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Altria 2Q19 Update

We maintain our SELL recommendation on MO. To us, this is a very simple story. This company was reporting that the secular decline for traditional cigarette volume is 2%-3%. Until recently that was a reasonable projection to continue, but the rate of decay has accelerated in a rapid manner. **We do not view this as a 2-quarter issue – but one of long term decay that is picking up speed. Many of the catalysts haven't even fully kicked in, and the decay rate is 2-3x the rate the company saw as the secular decline.** Moreover, it has rapidly boosted its forecasts for volume decay in the last 3 quarters. **Efforts to offset this volume decay involve replacing cash flow from cigarettes with a share of non-cash earnings from JUUL and perhaps a share of a less profitable per unit heated tobacco roll-out.** Results of heated tobacco roll-outs in other countries show one thing is clear – it crushes traditional cigarette volumes on a permanent basis. **MO is only staying ahead of its dividend payment by having pricing gains exceed volume losses to maintain cash flow in its tobacco market**. We believe the dividend is in danger and efforts to diversify will ultimately have negative impacts on cash flow.

- **2Q19 was the third straight quarter, MO saw volume growth get worse and it cut the full-year forecast for 2019 volume decay.** It also made its 5-year CAGR growth rate for cigarettes direr in 2Q. 2%-3% secular volume decay is now falling at 7%.

- **The push to raise the age to purchase cigarettes and e-cigarettes like JUUL to 21 has only just begun. The company estimates that effective in July, half the country is now subject to state/city laws for a minimum age of 21. Bi-partisan legislation is moving forward for a federal law** supported by the FDA plus MO and JUUL along with other tobacco sellers. About 95% of smokers start before age 21. These are the new smokers that offset the loss of older ones and thus make the decay rate appear smaller than it really is. Turning off the spigot of new smokers should likely cause the decay rate to accelerate even more as these new laws take hold going forward.

- **JUUL and other e-cigarettes are taking share from regular cigarettes – especially among the youth.** This is a big problem for MO who bought at 35% stake in JUUL before helping push for the new 21-year minimum age. **A bigger issue is e-cigarettes cannibalize traditional cigarette demand. For every unit MO loses, it only gains a 35% share of JUUL's income per unit. More importantly, traditional cigarettes generate cash earnings. The stake in JUUL produces a 35% share of equity earnings** with no cash flow. MO is giving its shelf space to JUUL and advertising for JUUL in packs of Marlboro to further drive cannibalization.

- **IQOS – or Heated Tobacco – will start rolling out in September. This creates three problems. It has proven in international markets that it can swiftly cut volumes in traditional cigarettes.** It also may generate a short rapid growth rate for heated tobacco that quickly fades and joins total tobacco in a declining volume trend. So far early results do not show that the total volume of traditional and heated cigarettes remains above prior levels in all but one market. Finally, MO won't get 100% of the cash flow here either. Philip Morris will be paid a royalty and likely some contract manufacturing fees. Again, trading full cash earnings for a percentage of another product.

- **MO continues to work to offset this accelerating decay with ever-higher price hikes. We doubt it can offset these growing negative catalysts on volume.** Excise taxes are still increasing too. MO has pointed out that demand is not inelastic. Higher gas prices cause sales to decline along with higher cigarette prices. With new competition from e-cigarettes and IQOS, boosting prices at rapid rates may also boost the rate of decay. MO can work to shrink costs on production for lower volumes, which can also unwind economies of scale for margins.

