## Contents

| Altria (MO) Update- Maintain SELL | p. 1 |
| :--- | :--- |
| Mondelez (MDLZ) Update- | p. 14 |
| Ares Capital (ARCC) Update- Maintain BUY | p. 17 |
| PepsiCo. (PEP) EQ Update | p. 20 |
| Hershey (HSY) EQ Update | p. 22 |
| Colgate-Palmolive (CL) EQ Update | p, 24 |

## 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 $2-3 x$ 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 2 Q . $2 \%-3 \%$ 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 $\mathrm{e}^{-}$ 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 $10-\mathrm{Q}$.


## 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 doubledigit 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 ecigarette 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 ecigarette 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. Ithink 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 $\underline{\text { mailings and onserts to date have occurred. And I know that there is further activity }}$ 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. 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." 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. The agreements give Nu Mark the opportunity to generate royalties and contract manufacturing fees 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 | 1 H 19 | 1 H 18 | 2018 | 2017 | 2016 | 2015 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cigarette Vol. | 14.4 | 16.7 | 30.8 | 34.9 | 43.9 | 45.7 |
| Heated Vol. | $\underline{12.7}$ | $\underline{12.6}$ | $\underline{21.4}$ | $\underline{31.3}$ | $\underline{7.1}$ | $\underline{0.0}$ |
| Total Vol. | 27.1 | 29.3 | 52.2 | $\underline{66.1}$ | 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 | 1 H 18 | 2018 | 2017 | 2016 | 2015 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cigarette Vol. | 5.3 | 6.0 | 12.0 | 13.5 | 15.5 | 14.2 |
| Heated Vol. | $\underline{2.4}$ | $\underline{2.6}$ | $\underline{5.4}$ | $\underline{1.4}$ | $\underline{0.0}$ | $\underline{0.0}$ |
| Total Vol. | 7.7 | 8.6 | 17.4 | $\underline{14.9}$ | $\underline{15.5}$ | 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 | 1 H 18 | 2018 | 2017 | 2016 | 2015 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cigarette Vol. | 27.2 | 29.4 | 64.6 | 72.1 | 79.7 | 84.4 |
| Heated Vol. | $\underline{2.7}$ | $\underline{0.9}$ | $\underline{3.4}$ | $\underline{0.3}$ | $\underline{0.0}$ | $\underline{0.0}$ |
| Total Vol. | 29.9 | 30.3 | 68.0 | $\underline{72.4}$ | 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 | 1 H 18 | 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 | 1 H18 | 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 | 1 H 19 | 1 H 18 | 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 | 1 H 19 | 1 H 18 | 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 | 1 H 19 | 1 H 18 | 2018 | 2017 |
| :--- | :---: | :---: | :---: | :---: |
| Pricing | $\$ 684$ | $\$ 543$ | $\$ 1,092$ | $\$ 1,023$ |
| Volume | $\underline{-\$ 473}$ | $\underline{-\$ 537}$ | $\underline{-\$ 779}$ | $\underline{-\$ 691}$ |
| net of $25 \%$ tax | $\$ 158$ | $\$ 5$ | $\$ 235$ | $\$ 249$ |
|  |  |  |  |  |
| MO Smokeless | 1 H 19 | 1 H 18 | 2018 | 2017 |
| Pricing | $\$ 92$ | $\$ 62$ | $\$ 138$ | $\$ 168$ |
| Volume | $\underline{-\$ 46}$ | $\underline{\text { Neg }}$ | $\underline{\text { Neg }}$ | $\underline{-\$ 18}$ |
| 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 | 1 H 19 | 1 H 18 | 2018 | 2017 |
| :--- | :---: | :---: | :---: | :---: |
| Reported CFO | $\$ 2,392$ | $\$ 3,850$ | $\$ 8,391$ | $\$ 4,901$ |
| Work Cap Chg | $\$ 1,158$ | $\$ 14$ | $\underline{-\$ 1,100}$ | $\$ 2,200$ |
| 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 everincreasing 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.

