

Tobacco 2020 Outlook

Beyond noise: Continued resilience & More positive regulatory environment.

Into 2020 we are bullish on the Tobacco sector with a preference for BATS. We see 3 key drivers: 1) Another year of consistent earnings and cash flow supported by resilient combustibles profit growth, 2) Receding fears around NGP disruption and more [stringent US regulation](#), 3) Valuation appeal amid investors focus for value names. Our updated bottom-up analysis of the top 16 Nicotine markets continues to point to **5% industry profit pool growth CAGR19-25e**. For 2020 we expect CC EPS growth of 5.5% even though we expect a *top-line deceleration* in FY20e (3.5% vs 4.4% in FY19e) given a) tax increase in some major EMs and b) slower NGP growth (23% in FY20e vs 40% FY19e) driven by vapor market deceleration. At 12x PE20e (45% below EU Food/HPC/Bevs 21x), 10x EBITDA20e (25% below vs EU Food/HPC/Bevs 14x), 7% dividend yield 20e (vs 2.4%), EU Tobacco offers Value for resilient M/HSD CC EPS growth. Within our coverage, **we prefer BATS (OW) to PMI (N) and IMB (N).**

- **We prefer BATS (OW) to PMI (N) and IMB (N):** BATS offers **Value for 7% CC earnings growth**, continued deleveraging and positive development of US regulatory environment (on cigarettes and on NGP). **iQOS momentum** will continue to fuel PMI's outperforming 9% CC EPS growth, though we remain Neutral given the 40% premium to Tobacco peers and tax increases in its key EMs in FY20e. Despite IMB strong underperformance (-28% 1Y vs PMI -4%, BATS +9%), the **growing lag in NGP** increases the risk of important reinvestments. We remain Neutral given the continued resilience of EU cigarettes volume, but we will monitor iQOS progress in IMB's key European markets.
- **Combustibles resilient:** Following strong growth in FY19e (+1.9%) thanks to modest -2% volume decline in the EU, we expect BATS/IMB/PMI cigarettes growth to normalize to +1.1% in FY20e. The drag from 2020e tax increases in some major EMs should lead to lower volume (-4.4% vs -4.1% in FY19e). This should be offset by continued strong pricing (+5.8% vs +6.2% in FY19e) supporting profit growth.
- **NGP steady inroads:** In our [March-2019 deep-dive](#), we flagged the exaggerated fears of the market of a widespread disruption from NGP. NGP growth is slowing, owing to disappointing US vapor growth, increased regulatory scrutiny, and lower-than-expected progression of pod-based vapor systems in the EU. 2020 could prove a winning set up for incumbents as the industry faces [PMTA submissions in May](#).

Equity Ratings and Price Targets

Company	Ticker	Mkt Cap (\$ mn)	Price CCY	Price	Rating		Price Target			
					Cur	Prev	Cur	End Date	Prev	End Date
British American Tobacco	BATS LN	88,769.56	GBp	2,956	OW	n/c	3,600	Dec-20	n/c	n/c
Imperial Brands PLC	IMB LN	21,143.75	GBp	1,689	N	n/c	1,900	Dec-20	n/c	n/c
Philip Morris International	PM US	128,100.90	USD	82.38	N	n/c	86.00	Dec-20	n/c	n/c

Source: Company data, Bloomberg, J.P. Morgan estimates. n/c = no change. All prices as of 05 Dec 19.

See page 20 for analyst certification and important disclosures, including non-US analyst disclosures.

J.P. Morgan 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 this report. Investors should consider this report as only a single factor in making their investment decision.

European Consumer Goods and Beverages

Celine Pannuti, CFA ^{AC}

(44-20) 7134-7123

celine.pannuti@jpmorgan.com

Bloomberg JPMA PANNUTI <GO>

Samuel Vialla

(44-20) 7134-8804

samuel.vialla@jpmorgan.com

Edward G Hockin

(44-20) 7742-6937

edward.hockin@jpmorgan.com

J.P. Morgan Securities plc

Sector Specialist (Sales & Trading) contact details

Sophie L Warrick, CFA - Sales and Trading

(44-20) 7134-1423

sophie.l.warrick@jpmorgan.com

Temí Ladega - Sales and Trading

(44-20) 7134-2654

temi.ladega@jpmorgan.com

- **Positive evolution of regulatory environment:** In the US, we believe the [removal of the nicotine regulation](#) plan outweighs the risk on menthol cigarettes ban (which remains unlikely at a Federal level and at risk of litigation at the State level). The progression of NGP regulation ([May-2020 deadline](#), two products authorized by the FDA, [General Snus](#) and [iQOS](#)) underlines the establishment of a more regulated NGP environment, favoring big Tobacco players.
- **Estimates change:** We increase BATS EPS20e by +0.5% on stronger top-line growth (+4.1% vs +3.3% earlier; given continued strong cigarettes pricing and the share uptick in US vapor) and better CC operating profit growth (+5.1% vs +4.6% earlier thanks to US cigarettes pricing). We slightly reduce IMB EPS20e on FX. We increase PMI EPS19e/20e by +0.4%/0.6% on higher top-line (+6.7%/6.3% FY19/20e vs +6.7%/5.9% earlier) and higher PF Adj Op Income growth (+9.4% in FY20e vs +8.5% earlier).

Table of Contents

Executive Summary	4
Key Conclusions – How to invest in the sector? We prefer BATS.....	5
Point 1: Resilient cigarettes growth.....	6
Point 2: Positive evolution of US regulatory environment ...	7
Point 3: US Vapor - beyond ST disruption, we expect higher barriers to entry	8
Point 4: Two new categories in US NGP, Modern oral and Heated tobacco.....	9
Point 5: Continued progression of Heated tobacco volume	10
Point 6: M-HSD profit growth despite NGP Investments	11
Point 7: Valuation and Earnings.....	12
British American Tobacco	14
Imperial Brands PLC	16
Philip Morris International	18

Executive Summary

1) Disruption: not as disruptive as the market feared

Necessary & Welcome reset of US vapor

- Youth vaping uptick, EVALI disease in 2019 created a **necessary reset** of US vapor industry (retail value sales -22% since Summer 2019 peak as per Nielsen, JPMe -5% value decline in 2020e).
- The growing regulatory oversight on vapor (May-2020 deadline) is **favorable** for big Tobacco players given the costs and the complexity of PMTA process.
- As of April-2019, more than 99% of the 373 PMTAs were closed as insufficient to accept or file. Only 4 PMTAs were pending for deemed products, none of them for e-cigarette products.
- BATS flagged that, in US Vapor, the *“PMTA will be a significant hurdle for many current players, opening up a \$1bn contestable space.”*
- BATS's PMTA on Vuse Solo vapor product has been filed for substantive scientific review in Nov-2019. JT's Logic vapor product under review following its application in Aug-2019 (as per [WSJ](#))

Strong resilience of cigarettes in 2019e

- In our March-2019 deep-dive, we had laid out the drivers of cigarettes revenue growth resilience. Through 2019, we were **positively surprised** by the better-than-expected cigarettes growth (we revised BATS/IMB/PMI average cigarettes growth for 2019e to +1.9% from +1.5% thanks to pricing) with a beat in EU cigarettes (just down -2% in 9M19 despite IQOS uptick)
- Cigarettes resiliency is driven by a) cigarettes good affordability (excluding Australia, the UK, France), b) the rationale taxation and pricing environment.
- We expect **+1.2% average 2020-21-22e growth** (vs 2013-19e +1.7%) for cigarettes revenue pool in Top 16 markets with DM -0.3% (vs +0.8% 2013-19e; with volume deceleration driven by NGP) and EM +5.1% (accelerating from 4.0% thanks to lower drag from tax increases, following strong taxes increase in EM in 2014-18).

Favorable evolution of DM regulatory environment

- US Cigarettes: Overall, the **removal of the nicotine regulation plan outweighs** the risk on menthol cigarettes ban. An increase of legal smoking age at 21y old at a federal level will represent JPMe 1.5% volume downside risk.
- US Next Generation Products: May-2020 deadline and the two FDA authorization (General Snus MRTP, IQOS PMTA) underlines FDA's willingness to authorize 'Appropriate for the protection of public health' product and the built-up of future higher regulatory barriers-to-entry in US NGP market.
- EU: The lower taxation of heated tobacco enables PMI to increase the affordability of IQOS sticks vs cigarettes (IQOS 20% cheaper than Marlboro in major EU markets vs 12% in July-2019).

2) BATS (OW) and PMI (N): Sustainable HSD Earnings growth & M-HSD dividend yield

HSD Earnings growth

- BATS&PMI continues to deliver MSD top-line growth thanks to 2%+ cigarettes growth and growth of their NGP portfolio.
- The profit stream from cigarettes lead to HSD EBIT growth despite continued incremental investments in NGP.

Secure dividends and deleveraging underway

- BATS&PMI 6.6% dividend yield 20e is secured given the progress on deleveraging (BATS -0.4x to 3.6x 20e [company definition]) and lower payout ratio (PMI 87% 20e)

3) Divergent earnings trajectory for IMB (N)

Widening lag in NGP portfolio

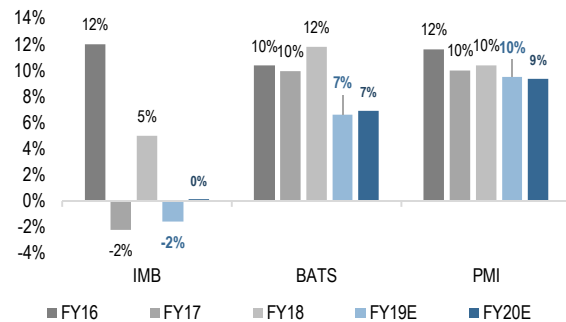
- **Lower top-line:** flat in 20e vs BATS&PMI 5% owing to lower performance in tobacco (+0.2% vs 1.6% in 20e) and lagging NGP performance (+3% vs BATS +38% and PMI +30% in 20e)
- Growing lag in NGP (weak performance in vapor and limited exposure to Heated tobacco) creates **uncertainty on earnings trajectory** given the risk of important NGP incremental investments
- The c15% discount EV/EBITDA20e to BATS (7.3x vs 8.7x ex ITC) is justified given the reinvestment risks.

We remain **Neutral given the continued resilience of EU cigarettes volume** (Europe Tobacco & NGP represents 45% of Adj operating profit FY19), but we will monitor IQOS progress in IMB's key European markets (Germany, United Kingdom, Spain, France).

Key Conclusions – How to invest in the sector? We prefer BATS

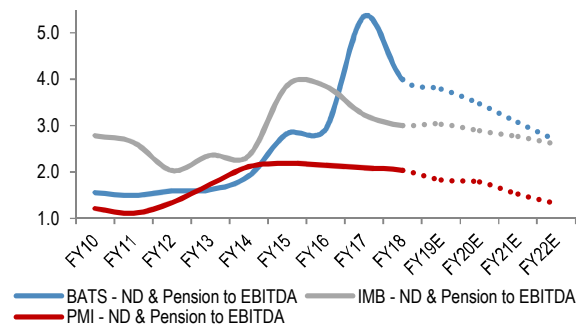
- **BATS (OW) : Best combination of value and resiliency**
- Our modelling leads to **7% CC EPS growth with 8% FCF growth sustaining its DPS as well as a steady deleveraging of the balance sheet**. JPMc 2.4x ND/EBITDA by 2022 with a 5% DPS CAGR 18-22E.
- **NGP**: Under current dynamics, **we do not expect BATS to reach its NGPS sales target of £5bn by 2023/24**; though the acceleration of FDA agenda provides upside risks.
- **Regulation**: **We do not model any impact from US regulation** (menthol cigarettes and NGP May-2020 deadline) as we take the view of an unlikely impact through 2025.
- **Valuation**: BATS trades at 9x PE20E (8x exITC), 9.5x EV/EBITDA20E (8.5x ex-ITC), 7.5% dividend yield.
- **IMB (N): NGP investment risks remains high**
- We model **2% CC EPS growth** (vs 5% in March-19, cut driven by slow progress in NGP and tax rate increase) **below the MT 4-8% target**. While management gave up the 10%+DPS growth policy, cash position remains stretched with low level of FCF post dividends and slow deleveraging.
- **NGP**: Under current dynamics, **we model £290m by FY20 (below the £0.3-1.5bn target)** with potential lags in technology being the key risks to NGP. IMB has not yet shared details on its PMTA applications in the US.
- **Regulation**: **We do not model any impact from US regulation** (menthol cigarettes and NGP May-2020 deadline) through 2025.
- **Valuation**: IMB trades at 6x PE20E, 7.5x EV/EBITDA20E, 12.5% dividend yield.
- **PMI (N) : Risk rewards equation not evident**
- PMI offers the **best earnings growth** (9% CAGR18-22E) given its superior combustibles portfolio and its highly profitable HTU exposure.
- **NGP**: We do not expect PMI to reach its 90-100bn HTU target by 2021 (JPMc 85bn) as there is, for now, limited evidence of iQOS uptick in EM. Our NGP revenues estimates do not include MESH (vapor product) launch.
- **Balanced risk/reward**: While we expect iQOS growth in EU to continue to drive profit, we foresee combustible growth to be more volatile EM growth given tax increases in major EMs (Indonesia 10% of PMI's net revenues, Philippines c5%). Given the 40% premium to Tobacco peers, we remain Neutral
- **Valuation**: PMI trades at 15x PE20E, 11.5x EV/EBITDA20E, 6% dividend yield.

