JM FINANCIAL

Automobiles

Quarterly update and outlook from global OEMs

Vivek Kumar
vivek.kumar@jmfl.com | Tel: (91 22) 66303019

Ronak Mehta
ronak.mehta@jmfl.com | Tel: (91 22) 66303125

We acknowledge the support services of **Naman Shah** and **Rajvi Panchmatia** in preparation of this report

This is the 16th note in our global auto series covering quarterly commentary from 30+ global automotive companies. As per most OEMs, supply constraints continued to ease during the quarter. Although wholesales for major OEMs declined sequentially owing to seasonality and workmen strikes, demand momentum remains healthy. Majority of the OEMs have maintained volume guidance for CY23. Inflationary pressure has softened and companies have guided for better margin outlook during the year. Global Tractor demand remains mixed with positive outlook for large agri equipment and inventory destocking for small agri equipment. Tyre companies indicated of sluggish demand environment and continued inventory destocking in replacement market in the near term. Overall, automakers are maintaining a positive mid-term outlook, focusing on executing healthy order book and move to electrification. We expect revenue/margins of Indian auto companies with higher global exposure like SAMIL / TTMT / SONACOMS to continue to improve/remain steady.

- Steady performance of global OEMs in 3QCY23: Easing supply challenges led to volume growth for Global OEMs on a YoY basis. Sequential decline during 3Q was owing to strikes and seasonality. In North America, volumes grew on YoY basis whereas change in emission norms in Brazil (LATAM) impacted some OEMs. Demand momentum remains healthy in EU as well. Slight demand moderation was witnessed in Asia and Global OEMs reported that intense competition in China led to sales decline. Outlook for China market remains neutral to positive. Automakers' margins improved on YoY basis led by receding inflationary pressure, volume growth and better mix. While new orders/enquiries in Europe have seen some moderation, overall order book across players provides comfort. For instance, Renault's order backlog stood at 2.5 months (vs 3.4 months in 2QCY23). Tyre volumes declined owing to high channel inventory in NA and EU. In the OHV segment, US large agri demand remains strong driven by higher crop prices, favourable farm income. However, US small agri demand has seen moderation owing to customers' deferring purchases. Strong order backlog and infra spends support CE sales in NA whereas EU witnessed signs of slowdown.

- Supply constraints continued to ease; outlook maintained by OEMs/Ancs: Although global OEM wholesales were impacted QoQ during 3QCY23, supply constraints are broadly receding across the board and inventories are reaching normalized level. Overall, OEMs / auto component companies expect steady sales for light vehicles in CY23 and positive outlook for CY24 led by premium portfolio. Majority of them have maintained their volume guidance at the same time remaining cautious on macro-developments in developed markets.

- Inflation easing; margin improvement likely to continue: Just like Indian auto OEMs, global players witnessed easing on inflationary pressure (esp. RM). Margins improved during 3Q (on YoY basis). OEMs expect improvement in mix to continue led by traction in the premium portfolio. Global Auto Ancillary companies' margins improved during 3Q owing to better mix, pricing via pass-through of inflationary costs to OEMs and relatively lower production volatility. However, margins for tyre companies declined owing to negative operating leverage / phasing out of high cost inventory. With the recent softening in commodity prices and energy inflation, global players have guided for improvement in operating margins. Price correction on EVs remains a monitorable.

- SAMIL / JLR / Sona BLW performance to improve going ahead: Basis commentary from global OEMs, customer order book, easing supply constraints and inflationary pressure is expected to drive steady performance for SAMIL / JLR going ahead. Inventory destocking (likely to continue for next quarter) will remain near-term headwind for Tyre companies. Slowdown in small ag. demand remains a challenge for Uniparts / SEL in the near-term. Sona Comstar performance is likely to be supported by order execution and robust new order wins.

Exhibit 1. Volume / sales / margin guidance: Upgrade / downgrade / maintained

Companies	Volume/Sales Guidance	Margin Guidance
PV/CV OEMs		
Mercedes-Benz	⇔	⇔
Daimler	⇔	⇔
BMW	⇔	⇔
Volkswagen	⇔	⇔
Stellantis	⇔	⇔
Renault	NA	⇔
Tesla	⇔	NA
GM*	NA	NA
Ford*	NA	NA
Toyota	⇔	↑
Kia	⇔	⇔
Hyundai	⇔	⇔
Auto Ancillaries		
Continental	↓	⇔
Valeo SA	⇔	⇔
LG Chem.	⇔	⇔
Panasonic Auto.	↑	↑
Dana Inc.	⇔	↓
APTIV	⇔	⇔
Lear Corp	↑	↑
Magna Int.	⇔	↑
Faurecia	⇔	⇔
Tyre Manufacturers		
Michelin	↓	⇔
Goodyear	↑	↑
Nokian Tyres	↓	↓
Titan Int.	↓	↓
Yokohama Rubber	⇔	↑
2W OEMs		
Honda	↓	NA
Suzuki	↓	NA
Yamaha	⇔	⇔
OHV OEMs (Tractors + Construction Equipment)		
AGCO	⇔	↑
John Deere	↓	↓
Caterpillar	↑	↑
Kubota	⇔	↑
Tractor Supply Co.	↓	↓
Doosan Bobcat	⇔	⇔

Source: Company, Industry, JM Financial, ↑ Upgraded, ↓ Downgraded, ⇔ Maintained, *Guidance withdrawn owing to UAW strikes