## Mondelez International 2Q19 Update Maintain NEUTRAL

We remain far from impressed with MDLZ's results. We are keeping it Neutral for now, but it is evident that the organic growth figures are likely being overstated by hyperinflation in Argentina. The company is not projecting that it will hit its $\$ 3$ billion goal in free cash flow even with lower capital spending as some of the working capital stretching is now snapping back to consume cash flow.

- We seriously question the $4.6 \%$ organic growth rate in $2 Q$ for MDLZ and the company boosted its annual forecast above $3 \%$ for sales growth after the quarter. All this growth is coming from hyperinflation in Argentina. Investors would have to believe that the smallest and weakest segment - Latin America at only $12 \%$ of total sales is actually the rocket booster driving up results. The $4.6 \%$ organic growth is broken down as $3.0 \%$ higher pricing and $1.6 \%$ stronger volume.
- 

| MDLZ 2Q | Pricing | Vol/Mix | Organic | FX | Acq/Divest | Real |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Latin America | $11.5 \%$ | $-0.6 \%$ | $10.9 \%$ | $-15.7 \%$ | $0.0 \%$ | $-4.8 \%$ |
| Asia/ME/Africa | $1.9 \%$ | $2.8 \%$ | $4.7 \%$ | $-4.5 \%$ | $-0.8 \%$ | $-0.6 \%$ |
| Europe | $0.3 \%$ | $3.6 \%$ | $3.9 \%$ | $-6.3 \%$ | $0.0 \%$ | $-2.4 \%$ |
| North America | $\underline{3.5 \%}$ | $\underline{-1.0 \%}$ | $\underline{2.5 \%}$ | $-0.4 \%$ | $0.9 \%$ | $\underline{3.0 \%}$ |
| Total | $3.0 \%$ | $1.6 \%$ | $4.6 \%$ |  |  | $0.8 \%$ |

- All the pricing is coming from Latin America, which is being done ahead of huge FX losses there. If Latin America is so strong, why is volume negative? This is even worse because in 2018, this unit was suffering from a Brazilian trucking strike. Simply having that resolved boosted volumes in Brazil - yet the segment still posted negative volume growth. We think this picture of $10.9 \%$ organic growth in Latin America is very misleading.
- If we pull Latin America out of the mix - as it actually posted the worst result on GAAP results as opposed to the highest on the company's organic definition - the organic growth rate here is $3.7 \%$ - not $4.6 \%$. What does it say about the company's definition of organic growth when pulling the laggard division out of the mix makes results decline?

| MDLZ 2Q | $20182 Q$ | $20192 Q$ | Org. Growth $\$$ | Organic Growth |
| :--- | :---: | :---: | :---: | :---: |
| Asia/ME/Africa | $\$ 1,328$ | $\$ 1,391$ | $\$ 63$ | $4.7 \%$ |
| Europe | $\$ 2,303$ | $\$ 2,392$ | $\$ 89$ | $3.9 \%$ |
| North America | $\$ 1,675$ | $\$ 1,717$ | $\$ 42$ | $\underline{2.5 \%}$ |
| Total | $\$ 5,306$ | $\$ 5,500$ | $\$ 194$ | $3.7 \%$ |

This makes much more sense to us. As seen in the first table, the company is taking FX losses in every unit. Where the FX losses are greatest, because the dollar is stronger MDLZ has trouble taking pricing. Except, when there is hyperinflation and pricing is high but that doesn't translate into volume gains and FX losses exceed the organic growth.

- We would still point out that FX losses are a way of life for MDLZ. It is not a case where there are good years and bad. This is why the company's $3 \%$ organic growth is never seen in actual sales changes. It is also why sales since 2014 are down about $12 \%$ instead of being up $14 \%$ if $3 \%$ was compounded over the same period.

| Sales Growth | 1 H 19 | 2018 | 2017 | 2016 | 2015 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Actual | $-0.8 \%$ | $1.0 \%$ | $1.2 \%$ | $-3.3 \%$ | $-11.6 \%$ |
| Organic | $4.6 \%$ | $2.4 \%$ | $0.9 \%$ | $1.3 \%$ | $1.4 \%$ |