Figure 1: EU Tobacco, CC EPS growth



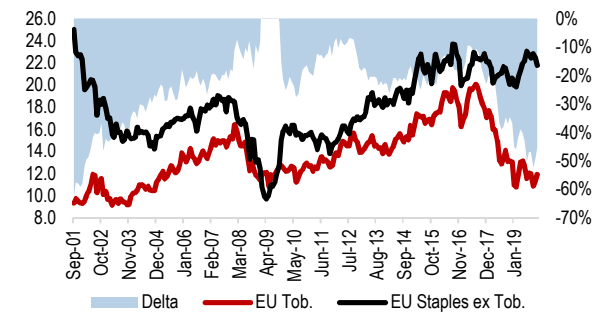
Source: Company reports and J.P. Morgan estimates.

Figure 2: EU Tobacco, Net Debt to EBITDA



Source: Company reports and J.P. Morgan estimates.

Figure 3: EU Tobacco, PE NTM to Europe Staples



Source: Datastream. Tob.: Tobacco

Point 1: Resilient cigarettes growth

2019E 2% Cigarettes growth, Normalization in 2020 to 1%

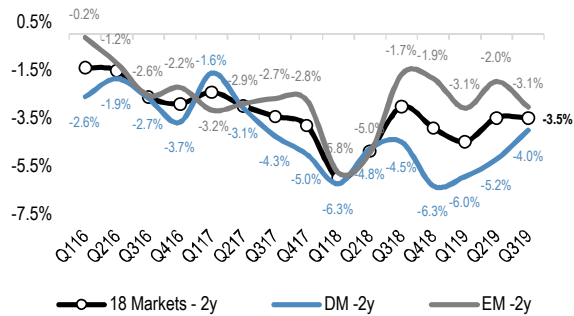
Exceptional resilience in 2019

- Rational pricing and taxation environment led to **strong price/mix** (6.2% for BATS/IMB/PMI FY19e vs 5.4% in FY18)
- Volume growth came-in, overall, **above our expectations**, (to -4.1% for BATS/IMB/PMI) driven by an improvement of volume in EMS and resilient EU cigarettes volume -2% in 2019E

Normalization to 1% in 2020E for BATS/IMB/PMI

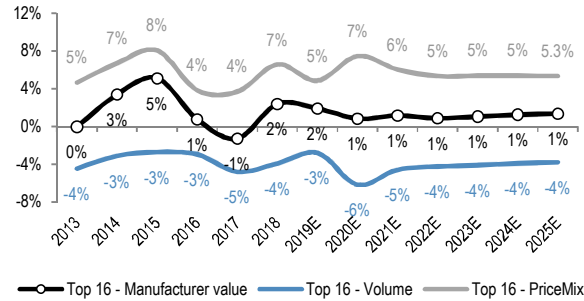
- While we expected continued rational pricing behavior (5.7% FY20e for BATS/IMB/PMI), we foresee a growth normalization to 1% given tax increases in major EMs (Indonesia, Philippines, Mexico), leading to lower volume (-4.4% in FY20e for BATS/IMB/PMI)
- We foresee slightly better volume in the US (-4.8% vs -5.5% in 2019E) given the lower speed of switch to NGPs.

Figure 6: Quarterly cigarettes volume growth (2y average)



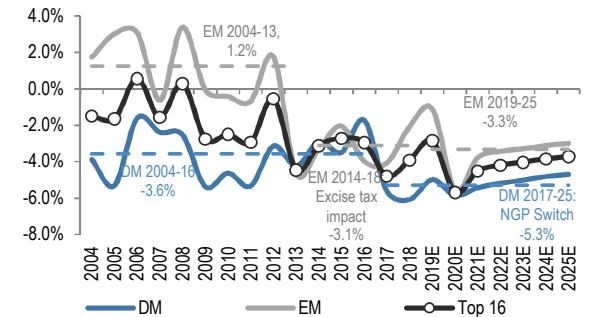
Source: PMI and Altria reports.

Figure 4: Cigarettes resilient revenues pool



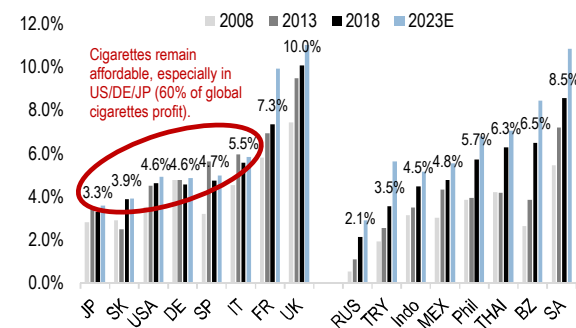
Source: Euromonitor, Company reports and J.P. Morgan estimates.

Figure 5: Cigarettes volume growth, EM and DM



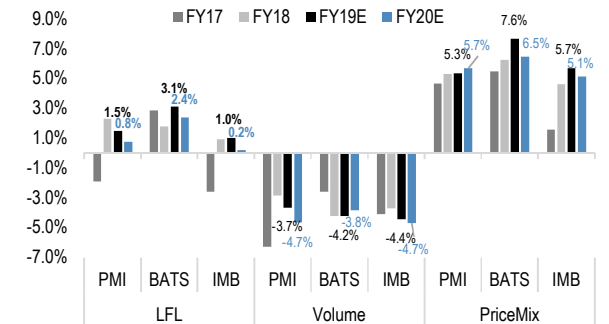
Source: Euromonitor, Company reports and J.P. Morgan estimates.

Figure 7: Cigarettes affordability (Price of a pack in % of daily GDP per capita)



Source: Company reports and J.P. Morgan estimates.

Figure 8: Cigarettes organic growth



Source: Company reports and J.P. Morgan estimates.

Point 2: Positive evolution of US regulatory environment

US regulatory environment more positive for Tobacco industry

Three evolutions on cigarettes regulatory environment

- 1) **Nicotine regulation:** the US Department of HHS has dropped its plan to reduce nicotine in cigarettes. → **Positive**
- 2) **18-21yrs old:** We estimate that there 1m of smokers aged 18-19-20yrs old in the US in 2018 (<3% of total adult smokers). 52% of US population will be covered by the 21y legal age regulation by end of 2019. → **-1.5% volume impact**
- 3) **Menthol cigarettes:** Massachusetts State will be the first US State to end the sale of all flavored tobacco products (including menthol cigarettes) → **A federal ban (currently unlikely) will lead to MSD EBIT downside risk on BATS**

2020: NGP Regulation to favor incumbent players

- Two major milestones in 2019 with the first MRTP (General Snus) and iQOS PMTA (first heated tobacco product authorized as 'appropriate for protection of public health')
- Product application deadline moved to May-2020 (vs Aug-2022). We expect major Nicotine players to apply by May-2020.

Table 2: Agenda of US Department of Health and Human Services (HHS)

Date	Agenda Stage	Title
Spring 2019	Proposed	Modified Risk Tobacco Product Applications
Spring 2019	Proposed	Required Warnings for Cigarette Packages and Advertisements
Spring 2019	Proposed	Requirements for Tobacco Product Manufacturing Practice
Spring 2019	Proposed	Tobacco Product Standard for Characterizing Flavors in Cigars
Spring 2019	Proposed	Tobacco Product Standard for Nicotine Level of Certain Tobacco Products; Request for Information
Fall 2019	Proposed	Modified Risk Tobacco Product Applications
Fall 2019	Final Rule	Required Warnings for Cigarette Packages and Advertisements
Fall 2019	Proposed	Requirements for Tobacco Product Manufacturing Practice
Fall 2019	Proposed	Tobacco Product Standard for Characterizing Flavors in Cigars

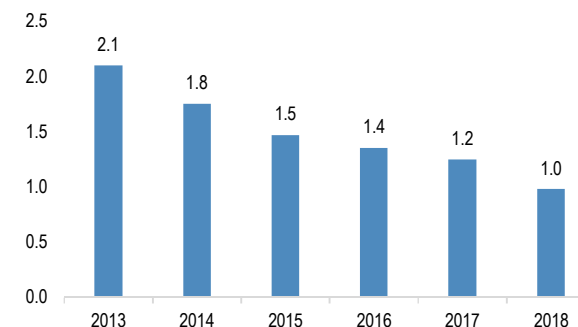
Source: RegInfo

Table 1: US Menthol ban, EBIT impact (% of Group EBIT)

		Menthol smokers switching to Non-menthol ciga				
		75%	80%	85%	90%	95%
BATS	Brand loyalty	-6%	-4%	-3%	-2%	-1%
	Brand switch	-14%	-13%	-13%	-12%	-12%
IMB	Brand loyalty	-4%	-3%	-2%	-1%	-1%
	Brand switch	-3%	-2%	-2%	-1%	-1%

Source: Company reports and J.P. Morgan estimates. Brand loyalty: The menthol smoker switches to the non-menthol version of the menthol brand.

Figure 9: US Smokers aged 18-19-20y old (m)



Source: Monitoringthefuture and J.P. Morgan estimates.

Figure 10: Products authorized by the FDA

- Modified Risk Tobacco Product (MRTP):**
 - Oral tobacco: General Snus authorized in Oct-2019, after TPSAC on Feb-2019 (MRTPA filed in Aug-2014)
- Premarket Tobacco Application (PMTA):**
 - Oral tobacco: General Snus authorized in Nov-2015
 - Heated tobacco: iQOS authorized in April-2019
- Substantial Equivalence (SE):**
 - Heated tobacco: BATS' Eclipse authorized in July-2018

Source: Company reports.

Figure 11: Pipeline of products application at the FDA

- Modified Risk Tobacco Product (MRTP):**
 - Oral tobacco: BATS' Camel Snus under review (TPSAC on Sept-2018). Altria's Copenhagen Snuff under review (TPSAC on Feb-2019)
 - Heated tobacco: PMI's iQOS under review (TPSAC on Jan-2018). BATS' Glo MRTP application scheduled for July-2020
 - Vapor: None
 - Cigarettes: 22nd Century Group: low-nicotine cigarette VLN under review, filed in July-2019
- Premarket Tobacco Application (PMTA):**
 - Oral tobacco: BATS' Camel Snus under review. BATS will submit VELO. SWMA will submit ZYN.
 - Heated tobacco: None
 - Vapor: JT's Logic **under review**, application in Aug-2019 (as per [WSJ](#)). BATS's Vusc Solo **under review**, application on Oct-2019. Juul plans to submit application by May-2020 (as per [WSJ](#)). Njoy aims to submit application by Jan-2020 (as per [WSJ](#))
- Substantial Equivalence (SE):**
 - Heated tobacco: BATS's Glo under review. IMB sees an opportunity in iQOS PMTA to launch SE application for its ID sticks.

Source: Company reports.

Point 3: US Vapor - beyond ST disruption, we expect higher barriers to entry

Disruption in the US vapor market to continue in 2020.