- **Cash flow for MO is still very dependent on traditional cigarettes. We estimate that net of taxes, MO is generating over $300 million per year by boosting prices on tobacco in excess of what it is losing in volume.** It is now boosting prices by 7% and 8% in 2019 as it ramps up the level of price hikes to deal with accelerating volume decay. New products, new minimum 21-year age laws seem likely to pushing volume lower. MO was complaining before that most increases in gas prices hurt cigarette demand – so how much longer can they go without pricing out customers via higher tobacco prices? **If new products cost less do price hikes in tobacco lead to faster volume decay as customers switch?**

- **The FDA continues to point to reducing nicotine levels in traditional cigarettes as a way to cut demand for the most-unhealthy way to obtain nicotine.** This is one of the four parts of the plan the FDA is pushing. There is no fixed timetable for when this change may occur. But it remains a serious game-changing risk for MO and its largest profit center and source of cash flow. **Studies show it could lose millions of smokers** in a very short time. **The FDA is also continuing its work on whether flavors in tobacco including menthol should be eliminated** – this is focused heavily on the e-cigarette category now where regulation is moving more quickly. We have talked in prior reports that this would follow European laws and several other countries and US cities in banning menthol cigarettes. We are not exploring too much more in these areas in this update, but even MO lists both as material risks to its business in the latest 10-Q.

The Rate of Volume Decay Continues to Worsen

For some time, the story behind MO has been managing the decay. The company would concede that more smokers were quitting and offset the volume loss with modest price increases and focus on reducing some costs. The company spoke of the secular decline for cigarettes being -2% to -3% per year. That was the case until recently:

MO Decay	2016	2015	2014
y/y Cig Vol.	-2.5%	0.5%	-3.0%

That was already an issue that could spook the markets. Our view was that Altria was taking some share from weaker brands that were not given marketing support by itself and other producers. Several brands such as Salem and Doral were losing volume at double-digit rates for years and soon they had very little share to forfeit which meant MO lost the masking impact of weaker brands essentially liquidating. Altria mentioned that rising gas prices also hurt volumes and could boost volume losses by about 0.3% per year as oil recovered from the lows a few years ago. It also believed e-vapor was starting to take a toll and forecast that substitution at 0.4% negative volume impact per year in 1Q19.

The rate of decline has been accelerating in the last 2.5 years to levels MO was never expecting. Here are the quarterly changes in MO's y/y volume adjusted for seasonal inventory swings when the distribution channel will stock up ahead of price hikes:

MO Decay	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17
y/y Cig Vol.	-7.0%	-7.0%	-5.5%	-5.0%	-5.0%	-7.0%	-6.5%	-4.5%	5.0%

This has acceleration has not been a one or two-quarter issue. Moreover, the company continues to cut guidance for volumes:

MO's Range	2Q19	1Q19	4Q18
est. 2019 y/y Vol.	-5% to -6%	-4% to -6%	-3.5% to -5%

MO's Range	2Q19	1Q19
Est. 5 Yr CAGR for Vol	-4% to -6%	-4% to -5%

The company was asked very pointedly on the 2Q19 call if e-cigarette competition was taking volume away in a faster manner and Altria both times said its forecasts for e-cigarette decay remains unchanged. If that is true, then the secular decay rate is exploding upward. That should also mean that the negative impact of e-cigarette growth is still coming:

> **Gaurav Jain** – Analyst - *"So on cigarettes -- what we have seen this year is that pricing has gone up above expectations and volumes have come in below expectations and that substitute product which is e-cigarettes they aren't really taking any pricing and they haven't taken any pricing for two years. So as we look out* ***does the e-cigarette cannibalization increase over time as price gaps keep widening****? And what has been your experience over the last two years?"*
>
> **Howard Willard – CEO –** "*Yes. I'm not going to speculate on future pricing.* ***I think that consumers are moving into e-vapor because of significant benefits that those products have unrelated to price*** *and I'm not going to speculate on future pricing."*
> **Jennifer Maloney** – Analyst – "*I wonder if you* ***can give us an update on direct mailings to your cigarette consumers and onserts or inserts in cigarette packs on behalf of Juul.*** *How many have you sent out? And what are the redemption rates looking like?"*
>
> **Howard Willard** – CEO – "*Yes. We don't share level of that detail.* ***Both direct mailings and onserts to date have occurred.*** *And I know that there is further activity*

that's planned between now and the end of the year communicating about the benefits of Juul, but we haven't shared numbers or fine details on that."