- We also noted that the company's forecast for Free Cash Flow is only $\$ 2.8$ billion for 2019 vs. the goal of $\$ 3.0$ billion. This is with lower capital spending so far in 2019 by $\$ 67$ million. The reason is the company's past efforts of stretching working capital is now reversing and they are consuming cash.

| W/C Cash Flow | 1 H 19 | 1 H 18 |
| :--- | :--- | :--- |
| Receivables | $\$ 135$ | $\$ 112$ |
| Inventory | $-\$ 145$ | $-\$ 240$ |
| Accts Payable | $-\$ 430$ | $-\$ 325$ |

There is some seasonality here, but we had been warning that MDLZ had been stretching payables and selling receivables into factoring deals to generate cash. In 2Q19, payables were down considerably even as inventory still rose albeit at a slower rate than last year. The company noted that factored receivables also fell just over $\$ 100$ million along with declining figure on the balance sheet.

- We still question that MDLZ continues to borrow money to plug its cash flow shortfall and debt is up to $\$ 18.0$ billion. It just raised the dividend to an annualized $\$ 1.65$ billion against free cash flow of $\$ 2.8$ billion for a $60 \%$ payout ratio. That is rising quickly, and MDLZ still likes to repurchase its shares at over 22x EPS even though EPS is only growing at its forecast adjusted rate of $5 \%$, which includes about $3 \%$ growth as a result of spending considerable sums buying back stock. So $2 \%$ growth for 22x EPS with rising debt.


## Ares Capital Corp - 2Q19 Update Maintain BUY

We are maintaining our BUY recommendation on ARCC after 2Q19 results. Results showed several positives continuing and there is more evidence that the dividend could increase in the near future. There are issues of timing to keep in mind going forward as well:

- Timing - the change to allow BDCs to boost leverage ratios for Debt to Equity from $1: 1$ to $2: 1$ only went into effect on June 21 . Thus, the company only had 9 -days under the new rules in 2Q19. ARCC's plan remains to take the leverage ratio to between $0.9 x-1.25 x$ over $12-36$ months vs. a ratio under $0.6 x$ in much of 2018 and $0.7 x$ coming into this year.
- Timing - Ares Capital Management has been waiving essentially $\$ 10$ million in management fees from ARCC per quarter as ARCC restructured the acquired American Capital portfolio. That $\$ 10$ million waiver is essentially 2.3 cents per quarter in EPS for ARCC. This waiver will end after 3Q19.
- Negative - Only one area has some concern. The company reported that there is growing competition for new business among lenders like BDCs. This has centered on companies with strong and growing cash flow, with other companies posting less growth not attracting as much attention. Also, the competition is not causing pricing pressure - but there are more covenant-light terms or other weaker documentation clauses that are being offered by the competition. The result is ARCC only closed about $2 \%$ of the potential business it looked at last quarter vs. a longer-term close ratio of about $4 \%$.
- Interest Rate Lever - We have noted in the past that in addition to boosting leverage from abnormally low levels to drive EPS growth, ARCC also has $84 \%$ of its portfolio on floating rates and that a 100 bp rise in LIBOR adds about 4 -cents in EPS per quarter. With the potential for interest rate cuts now, it is worth pointing out that $78 \%$ of the floating rate portfolio has interest rate floors in place. That should mitigate some of the negative impact of LIBOR decreasing. Management believes this is a minor headwind for the 2 H of 2019. Also, they have historically seen that a rate cut tends to reduce funding costs faster than loans reset and their spread has often widened under such a situation. If ARCC loses 25 bp of spread on the floating
rate investments - it would cost it about 1.6 cents per share in quarterly EPS. The reverse would also be true if the spread widens by 25 bp .
- Positive - the company has the size to chase larger deals that many other BDCs cannot tackle. The weighted average for investment company EBITDA for the portfolio is now $\$ 135$ million up from $\$ 82$ million a year ago. At $4-5 x$ EBITDA for a debt figure, that is larger than the market cap of many BDCs in the market. It is also important to remember that ARCC has a long tenure of working with many companies in its portfolio and backlog. Its knowledge of the companies allows it to move quickly and it has found that it has been able to grow with those businesses it knows. In 2Q, 25 of 33 new investments were made to existing clients.
- Positive - Companies in the underlying portfolio continue to grow with high credit quality. EBITDA growth came in at $4 \% \mathrm{y} / \mathrm{y}$ against the toughest comp in years:

| ARCC | 2Q19 | 1Q19 | 4Q18 | $3 Q 18$ | 2Q18 | 1Q18 | 4 Q17 | $3 Q 17$ | 2 Q17 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EBITDA growth | $4 \%$ | $5 \%$ | $5 \%$ | $6 \%$ | $7 \%$ | $7 \%$ | $6 \%$ | $4 \%$ | $5 \%$ |


| ARCC | 2Q19 | 1Q19 | 4Q18 | 3Q18 | 2Q18 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Nonacrruals | $\$ 313$ | $\$ 314$ | $\$ 324$ | \$312 | \$304 |
| Nonaccrual \% | $2.3 \%$ | $2.3 \%$ | $2.5 \%$ | $2.7 \%$ | $2.7 \%$ |
| Carrying Value | $\$ 25$ | $\$ 51$ | $\$ 75$ | $\$ 70$ | $\$ 90$ |
| Carrying \% | $0.2 \%$ | $0.4 \%$ | $0.6 \%$ | $0.6 \%$ | $0.8 \%$ |

No new loans were added to the non-accrual portion of the portfolio and they are carrying those loans at $0.2 \%$ of the portfolio now.

- Positive - Growth in the leverage ratio is still expected to proceed. The growth will likely be lumpy. In 1Q19, the commitments less exits were $+\$ 600$ million, in 2Q19 it was flat, in early 3 Q19 it was $+\$ 184$ million. They have locked up $\$ 2.2$ billion of additional financing and have $\$ 3.7$ billion in liquidity that can be put to work. That would not require new share issuance and $\$ 1$ billion in new assets at a net $6 \%$ produces about 3.5 cents per quarter in income. If the entire $\$ 1$ billion was borrowed, the debt to equity ratio would only be 0.97 x and 0.90 x net of cash. They are moving in the right direction to reach $0.9-1.25 \mathrm{x}$ :

| ARCC | 2Q19 | 1Q19 | 4 Q18 | 3Q18 | 2Q18 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Debt to EQ net cash | 0.76 | 0.79 | 0.69 | 0.54 | 0.57 |

- The dividend has room to expand further. Core EPS of $\$ 0.49 / Q$ exceeds the $\$ 0.40 / \mathbf{Q}$, plus the $\$ 0.02 / \mathrm{Q}$ special dividend being paid in 2019. The company has to pay out at least $90 \%$ of its taxable income to keep its RIC (Regulated Investment Company) status where it passes through income tax-free to shareholders. Recent current results would indicate dividends should be about 2-cents per share higher per Q:

| ARCC | 2 Q19 | 1Q19 | 4Q18 | 3Q18 | 2Q18 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Core EPS | $\$ 0.49$ | $\$ 0.48$ | $\$ 0.45$ | $\$ 0.45$ | $\$ 0.39$ |
| $90 \%$ of Core | $\$ 0.44$ | $\$ 0.43$ | $\$ 0.41$ | $\$ 0.41$ | $\$ 0.35$ |
| Dividend Paid | $\$ 0.40$ | $\$ 0.40$ | $\$ 0.39$ | $\$ 0.39$ | $\$ 0.38$ |
| Special Div. | $\$ 0.02$ | $\$ 0.02$ | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |

A 90\% payout would result in ARCC paying more than the current dividend. After 3Q19, the core EPS will see a 2.3 -cent drop as the fee-waiver of $\$ 10$ million per quarter vanishes. That would put the dividend at the current $\$ 0.42$. However, higher leverage should add to EPS, if lower rates expand the spread - that would boost EPS. The minimum goal for the level of leverage at 0.9 x would add about 3.5 -cents per quarter to EPS. In addition, the company guided that its preliminary estimate of undistributed taxable income from 2018 is $\$ 323$ million or $\$ 0.76$ per share. That figure will be finalized later this year and also represents more income where a high percentage will need to be paid to shareholders. That does not mean that ARCC will suddenly declare a $\$ 0.76$ special dividend. It could announce something like it intends to pay $\$ 0.05$ in special dividends per quarter for three years. It simply represents another area that could help push the dividend higher.