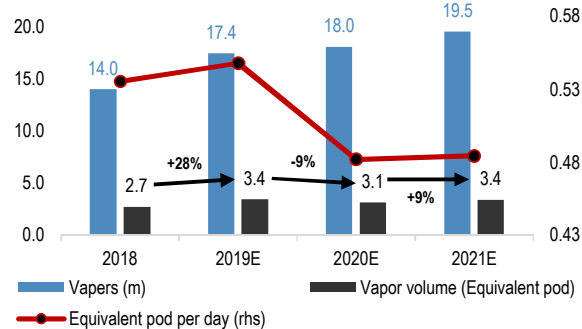
US Vapor: -22% decline from Summer peak due to

- 1) regulatory pressure to solve the continued youth vaping uptick (28% of US high-school students used vapor products within the last 30 days),
- 2) 2.3k cases of EVALI (e-vapor associated lung injury),
- 3) States & localities restricting the sale of flavored vapor products

Uncertainty on growth outlook and share trends

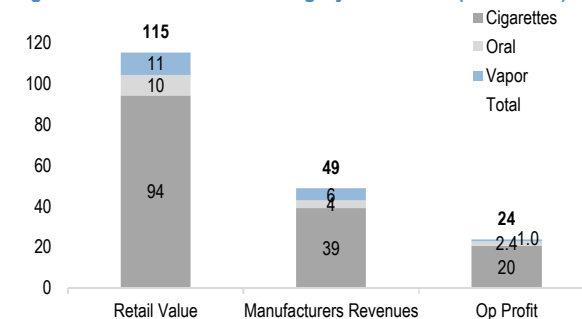
- We expect vapor market growth due to **decline by -5%** in 2020E with volume -9%.
- While we foresee continued volatile market share evolution, we see **big incumbents players (esp. BATS) well positioned to capture share** from smaller players given the complexity and the costs of FDA product applications.

Figure 14: Drivers of Vapor volume in the US



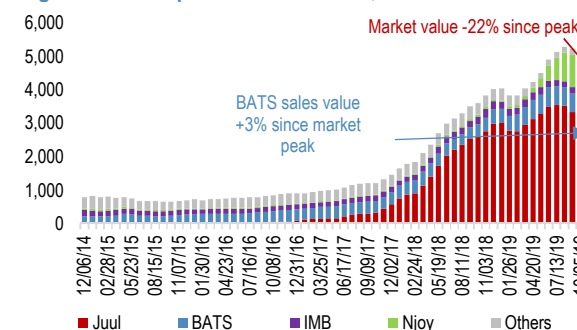
Source: Company reports and J.P. Morgan estimates.

Figure 12: Size of Nicotine category in the USA (\$bn 2019E)



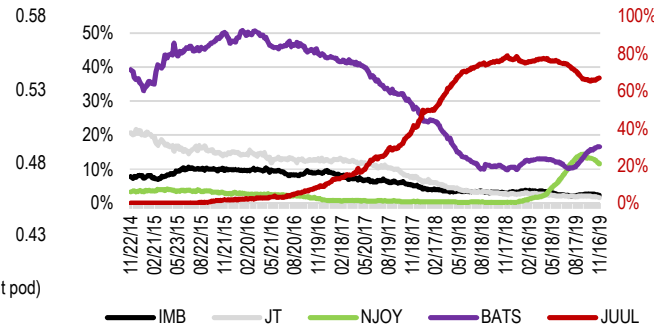
Source: Euromonitor, company reports and J.P. Morgan estimates.

Figure 13: US Vapor annualized sales, USD million



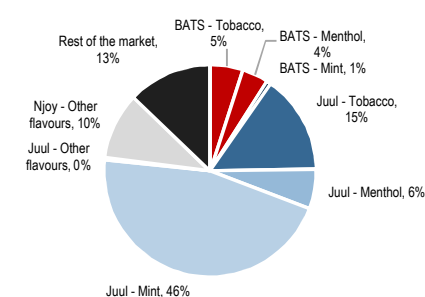
Source: The Nielsen Co.

Figure 15: US Vapor value market share, Weekly



Source: The Nielsen Co. Juul on the right scale.

Figure 16: US Vapor refill flavors, Value share (last 4 week)



Source: The Nielsen Co. Other flavors = Refills which are not Tobacco, nor Mint, nor Menthol flavored.

Point 4: Two new categories in US NGP, Modern oral and Heated tobacco

Booming oral nicotine vs our cautious view on Heated tobacco uptick

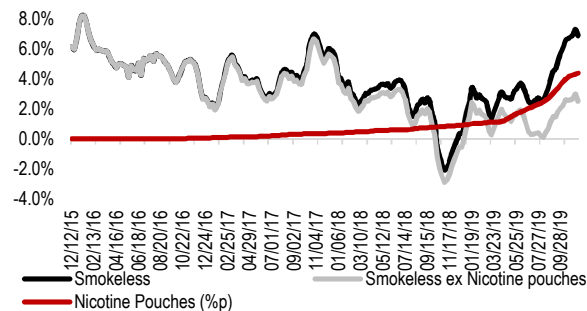
Modern oral uptick: 4%p contribution to US smokeless growth

- Nicotine pouches category reached \$350m annualized sales in November 2019, c4.5x November 2018 value (Nielsen)
- Major players: Zyn from SWMA (60k+ stores as of Q319, 9M19 and 31m cans), Velo from BATS (75k stores as of Nov-19, 100k by YE19), On! by Altria (50m cans capacity by mid-2020)

Heated Tobacco: 2% penetration by 2025

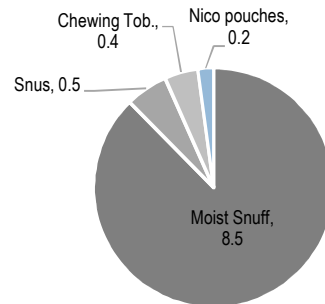
- Conservative assumptions** on volume penetration given 1) unattractive economics, 2) 'cigarettes-like' advertising regulation, 3) US smokers preference for high-tar cigarettes, 4) existence of alternatives (vapor, oral nicotine), 5) limited evidence of US smokers' interest in heated tobacco
- Products: iQOS PMTA since May-2019, BATS' glo product under scientific review for Substantial Equivalence

Figure 19: US Smokeless, Retail value growth (with and excluding Nicotine pouches)



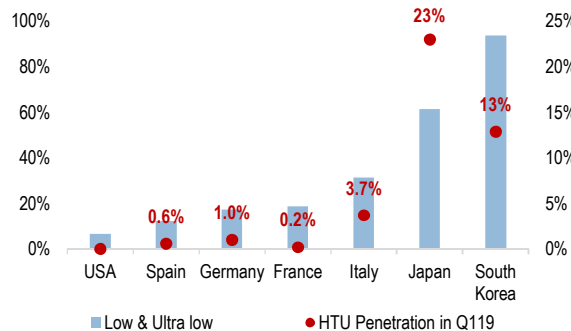
Source: The Nielsen Co. Q419: Assuming stable sales for the next weeks until 31-Dec-2019

Figure 17: US Oral nicotine market, Retail value (2019E,\$bn)



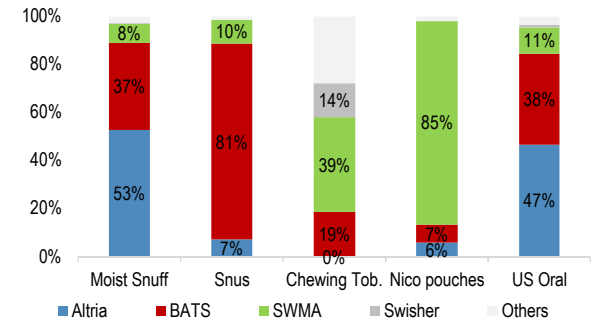
Source: Euromonitor, company reports and J.P. Morgan estimates. For Nicotine pouches: last week retail tracked valued x 52.

Figure 20: Low & Ultra low tar cigarettes penetration (in % of cigarettes volume) vs Heated Tobacco Unit penetration (in % of HTU and cigarettes sold)



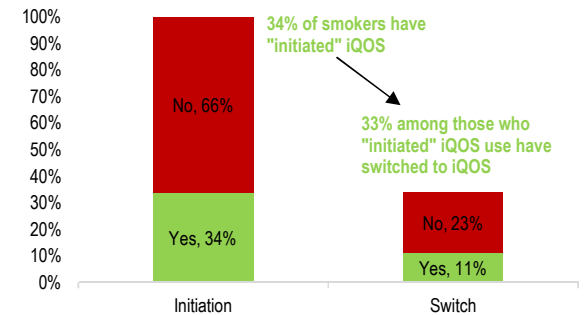
Source: Euromonitor, Company reports and J.P. Morgan. Low is 4-6 mg of tar per stick, Ultra-Low is < 4 mg.

Figure 18: US Oral nicotine market, Retail value (\$bn) and Market share



Source: Euromonitor, The Nielsen Co. 2018 volume share for Moist Snuff, Snus, Chewing Tobacco. Last Nielsen 4-week period value share for Nicotine Pouches.

Figure 21: Philip Morris study on iQOS initiation and Switch to iQOS among 1,106 US smokers



Source: Company reports and J.P. Morgan. Philip Morris PBA-07 Study as per FDA Review of iQOS PMTA. Initiation = Consuming 100+ Heatsticks during the 6-week observational period. Switch= Heatsticks comprising 70%+ of total product use during the last week of the observational period.

Point 5: Continued progression of Heated tobacco volume

Volume uptick driven by geographical expansion and favorable affordability

Progression in Europe and Japan, decline in S. Korea

- Europe: Uptick in EU to 2.5% (+130bps YoY) and in Russia to 4.0% (+280bps YoY)
- Japan: Penetration progression at slow pace
- S. Korea: Lower heated tobacco penetration given the negative news flow on the category from the Korean FDA

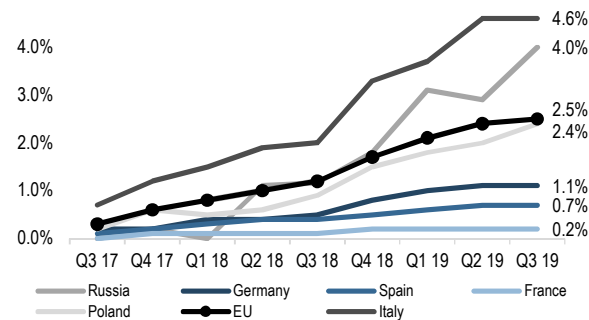
PMI outperformance

- c80% global share thanks to first-mover advantage (in 51 markets as of Q319) combined with resilient share within the competitive Japanese HTU market

Affordability improvement

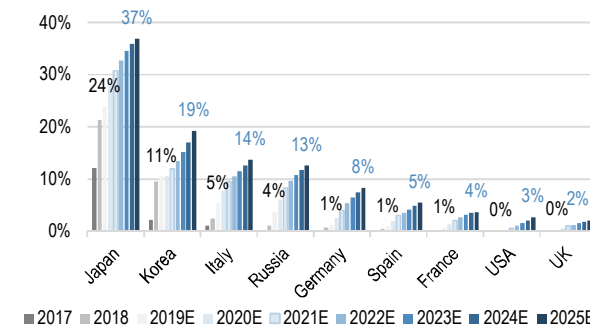
- Lower taxation on HTU vs cigarettes and lower up-front costs (post the completion of major infrastructure investments) enables PMI to reduce retail price of iQOS in Western and Eastern Europe
- iQOS 20% cheaper than Marlboro (premium-priced cigarettes) in major EU markets, c5% in Japan, c15% in Russia

Figure 24: iQOS penetration of HTU + cigarettes volume



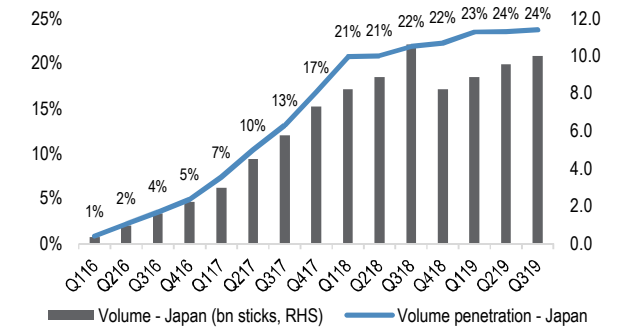
Source: Company reports.

Figure 22: Heated tobacco volume penetration (within Heated tobacco and cigarettes sticks consumed)



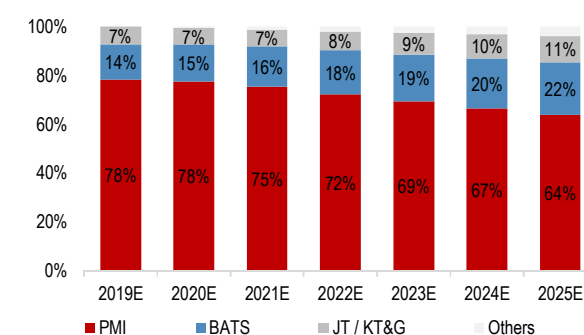
Source: Company reports and J.P. Morgan estimates.