Jennifer Maloney – Analyst – *"Broadly speaking, **have the results of those changed your estimates for sort of what cannibalization** **you expect to see specifically on your brands from Juul?***

Howard Willard – CEO – *"No it hasn't. **I don't think we've seen anything that caused us to change our views on Juul's growth rate or the cannibalization of our products."***

Raising Minimum Age to 21 to Buy Tobacco Products is Gaining Steam

The FDA has laid out very clear pillars behind their recent drives to change the tobacco/smoking market. We have written about this more extensively in prior reports but the main points are:

- Recognize the smoking cigarettes is the most harmful way to obtain nicotine
- Make it possible for smokers to transition to safer products on the road to quitting altogether – favor gum, e-cigarettes, etc. over cigarettes
- Make cigarettes less desirable by potentially reducing nicotine levels
- Prevent new smokers by limiting access to kids for regular cigarettes, flavored smoking products including menthol, and e-cigarettes.

Even with the recent change at the head of the FDA – the push for these plans continues and solid progress has been made in all areas except implementing lower nicotine levels. Preventing access to nicotine products to kids has really picked up steam in the last 6-9 months.

We have shown this quote and stats before from Dr. Gottlieb of the FDA, *"Almost all adult smokers started smoking when they were kids. Nearly 90 percent started smoking before the age of 18, and 95 percent by age 21. If you make it to age 26 without smoking, the odds are overwhelmingly in your favor that you won't become a smoker. Only about 1 percent of cigarette smokers start at that point or later in their lives."*

The FDA has been extremely vigilant in e-cigarettes because it has seen youth vaping rates explode upward in 2018 and 2019. The view is they do not want kids to have an easy way to gain a nicotine addiction that can lead them to become smokers as well. That has been amply publicized in recent months.

The problem for Altria is their secular decay rate for smoking is a net figure. It is the sum of smokers who start smoking less those who quit. We know that roughly 2,300 kids under 18 smoke for the first time each day. They may also grow in usage over time from a few cigarettes per day to maybe 20. At the same time, current smokers may be trying to cut back on cigarettes and may be moving from 25-30 to 10-15 per day. **We cannot find good figures on this process, so we are simply going to speculate. For illustrative purposes, if MO thinks its rate of decay is now about 5%; it may really be 8% in terms of the number of people quitting or reducing their smoking habits. That -8% is being offset by 3% from new smokers joining the ranks and expanding their usage.**

During 2018 we saw several states raising the minimum age for tobacco products to 21. Again, 95% of smokers start before that age and only 1% start after age 26. Even after it is passed, legislation takes some time to go into effect. Altria noted that half the US population is now subject to the minimum age of 21 to buy any tobacco product including e-cigarettes – but many of those laws didn't become active until July 2019. In other words, this negative change is not fully in the recent figures of -7% volume declines in 1Q19 and 2Q19.

Howard Willard the CEO noted that boosting the age is one of the key reasons they cut their long-term forecast for volume in 2Q19:

> *"And then on top of that, **we've also had increased momentum behind increasing the minimum age to purchase to 21. We've now got 50% of U.S. population in jurisdictions where the minimum age to purchase to 21.** So we thought given that range of changes that it made sense to broaden the decline range for the cigarette category over the next five years."*

It is actually amazing how fast some of these changes have been made. We wrote recently that newspapers were incredulous that after years of fighting it; Altria, JUUL and other major tobacco-related companies came out in unison in recent months to support a federal minimum age of 21 for all tobacco and e-cigarettes. There is now federal legislation supported also by the FDA with bipartisan support in both chambers of Congress moving forward. However, even MO admits the actual negative impact of this movement is probably still in front of the company. Again, from Howard Willard:

> "*In addition they [JUUL] have also been very supportive of raising the minimum age to purchase to 21.* ***<u>And a lot of those laws kicked in July 1st and so we're going to start to see the impact of that going forward."</u>*** *And, "There's been good progress on raising the minimum age to purchase to 21, but I would say the bulk of that impact is at July 1 and moving forward kind of impact, so that's going to take a while. So, I think the expectation is that a lot of the actions that -- and frankly the FDA has expanded their advertising campaign to discourage youth from using e-vapor products."*

To the extent e-cigarette usage among the youth has been growing very rapidly and that rising group of youth is becoming addicted to nicotine – turning off this market may really hurt. Altria could lose multiple sources of ways to add new smokers – tobacco is off-limits, e-cigarettes are off-limits, and flavors that attract kids and make it easier to take up smoking and vaping are off-limits. It would seem that the replacement market for smoking is taking some sizeable hits.

New Product Substitution Is Not the Same as Selling Cigarettes

In order to combat some of the decay, MO has over the years sought to diversify and even embrace newer technology methods for delivering tobacco and nicotine to customers. In 2013, it signed agreements to work with Philip Morris to develop new products and then let the other company have access to them for their respective markets – MO in the USA and PM overseas. We cannot find full terms for the deal, but the 2014 10-K spoke about the outline in regard to selling the Nu Mark e-vapor product, "Altria's strategic agreements with PMI further strengthen Nu Mark's e-vapor strategy. Through licensing, regulatory engagement and contract manufacturing arrangements, Altria is providing PMI with an exclusive license to commercialize Nu Mark's e-vapor products internationally. <u>The agreements give Nu Mark the opportunity to generate royalties and contract manufacturing fees</u> on the products provided to PMI."

The companies are looking at JUUL (35% owned by MO) being sold by PM in overseas markets and IQOS (Heated Tobacco) products owned by PM being sold by MO in the USA. **The first problem is if MO helps cannibalize its own cigarette market with JUUL or IQOS products – it doesn't make the same money.**

In the case of JUUL – MO loses cigarette sales that are high margin and essentially all in cash. Having a customer buy JUUL instead results in MO getting a 35% share of equity earnings in JUUL's results. These are non-cash earnings. On top of that, as noted earlier, JUUL sells for less than cigarettes now. MO is getting a 35% portion of a smaller income stream per unit and forfeiting 100% portion of a larger income stream. Plus, MO is helping JUUL do this by advertising on Marlboro packets, giving shelf space to JUUL and perhaps targeting the 2 million members of Marlboro's Rewards Program.

Eventually, MO may receive some cash dividends, but the current phase for JUUL is to grow its market. Even if MO eventually gets a 100% dividend from JUUL, it's still trading 100% of a larger income stream for 35% of a smaller one. They would need JUUL to sell 3 times the volume that it takes from MO via sales in the US and what it sells via PM overseas. Even then without a 100% of earnings dividend policy from JUUL – MO may still come out behind on cash flow.

In the case of IQOS from PM, MO should receive cash earnings. However, it will also be paying PM royalties and contract manufacturing fees on all the units sold. That also sounds like a less profitable deal. Especially when the cigarette business is being managed for decay and limiting promotional spending, reducing staff, etc. – while the IQOS business would likely be ramping up spending.

IQOS Roll-Out Has Posted Mixed Results for PM

Philip Morris has been rolling out Heated Tobacco (IQOS) in several markets around the world. Competition has followed it from Japan Tobacco and British American. In general, heated tobacco tends to create a one-year pop in demand that quickly levels off. Basically, people use both heated and traditional smoking tobacco at the same time, then stick with one or quit altogether. It has rolled it out to more markets in 2019. We looked at results in three major countries where the roll-out is at least two years old and three major countries where the roll-out has not happened yet. Here is the data:

PM Japan	1H19	1H18	2018	2017	2016	2015
Cigarette Vol.	14.4	16.7	30.8	34.9	43.9	45.7
Heated Vol.	12.7	12.6	21.4	31.3	7.1	0.0
Total Vol.	27.1	29.3	52.2	66.1	51.0	45.7

Japanese Result – Heated was very popular and grew the total market in 2016 and 2017, it has now leveled off. Traditional cigarette market cratered by 33% from 2015-2018.