Exhibit 2. Sales / volume performance during quarter ending Sept'23

Companies	NA	SA/LATAM	EU	CH	Asia & India	MEA
PVs / CVs OEMs						
Mercedes-Benz	↓	↑	↑	↓	↓	NA
Daimler	↓	↓	↑	↑	↓	NA
BMW	↑	↑	↑	↓	↑	NA
Volkswagen	↑	↑	↑	↓	↓	↓
Stellantis	↑	↑	↑	↑	↓	↑
Renault	NA	↓	↑	NA	↓	↑
GM	↑	↓	NA	↓	↑	↑
Toyota	↑	↑	↑	NA	↑	↑
Kia	↑	↔	↑	↓	↓	↑
Hyundai	↑	↔	↑	↓	↑	NA
Auto Ancillaries						
Continental	↑	NA	↑	↔	NA	NA
Valeo SA	↓	↑	↓	↓	↑	↓
LG Chem.	↑	NA	↓	NA	NA	NA
Dana Inc.	↑	↓	↑	NA	↑	NA
APTIV	↑	↑	↑	↔	↔	NA
Lear Corp	↑	↑	↑	↓	↔	↑
Magna Int.	↑	NA	↑	↓	↑	NA
Faurecia	↑	↑	↑	↑	↑	↑
Tyre Manufacturers						
Michelin (OE)	↑	↑	↑	↑	↑	↓
Michelin (RT)	↓	↑	↓	↑	↓	↑
Goodyear	↓	↓	↓	↑	↑	↓
Nokian Tyres	↓	NA	↓	NA	NA	NA
Titan Int.	↓	↓	↓	NA	NA	NA
Yokohama Rubber	↓	NA	↓	↓	↑	NA
2W OEMs						
Honda	↑	NA	↑	↓	↓	NA
Suzuki	↓	↓	↑	↓	↔	NA
Yamaha	↑	↑	↑	↑	↓	NA
OHV OEMs (Tractors + Construction Equipment)						
AGCO	↑	↑	↑	NA	↓	↑
John Deere*	↓	↓	↓	NA	↔	NA
Caterpillar	↑	↓	↑	↓	↑	NA
Kubota	↓	NA	↑	↓	↔	NA
Doosan Bobcat	↔	↓	↑	NA	↓	↑

Source: Company, Industry, JM Financial; ↑ Increased, ↓ Declined, ⇔ Flat; *Guidance (Region wise sales data not available)

Exhibit 3. Outlook of Global Auto OEMs (PVs)

OEM	Volume Growth & Margin	Outlook & Guidance	Key Takeaways
Mercedes-Benz (Cars)	Car wholesales during 3Q were 510.5k units (-3.7% YoY, -1% QoQ) while Van volumes were 105k units (+1% YoY,-12%QoQ). Adj. EBIT was 13.2% (-100bps YoY, -40bps QoQ) in 3QCY23.	Volume: Guidance maintained. Expect Car segment to remain flat and Van segment to slightly growth in CY23. Margin: EBIT guidance maintained. Expect EBIT margin to be at par with CY22. EBIT margin for CY22 was 13.7%.	Demand: Expects premium segment to witness healthy growth in CY23. However, it expects overall volumes to remain flat owing to slight decline in entry segment. In NA, although wholesale growth declined, retails grew by 48% YoY during 3Q. Momentum is gradually picking-up in China. The company expects significant contribution from top-end luxury cars with growth of +60% from CY19-CY26E. Supply: Supply chain bottlenecks existed in the mid-level segment on the 48-volts. There has been price rise compared to H1 owing to inflation. EV: BEV / EV sales is growing strongly (Share of BEV / EV: 12% / 20% vs. 7% / 16% YoY) and targets 50%/100% EV penetration by 2025 / 2030.
Daimler (Trucks)	Wholesales stood at 128.8k units (-4.5% YoY, -2.3% QoQ) during 3QCY23. Adj. EBIT at 9.8% (+40bps YoY, -50bps QoQ) in 3QCY23.	Volume: Volume guidance maintained for CY23. Expect volumes to range between 530-550k units (520k units in CY22). EBIT: EBIT guidance maintained. Expect significant improvement in CY23 over CY22 levels.	Demand: Wholesale volumes and production declined in 3Q owing to bottlenecks with suppliers and changes in emission standards in Brazil and Indonesia. Pent-up demand has normalized leading to decrease in incoming orders and order backlogs, while orders for Zero-Emission vehicles increased significantly. Demand remains healthy in NA and EU for heavy trucks. Inventory slightly above average in NA for Class 8 trucks while inventory remains at normal levels for EU30 trucks. Demand has started to improve in China due to market development and low base. Inflation in US and EU market could possibly moderate sales growth going ahead. Supply: Supply chain bottlenecks to continue and expect gradual improvement.
BMW	Automotive deliveries at 621.7k units in 3QCY23 (+6% YoY, -1% QoQ). EBIT was at 9.8% (+90bps YoY, +60bps QoQ) for the automotive segment this quarter.	Volume: Wholesales expected to witness significant increase compared to CY22 levels. (Guidance maintained). EBIT: CY23 automotive EBIT margin guidance maintained between 9 to 10.5%. (8.6% in CY22).	Demand: Order backlog remains strong and with improving supply chain, expect healthy demand momentum to continue in 4Q as well. EU and US markets remained healthy during 3Q whereas Asian markets (excl. China) were flat. Slight reduction during 3Q in China due to model change. Focus at Japan continues to be towards hybrids and ICE vehicles and the demand for EVs remain slow. There have been signs of a return to normal pricing and the company expects that this trend would continue in 4Q as well. Supply: Global supply chain has recovered well with the situation on raw materials continuing to normalise. However, battery related costs are expected to remain high. EV: BEV sales are witnessing strong growth. Share of BEV for 3QCY23 at 15% vs. 9% YoY. CY23/ 24/ 25/ 26 BEV share guidance stands at 15%/ 20%/ 25%/ 33%.
Volkswagen	Wholesales for 3QCY23 were 2.3mn units (+3.5% YoY, flat QoQ). EBIT Margin in 3Q was 6.4% (+100bps YoY, -40bps QoQ).	Volume: Delivery guidance maintained to be in the range of 9 - 9.5mn units in CY23 (c.11.4% YoY). Margins: Operating Margin guidance maintained between 7.5 to 8.5%.	Demand: Revenue is expected to grow in double-digits in CY23 led by positive mix and pricing. Revenue growth during 3Q was led by healthy performance in NA and Western Europe with a slight decline in China. Order backlog remains strong at c.1.4mn (vs 1.9mn YoY) units in Western Europe (includes 150k+ units for BEV). Order intake in ICE segment declined slightly due to lower than expected demand. CV sales improved led by high order backlog and improved supply chains. VW continues to be market leader in ICE at China and the company is gaining momentum in BEV sales at China. Supply: Global supply chain situation continued to improve. However, production was affected in 3Q owing to shortages due to floods at Slovenia (Europe). EV: BEV sales witnessed robust growth (c.45% YoY in 9MCY23). Share of BEV in 3QCY23: 9% vs. 6.7% YoY. VW gained markets share in EU BEV market (mkt. leader in EU). CY23 BEV share guidance stands at 8-10% vs 7% in CY22.
Stellantis	Volumes (shipment) grew by 11.4% YoY (-17.3% QoQ) in 3QCY23 to 1.4mn units.	Margin: The company maintained its guidance to achieve double-digit operating margin for CY23. Cash Flow: The company maintained its guidance for positive cash flows in CY23.	Demand: Volumes growth on YoY basis led by NA, SA, EU and MEA regions. Inventory levels have normalized. Order book stands at 3 months. Outlook: Industry outlook for 2023: India & APAC/ China expected to grow by +5% /+2% resp (unchanged). Expects NA to grow by 8% (previously +5%); EU & MEA both to grow by 10% (increased from 7% earlier), whereas SA reduced from +3% previously to Flat owing to constraints in Brazil and Argentina. EV: BEV sales increased 33% YoY. BEV sales momentum remains strong in EU.
Renault	Volumes grew 6% YoY (c.-14% QoQ) to 511k units in 3QCY23.	Margin: OPM guidance maintained. Expect CY23 margin to range between 7-8% (vs. 5.6% in CY22). Cash Flow: FCF guidance maintained at EUR 2.5bn for CY23.	Demand: Order book remains healthy at c.2.5 months of sales and expected to remain above the target 2 months throughout 2023. Revenue grew in 3Q led by better pricing effects. The company expects low to mid-single digit volume growth in 2024. Supply: Independent dealers started destocking as conditions are getting back to normal with improved components and logistics issue. Company's inventory declined to 542k units vs. c.569k units in June'23 in-line with company's objective to bring it down to 500k units. EV: Share of BEV stands at 11% of overall volumes.