Figure 23: Japan HTU market volume and penetration %



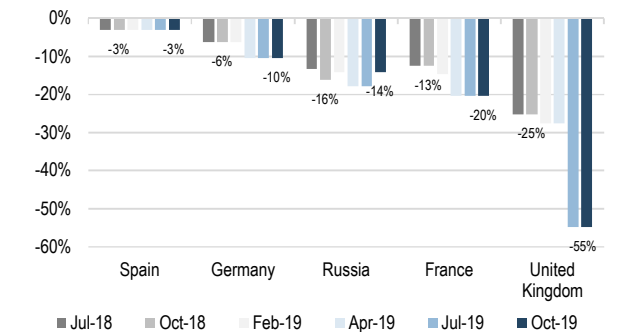
Source: Company reports and J.P. Morgan estimates.

Figure 25: Value share within Heated tobacco market, Top 16 Markets



Source: Company reports and J.P. Morgan estimates.

Figure 26: Heated tobacco affordability is increasing in Europe (Pack of iQOS retail price vs Marlboro)



Source: PMI reports.

Point 6: M-HSD profit growth despite NGP Investments

Nicotine industry profit pool growing MSD

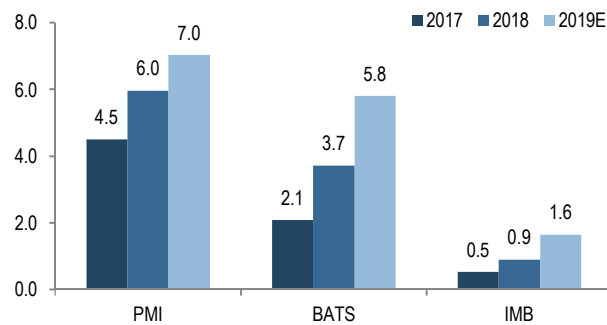
Continued growth of Cigarettes profit

- Profit resiliency highly dependent on combustible pricing. In 2019, we see no signs of pricing deceleration given a) Cigarettes affordability, b) the consolidation of the market, 3) rationale tax environment.

NGP profit driver

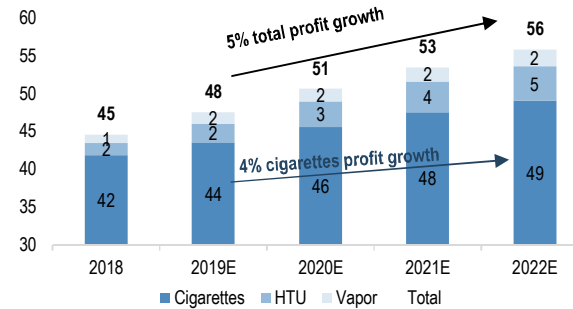
- In the MT, we see HTU margins above Combustibles at c50-60% and Vape margins at c20-25% though this could be upset by changes to excise in these categories.
- Heated tobacco:** While NGP investments continue to drag PMI profit in 2019e, we have seen evidence of role of these up-front investments in the EU. Post initial investments (EU profit -5% in FY17, +3% in FY18), PMI reported +17% CC Op.Profit growth in EU in 9M19 thanks to iQOS profitability.
- Vapor:** The lack of consolidation, the technology race and the regulation scrutiny limits the visibility on vapor profit pool growth. The expected consolidation following the May-2020 deadline could be a game changer, creating higher barriers to entry.

Figure 29: NGP Investments (\$bn)



Source: Company reports and J.P. Morgan estimates.

Figure 27: MSD Operating profit growth, fueled by cigarettes



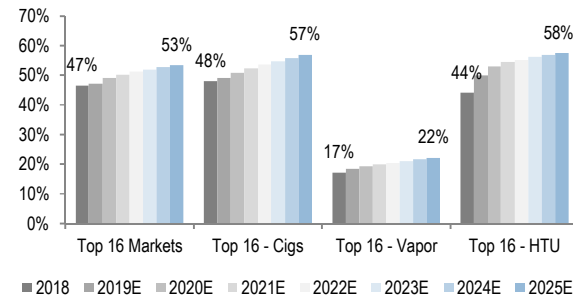
Source: Company reports and J.P. Morgan estimates.

Figure 28: Drivers of Cigarettes profit, Top 16 Markets

	Unit	2019E	2022E	19-22E
Volume	bn sticks	1,516	1,304	-4.9%
x	x	x	x	x
Retail value	\$bn	326	336	1.0%
Tax & Trade	\$bn	237	244	1.0%
Revenues	\$bn	89	92	1.0%
Op. costs	\$bn	45	42	-2.2%
Op. profit	\$bn	44	49	4.1%
Margin	%(bps/y)	49%	54%	154
Retail value	\$ per Pack	4.30	5.15	6.2%
Tax & Trade	\$ per Pack	3.13	3.74	6.2%
Revenues	\$ per Pack	1.17	1.40	6.2%
Op. costs	\$ per Pack	0.60	0.65	2.9%
Op. profit	\$ per Pack	0.57	0.75	9.4%

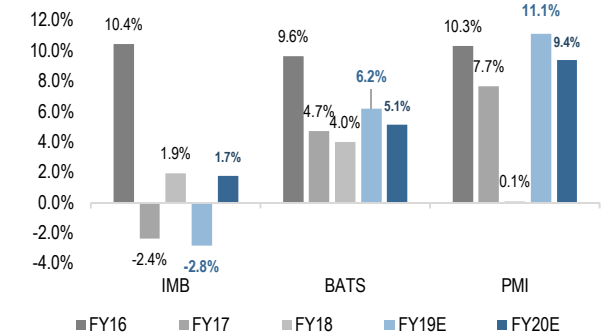
Source: Company reports and J.P. Morgan estimates.

Figure 30: Operating margin, Top 16 Markets



Source: Company reports and J.P. Morgan estimates.

Figure 31: Constant Currency Operating profit growth



Source: Company reports and J.P. Morgan estimates.

Point 7: Valuation and Earnings

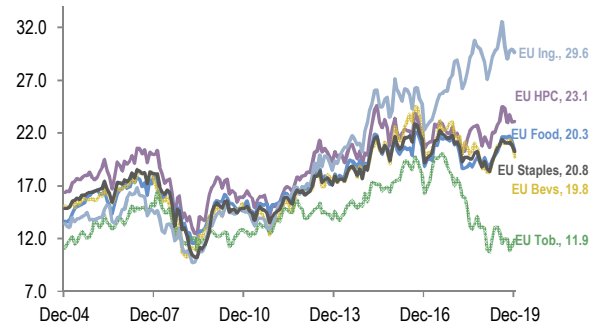
Valuation remains depressed despite resilient earnings and positive evolution of regulatory environment.

- EU Tobacco currently trades at 12x PE12m (-c40% vs Jul-17 peak and compares with 5y average 16.1x). EU Tobacco trades at an -18% discount to MSCI Europe (vs 5y average premium +11%).
- Valuation likely to be supported by cycle rotation (preference for Value stocks in the Recovery phase), a theme we have seen starting to play out (currently trading c40% PE discount to Staples, vs Oct-19 peak of c50%).

Consensus

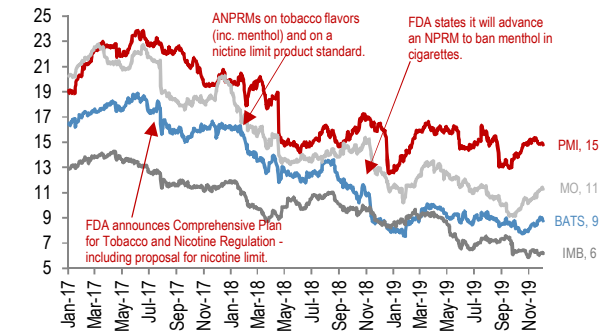
- We remain optimistic on BATS (OW), despite slightly lower FY20e expectations vs consensus (on topline, likely FX).
- In the short term, we prefer PMI (N) (on JPMe ahead of consensus EPS20e) to IMB (N) (caution on NGP growth/reinvestments) despite relative valuation premium given IQOS momentum whilst the visibility on IMB EPS growth remains low.

Figure 32: EU Staples, PE 12m forward by sub-sector



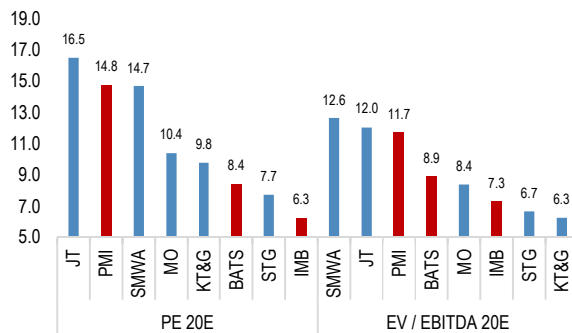
Source: DataStream.

Figure 33: Tobacco PE12m de-rating driven by FDA regulatory news



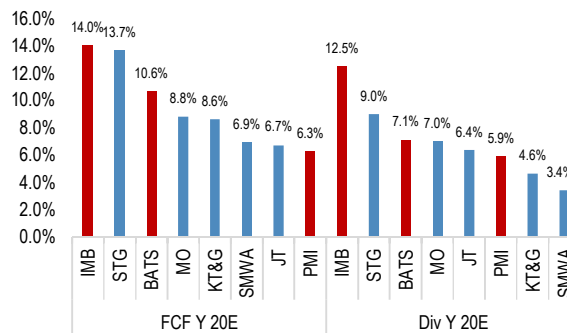
Source: Bloomberg.

Figure 34: Global Tobacco companies, PE20e, EV/EBITDA20e



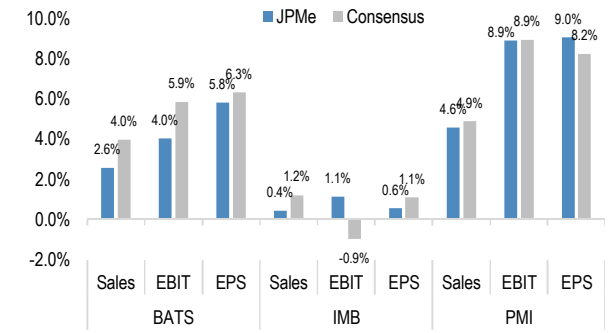
Source: Company reports, Bloomberg and J.P. Morgan estimates.

Figure 35: Global Tobacco companies, Div & FCF yield



Source: Company reports, Bloomberg and J.P. Morgan estimates.

Figure 36: JPMe vs Consensus, CAGR FY19-21e



Source: J.P. Morgan estimates and Bloomberg consensus.

Table 3: Tobacco summary

		FY16	H117	H217	FY17	H118	H218	FY18	H119	H219E	FY19E	FY20E
OG Topline	IMB	-1%	-6%	0%	-3%	-2%	6%	2%	2%	2%	2.2%	0.3%
	BATS	5%	2%	3%	3%	2%	5%	4%	4%	4%	4.2%	4.1%
	PMI	4%	4%	14%	9%	8%	0%	3%	6%	7%	6.7%	6.3%
	Average	3%	0%	6%	3%	3%	4%	3%	4%	4%	4.4%	3.5%
Combustibles OG topline	IMB	-1%	-6%	0%	-3%	-2%	3%	1%	0%	2%	1.0%	0.2%
	BATS	5%	2%	3%	3%	0%	4%	2%	3%	3%	3.1%	2.4%
	PMI	-3%	-2%	-2%	-2%	1%	4%	2%	2%	1%	1.5%	0.8%
	Average	0%	-2%	1%	-1%	0%	4%	2%	2%	2%	1.9%	1.1%
Combustibles volume	IMB	-7%	-6%	-3%	-4%	-2%	-5%	-4%	-7%	-2%	-4.4%	-4.7%
	BATS	-1%	-6%	1%	-3%	-3%	-5%	-4%	-4%	-4%	-4.2%	-3.8%
	PMI	-4%	-9%	-3%	-6%	-3%	-2%	-3%	-2%	-6%	-3.7%	-4.7%
	Average	-4%	-7%	-2%	-4.3%	-3%	-4%	-3.6%	-4%	-4%	-4.1%	-4.4%
Combustibles price/mix	IMB	7%	0%	3%	2%	0%	9%	5%	6%	5%	5.7%	5.1%
	BATS	6%	7%	3%	5%	3%	10%	6%	7%	8%	7.6%	6.5%
	PMI	1%	8%	2%	5%	4%	6%	5%	4%	7%	5.3%	5.8%
	Average	5%	5%	2%	3.9%	2%	8%	5.4%	6%	6%	6.2%	5.8%
NGP growth	IMB								247%	-8%	49.2%	2.5%
	BATS					168%	69%	104%	27%	39%	33.6%	37.8%
	PMI		484%	385%	409%	96%	-23%	11%	30%	46%	38.0%	29.8%
	Average		484%	385%	409%	132%	23%	58%	102%	26%	40.3%	23.3%
NGP contribution	IMB								3%	0%	1.2%	0.1%
	BATS					2%	1%	2%	1%	1%	1.2%	1.7%
	PMI		7%	15%	11%	8%	-4%	1%	4%	6%	5.2%	5.4%
	Average		7%	15%	11%	5%	-1%	1%	3%	2%	2.5%	2.4%
Organic operating profit	IMB	10%	-8%	3%	-2%	-3%	6%	2%	-2%	-4%	-2.8%	1.7%
	BATS	10%	3%	4%	5%	2%	5%	4%	6%	6%	6.2%	5.1%
	PMI	10%	2%	14%	8%	4%	-3%	0%	13%	10%	11.1%	9.4%
	Average	10%	-1%	7%	3%	1%	3%	2%	6%	4%	4.8%	5.4%
Adj. EPS growth	IMB	17%	8%	6%	7%	-6%	9%	2%	1%	2%	0.4%	-1.8%
	BATS	19%	21%	10%	15%	2%	8%	5%	9%	7%	7.9%	4.6%
	PMI	1%	0%	11%	5%	13%	4%	8%	6%	3%	6.6%	8.7%
	Average	12%	10%	9%	9%	3%	7%	5%	5%	4%	5.0%	3.8%
EPS CC growth	IMB	12%	-6%	2%	-2%	-1%	11%	5%	-1%	-2%	-1.6%	0.1%
	BATS	10%	6%	12%	10%	10%	13%	12%	7%	6%	6.6%	6.9%
	PMI	12%	5%	15%	10%	10%	11%	10%	15%	4%	9.5%	9.4%
	Average	11%	2%	10%	6%	6%	12%	9%	7%	3%	4.9%	5.5%

Source: Company reports, J.P. Morgan estimates.