PM Korea	1H19	1H18	2018	2017	2016	2015
Cigarette Vol.	5.3	6.0	12.0	13.5	15.5	14.2
Heated Vol.	2.4	2.6	5.4	1.4	0.0	0.0
Total Vol.	7.7	8.6	17.4	14.9	15.5	14.2

Korean Result – The smoking market was still growing in 2016. Heated had its big pop in 2018 which grew the total market but is now declining. Traditional cigarette market fell by 23% from 2016-18 as heated rolled out.

PM Russia	1H19	1H18	2018	2017	2016	2015
Cigarette Vol.	27.2	29.4	64.6	72.1	79.7	84.4
Heated Vol.	2.7	0.9	3.4	0.3	0.0	0.0
Total Vol.	29.9	30.3	68.0	72.4	79.7	84.4

Russian Result – Smoking market in significant decay with smoking bans and higher taxes First years of rollout of Heated is not growing the market overall. Traditional cigarette market down 23% since 2015, down 10% in 2018 after larger roll-out of heated.

In all cases, the introduction of IQOS (Heated Tobacco) accelerated the decay of traditional cigarettes. For PM, this may be a lesser impact as it owns both markets. **Moreover, it may be too soon to conclude for Russia yet – but both Japan and Korea quickly showed leveling off or decay in heated sales.** For MO, they will be paying part of the Heated sales to PM. So, accelerating the loss of traditional tobacco and replacing it with heated volume – may cost the company earnings and cash flow especially after the first year. We think MO is counting on a Japan-style situation where the overall market of cigarettes and IQOS combined increases the total market and results in a lost unit of cigarettes being replaced with 1.3 units of IQOS. The other markets are not showing that level of sustainability. Moreover, the e-vaper style of smoking may already have taken a decent amount of market share for non-traditional smoking in the US.

In markets where PM has not rolled out IQOS yet, the decay rate in traditional cigarettes has not been as pronounced as even the US:

PM Indonesia	1H19	1H18	2018	2017	2016	2015
Cigarette Vol.	47.1	48.0	101.4	101.3	105.5	109.8

In Indonesia, the volume loss has been only 8% between 2015-18 and another 1% loss in the first half of 2019.

PM Philippines	1H19	1H18	2018	2017	2016	2015
Cigarette Vol.	24.9	24.0	51.2	50.6	56.6	66.2

The Philippines had issues in 2016 but has been a fairly stable market as smoking goes – down 10% since 2016 or 23% including the drop in 2015 and 4% growth in early 2019.

PM France	1H19	1H18	2018	2017	2016	2015
Cigarette Vol.	8.6	9.5	18.4	19.7	19.2	18.9

France only fell 3% from 2015-18. It has picked up the decline in early 2019

We think the results without IQOS show that PM has been able to hold volumes much better in traditional tobacco in some big markets. **Once they lose traditional tobacco to IQOS – it appears to be gone forever so why race to that point?** Several other PM markets, particularly in Europe, are in early stages of rolling out IQOS and it's still a very minor part of total volume so we're not going to draw conclusions there.

For MO, we think there may be more negatives than positives here after the first year. It appears that IQOS will permanently impair its key cigarette market. It will replace it with a product that likely generates lower profits per unit given the added costs to be paid. So far, only one market has seen IQOS hold volumes after one year.