OEM	Volume Growth & Margin	Outlook & Guidance	Key Takeaways
Tesla	Deliveries increased by 27% YoY (-7% QoQ) to 435k units in 3QCY23. EBIT margin stood at 7.6% (-960bps YoY, -200bps QoQ) in 3QCY23.	**Volume:** Volume guidance maintained for CY23 at 1.8mn units vs. 1.31mn units in CY22 (+c.37% YoY).	**Demand:** Volumes declined QoQ owing to factory shutdown for upgrades. It continues to maintain c.50% volume CAGR target (over LT). The company continues to focus on cost reduction. Cybertruck deliveries have commenced since Dec23, however there exists challenges in ramping up the production. Expect Cybertruck production levels to reach 250k units by CY25. **Gigafactory:** Shanghai Giga continues to operate at near full capacity. The company began pilot production of Cybertruck from Gigafactory Texas.
GM	Volume increased 1.6% YoY (flat QoQ) to 981k units in 3QCY23. Adj. EBIT margin of 8.1% (-210bps YoY/ +90bps QoQ) in 3QCY23. Margin impacted owing to strikes.	**Volume:** Previous guidance was +5 to +10% for CY23. However, guidance was withdrawn owing to strikes. **EBIT:** Previous full-year adj. EBIT guidance was USD 12-14bn and NA margins was 8-10% for CY23. However, guidance was withdrawn owing to strikes.	**Demand:** Deliveries in NA / APAC & MEA (excl. China) / China / SA increased/ (declined) by +20% / +38%% / -14% / -8% YoY. Demand for full-size trucks and SUVs in NA remains robust. Deliveries in China impacted due to intense market competition. Expect modest market recovery in China in 4Q. **Supply:** Supply chain constraints continue to ease in 3Q. **EV:** EV production stands at c.32k units in 3QCY23 (vs c.50k in 1HCY23). Aim to expand EV capacity to 1mn units in NA by CY25.
Ford	Volumes increased 5.2% YoY (-3% QoQ) to 1mn units in 3QCY23. Adj. EBIT margin stood at 5% (+40bps YoY, -340bps QoQ) in 3QCY23.	**EBIT:** : Previous guidance was USD11-12bn (USD 10.4bn in CY22). However, guidance was withdrawn owing to strikes. **Cash Flow:** Previous adj. FCF guidance was USD 6.5-7bn for CY23. However, guidance withdrawn owing to strikes.	**Demand:** Ford remains No. 1 player for CV US. Tailwinds include strong order book and pricing power. However, labour strikes (UAW) could impact the business and margins till agreements are reached. Market in China remains extremely competitive. **Supply:** Demand continues to outstrip supply. **EV:** EV and hybrid technology continue to witness steady improvement. Industry-wide EV price compression continues. **Customers in NA unwilling to pay premium for EVs over ICE or hybrid models, this has impacted EV pricing and profitability.** E-van segment (2 tonnes) continues to grow in US and Europe and sales for the same grew by 90% YoY for Ford.
Toyota (year ending March'24)	Wholesales increased 12.7% YoY (-12% QoQ) to 2.4mn units in 2QFY24. EBIT margin was at 12.6% (+650bps YoY, +200bps QoQ) for the 2QFY24.	**Volume:** FY24 production guidance maintained at 10.1mn units (+10.6% YoY). Retail volume guidance at 11.4mn units (+7.8% YoY). **Margin:** Operating margin guidance increased from 7.9% previously to 10.5% for FY24 (vs 7.3% in FY23).	**Demand:** Geographically, sales volume increased on YoY basis during 2Q across all regions. Guides for healthy wholesale growth for FY24 across regions: Japan - 12%, NA – 13%, Europe – 11%, Asia -flat; led by improving chip supplies. **EV:** EVs (incl. hybrids) formed c.36% (vs. c.27% YoY) of overall retails sales during 2QFY24. Targets EV (incl. hybrids) mix to reach 37% by FY24 end.
Kia	Wholesales grew by 3.5% YoY (-3.7% QoQ) at 778k units in 3QCY23. EBIT margin at 11.2% in 3QCY23 (+790bps YoY, -180bps QoQ).	**Volume:** Expect Wholesales to grow by 10.3% YoY to c.3.2mn units in CY23. CY23 Revenue guidance at KRW 100tn. **EBIT:** CY23 EBIT margin guidance between 11.5-12.0% (Guidance **from last Qtr**).	**Demand:** New launches aid the wholesale volume growth in Korea, US and EU. India sales declined owing to competition and company plans to take actions on price to mitigate this effect. Sales have been slow at China in both ICE and EV powertrains. **EV:** BEV share at 6.5% in 3QCY23 (vs 5.6% in 2QCY23). Total EVs (BEV + hybrids) account for c.20% of total volume during 3Q (flat QoQ).
Hyundai	Wholesale volumes increased 2% YoY (-1% QoQ) to 1.04mn units in 3QCY23. EBIT margin stood at 9.3% for 3QCY23 (+520bps YoY, -70bps QoQ).	**Volume:** Expect wholesales at 4.32mn units in CY23 (+9.6%YoY) (from last Qtr). Expect revenue to grow by 14-15% YoY during CY23. **Margin:** CY23 Op. margin guidance to range between 8% to 9% vs. 6.9% in CY22. (Guidance **from last Qtr**).	**Demand:** Wholesales improved across majority of regions: Europe- 7.9%, Korea- 2.8%, NA- 12.8%, India- 5.9%. However, wholesales in China declined by 33.8% YoY. SUVs contributed 54.7% in the volume mix (vs 52.8% in 3QCY22). Revenue growth was driven by higher volumes and better mix. **EV:** Sales of EVs (incl. Hybrids) increased c.33% YoY in 3QCY23. EV mix of Hyundai region-wise: Korea- 25%, US- 21%, EU- 37%. Company raised EV sales target to 2mn units (from 1.87mn units earlier) in CY30 owing to global demand growing faster than market forecast during last quarter.