British American Tobacco

Overweight

Company Data	
Shares O/S (mn)	2,292
52-week range (p)	3,222-2,337
Market cap (\$ mn)	88,769.56
Exchange rate	76.31
Free float(%)	99.9%
3M - Avg daily vol (mn)	3.03
3M - Avg daily val (\$ mn)	114.3
Volatility (90 Day)	25
Index	MSCI Europe
BBG BUY HOLD SELL	15 5 3

British American Tobacco (BATS.L;BATS LN)

Year-end Dec (£)	FY17A	FY18A	FY19E	FY20E (Prev)	FY20E (Curr)	FY21E (Prev)	FY21E (Curr)
Revenue (£ mn)	20,034	24,312	25,662	25,693	25,893	26,760	26,998
Gross margin	-	-	-	-	-	-	-
EBITDA margin	43.8%	46.4%	47.1%	47.6%	48.0%	48.0%	48.4%
Adj. net income (£ mn)	5,834	6,801	7,341	7,639	7,680	8,176	8,218
Adj. EPS (p)	284.45	296.73	320.29	333.31	335.08	356.73	358.54
BBG EPS (p)	280.60	290.90	321.00	-	341.60	-	362.90
Reported EPS (p)	284.45	296.73	320.29	333.31	335.08	356.73	358.54
Dividend yield	6.6%	6.9%	7.1%	7.3%	7.4%	7.8%	7.8%
Adj. P/E	10.4	10.0	9.2	8.9	8.8	8.3	8.2
EV/EBITDA	15.9	10.8	10.0	9.6	9.5	0.0	0.0

Source: Company data, Bloomberg, J.P. Morgan estimates.

Investment Thesis, Valuation and Risks

British American Tobacco (Overweight; Price Target: 3,600p)

Investment Thesis

BATS is a leading company in the global tobacco industry with a business mix that is heavily exposed to emerging markets. In our view, it offers investors a combination of strong brands, good management and resilient EPS and DPS growth. Over the medium term, we believe that the combination of these factors together with a strong positioning in NGPs will support a, so far, undemanding valuation. We rate the stock Overweight.

Valuation

Our Dec-20 TP of £36 is obtained by applying a 10% premium to Tobacco peers (PMI/IMB/MO/JT) on PE20E (11x), EV/EBITDA20E (9x) and dividend yield 20E (7.7%).

Risks to Rating and Price Target

Downside risks include: 1) faster-than-anticipated industry volume declines, 2) price competition in key markets (e.g. US, Russia, WE), 3) deterioration of macroeconomic conditions and FX depreciation in emerging markets (particularly vs. the dollar), and 4) regulation and litigation risks including Canada, US menthol and Natural American Spirit.

British American Tobacco: Summary of Financials

Income Statement						Cash Flow Statement					
	FY17A	FY18A	FY19E	FY20E	FY21E		FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	20,034	24,312	25,662	25,893	26,998	Cash flow from operating activities	4,316	8,788	7,265	8,522	9,172
COGS	-	-	-	-	-	o/w Depreciation & amortization	902	1,038	1,096	1,106	1,153
Gross profit	-	-	-	-	-	o/w Changes in working capital	(72)	433	(630)	(180)	(131)
SG&A	-	-	-	-	-	Cash flow from investing activities	(18,627)	(1,073)	(897)	(905)	(945)
Adj. EBITDA	8,765	11,274	12,092	12,442	13,056	o/w Capital expenditure	(978)	(943)	(937)	(945)	(985)
D&A	(772)	(927)	(978)	(987)	(1,029)	as % of sales	4.9%	3.9%	3.7%	3.7%	3.7%
Adj. EBIT	7,993	10,347	11,113	11,454	12,026	Cash flow from financing activities	15,873	(8,071)	(6,871)	(7,026)	(7,231)
Net Interest	(889)	(1,385)	(1,526)	(1,451)	(1,359)	o/w Dividends paid	(3,626)	(4,489)	(4,871)	(5,026)	(5,231)
Adj. PBT	7,104	8,962	9,587	10,004	10,668	o/w Shares issued/(repurchased)	(205)	(150)	0	0	0
Tax	(2,107)	(2,364)	(2,493)	(2,601)	(2,774)	o/w Net debt issued/(repaid)	20,110	(3,485)	(2,000)	(2,000)	(2,000)
Minority Interest	(175)	(184)	(199)	(208)	(222)	Net change in cash	1,171	(494)	(503)	590	995
Adj. Net Income	5,834	6,801	7,341	7,680	8,218	Adj. Free cash flow to firm	4,058	8,903	7,498	8,690	9,231
Reported EPS	284.45	296.73	320.29	335.08	358.54	y/y Growth	6.2%	119.4%	(15.8%)	15.9%	6.2%
Adj. EPS	284.45	296.73	320.29	335.08	358.54						
DPS	195.20	203.00	209.79	217.80	231.26						
Payout ratio	68.6%	68.4%	65.5%	65.0%	64.5%						
Shares outstanding	2,051	2,292	2,292	2,292	2,292						
Balance Sheet						Ratio Analysis					
	FY17A	FY18A	FY19E	FY20E	FY21E		FY17A	FY18A	FY19E	FY20E	FY21E
Cash and cash equivalents	3,291	2,602	2,099	2,689	3,685	Gross margin	-	-	-	-	-
Accounts receivable	4,513	3,662	4,082	4,118	4,290	EBITDA margin	43.8%	46.4%	47.1%	48.0%	48.4%
Inventories	5,864	6,029	6,679	6,775	7,101	EBIT margin	39.9%	42.6%	43.3%	44.2%	44.5%
Other current assets	298	362	362	362	362	Net profit margin	29.1%	28.0%	28.6%	29.7%	30.4%
Current assets	13,966	12,655	13,222	13,944	15,438	ROE	16.9%	10.8%	11.1%	11.2%	11.6%
PP&E	4,882	5,166	5,354	5,544	5,743	ROA	6.5%	4.7%	5.0%	5.2%	5.5%
LT investments	632	595	595	595	595	ROCE	8.2%	6.8%	7.3%	7.5%	7.8%
Other non current assets	121,558	127,926	127,746	127,636	127,557	SG&A/Sales	-	-	-	-	-
Total assets	141,038	146,342	146,918	147,719	149,333	Net debt/Equity	0.8	0.7	0.6	0.6	0.5
Short term borrowings	5,423	4,225	4,225	4,225	4,225	Net debt/EBITDA	5.3	4.0	3.6	3.3	2.9
Payables	9,567	11,484	11,962	11,920	12,318	Sales/Assets (x)	0.2	0.2	0.2	0.2	0.2
Other short term liabilities	554	620	620	620	620	Assets/Equity (x)	2.6	2.3	2.2	2.2	2.1
Current liabilities	15,544	16,329	16,807	16,765	17,163	Interest cover (x)	9.9	8.1	7.9	8.6	9.6
Long-term debt	44,027	43,284	41,284	39,284	37,284	Operating leverage	128.0%	137.9%	133.3%	341.5%	117.1%
Other long term liabilities	20,441	21,041	21,281	21,638	22,021	Tax rate	29.7%	26.4%	26.0%	26.0%	26.0%
Total liabilities	80,012	80,654	79,372	77,687	76,468	Revenue y/y Growth	35.8%	21.4%	5.6%	0.9%	4.3%
Shareholders' equity	60,804	65,444	67,262	69,706	72,496	EBITDA y/y Growth	45.5%	28.6%	7.3%	2.9%	4.9%
Minority interests	222	244	284	325	370	EPS y/y Growth	14.9%	4.3%	7.9%	4.6%	7.0%
Total liabilities & equity	141,038	146,342	146,918	147,719	149,333						
BVPS	2,975.43	2,865.97	2,947.01	3,055.48	3,179.13	Valuation					
y/y Growth	560.1%	(3.7%)	2.8%	3.7%	4.0%		FY17A	FY18A	FY19E	FY20E	FY21E
Net debt/(cash)	46,159	44,907	43,410	40,820	37,824	P/E (x)	10.4	10.0	9.2	8.8	8.2
						P/BV (x)	1.0	1.0	1.0	1.0	0.9
						EV/EBITDA (x)	15.9	10.8	10.0	9.5	0.0
						Dividend Yield	6.6%	6.9%	7.1%	7.4%	7.8%

Source: Company reports and J.P. Morgan estimates.

Note: £ in millions (except per-share data). Fiscal year ends Dec. o/w - out of which

Imperial Brands PLC

Neutral

Company Data	
Shares O/S (mn)	955
52-week range (p)	2,714-1,655
Market cap (\$ mn)	21,143.75
Exchange rate	76.31
Free float(%)	100.0%
3M - Avg daily vol (mn)	2.50
3M - Avg daily val (\$ mn)	60.3
Volatility (90 Day)	32
Index	MSCI Europe
BBG BUY HOLD SELL	11 6 4

Imperial Brands PLC (IMB.L;IMB LN)

Year-end Sep (£)	FY18A	FY19A	FY20E (Prev)	FY20E (Curr)	FY21E (Prev)	FY21E (Curr)	FY22E
Revenue (£ mn)	8,719	9,013	9,007	8,928	9,129	9,091	-
Gross margin	74.0%	69.2%	69.2%	69.2%	69.2%	69.2%	-
EBITDA margin	45.5%	43.9%	44.2%	44.4%	44.5%	44.5%	-
Adj. net income (£ mn)	2,592	2,605	2,558	2,550	2,631	2,619	-
Adj. EPS (p)	272.15	273.35	269.12	268.30	277.68	276.39	-
BBG EPS (p)	267.70	276.10	-	274.70	-	282.20	-
Reported EPS (p)	272.15	273.35	269.12	268.30	277.68	276.39	-
Dividend yield	11.1%	12.2%	12.5%	12.5%	12.7%	12.7%	-
Adj. P/E	6.2	6.2	6.3	6.3	6.1	6.1	-
EV/EBITDA	9.0	8.0	7.3	7.4	7.1	7.1	-

Source: Company data, Bloomberg, J.P. Morgan estimates.

Investment Thesis, Valuation and Risks

Imperial Brands PLC (Neutral; Price Target: 1,900p)

Investment Thesis

Imperial Brands is a global tobacco company with JPMe ~50% of tobacco profits derived from the EU and ~25% from the US. It is a price-setter in very few of its markets and, in our view, is likely to grow modestly slower than peers in EPS terms over the medium term. Imperial's so far "measured approach" towards NNPs could be risky, in our view, if the category does grow rapidly, as it could impact earnings and any potential M&A premium. We rate the stock Neutral.

Valuation

To set our Dec-20 TP of £19 we apply a 30% discount to Tobacco peers (PMI/BATS/MO/JT) on PE20E (11x), EV/EBITDA20E (10x) and dividend yield 20E (7%).