Altria Continues to Rely Heavily on Cigarette Price Hikes and Still Doesn't Fully Cover Cash Outflow to Shareholders

By any measure, Altria remains largely a cigarette company. Here are the breakdowns operating income per division:

MO Op. Income	1H19	1H18	2018	2017
Smokable	$4,303	$4,239	$8,408	$8,426
Smokeless	$778	$715	$1,431	$1,306
Wine	$34	$44	$50	$146

Smokable tobacco products are 85% of segment operating income and smokeless tobacco products are 14% of the total. It so far has been offsetting the accelerating declines in volume with price increases:

MO Smokable	1H19	1H18	2018	2017
Pricing	$684	$543	$1,092	$1,023
Volume	-$473	-$537	-$779	-$691
net of 25% tax	$158	$5	$235	$249

MO Smokeless	1H19	1H18	2018	2017
Pricing	$92	$62	$138	$168
Volume	-$46	Neg	Neg	-$18
net of 25% tax	$35	$25*	$85*	$113

- MO does not quantify the negative impact on smokeless operating income in all periods, we made an estimate for 2018 and 1H18.

We believe MO has been picking up over $300 million in additional cash flow per year by taking pricing actions that exceed volume declines in the various tobacco businesses. That is actually a very significant part of the cash flow equation here:

MO Cash Flow	1H19	1H18	2018	2017
Reported CFO	$2,392	$3,850	$8,391	$4,901
Work Cap Chg	$1,158	$14	-$1,100	$2,200
Adj. CFO	$3,550	$3,864	$7,291	$7,101
FCF	$3,471	$3,792	$7,053	$7,101
Dividend	$3,001	$2,585	$5,415	$4,807
Repurchases	$346	$950	$1,673	$2,917

The company routinely has large swings in settlement accruals and payments in working capital so we added back all working capital changes. The impact on the higher debt load is reducing cash flow now and the company is essentially generating about $7 billion per year in free cash flow. The dividend is $6 billion per year and investors expect that grow.

EPS growth is also driven partly by share repurchases and those are already falling because MO cannot afford them at this point.

They have been offsetting 7% volume decay with 7%-8% price hikes in 2019. If they cannot get pricing to exceed volumes, MO probably already has $300 million in cash flow at risk. It is probably not a huge stretch to estimate that volume decay in tobacco could continue to expand and hurt cash flow more. The age limit laws are growing and the company plans to lose more smoking volume to JUUL (which will not be replaced with cash flow – but equity earnings) and IQOS (which may not be as profitable per unit). We're not sure if volume has periods of decay in the 7%-10% range that MO can simply keep boosting prices at ever faster rates.

For illustration purposes - the story will become – cigarette volumes are down 10% with age laws and new products, but JUUL took 2% of that share back and IQOS took 2% so really the net loss is only 6%. It won't work that way in our view. The 2% share for JUUL – MO only gets 35% of that income and it's not in cash. The IQOS will have a lower margin per unit – so the net won't be managing 6% decay. From a cash flow standpoint, the decay may be 8.5%. Are they going to raise prices by 10% against that backdrop when the competitive products are available and sapping cash flow?

Excise taxes continue to rise too – the company noted a couple more in the last call. That raises the price to consumers already. There is a growing price gap between newer products and cigarettes. There is also a price gap between economy brands and premium brands. On top of that, MO spent time in 2017-18 telling investors when gas prices rose $0.30-50 that hurts cigarette sales as customers have less disposable income. Some of the accelerated decay in volume was due to that. That certainly doesn't give too much support for ever-increasing price hikes. Plus, the company is giving investors a 5-year CAGR forecast for volume of basically -5%. That would cut 23% off cigarette volume in 5-years – are they going to boost prices by 40% over that time, plus tax increases from government? The rate of decay already is pointing to the snowball beginning to pick up speed.

We already see a situation where MO has little room to maneuver. Its cash flow relies on posting $300 net of taxes higher income from pricing versus volume loss. Several signs point that being unsustainable and transitioning beyond being neutral to becoming a headwind. Then the base cash flow will also be falling as it converts to selling units that produce less cash flow than the product being replaced. Cutting the dividend or share repurchases will not go over well.

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