Source: Company, Industry, JM Financial

Exhibit 4. Outlook of Global Auto Ancillaries / Battery suppliers

Company	Sales Growth & Margin	Outlook & Guidance	Key Takeaways
Continental	Sales declined 2% YoY & QoQ to EUR 10.2bn in 3QCY23. Adj. EBIT margin was 6.2% (+50bps YoY, +140bps QoQ).	**Revenue:** Consolidated sales guidance downgraded to EUR 41 – 43bn from EUR 41.5 - 44.5bn for CY23 (+4 to 9% YoY) due to currency movements. **Margin:** Adj. EBIT margin guidance maintained between 5.5%-6.5% for CY23 (vs. CY22 margins of 5%).	**Demand:** Company revised its LV production outlook on the back of stronger than expected vehicle production in Europe and China. CV demand is expected to remain sluggish in Europe and China. There exists uncertainty in the RT tyre demand. Geography-wise production growth during 3Q was - Europe: +5%, NA: +9%, China: flat YoY. **Outlook:** Global LV production growth is expected at 5-7% (vs. 3-5% earlier) in CY23. CV production to grow 7-10% in EU and 3-7% for NA. LVs replacement tyre demand is expected to remain between -2% to 0% for CY23. CVs replacement tyre demand to decline in Europe by -13% to -11% (vs. -8% to -6%) and NA by -19% to -17% (vs. 10% to -8%). **Supply:** There was an increase in cash flows led by reduction of inventories. Supply chains have stabilized.
Valeo SA	Sales grew by 4% YoY (-9% QoQ) in 3QCY23 at EUR 5.2bn.	**Revenue:** Guidance maintained EUR 22 to 23bn for CY23 (+10 to +15% YoY). **Margin:** EBIT margin guidance maintained between 3.2%-4% for CY23 (vs 3.2% in CY22).	**Demand:** Revenue growth was driven by acceleration in ADAS and higher production volumes in EU and NA. Expect continued momentum of ADAS business in 4Q. The company expects 90% of new vehicles to be equipped with front cameras by 2030 (higher content per vehicle). The powertrain business slowed down due to lower EV volumes in EU and inventory build-up in 2Q. Expect 4Q to perform well.
LG Chem	Sales declined 28% YoY & 13.3% QoQ to KRW 1,714bn in 3QCY23 for Adv Materials business. Op margin at 7.5% (-10.3% YoY, -130bps QoQ).	**Revenue**: LG's Adv. Material business is expected to grow by 31% in CY23 **Margin**: Expect EBIT margins in 2023 to remain around 10% (11.6% in CY22). (Guidance **from last Qtr**).	**Demand:** Battery material sales & profitability fell in 3Q owing to slowdown of shipments in Europe and decline in RM prices. 4Q outlook: Expect declining performance sequentially owing to decline in metal prices**.** EV demand is expected to remain solid in NA.
Panasonic Automotive (year ending March'24)	Net sales of automotive division at JPY 367bn in 2Q (+14% YoY, +7.6%QoQ). Adj. Op margin of automotive at 2.4% (-10bps YoY, +80bps QoQ) in 2QFY24.	**Sales:** Automotive Revenue guidance increased at JPY 1,460bn (+13% YoY) in FY24 vs previous guidance of JPY 1,370bn. **Margin:** Adj. EBIT guidance improved at c.2.3% in FY24 vs 1.3% during previous forecast. (1.1% in FY23)	**Demand:** Expect increase in sales led by recovery in automobile production (on receding supply constraints) and growth of EVs. Margins to improve based on price revision to counter price hikes in parts & materials (semiconductor). The company has shifted its supply to EVs eligible for tax credit in NA. Demand has slowed down for high-end EVs. **Supply:** Semiconductor supplies continue to improve.
Dana Incorporation	Net sales grew by 5% YoY (-3% QoQ) to USD 2.7bn in 3QCY23. Adjs. EBITDA margin increased by 150bps YoY, & 30bps QoQ to 9.1% in 3QCY23.	**Sales:** Sales guidance maintained at USD 10.7bn for CY23, implying growth of 4.9% YoY. **Margin:** EBITDA Margin guidance downgraded to range between 7.5 to 8.0% for CY23 vs. 7.6t o 8.2% previously (6.9% in CY22).	**Demand: Light Trucks:** End-market in NA impacted by stoppage of some key programs. Although the inventory levels with OEMs were improving, the strikes have impacted the same. EU demand slightly improved led by strong order backlog and restocking, whereas production levels in Asia remains flat. **CVs:** Outlook for MHCV during CY23: NA / EU / SA / India : +7% / +15% / -30% / +2% YoY. **OHVs:** CE supported by infra spending. However, Ag business was impacted by declining farm commodity prices. Expect Asia business to remain slow owing to decline in China offset by growth in India. **Supply:** Commodity prices have started recovering. There seems sequential improvement in customer production volatility. However, the UAW strikes have impacted NA Light Vehicle (LV) business.
Aptiv	Revenue in 3Q was USD 5.2bn (+7% YoY, -2% QoQ). Adj Op Margin in 2Q was 11% (-40bps YoY, +80bps QoQ).	**Sales:** CY23 guidance maintained at USD 19.9-20.2bn. **Margin:** Op margin guidance steady at 10.4 to 10.7% (9.1% in CY22).	**Demand:** Company expects global vehicle production to increase by 6% (vs 4% previous assumption) in CY23 driven by higher than expected production levels in Europe and China. NA production affected by UAW strikes. EV growth was slow in China during 3Q. Despite the slowdown in EV production, the company expects strong double-digit growth in CY23. **Supply:** Supply chain situation is improving gradually with fewer production disruptions.
Lear Corp	Revenue in 3Q was USD 5.78bn (+10% YoY, -3.5% QoQ). Op Margin was 4.6% (+10bps YoY, -40bps QoQ).	**Sales:** CY23 guidance increased to USD 23.1 – 23.3bn vs. USD 22.4-23.1bn previously (USD 20.9bn in CY22). **Margin:** CY23 Op margin guidance increased to 4.7% - 4.8% vs. 4.4 - 5% previously (4.2% in CY22).	**Demand:** Seating and e-system continued to outperform industry in Europe led by strong order backlog and favourable mix. However, the company underperformed industry in NA and China owing to unfavourable mix. Global vehicle production in 3QCY23 increased /(declined) in NA / Europe & Africa/ China by +9% / +6% / -1% YoY. Expect Global production to increase during CY23 by +5% / +12% / +5% in NA / Europe & Africa/ China. **Supply:** UAW strikes impacted the earnings capability of the company.
Magna International	Sales grew by 15% YoY (-3% QoQ) to USD 10.7bn in 3QCY23. Adj EBIT margin for 3QCY23 is 5.8% (+90bps YoY, +30bps QoQ).	**Sales:** CY23 Sales guidance changed between USD 42.1-43.1bn vs. USD 41.9-43.5bn previously. **Margin:** Adj. EBIT margin guidance increased to 5.1-5.4% vs. 4.8-5.2% previously (CY22 - 4.4%).	**Demand:** Raised Light Vehicle Industry production outlook for EU by +11.4% (vs. 7.6% previously), China by +2.7% (vs. -1% previously) for CY23. Maintained outlook for NA at +6.3%. However, continued inflation, higher interest rates, geopolitical risks and slowing economic growth can pose challenges to the industry. **Supply:** Supply constraints have reduced and OEM vehicle production has been less volatile.