Risks to Rating and Price Target

Downside risks to our rating and price target are: rapid growth of the HNB category, higher price competition in key profit pools (e.g. UK), higher-than-expected impact from EU TPD and higher-than-anticipated reinvestments in the US.

Upside risks include: improvement in market share trends in Europe, higher cost savings, lower-than-expected development of heat-not-burn in Europe.

Imperial Brands PLC: Summary of Financials

Income Statement					Cash Flow Statement					
	FY18A	FY19A	FY20E	FY21E	FY22E	FY18A	FY19A	FY20E	FY21E	FY22E
Revenue	8,719	9,013	8,928	9,091	-	Cash flow from operating activities	3,083	3,236	2,908	3,070
COGS	(2,269)	(2,773)	(2,747)	(2,797)	-	o/w Depreciation & amortization	1,266	1,316	1,270	1,274
Gross profit	6,450	6,240	6,181	6,294	-	o/w Changes in working capital	(11)	50	1	(32)
SG&A	(2,684)	(2,491)	(2,425)	(2,459)	-	Cash flow from investing activities	(230)	(425)	(369)	(246)
Adj. EBITDA	3,971	3,961	3,965	4,049	-	o/w Capital expenditure	(327)	(426)	(261)	(265)
D&A	(1,266)	(1,316)	(1,270)	(1,274)	-	as % of sales	3.8%	4.7%	2.9%	2.9%
Adj. EBIT	3,766	3,749	3,756	3,836	-	Cash flow from financing activities	(2,654)	(1,271)	(2,962)	(2,936)
Net Interest	(487)	(450)	(451)	(430)	-	o/w Dividends paid	(1,747)	(1,928)	(2,098)	(2,088)
Adj. PBT	3,321	3,354	3,364	3,470	-	o/w Shares issued/(repurchased)	(41)	(108)	(92)	(100)
Tax	(648)	(642)	(706)	(739)	-	o/w Net debt issued/(repaid)	(642)	1,369	(300)	(300)
Minority Interest	(81)	(107)	(108)	(111)	-	Net change in cash	147	1,511	(424)	(113)
Adj. Net Income	2,592	2,605	2,550	2,619	-	Adj. Free cash flow to firm	2,734	2,743	2,531	2,695
Reported EPS	272.15	273.35	268.30	276.39	-	y/y Growth	0.3%	0.3%	(7.7%)	6.5%
Adj. EPS	272.15	273.35	268.30	276.39	-					
DPS	187.79	206.57	210.70	214.92	-					
Payout ratio	69.0%	75.6%	78.5%	77.8%	-					
Shares outstanding	952	953	950	948	-					
Balance Sheet					Ratio Analysis					
	FY18A	FY19A	FY20E	FY21E	FY22E	FY18A	FY19A	FY20E	FY21E	FY22E
Cash and cash equivalents	775	2,286	1,862	1,749	-	Gross margin	74.0%	69.2%	69.2%	69.2%
Accounts receivable	2,585	2,993	2,911	2,964	-	EBITDA margin	45.5%	43.9%	44.4%	44.5%
Inventories	3,692	4,082	4,036	4,110	-	EBIT margin	43.2%	41.6%	42.1%	42.2%
Other current assets	201	1,727	1,727	1,727	-	Net profit margin	29.7%	28.9%	28.6%	28.8%
Current assets	7,253	11,088	10,536	10,549	-	ROE	45.3%	48.7%	56.2%	69.2%
PP&E	1,891	1,979	2,060	2,142	-	ROA	8.4%	8.1%	7.7%	8.2%
LT investments	82	119	119	119	-	ROCE	15.8%	15.5%	15.1%	16.2%
Other non current assets	21,622	20,544	19,583	18,493	-	SG&A/Sales	30.8%	27.6%	27.2%	27.0%
Total assets	30,848	33,730	32,297	31,303	-	Net debt/Equity	1.9	2.3	2.7	3.2
Short term borrowings	2,502	2,141	2,141	2,141	-	Net debt/EBITDA	3.1	3.3	3.3	3.2
Payables	8,270	9,536	9,408	9,504	-	Sales/Assets (x)	0.3	0.3	0.3	0.3
Other short term liabilities	465	705	705	705	-	Assets/Equity (x)	5.4	6.0	7.3	8.4
Current liabilities	11,237	12,382	12,254	12,350	-	Interest cover (x)	8.2	8.8	8.8	9.4
Long-term debt	10,671	13,105	12,805	12,505	-	Operating leverage	24.0%	(13.4%)	(19.2%)	115.8%
Other long term liabilities	2,495	2,659	2,448	2,376	-	Tax rate	19.5%	19.1%	21.0%	21.3%
Total liabilities	24,403	28,146	27,507	27,231	-	Revenue y/y Growth	0.6%	3.4%	(0.9%)	1.8%
Shareholders' equity	5,770	4,937	4,143	3,425	-	EBITDA y/y Growth	(0.1%)	(0.3%)	0.1%	2.1%
Minority interests	675	647	647	647	-	EPS y/y Growth	1.9%	0.4%	(1.8%)	3.0%
Total liabilities & equity	30,848	33,730	32,297	31,303	-					
BVPS	-	-	-	-	-	Valuation				
y/y Growth	-	-	-	-	-	FY18A	FY19A	FY20E	FY21E	FY22E
Net debt/(cash)	12,398	12,960	13,084	12,897	-	P/E (x)	6.2	6.2	6.3	6.1
						P/BV (x)	-	-	-	-
						EV/EBITDA (x)	9.0	8.0	7.4	7.1
						Dividend Yield	11.1%	12.2%	12.5%	12.7%

Source: Company reports and J.P. Morgan estimates.

Note: £ in millions (except per-share data). Fiscal year ends Sep. o/w - out of which

Philip Morris International

Neutral

Company Data	
Shares O/S (mn)	1,555
52-week range (\$)	92.74-64.67
Market cap (\$ mn)	128,100.90
Exchange rate	1.00
Free float(%)	99.8%
3M - Avg daily vol (mn)	5.81
3M - Avg daily val (\$ mn)	452.7
Volatility (90 Day)	27
Index	-
BBG BUY HOLD SELL	12 6 1

Philip Morris International Inc. (PM;PM US)

Year-end Dec (\$)	FY17A	FY18A	FY19E	FY19E	FY20E	FY20E	FY21E	FY21E
			(Prev)	(Curr)	(Prev)	(Curr)	(Prev)	(Curr)
Revenue (\$ mn)	28,749	29,625	29,848	29,840	31,368	31,329	32,473	32,649
Gross margin	63.7%	63.7%	65.5%	65.5%	65.5%	65.5%	65.5%	65.5%
EBITDA margin	43.3%	41.7%	42.0%	46.6%	43.2%	43.9%	45.5%	46.1%
Adj. net income (\$ mn)	7,326	7,926	7,997	8,027	8,690	8,745	9,559	9,669
Adj. EPS (\$)	4.72	5.10	5.14	5.16	5.57	5.61	6.12	6.19
BBG EPS (\$)	4.75	5.02	-	5.18	-	5.58	-	6.07
Reported EPS (\$)	3.88	5.08	4.73	4.55	5.57	5.61	6.12	6.19
Dividend yield	5.1%	5.5%	5.6%	5.6%	5.9%	5.9%	6.2%	6.2%
Adj. P/E	17.5	16.2	16.0	16.0	14.8	14.7	13.5	13.3
EV/EBITDA	12.4	12.4	12.2	10.9	11.3	10.9	10.3	9.9

Source: Company data, Bloomberg, J.P. Morgan estimates.

Investment Thesis, Valuation and Risks

Philip Morris International Inc. (Neutral; Price Target: \$86.00)

Investment Thesis

While Philip Morris' Tobacco portfolio has key strengths in Europe and Asia thanks to its cigarettes price-setter position in many markets and its RRP's exposure, we see no reasons for share outperformance. With limited evidence of top-line recovery over the next two quarters, we do not expect a stronger premium valuation. Neutral.

Valuation

Our Dec-20 TP of \$86 is obtained by applying a 40% premium to Tobacco peers (BATS/IMB/MO/JT) on PE20E (9x), EV/EBITDA20E (8x) and dividend yield 20E (8.0%).

Risks to Rating and Price Target

Upside risks to our rating are: 1) Stronger acceleration of cigarettes business, and 2) IQOS growth acceleration in 2019.

Downside risks to our rating are: FX changes that have a substantial impact on PM earnings given PM: 1) reports in US\$ but does not operate in the US; 2) derives 45% of sales in emerging markets; 3) incurs transaction costs, as 56% of its operating costs and 90% of its financing are tied to the US\$, euro and CHF. Other risks include litigation (e.g. Thailand and proposed ban to certain trademarks in France), challenging price dynamics in certain Asian markets (e.g. Australia, Indonesia) and slower-than-anticipated development of IQOS/RRP products.

Philip Morris International: Summary of Financials

Income Statement						Cash Flow Statement					
	FY17A	FY18A	FY19E	FY20E	FY21E		FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	28,749	29,625	29,840	31,329	32,649	Cash flow from operating activities	8,834	9,478	9,179	9,715	10,800
COGS	(10,433)	(10,758)	(10,295)	(10,809)	(11,264)	o/w Depreciation & amortization	875	989	959	1,007	1,049
Gross profit	18,316	18,867	19,545	20,521	21,385	o/w Changes in working capital	1,063	(611)	(179)	(523)	(463)
SG&A	(6,647)	(7,408)	(8,897)	(7,623)	(7,220)	Cash flow from investing activities	(3,014)	(998)	(1,918)	(1,253)	(1,306)
Adj. EBITDA	12,456	12,366	13,894	13,749	15,060	o/w Capital expenditure	(1,659)	(1,499)	(1,015)	(1,253)	(1,306)
D&A	(875)	(989)	(959)	(1,007)	(1,049)	as % of sales	5.8%	5.1%	3.4%	4.0%	4.0%
Adj. EBIT	11,669	11,459	11,793	12,827	14,095	Cash flow from financing activities	(2,769)	(9,651)	(8,310)	(8,975)	(9,364)
Net Interest	(914)	(665)	(610)	(632)	(623)	o/w Dividends paid	(6,520)	(6,885)	(7,140)	(7,475)	(7,864)
Adj. PBT	10,589	10,671	11,028	12,040	13,317	o/w Shares issued/(repurchased)	0	0	0	0	0
Tax	(4,307)	(2,445)	(2,254)	(2,769)	(3,063)	o/w Net debt issued/(repaid)	4,172	(2,229)	(750)	(1,500)	(1,500)
Minority Interest	(306)	(375)	(535)	(578)	(636)	Net change in cash	4,130	(1,856)	(1,049)	(513)	130
Adj. Net Income	7,326	7,926	8,027	8,745	9,669	Adj. Free cash flow to firm	7,286	8,042	8,165	8,462	9,494
Reported EPS	3.88	5.08	4.55	5.61	6.19	y/y Growth	5.5%	10.4%	1.5%	3.6%	12.2%
Adj. EPS	4.72	5.10	5.16	5.61	6.19						
DPS	4.22	4.49	4.62	4.86	5.10						
Payout ratio	108.8%	88.4%	101.6%	86.6%	82.4%						
Shares outstanding	1,553	1,555	1,556	1,559	1,562						
Balance Sheet						Ratio Analysis					
	FY17A	FY18A	FY19E	FY20E	FY21E		FY17A	FY18A	FY19E	FY20E	FY21E
Cash and cash equivalents	8,447	6,593	5,544	5,031	5,161	Gross margin	63.7%	63.7%	65.5%	65.5%	65.5%
Accounts receivable	3,738	3,564	3,590	3,769	3,928	EBITDA margin	43.3%	41.7%	46.6%	43.9%	46.1%
Inventories	8,806	8,804	8,868	9,311	9,703	EBIT margin	40.6%	38.7%	39.5%	40.9%	43.2%
Other current assets	603	481	481	481	481	Net profit margin	25.5%	26.8%	26.9%	27.9%	29.6%
Current assets	21,594	19,442	18,483	18,592	19,273	ROE	(59.1%)	(64.6%)	(65.6%)	(76.6%)	(97.1%)
PP&E	7,271	7,201	7,195	7,540	7,899	ROA	18.4%	19.2%	20.0%	21.5%	23.4%
LT investments	-	-	-	-	-	ROCE	35.8%	42.5%	49.0%	52.4%	57.7%
Other non current assets	14,103	13,158	14,881	14,783	14,680	SG&A/Sales	23.1%	25.0%	29.8%	24.3%	22.1%
Total assets	42,968	39,801	40,560	40,914	41,852	Net debt/Equity	NM	NM	NM	NM	NM
Short term borrowings	3,005	4,784	4,784	4,784	4,784	Net debt/EBITDA	2.1	2.0	1.8	1.8	1.5
Payables	2,242	2,068	1,979	2,078	2,165	Sales/Assets (x)	0.7	0.7	0.7	0.8	0.8
Other short term liabilities	10,715	10,339	10,863	10,957	11,057	Assets/Equity (x)	NM	NM	NM	NM	NM
Current liabilities	15,962	17,191	17,626	17,819	18,006	Interest cover (x)	13.6	18.6	22.8	21.7	24.2
Long-term debt	31,334	26,975	26,225	24,725	23,225	Operating leverage	92.7%	(59.1%)	401.3%	175.7%	234.7%
Other long term liabilities	5,902	6,374	6,468	6,358	6,248	Tax rate	40.7%	22.9%	20.4%	23.0%	23.0%
Total liabilities	53,198	50,540	50,319	48,902	47,479	Revenue y/y Growth	7.7%	3.0%	0.7%	5.0%	4.2%
Shareholders' equity	(12,086)	(12,459)	(12,014)	(10,821)	(9,095)	EBITDA y/y Growth	7.8%	(0.7%)	12.4%	(1.0%)	9.5%
Minority interests	1,856	1,720	2,255	2,833	3,468	EPS y/y Growth	5.3%	8.1%	1.2%	8.7%	10.4%
Total liabilities & equity	42,968	39,801	40,560	40,914	41,852						
BVPS	(7.78)	(8.01)	(7.72)	(6.94)	(5.82)	Valuation					
y/y Growth	(4.9%)	3.0%	(3.6%)	(10.1%)	(16.1%)		FY17A	FY18A	FY19E	FY20E	FY21E
Net debt/(cash)	25,892	25,166	25,465	24,478	22,848	P/E (x)	17.5	16.2	16.0	14.7	13.3
						P/BV (x)	NM	NM	NM	NM	NM
						EV/EBITDA (x)	12.4	12.4	10.9	10.9	9.9
						Dividend Yield	5.1%	5.5%	5.6%	5.9%	6.2%