# PepsiCo. (PEP) EQ Update-6/19 Qtr. 

| Current EQ Rating* | Previous EQ Rating |
| :---: | :---: |
| $3-$ | $3+$ |

*For an explanation of the EQ Review Rating scale, please refer to the end of this report

## We are lowering our earnings quality rating to 3- (Minor Concern) from 3- (Minor Concern)

PEP beats the consensus estimates by 3 cps in the quarter with a slight beat on the top line. An increase in receivables and payables plus the decline in the allowances prompts us to reduce our earnings quality rating. We would also note again that the company recently launched another restructuring program which always reduces our overall view of the quality of reported earnings.

- We mentioned PEP in our recent piece on the distortions of non-GAAP FX adjustments to organic revenue growth for companies with operations in Latin America. FX-adjusted results can be skewed at companies with operations in countries experiencing high inflation due to big pricing boosts from that geographic segment due to high inflation benefitting results while the offsetting negative FX impact is adjusted out of the organic results. PEP was not receiving as large a benefit from inflationary conditions in Latin America as some companies we looked at as its total company organic revenue growth figures of just over $5 \%$ in the $3 / 19$ quarter only fell to a little more than $4.5 \%$ after we adjusted out the impact of Latin America. In the 6/19 quarter, the Latin American segment actually posted decent volume growth of $4 \%$, up from $0 \%$ in the $3 / 19$ quarter. Pricing was still strong at positive $6 \%$, yet the negative currency impact persisted at negative 7\%. Total company organic FXadjusted revenue growth was approximately $4.5 \%$ and we estimate that falls to the high 3\% range with Latin America adjusted out.
- Accounts receivable days jumped by 2.9 over the year-ago quarter. The company offered no explanation of the increase in its $10-\mathrm{Q}$ and it was not mentioned in the conference call beyond noting that working capital was a drain on cash flow growth for the six months ended $6 / 19$. The $12 / 18$ SodaStream acquisition could have driven some of this increase, the but the year-over-year increase in DSOs in the $3 / 19$ quarter was only 1.8 days. Likewise, the $12 / 18$ quarter, which included all the SodaStream assets but virtually none of the cost of sales, increased by only 0.6 days. Therefore, we are skeptical that SodaStream had a meaningful impact on the DSO growth.

While this could have been a timing issue, we note that PEP's DSOs have been very stable and the almost 3-day increase appears out-of-line, increasing the chance that sales were pulled forward into the 6/19 quarter at the expense of the next.

- Accounts receivable allowances fell as a percentage of gross receivables to $1.3 \%$ compared to $1.6 \%$ a year ago and $1.5 \%$ in the previous quarter. We have noted in past reviews that allowances were in the $1.8 \%-1.9 \%$ range in 2017 and to return the allowance to that level would require about 3 cps in charges.
- Also, on the working capital front, inventory DSIs rose year-over-year by 5.3 days after rising 3.2 and 2.3 days in the $3 / 19$ and $12 / 18$ quarters, respectively. Of the $5.3^{-}$ day increase, 3 days of the increase came from finished goods and 1.8 days came from work in process. As with receivables, the inventory increase could have been partly driven by the SodaStream acquisition, but again, the increase in DSIs was only 3.2 and 2.3 days in the $3 / 19$ and $12 / 18$ quarters, respectively. This increases the chance that the inventory buildup was unintended and may be signaling discounting pressure or reduced production ahead.


# Hershey (HSY) EQ Update-6/19 Qtr. 

| Current EQ Rating* | Previous EQ Rating |
| :---: | :---: |
| $3-$ | $3-$ |

*For an explanation of the EQ Review Rating scale, please refer to the end of this report

## We are maintaining our earnings quality rating to 3 - (Minor Concern) noting a one-time boost to margins from an inventory buildup.