Company	Sales Growth & Margin	Outlook & Guidance	Key Takeaways
Faurecia	Revenue increased by 2.5% YoY (-7% QoQ) to EUR c.6.5bn in 3QCY23.	Sales: CY23 Sales guidance maintained between EUR 26.5-27.5bn. Margin: Operating Margin guidance maintained between 5.2-6.2%.	Demand: Maintained its global LV automotive production estimate to c.86mn units for CY23. Robust order intake > EUR22bn in 9MCY23 with high average profitability. Sales momentum remains robust in Europe, China, South-America, Asia (exlc. China) with strong double-digit growth while North-America grew in high single-digit. Expects operating margin to improve in 2H (1HCY23 < 2HCY23) led by gradual pass-through (c.85% recovery) of inflationary costs.
Michelin	Volumes declined by 3.6% YoY in 3QCY23. Revenue was Euro 7.1bn (-5% YoY, flat QoQ) in 3Q. Excl. currency los, revenue in 3Q was flat on YoY basis.	Volume: Tyre volume growth guidance reduced to -4% in CY23 (vs. -4% to -2% previously). Margin: CY23 Op income guidance maintained at EUR 3.4bn (vs. EUR 3.4bn in CY22).	Demand: Global RT demand for PC and LT declined by 1% YoY during 9MCY23 with Europe posting -6%, NA -4%, SA +11%, MEA+India+2%, China +13% and Asia -6%. OE sales witnessed 6% YoY growth worldwide led by easing of supply disruptions. Truck tire markets outside China dropped 5% due to substantial dealer and B2B fleet inventory reductions. Demand for 18-inch and larger tires is steadily expanding. Inventory levels are back to normal in most regions except for winter tires in Europe Outlook: Demand for PC and LT tyres is expected to range between -1% to +1% owing to high base (across both OE and RT). Demand for truck tyres to remain robust in OE segment, despite a few supply disruptions. However, demand for truck tyres in replacement segment is expected to remain sluggish due to softening demand and inventory destocking in 4Q. OHT segment is expected to remain steady as growth in agri (OE)/mining/aircraft is expected to be offset by slower demand from construction segment / agri (RT). 2W tyres demand is expected to decline owing to high inventory (mainly of bicycles).
Goodyear	Tire volumes declined 2.8% YoY (+11% QoQ) to 45.3mn units in 3QCY23. Operating margin was 6.5% (-50bps YoY, +400bps QoQ) for 3QCY23.	Revenue: Expect 4Q volumes to be higher than earlier quarters in 2023. Margin: Expect sequential margin expansion in 4Q.	Demand: RT demand declined 5.3% YoY owing to low volumes in America and EMEA. Decline in America was due to rise in low-cost imports from LATAM and weakness in trucks industry whereas channel destocking impacted Europe. RT volumes declined in Asia in line with the industry and increased for OE segment led by ramping up of EVs. Overall volumes are expected to be below CY22, with weak replacement demand (-3% to -4%). OE volumes are expected to grow by 5% YoY. US and EU RT demand is expected to be remain sluggish (decline of mid-single digits) owing to inventory destocking.
Nokian Tyres	Net sales declined by 12.7% YoY & 5.8% QoQ in 3QCY23 to EUR 276.1mn. Operating margin during 3QCY23 stood at 7.1% (+190bps QoQ) vs. -5.4% in 3QCY22.	Revenue: Net sales guidance downgraded to EUR 1.15bn-1.2bn (previously 1.3-1.5bn) in 2023 vs c1.8bn in 2022. Margin: CY23 margins guidance downgraded to range between 5.5-6% (previously 6-8%) (vs. 12.5% in CY22).	Demand: PV tyres volume declined (c.18% YoY) owing to high inventory with distributors. Heavy duty tyres volume declined due to high inventory levels in the aftermarket channel. However, expect demand in coming period to be supported by channel filling, higher off-take on increased production capacity. High interest rates have soften OE demand. Focus will be on expanding capacity and creating a premium product portfolio. Supply: Supply constraints are easing out. New greenfield capacity in Romania to commence production in H2CY24 and deliveries to begin in 2025. The company increased its production capacity at Finland and US. Expect new production facilities to commence from 4QCY23 in US.
Titan International	Net sales were USD 402mn in 3QCY23 (-25% YoY & -16% QoQ). EBITDA margin was 10.1% (-140bps YoY & -220bps QoQ). Gross margins were 16.4%.	Revenue: Sales guidance maintained in the range of USD 1.85-1.9bn for CY23 (vs. USD 2.17bn in CY22). Margin: Adj. EBITDA margin guidance maintained at c.11% (vs. c.11.7% in CY22).	Demand: Sales declined for Ag. segment in 3Q owing to high inventory with customers in NA and SA, softness in demand for small ag. equipment and decline in Brazilian economy. Volumes for Earthmoving/ Construction segment declined due to higher customer inventory and slowdown for some global construction OEM players. Similarly, volumes in LATAM declined owing to high inventory and slowdown in the region. Outlook: Large Ag retail demand continues at strong levels supported by replacement needs for aging equipment fleet. U.S. Farmer sentiment is strong, with net farm income well above historical levels, supported by strong crop prices. In Europe, pent up demand levels provide support in 2023 and beyond. LatAm market remains strong with significant runway for continued growth due to low inventory levels and positive trends for global Ag economy. CE and earthmoving equipment demand to remain strong led by low inventory, healthy non-residential activity and rising mineral prices.
Yokohama Rubber	Net sales grew by 11% YoY (+4% QoQ) in 3QCY23 to JPY 249.3bn. Margin was 9.7% for 3QCY23 (+150bps YoY, +340bps QoQ).	Revenue: Guidance maintained for net sales in CY23 at JPY 1,000bn (vs. JPY 860.5 in CY22). Margin: Margin guidance increased from 8.5% to 9% for CY23 (vs. 8.1% in CY22).	Demand: In NA, demand for PCR and TBR replacement tyres have started recovering. Sales growth was led by both OE and RT demand. Regional growth/decline estimates: Japan: +2%, NA: flat, Europe: +1%, China: -5%, Asia: +7%.