Source: Company reports and J.P. Morgan estimates.

Note: \$ in millions (except per-share data). Fiscal year ends Dec. o/w - out of which

Analyst Certification: The research analyst(s) denoted by an “AC” on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an “AC” on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect the research analyst’s personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst’s compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. For all Korea-based research analysts listed on the front cover, if applicable, they also certify, as per KOFIA requirements, that their analysis was made in good faith and that the views reflect their own opinion, without undue influence or intervention.

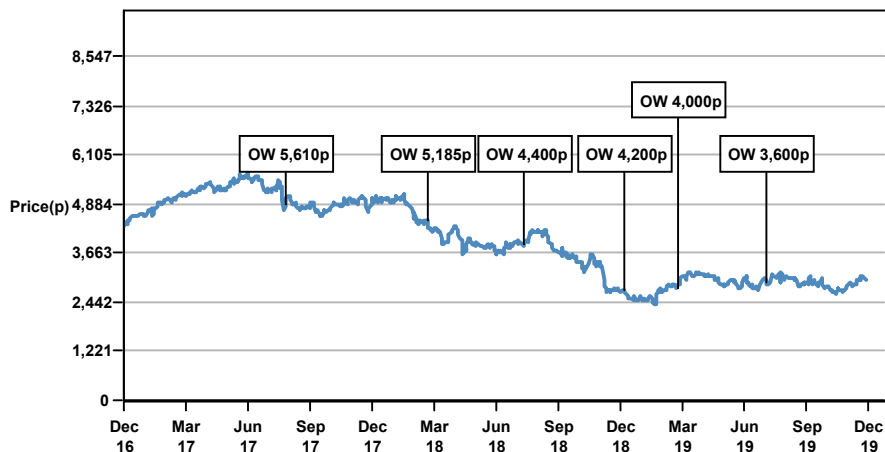
All authors named within this report are research analysts unless otherwise specified. In Europe, Sector Specialists may be shown on this report as contacts but are not authors of the report or part of the Research Department.

Important Disclosures

- **Market Maker/ Liquidity Provider:** J.P. Morgan is a market maker and/or liquidity provider in the financial instruments of/related to British American Tobacco, Imperial Brands PLC, Philip Morris International.
- **Manager or Co-manager:** J.P. Morgan acted as manager or co-manager in a public offering of securities or financial instruments (as such term is defined in Directive 2014/65/EU) for Philip Morris International within the past 12 months.
- **Director:** An employee, executive officer or director of J.P. Morgan or one of its affiliates is an officer, director or advisory board member of Philip Morris International.
- **Client:** J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as clients: British American Tobacco, Imperial Brands PLC, Philip Morris International.
- **Client/Investment Banking:** J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as investment banking clients: British American Tobacco, Philip Morris International.
- **Client/Non-Investment Banking, Securities-Related:** J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as clients, and the services provided were non-investment-banking, securities-related: British American Tobacco, Imperial Brands PLC, Philip Morris International.
- **Client/Non-Securities-Related:** J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as clients, and the services provided were non-securities-related: British American Tobacco, Imperial Brands PLC, Philip Morris International.
- **Investment Banking (past 12 months):** J.P. Morgan received in the past 12 months compensation for investment banking services from British American Tobacco, Philip Morris International.
- **Investment Banking (next 3 months):** J.P. Morgan expects to receive, or intends to seek, compensation for investment banking services in the next three months from British American Tobacco, Philip Morris International.
- **Non-Investment Banking Compensation:** J.P. Morgan has received compensation in the past 12 months for products or services other than investment banking from British American Tobacco, Imperial Brands PLC, Philip Morris International.
- **Debt Position:** J.P. Morgan may hold a position in the debt securities of British American Tobacco, Imperial Brands PLC, Philip Morris International, if any.

Company-Specific Disclosures: Important disclosures, including price charts and credit opinion history tables, are available for compendium reports and all J.P. Morgan–covered companies by visiting <https://www.jpmm.com/research/disclosures>, calling 1-800-477-0406, or e-mailing research.disclosure.inquiries@jpmorgan.com with your request. J.P. Morgan’s Strategy, Technical, and Quantitative Research teams may screen companies not covered by J.P. Morgan. For important disclosures for these companies, please call 1-800-477-0406 or e-mail research.disclosure.inquiries@jpmorgan.com.

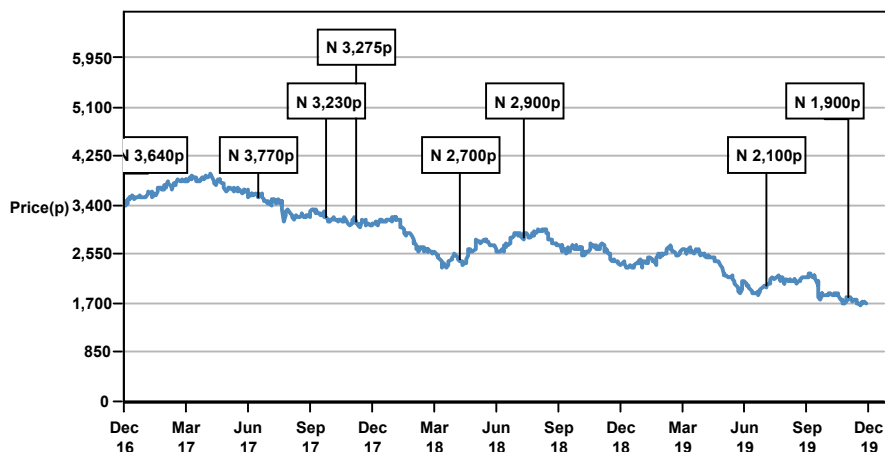
British American Tobacco (BATS.L, BATS LN) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.
 Initiated coverage Jul 02, 2002. All share prices are as of market close on the previous business day.

Date	Rating	Price (p)	Price Target (p)
03-Aug-17	OW	4854	5,610
27-Feb-18	OW	4464	5,185
17-Jul-18	OW	3872	4,400
13-Dec-18	OW	2740	4,200
01-Mar-19	OW	2758	4,000
11-Jul-19	OW	2948	3,600

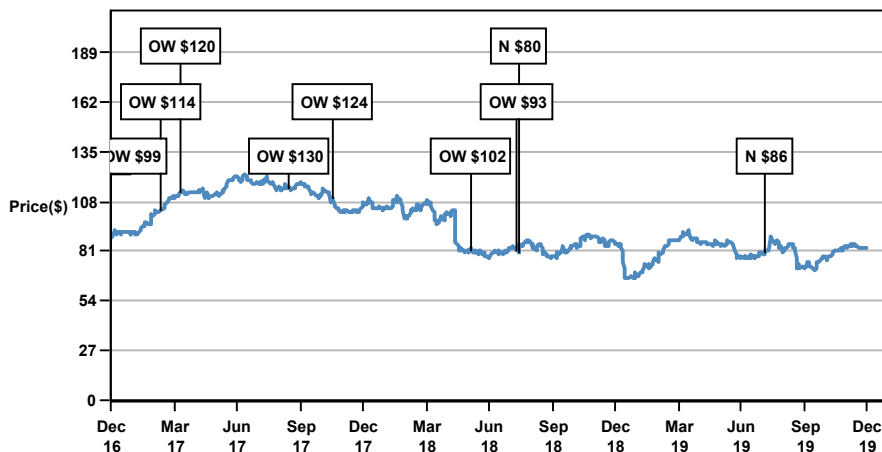
Imperial Brands PLC (IMB.L, IMB LN) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.
 Initiated coverage Jul 02, 2002. All share prices are as of market close on the previous business day.

Date	Rating	Price (p)	Price Target (p)
06-Dec-16	N	1707	3,640
22-Jun-17	N	3547	3,770
29-Sep-17	N	3172	3,230
14-Nov-17	N	3125	3,275
16-Apr-18	N	2463	2,700
17-Jul-18	N	2854	2,900
11-Jul-19	N	2015	2,100
07-Nov-19	N	1791	1,900

Philip Morris International (PM, PM US) Price Chart



Date	Rating	Price (\$)	Price Target (\$)
06-Dec-16	OW	82.10	99
16-Feb-17	OW	102.93	114
17-Mar-17	OW	112.70	120
21-Aug-17	OW	115.33	130
24-Oct-17	OW	109.36	124
10-May-18	OW	81.99	102
17-Jul-18	OW	81.92	93
20-Jul-18	N	80.90	80
11-Jul-19	N	80.28	86

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Apr 16, 2008. All share prices are as of market close on the previous business day.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.

J.P. Morgan ratings or designations: OW = Overweight, N= Neutral, UW = Underweight, NR = Not Rated

Explanation of Equity Research Ratings, Designations and Analyst(s) Coverage Universe:

J.P. Morgan uses the following rating system: Overweight [Over the next six to twelve months, we expect this stock will outperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] Neutral [Over the next six to twelve months, we expect this stock will perform in line with the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] Underweight [Over the next six to twelve months, we expect this stock will underperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] Not Rated (NR): J.P. Morgan has removed the rating and, if applicable, the price target, for this stock because of either a lack of a sufficient fundamental basis or for legal, regulatory or policy reasons. The previous rating and, if applicable, the price target, no longer should be relied upon. An NR designation is not a recommendation or a rating. In our Asia (ex-Australia and ex-India) and U.K. small- and mid-cap equity research, each stock's expected total return is compared to the expected total return of a benchmark country market index, not to those analysts' coverage universe. If it does not appear in the Important Disclosures section of this report, the certifying analyst's coverage universe can be found on J.P. Morgan's research website, www.jpmorganmarkets.com.

Coverage Universe: Pannuti, Celine: Anheuser Busch InBev (ABI.BR), Anheuser-Busch InBev (ADR) (BUD), Beiersdorf (BEIG.DE), British American Tobacco (BATS.L), Chr. Hansen (CHRH.CO), Danone (DANO.PA), Diageo (DGE.L), Essity (ESSITYB.ST), Givaudan (GIVN.S), Heineken (HEIN.AS), Henkel (HNGG_p.DE), Imperial Brands PLC (IMB.L), Kerry Group (KYGa.I), L'Oréal (OREP.PA), Nestle (NESN.S), Ontex (ONTEX.BR), Pernod-Ricard SA (PERP.PA), Philip Morris International (PM), Reckitt Benckiser (RB.L), Symrise (SY1G.F), Unilever NV (UNIA.AS), Unilever plc (ULVR.L)

J.P. Morgan Equity Research Ratings Distribution, as of October 05, 2019

	Overweight (buy)	Neutral (hold)	Underweight (sell)
J.P. Morgan Global Equity Research Coverage	45%	40%	14%
IB clients*	53%	48%	38%
JPMS Equity Research Coverage	43%	43%	14%
IB clients*	76%	64%	55%

*Percentage of subject companies within each of the "buy," "hold" and "sell" categories for which J.P. Morgan has provided investment banking services within the previous 12 months. Please note that the percentages might not add to 100% because of rounding.