- Inventory days (DSI) jumped by more than 10 days over the year-ago quarter. The company made the following comment about increased inventory levels during the call:
"Second, we increased internal inventory levels to support more demand from our retailers in the coming weeks as we transitioned to the new prices, which resulted in favorable fixed cost absorption."

The company raised prices in the summer of 2018 and recently announced a new wave of price increases. Customers have accelerated their purchases ahead of these increases taking effect which resulted in increased production. The increased production increases efficiency and lowers per-unit cost. With the company utilizing the LIFO (Last-in, first-out) method of inventory accounting for the majority of its US inventories (about $60 \%$ of total inventories), these lower-cost units are expensed first, which provided a temporary boost to gross margin in the quarter.

- After adjusting for mark-to-market gains on derivative contracts not designated as hedges, gross margin rose by 200 bps . About 90 bps was due to the above-mentioned inventory buildup as well as sales mix. The remainder was due to better commodity costs and price increases. However, management noted that it expects this to reverse in the second half, saying in the conference call "about 90 basis points of our gross margin expansion in the second quarter can be attributed to these two factors, and is expected to be offset in the second half, primarily Q3 as the internal and external inventory levels normalize." It remains to be seen if the company's sell-through is impacted by rising prices at a time when the company's main commodity costs are roughly flat with last year.
- Advertising expense is rising and will pressure margins in the second half as last year's media efficiencies are lapped and the company's boosts support of its brands in conjunction with price increases. However, this was partially offset by higher interest income related to an international local tax settlement.


# Colgate-Palmolive (CL) EQ Update-6/19 Qtr. 

| Current EQ Rating* | Previous EQ Rating |
| :---: | :---: |
| $3-$ | $3+$ |

*For an explanation of the EQ Review Rating scale, please refer to the end of this report

## We are lowering our earnings quality rating to 3 - (Minor Concern)

CL reported EPS in-line with the consensus estimate while falling short of the revenue target. Analysts were initially excited by organic sales growth in North America of 3.5\% exceeding the $3.2 \%$ estimate. Analysts also cheered the acceleration in organic sales growth to $4 \%$ from $3 \%$ in the $3 / 19$ quarter which was driven by a $3 \%$ increase in prices. However, as we show below, much of this was a result of misleading FX adjustments in Latin America. Given this and the jump in inventory discussed below, we are lowering our earnings quality rating to 3- (Minor Concern) from 3+ (Minor Concern).

- We discussed CL in our theme piece on Latin American inflation artificially boosting non-GAAP FX-adjusted organic sales growth. Specifically, we noted that in the 3/19 quarter, Latin America accounted for more than $46 \%$ of organic FX-adjusted sales growth despite accounting for only $23 \%$ of total sales. This was driven by a $3.5 \%$ boost from pricing in Latin America which was almost certainly possible due to inflation in the region. However, a negative impact of currency of $10.5 \%$ from the region was removed from the organic growth figures. We estimated that the total company organic growth rate of $3 \%$ would have been closer to $2 \%$ without the benefit from Latin America. The phenomenon continued into the 6/19 quarter. CL reported total company organic sales growth (before FX) of $4 \%$ which was heralded by analysts as an accelerating from the $3 \%$ growth in the $3 / 19$ quarter. However, reported sales growth was down $0.5 \%$ due to a negative $4.5 \%$ currency impact. Latin American pricing boosted the geographic segments' growth by $5.5 \%$. Again, this rapid increase in prices was almost certainly enabled by high inflation in the region. However, this benefit was more than offset by a $7.5 \%$ negative currency impact which was removed from the organic growth figures. We estimate that the $4 \%$ total company organic sales growth would have once again been closer to $2 \%$ if the Latin American impact was removed. Therefore, we do not see much acceleration in ex-Latin America organic growth.
- Inventory DSI resumed its climb, jumping by more than 5 days versus the year-ago second quarter with all of the increase coming from finished goods. Management did not offer an explanation for the increase in the $10-\mathrm{Q}$ or the conference call. The 6/19 DSI figure of 77.4 compares to 72.2 and 71.7 in the $6 / 18$ and $6 / 17$ quarters, respectively which is more indication that the current inventory level is elevated. The fact that the raw materials and work-in-process components declined as a percentage of total inventories does not indicate that the company is gearing up for expected near-term demand. All these factors point to an increased risk that the company will have to discount inventories in future quarters to move them or cut production in the future to the detriment of future cost per unit.
- Operating cash flow for the twelve months ended $6 / 19$ increased by $3.3 \%$ after adjustment for voluntary pension contributions. However, the company also saw its payable days spike by 6 days over the year-ago quarter. We estimate that this benefit could have accounted for all of the increase in operating cash flow in the period. Trailing 12 -month capital spending fell to $2.4 \%$ of sales, the lowest level in several years. This provided all the observed increase in free cash flow. Meanwhile, the buyback continues to consume more than free cash after the dividend.