Source: Company, Industry, JM Financial

Exhibit 5. Outlook of Global Auto OEMs (2Ws)

Company	Sales Growth & Margin	Outlook & Guidance	Key Takeaways
Honda (year ending March'24)	Motorcycle volumes declined 3% YoY (+7% QoQ) in 2QFY24 to c.4.79mn units. Op. margin stood at 13.5% for 2QFY24 (-370bps YoY, -550bps QoQ).	Volume: Guidance declined from c.12.6mn units to 12.3mn units for FY24.	**Demand:** Wholesale sales volumes declined YoY owing to economic slowdown in Vietnam and China. This was partially offset by increase in demand in Indonesia and Europe. Sales volume declined in India as well. The company overall demand (except Vietnam and China) to remain flattish FY24.
Suzuki (FY23: Apr'23 to Mar'24)	Motorcycle volumes remained flat YoY at 958k units for 1HFY23. Op. profit margin stood at 9% for 1HFY23 (+30bps YoY).	Volume: Guidance downgraded from 1.92mn units to 1.88mn units for FY23 (flat YoY).	**Demand:** Global sales were revised down by 39k units, mainly due to downward revisions in Asia including China. Global production was revised down by 53k units, mainly due to downward revisions in Asia incl. China. **Supply:** Production levels are being maintained at normal capacity.
Yamaha	Unit sales increased by c.3% YoY to c.1.2mn units. Op Margin was c.9.3% in 3QCY23 (+270bps YoY).	Revenue: Sales guidance at Yen 2,500bn (+11% YoY). Margin: Op margin guidance at 10%. (No guidance provided in 3QCY23)	**Demand:** Except Vietnam, all the key regions witnessed volume growth. Dealer inventory was above normal level at Vietnam; normalized at Europe, Thailand, Philippines and China, while it remains below normal levels for other regions. It expects strong demand for motorcycles in emerging countries to continue. Demand for small to midrange outboard models is declining and the company has planned inventory adjustment for the same. **Supply:** Semiconductor led supply constraints are gradually easing. Shipments for premium scooter models have improved at emerging markets.

Source: Company, Industry, JM Financial

Exhibit 6. Outlook of Global OHV OEMs (Tractors + Construction Equipment)

