by the Securities and Futures Commission to carry on types 1, 4, 6 and 9 regulated activities (as defined in the Securities and Futures Ordinance, “the SFO”). This report is not intended for, and should not be relied on by, any person other than professional investors (as defined in the SFO). Any securities and related financial instruments described herein are not intended for sale, nor will be sold, to any person other than professional investors (as defined in the SFO).

**Japan** – This report is distributed in Japan by Wells Fargo Securities (Japan) Co., Ltd, registered with the Kanto Local Finance Bureau to conduct broking and dealing of type 1 and type 2 financial instruments and agency or intermediary service for entry into investment advisory or discretionary investment contracts. This report is intended for distribution only to professional investors (Tokutei Touseika) and is not intended for, and should not be relied upon by, ordinary customers (Ippan Touseika).

The ratings stated on the document are not provided by rating agencies registered with the Financial Services Agency of Japan (JFSA) but by group companies of JFSA-registered rating agencies. These group companies may include Moody’s Investors Services Inc, Standard & Poor’s Rating Services and/or Fitch Ratings. Any decisions to invest in securities or transactions should be made after reviewing policies and methodologies used for assigning credit ratings and assumptions, significance and limitations of the credit ratings stated on the respective rating agencies’ websites.

**About Wells Fargo Securities, LLC**

Wells Fargo Securities is the trade name for the capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including but not limited to Wells Fargo Securities, LLC, a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission and a member of NYSE, FINRA, NFA and SIPC, Wells Fargo Institutional Securities, LLC, a member of FINRA and SIPC, Wells Fargo Prime Services, LLC, a member of FINRA, NFA and SIPC, Wells Fargo Bank, N.A. and Wells Fargo Securities International Limited, authorized and regulated by the Financial Services Authority.

Wells Fargo Securities, LLC is a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission and a member of the New York Stock Exchange, the Financial Industry Regulatory Authority and the Securities Investor Protection Corp.

This report is for your information only and is not an offer to sell, or a solicitation of an offer to buy, the securities or instruments named or described in this report. Interested parties are advised to contact the entity with which they deal, or the entity that provided this report to them, if they desire further information. The information in this report has been obtained or derived from sources believed by Wells Fargo Securities, LLC, to be reliable, but Wells Fargo Securities, LLC, does not represent that this information is accurate or complete. Any opinions or estimates contained in this report represent the judgment of Wells Fargo Securities, LLC, at this time, and are subject to change without notice. For the purposes of the U.K. Financial Services Authority’s rules, this report constitutes impartial investment research. Each of Wells Fargo Securities, LLC, and Wells Fargo Securities International Limited is a separate legal entity and distinct from affiliated banks.. Copyright © 2013 Wells Fargo Securities, LLC.

SECURITIES: NOT FDIC-INSURED/NOT BANK-GUARANTEED/MAY LOSE VALUE