## Explanation of EQ Rating Scale

| 6- "Exceptionally Strong" | Indicates uncommonly conservative accounting policies to the point that revenue <br> and earnings are essentially understated relative to the company's peers. <br> Higher possibility of reporting positive earnings surprises |
| :--- | :--- |
| 5- "Strong" | Indicates the company has no areas of concern with its reported results and we <br> see very little risk of the company disappointing due to recent results being <br> overstated from aggressive reporting in recent periods. |
| 4- "Acceptable" | Indicates the company may have exhibited a minor "red flag", but the severity of <br> the issue is not yet a concern. Minimal risk of an earnings disappointment <br> resulting from previous earnings or cash flow overstatement |
| 3- "Minor Concern" | Indicates the company has exhibited either a larger number of or more serious <br> warning signs than companies receiving a 4. The likelihood of an immediate <br> earnings or cash flow disappointment is not considered to be high, but the signs <br> mentioned deserve a higher degree of attention in the future. |
| 2- "Weak" | Indicates the company's recently reported results have benefitted materially <br> from aggressive accounting. Follow up work should be performed to determine <br> the nature and extent of the problem. There is a possibility that upcoming <br> results could disappoint as the impact of unsustainable benefits disappears. |
| 1- "Strong Concerns" | Indicates that the company's recent results are significantly overstated and that <br> we view a disappointment in upcoming quarters is highly likely. |

In addition to the numerical rating, the EQ Review Rating may also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into the next quarter. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

## Key Points to Understand About the EQ Score

The EQ Review Rating is much more than a blind, quantitative scoring method. While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

The EQ Review Rating is not comparable to a traditional buy/sell rating. The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

## Disclosure

BTN Research is a research publication structured to provide analytical research to the financial community. Behind the Numbers, LLC is not rendering investment advice based on investment portfolios and is not registered as an investment adviser in any jurisdiction. Information included in this report is derived from many sources believed to be reliable (including SEC filings and other public records), but no representation is made that it is accurate or complete, or that errors, if discovered, will be corrected.

The authors of this report have not audited the financial statements of the companies discussed and do not represent that they are serving as independent public accountants with respect to them. They have not audited the statements and therefore do not express an opinion on them. Other CPAs, unaffiliated with Mr. Middleswart, may or may not have audited the financial statements. The authors also have not conducted a thorough "review" of the financial statements as defined by standards established by the AICPA.

This report is not intended, and shall not constitute, and nothing contained herein shall be construed as, an offer to sell or a solicitation of an offer to buy any securities referred to in this report, or a "BUY" or "SELL" recommendation. Rather, this research is intended to identify issues that investors should be aware of for them to assess their own opinion of positive or negative potential.

Behind the Numbers, LLC, its employees, its affiliated entities, and the accounts managed by them may have a position in, and from time-to-time purchase or sell any of the securities mentioned in this report. Initial positions will not be taken by any of the aforementioned parties until after the report is distributed to clients, unless otherwise disclosed. It is possible that a position could be held by Behind the Numbers, LLC, its employees, its affiliated entities, and the accounts managed by them for stocks that are mentioned in an update, or a BTN Thursday Thoughts.