Company	Sales Growth & Margin	Outlook & Guidance	Key Takeaways
AGCO	Net sales increased 10.7% YoY (-9% QoQ) in 3QCY23 to USD 3.5bn. Adj. Op margin increased 160bps YoY (-80bps QoQ) to 12.3% in 3QCY23.	**Revenue:** Sales guidance maintained at USD 14.7bn for CY23 (USD 12.7bn in CY22). **Margin:** EBIT margin guidance upgraded by 30bps to 12% for CY23 (10.3% in CY22).	**Demand:** Demand remains strong led by healthy crop production, favourable farm income and improved supply chain. Industry production declined for tractors owing to lower sales of small equipment. Expect production levels to remain flat during 4Q for AGCO. **NA:** Demand for small tractors has slowed due to higher interest rates and overall macro challenge. However, strong demand from higher HOP tractors helped partially offset the decline. **EU:** Retails declined in EU owing to negative farm sentiments due to on-going war. Healthy farm income is expected to support solid retail demand through 2023. Dealer inventory is high. **SA:** Retails in Brazil declined owing to termination of subsidies, however demand remains above-average level for high HP tractors. Company downgraded its guidance on 2023 industry outlook for tractors - NA/ EU: -2 to -3% (previously flat); SA: -2 to -3% (previously 0 to +5%). **Supply:** Supply chain continues to improve allowing the company to keep lower inventory (inventory level down by 14% YoY).
John Deere (Year ended Oct'23)	Net sales was flat YoY (-2.5% QoQ) in 4QCY23 to USD 15.4bn. Operating margin increased 90bps YoY (-320bps QoQ) to 15.4% during 4QCY23.	**Revenue:** Guidance for CY24 decreased for Precision Ag/ Small Ag decreased by 15 to 20% /10 to 15% and increased for CFM by 10%. **Profitability:** Margin guidance for CY24 at 23-24%/ 15-16%/ 17-18% in Precision Ag/ Small Ag / CFM.	**Demand:** Agri Equipment: Large Ag demand will soften in US and Canada owing to high demand since past 3 years, moderating farm fundamentals and high interest rates. Small ag demand is expected to remain impacted by high interest rates. Demand in Europe remains mixed with Eastern Europe impacted by Ukraine pulling down commodity prices while Western Europe remains profitable led by favourable grain prices and declining input costs. Demand in SA to be negatively impacted due to Brazil govt policy and high interest rates. . Industry Outlook for CY24 - US and Canada large Ag: -10 to 15%; US and Canada small Ag: -5% to -10%; Europe Ag: -10%; South America Ag: -10%; Asia Ag: down moderately. Construction Equipment: There exists uncertainty in housing and commercial investments, partially offset by tailwinds from megaproject and infrastructure spending. Industry outlook for CY24 in US and Canada: -5 to -10%. **Supply:** Supply chain conditions seem to be stabilising.
Caterpillar	Net sales increased 12% YoY (-3% QoQ) in 3QCY23 to USD 16.8bn. Adj. operating profit margins increased by 430bps YoY (-50bps QoQ) to 20.8% in 3QCY23.	**Revenue:** Expect CY23 Revenues to be higher vs. 2022. **Margins:** The company guided for on improvement in margins for CY23 over CY22.	**Demand:** Demand remains healthy in end markets. Dealer inventory remains high on YoY basis. CE industry in NA is expected to be strong led by government spending on non-residential infra and healthy order pipeline. China's excavator industry above 10 tons is expected to remain below 2022 levels (by 5-10%) due to low construction activity. Rest of APAC to grow due to higher public infrastructure spending & commodity prices. CE in EMEA expected to decline partially offset by healthy construction demand in Middle East. Demand in LATAM is expected to remain flat YoY in CY23. **Supply:** Improving supply chain conditions have ensured better product availability and reduced the lead times.
Kubota	Net sales increased 15.7% YoY in 3QCY23 to Yen 2258bn. EBIT improved by 230bps YoY to 11.5% in 3QCY23.	**Revenue:** Revenue guidance maintained at JPY 2,950bn for CY23 (10.2% YoY). **Margin:** EBIT margin guidance upgraded to 10% from 9.7% for CY23 (vs 8% in CY22).	**Demand: NA:** Tractor retails declined due to shrinking of housing market. CE demand was strong supported by housing and infra activities of govt, however expect growth to moderate in near term. **EU:** There exists signs of slowdown in CE. Tractors volumes were high in 3Q due to inventory replenishment however overall market remains weak. **Japan:** FES grew in Japan led by high HP sales however the industry volumes remain steady YoY. **China:** Agri machinery / CE market in China to remain sluggish owing to pre buying before implementation of new emission norms. **India:** Demand remains healthy in India. However, drought situation could lead to adverse impact.
Tractor Supply Co.	Net sales stood at USD 3.41bn (+4.3% YoY). Comparable store sale declined by 0.4% YoY. EBIT margin for 3QCY23 was 10% (+60bps YoY).	**Revenue:** Downgraded revenue guidance at USD 14.5-14.6bn (c. 2.5% YoY) and downgraded comparable store sale growth guidance to flat YoY. **Margins:** CY23 operating margin guidance downgraded at 10.1%-10.2%.	**Demand:** Abnormal seasonal trends in Northeast & Midwest regions of the US and consumers' pullback on discretionary purchase impacted comparable store sales growth. 17 new stores were added during the quarter. Global supply chains continue to improve. Comparable sales growth in 4Q is expected to decline low to mid-single digits owing to weakening of consumer discretionary spending and abnormal weather.
Doosan Bobcat	Revenue during 3QCY23 was USD 1.8bn (flat YoY, -11.4% QoQ). Op margin was 12.5% in 3QCY23 (-80bps YoY,-500bps QoQ).	**Revenue:** Sales for CY23 expected USD 6.9bn (+4% YoY). **Margin:** Margins for CY23 to be 9.7% (vs 12.4% in CY22) owing to higher marketing and labour costs. **(Guidance from previous quarter)**	**Demand:** Expect CE to remain flat in 4Q. Sales remained flat in 3Q due to high base. Order backlog remains normalized as supply constraints eased out. Construction related spending is supported by non-residential sector. Residential segment remains below par due to high interest rates. Expect modest growth in NA during 4Q impacted by high interest rates. There exists uncertainty in EMEA due to geopolitical risks. Although production rates recovered in EU, building permits declined during the same period and rising recession concerns lead to uncertainty over construction growth in EU.

Source: Company, Industry, JM Financial

APPENDIX I

JM Financial Institutional Securities Limited

Corporate Identity Number: U67100MH2017PLC296081
Member of BSE Ltd. and National Stock Exchange of India Ltd.
SEBI Registration Nos.: Stock Broker - INZ000163434, Research Analyst - INH000000610
Registered Office: 7th Floor, Cnergy, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India.
Board: +91 22 6630 3030 | Fax: +91 22 6630 3488 | Email: jmfinancial.research@jmfl.com | www.jmfl.com
Compliance Officer: Mr. Sahil Salastekar | Tel: +91 22 6224 1073 | Email: sahil.salastekar@jmfl.com
Grievance officer: Mr. Sahil Salastekar | Tel: +91 22 6224 1073 | Email: instcompliance@jmfl.com

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Definition of ratings	
Rating	Meaning
Buy	Total expected returns of more than 10% for stocks with market capitalisation in excess of INR 200 billion and REITs* and more than 15% for all other stocks, over the next twelve months. Total expected return includes dividend yields.
Hold	Price expected to move in the range of 10% downside to 10% upside from the current market price for stocks with market capitalisation in excess of INR 200 billion and REITs* and in the range of 10% downside to 15% upside from the current market price for all other stocks, over the next twelve months.
Sell	Price expected to move downwards by more than 10% from the current market price over the next twelve months.

* REITs refers to Real Estate Investment Trusts.

Research Analyst(s) Certification

The Research Analyst(s), with respect to each issuer and its securities covered by them in this research report, certify that:

All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and

No part of his or her or their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

This research report has been prepared by JM Financial Institutional Securities Limited (JM Financial Institutional Securities) to provide information about the company(ies) and sector(s), if any, covered in the report and may be distributed by it and/or its associates solely for the purpose of information of the select recipient of this report. This report and/or any part thereof, may not be duplicated in any form and/or reproduced or redistributed without the prior written consent of JM Financial Institutional Securities. This report has been prepared independent of the companies covered herein.

JM Financial Institutional Securities is registered with the Securities and Exchange Board of India (SEBI) as a Research Analyst and a Stock Broker having trading memberships of the BSE Ltd. (BSE) and National Stock Exchange of India Ltd. (NSE). No material disciplinary action has been taken by SEBI against JM Financial Institutional Securities in the past two financial years which may impact the investment decision making of the investor. Registration granted by SEBI and certification from the National Institute of Securities Market (NISM) in no way guarantee performance of JM Financial Institutional Securities or provide any assurance of returns to investors.