For purposes only of FINRA ratings distribution rules, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category. Please note that stocks with an NR designation are not included in the table above. This information is current as of the end of the most recent calendar quarter.

Equity Valuation and Risks: For valuation methodology and risks associated with covered companies or price targets for covered companies, please see the most recent company-specific research report at <http://www.jpmorganmarkets.com>, contact the primary analyst

or your J.P. Morgan representative, or email research.disclosure.inquiries@jpmorgan.com. For material information about the proprietary models used, please see the Summary of Financials in company-specific research reports and the Company Tearsheets, which are available to download on the company pages of our client website, <http://www.jpmorganmarkets.com>. This report also sets out within it the material underlying assumptions used.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Registration of non-US Analysts: Unless otherwise noted, the non-US analysts listed on the front of this report are employees of non-US affiliates of J.P. Morgan Securities LLC, may not be registered as research analysts under FINRA rules, may not be associated persons of J.P. Morgan Securities LLC, and may not be subject to FINRA Rule 2241 or 2242 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Other Disclosures

J.P. Morgan is a marketing name for investment banking businesses of JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide.

All research reports made available to clients are simultaneously available on our client website, J.P. Morgan Markets. Not all research content is redistributed, e-mailed or made available to third-party aggregators. For all research reports available on a particular stock, please contact your sales representative.

Any data discrepancies in this report could be the result of different calculations and/or adjustments.

Any long form nomenclature for references to China; Hong Kong; Taiwan; and Macau within this research report are Mainland China; Hong Kong SAR, China; Taiwan, China; Macau SAR, China.

Options and Futures related research: If the information contained herein regards options or futures related research, such information is available only to persons who have received the proper options or futures risk disclosure documents. Please contact your J.P. Morgan Representative or visit <https://www.theocc.com/components/docs/riskstoc.pdf> for a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options or http://www.finra.org/sites/default/files/Security_Futures_Risk_Disclosure_Statement_2018.pdf for a copy of the Security Futures Risk Disclosure Statement.

Private Bank Clients: Where you are receiving research as a client of the private banking businesses offered by JPMorgan Chase & Co. and its subsidiaries ("J.P. Morgan Private Bank"), research is provided to you by J.P. Morgan Private Bank and not by any other division of J.P. Morgan, including but not limited to the J.P. Morgan corporate and investment bank and its research division.

Legal entity responsible for the production of research: The legal entity identified below the name of the Reg AC research analyst who authored this report is the legal entity responsible for the production of this research. Where multiple Reg AC research analysts authored this report with different legal entities identified below their names, these legal entities are jointly responsible for the production of this research.

Legal Entities Disclosures

U.S.: JPMS is a member of NYSE, FINRA, SIPC and the NFA. JPMorgan Chase Bank, N.A. is a member of FDIC. **Canada:** J.P. Morgan Securities Canada Inc. is a registered investment dealer, regulated by the Investment Industry Regulatory Organization of Canada and the Ontario Securities Commission and is the participating member on Canadian exchanges. **U.K.:** JPMorgan Chase N.A., London Branch, is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and to limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from J.P. Morgan on request. J.P. Morgan Securities plc (JPMS plc) is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Registered in England & Wales No. 2711006. Registered Office 25 Bank Street, London, E14 5JP. **Germany:** This material is distributed in Germany by J.P. Morgan Securities plc, Frankfurt Branch which is regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht and also by J.P. Morgan AG (JPM AG) which is a member of the Frankfurt stock exchange and is regulated by the Federal Financial Supervisory Authority (BaFin), JPM AG is a company incorporated in the Federal Republic of Germany with registered office at Taunustor 1, 60310 Frankfurt am Main, the Federal Republic of Germany. **South Africa:** J.P. Morgan Equities South Africa Proprietary Limited is a member of the Johannesburg Securities Exchange and is regulated by the Financial Services Board. **Hong Kong:** J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong and/or J.P. Morgan Broking (Hong Kong) Limited (CE number AAB027) is regulated by the Securities and Futures Commission in Hong Kong. JP Morgan Chase Bank, N.A., Hong Kong is organized under the laws of U.S.A. with limited liability. **Korea:** This material is issued and distributed in Korea by or through J.P. Morgan Securities (Far East) Limited, Seoul Branch, which is a member of the Korea Exchange (KRX) and is regulated by the Financial Services Commission (FSC) and the Financial Supervisory Service (FSS). **Australia:** J.P. Morgan Securities Australia Limited (JPMSAL) (ABN 61 003 245 234/AFS Licence No: 238066) is regulated by ASIC and is a Market, Clearing and Settlement Participant of ASX Limited and CHI-X. **Taiwan:** J.P. Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. **India:** J.P. Morgan India Private Limited (Corporate Identity Number - U67120MH1992FTC068724), having its registered office at J.P. Morgan Tower, Off. C.S.T. Road, Kalina, Santacruz - East, Mumbai - 400098, is registered with Securities and Exchange Board of India (SEBI) as a 'Research Analyst' having registration number INH000001873. J.P. Morgan India Private Limited is also registered with SEBI as a member of the National Stock Exchange of India Limited and the Bombay Stock Exchange Limited (SEBI Registration Number - INZ000239730) and as a Merchant Banker (SEBI Registration Number - MB/INM000002970). Telephone: 91-22-6157 3000, Facsimile: 91-22-6157 3990 and Website: www.jpmmpl.com. For non local research reports, this material is not distributed in India by J.P. Morgan India Private Limited. **Thailand:** This material is issued and distributed in Thailand by JPMorgan Securities (Thailand) Ltd., which is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and

Exchange Commission and its registered address is 3rd Floor, 20 North Sathorn Road, Silom, Bangrak, Bangkok 10500. **Indonesia:** PT J.P. Morgan Sekuritas Indonesia is a member of the Indonesia Stock Exchange and is regulated by the OJK a.k.a. BAPEPAM LK. **Philippines:** J.P. Morgan Securities Philippines Inc. is a Trading Participant of the Philippine Stock Exchange and a member of the Securities Clearing Corporation of the Philippines and the Securities Investor Protection Fund. It is regulated by the Securities and Exchange Commission. **Brazil:** Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. **Mexico:** J.P. Morgan Casa de Bolsa, S.A. de C.V., J.P. Morgan Grupo Financiero is a member of the Mexican Stock Exchange and authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. **Singapore:** This material is issued and distributed in Singapore by or through J.P. Morgan Securities Singapore Private Limited (JPMS) [MCI (P) 058/04/2019 and Co. Reg. No.: 199405335R], which is a member of the Singapore Exchange Securities Trading Limited and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore) [MCI (P) 070/09/2019], both of which are regulated by the Monetary Authority of Singapore. This material is issued and distributed in Singapore only to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act, Cap. 289 (SFA). This material is not intended to be issued or distributed to any retail investors or any other investors that do not fall into the classes of "accredited investors," "expert investors" or "institutional investors," as defined under Section 4A of the SFA. Recipients of this document are to contact JPMS or JPMCB Singapore in respect of any matters arising from, or in connection with, the document. **Japan:** JPMorgan Securities Japan Co., Ltd. and JPMorgan Chase Bank, N.A., Tokyo Branch are regulated by the Financial Services Agency in Japan. **Malaysia:** This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X) which is a Participating Organization of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission in Malaysia. **Pakistan:** J. P. Morgan Pakistan Broking (Pvt.) Ltd is a member of the Karachi Stock Exchange and regulated by the Securities and Exchange Commission of Pakistan. **Dubai:** JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre - Building 3, Level 7, PO Box 506551, Dubai, UAE. **Russia:** CB J.P. Morgan Bank International LLC is regulated by the Central Bank of Russia. **Argentina:** JPMorgan Chase Bank Sucursal Buenos Aires is regulated by Banco Central de la República Argentina ("BCRA"- Central Bank of Argentina) and Comisión Nacional de Valores ("CNV"- Argentinian Securities Commission")

Country and Region Specific Disclosures

U.K. and European Economic Area (EEA): Unless specified to the contrary, issued and approved for distribution in the U.K. and the EEA by JPMS plc. Investment research issued by JPMS plc has been prepared in accordance with JPMS plc's policies for managing conflicts of interest arising as a result of publication and distribution of investment research. Many European regulators require a firm to establish, implement and maintain such a policy. Further information about J.P. Morgan's conflict of interest policy and a description of the effective internal organisations and administrative arrangements set up for the prevention and avoidance of conflicts of interest is set out at the following link <https://www.jpmorgan.com/jpmpdf/1320742677360.pdf>. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction. **Australia:** This material is issued and distributed by JPMSAL in Australia to "wholesale clients" only. This material does not take into account the specific investment objectives, financial situation or particular needs of the recipient. The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of JPMSAL. For the purposes of this paragraph the term "wholesale client" has the meaning given in section 761G of the Corporations Act 2001. J.P. Morgan's research coverage universe spans listed securities across the ASX All Ordinaries index, securities listed on offshore markets, unlisted issuers and investment products which Research management deem to be relevant to the investor base from time to time. J.P. Morgan seeks to cover companies of relevance to the domestic and international investor base across all GIC sectors, as well as across a range of market capitalisation sizes. **Germany:** This material is distributed in Germany by J.P. Morgan Securities plc, Frankfurt Branch which is regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht. **Korea:** This report may have been edited or contributed to from time to time by affiliates of J.P. Morgan Securities (Far East) Limited, Seoul Branch. **Singapore:** As at the date of this report, JPMS is a designated market maker for certain structured warrants listed on the Singapore Exchange where the underlying securities may be the securities discussed in this report. Arising from its role as designated market maker for such structured warrants, JPMS may conduct hedging activities in respect of such underlying securities and hold or have an interest in such underlying securities as a result. The updated list of structured warrants for which JPMS acts as designated market maker may be found on the website of the Singapore Exchange Limited: <http://www.sgx.com>. In addition, JPMS and/or its affiliates may also have an interest or holding in any of the securities discussed in this report – please see the Important Disclosures section above. For securities where the holding is 1% or greater, the holding may be found in the Important Disclosures section above. For all other securities mentioned in this report, JPMS and/or its affiliates may have a holding of less than 1% in such securities and may trade them in ways different from those discussed in this report. Employees of JPMS and/or its affiliates not involved in the preparation of this report may have investments in the securities (or derivatives of such securities) mentioned in this report and may trade them in ways different from those discussed in this report. **Taiwan:** Research relating to equity securities is issued and distributed in Taiwan by J.P. Morgan Securities (Taiwan) Limited, subject to the license scope and the applicable laws and the regulations in Taiwan. According to Paragraph 2, Article 7-1 of Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers (as amended or supplemented) and/or other applicable laws or regulations, please note that the recipient of this material is not permitted to engage in any activities in connection with the material which may give rise to conflicts of interests, unless otherwise disclosed in the "Important Disclosures" in this material. **India:** For private circulation only, not for sale. **Pakistan:** For private circulation only, not for sale. **New Zealand:** This material is issued and distributed by JPMSAL in New Zealand only to "wholesale clients" (as defined in the Financial Advisers Act 2008). The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of JPMSAL. **Canada:** This report is distributed in Canada by or on behalf of J.P. Morgan Securities Canada Inc. The information contained herein is not, and under no circumstances is to be construed as an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. **Dubai:** This report has been distributed to persons regarded as professional clients or market counterparties as defined under the DFSA rules. **Brazil:** Ombudsman J.P. Morgan: 0800-7700847 / ouvidoria.jp.morgan@jpmorgan.com.

General: Additional information is available upon request. Information has been obtained from sources believed to be reliable but JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) do not warrant its completeness or accuracy except with respect to any disclosures relative to JPMS and/or its affiliates and the analyst's involvement with the issuer that is the subject of the research. All pricing is indicative as of the close of market for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any

financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein. JPMS distributes in the U.S. research published by non-U.S. affiliates and accepts responsibility for its contents. Periodic updates may be provided on companies/industries based on company specific developments or announcements, market conditions or any other publicly available information. Clients should contact analysts and execute transactions through a J.P. Morgan subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise.

"Other Disclosures" last revised October 26, 2019.

Copyright 2019 JPMorgan Chase & Co. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of J.P. Morgan.