JM Financial Institutional Securities renders stock broking services primarily to institutional investors and provides the research services to its institutional clients/investors. JM Financial Institutional Securities and its associates are part of a multi-service, integrated investment banking, investment management, brokerage and financing group. JM Financial Institutional Securities and/or its associates might have provided or may provide services in respect of managing offerings of securities, corporate finance, investment banking, mergers & acquisitions, broking, financing or any other advisory services to the company(ies) covered herein. JM Financial Institutional Securities and/or its associates might have received during the past twelve months or may receive compensation from the company(ies) mentioned in this report for rendering any of the above services.

JM Financial Institutional Securities and/or its associates, their directors and employees may; (a) from time to time, have a long or short position in, and buy or sell the securities of the company(ies) mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) covered under this report or (c) act as an advisor or lender/borrower to, or may have any financial interest in, such company(ies) or (d) considering the nature of business/activities that JM Financial Institutional Securities is engaged in, it may have potential conflict of interest at the time of publication of this report on the subject company(ies).

Neither JM Financial Institutional Securities nor its associates or the Research Analyst(s) named in this report or his/her relatives individually own one per cent or more securities of the company(ies) covered under this report, at the relevant date as specified in the SEBI (Research Analysts) Regulations, 2014.

The Research Analyst(s) principally responsible for the preparation of this research report and their immediate relatives are prohibited from buying or selling debt or equity securities, including but not limited to any option, right, warrant, future, long or short position issued by company(ies) covered under this report. The Research Analyst(s) principally responsible for the preparation of this research report or their immediate relatives (as defined under SEBI (Research Analysts) Regulations, 2014); (a) do not have any financial interest in the company(ies) covered under this report or (b) did not receive any compensation from the company(ies) covered under this report, or from any third party, in connection with this report or (c) do not have any other material conflict of interest at the time of publication of this report. Research Analyst(s) are not serving as an officer, director or employee of the company(ies) covered under this report.

While reasonable care has been taken in the preparation of this report, it does not purport to be a complete description of the securities, markets or developments referred to herein, and JM Financial Institutional Securities does not warrant its accuracy or completeness. JM Financial Institutional Securities may not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. This report is provided for information only and is not an investment advice and must not alone be taken as the basis for an investment decision.

This research report is based on the fundamental research/analysis conducted by the Research Analyst(s) named herein. Accordingly, this report has been prepared by studying/focusing on the fundamentals of the company(ies) covered in this report and other macro-economic factors. JM Financial Institutional Securities may have also issued or may issue, research reports and/or recommendations based on the technical/quantitative analysis of the company(ies) covered in this report by studying and using charts of the stock's price movement, trading volume and/or other volatility parameters. As a result, the views/recommendations expressed in such technical research reports could be inconsistent or even contrary to the views contained in this report.

The investment discussed or views expressed or recommendations/opinions given herein may not be suitable for all investors. The user assumes the entire risk of any use made of this information. The information contained herein may be changed without notice and JM Financial Institutional Securities reserves the right to make modifications and alterations to this statement as they may deem fit from time to time.

This report is neither an offer nor solicitation of an offer to buy and/or sell any securities mentioned herein and/or not an official confirmation of any transaction.

This report is not directed or intended for distribution to, or use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject JM Financial Institutional Securities and/or its affiliated company(ies) to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to a certain category of investors. Persons in whose possession this report may come, are required to inform themselves of and to observe such restrictions.

Additional disclosure only for U.S. persons: JM Financial Institutional Securities has entered into an agreement with JM Financial Securities, Inc. ("JM Financial Securities"), a U.S. registered broker-dealer and member of the Financial Industry Regulatory Authority ("FINRA") in order to conduct certain business in the United States in reliance on the exemption from U.S. broker-dealer registration provided by Rule 15a-6, promulgated under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission ("SEC") (together "Rule 15a-6").

This research report is distributed in the United States by JM Financial Securities in compliance with Rule 15a-6, and as a "third party research report" for purposes of FINRA Rule 2241. In compliance with Rule 15a-6(a)(3) this research report is distributed only to "major U.S. institutional investors" as defined in Rule 15a-6 and is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research report and are not a major U.S. institutional investor, you are instructed not to read, rely on, or reproduce the contents hereof, and to destroy this research or return it to JM Financial Institutional Securities or to JM Financial Securities.

This research report is a product of JM Financial Institutional Securities, which is the employer of the research analyst(s) solely responsible for its content. The research analyst(s) preparing this research report is/are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to supervision by a U.S. broker-dealer, or otherwise required to satisfy the regulatory licensing requirements of FINRA and may not be subject to the Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Any U.S. person who is recipient of this report that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, must contact, and deal directly through a U.S. registered representative affiliated with a broker-dealer registered with the SEC and a member of FINRA. In the U.S., JM Financial Institutional Securities has an affiliate, JM Financial Securities, Inc. located at 1325 Avenue of the Americas, 28th Floor, Office No. 2821, New York, New York 10019. Telephone +1 (332) 900 4958 which is registered with the SEC and is a member of FINRA and SIPC.

Additional disclosure only for U.K. persons: Neither JM Financial Institutional Securities nor any of its affiliates is authorised in the United Kingdom (U.K.) by the Financial Conduct Authority. As a result, this report is for distribution only to persons who (i) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the matters to which this report relates may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This report is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this report relates is available only to relevant persons and will be engaged in only with relevant persons.

Additional disclosure only for Canadian persons: This report is not, and under no circumstances is to be construed as, an advertisement or a public offering of the securities described herein in Canada or any province or territory thereof. Under no circumstances is this report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the registration requirement in the relevant province or territory of Canada in which such offer or sale is made. This report is not, and under no circumstances is it to be construed as, a prospectus or an offering memorandum. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. If you are located in Canada, this report has been made available to you based on your representation that you are an “accredited investor” as such term is defined in National Instrument 45-106 Prospectus Exemptions and a “permitted client” as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada nor should it be construed as being tailored to the needs of the recipient. Canadian recipients are advised that JM Financial Securities, Inc., JM Financial Institutional Securities Limited, their affiliates and authorized agents are not responsible for, nor do they accept, any liability whatsoever for any direct or consequential loss arising from any use of this research report or the information contained herein.