

The Coming Cost Crunch: UAW Contracts, Capital, & the EV Transition

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Agenda

- Impact of New UAW Contract
- Economics of BEVs
- Other Industry Challenges

Summary of UAW Contract Concessions

Standard Terms

- ~25% General Wage Increase Over Contract (~6% Last Contract)
- In-Progression Grow-In (3 Yrs vs. 8 Yrs)
- Temps Convert to In-Progression After 9 Months
- 401K Contribution 10% (6.4% prior)
- +9% Increase in Pension Payment for Eligible Retiree
- Profit Share Retained
- \$5K signing bonus (\$9K-11K prior)
- No Lump Sums

2007 Contract Provisions Returned

- Cost of Living Adjustment (COLA) Returned
- Retirees: \$2.5K in Lump Sum Payments

Other Concessions

- GM & STLA Unionize Battery Plants
- Right to Strike Over Plant Closing
- STLA Reopens Belvidere Plant

Cost of UAW Concessions

- Estimate Average Wage Rises from ~\$40/hr to ~\$49/hr by 2027
- Implies Annual Salary Rises from ~\$83K to ~\$102K
- All-In Cost Rises from ~\$58/hr to ~\$73/hr
- Transplant All-In Wages ~\$52-55/hr in 2023 (Now Up ~10%)

Estimated All-In Wage Per Hour at Detroit 3 Based on UAW Highlighters

	Ford			GM			STLA		
	2023E	2024E	2027E	2023E	2024E	2027E	2023E	2024E	2027E
Skilled	\$36.96	\$42.65	\$50.57	\$36.85	\$42.52	\$50.43	\$37.05	\$42.91	\$50.87
Legacy	\$32.05	\$35.70	\$42.60	\$32.32	\$36.00	\$42.95	\$31.77	\$35.38	\$42.24
In Progression	\$30.87	\$32.02	\$40.82	\$31.23	\$32.29	\$41.17	\$31.37	\$31.74	\$40.46
Temp	\$16.67	\$21.00	\$21.00	\$16.67	\$21.00	\$21.00	\$17.53	\$21.00	\$21.00
Average Base Wage	\$31.56	\$34.55	\$42.30	\$31.70	\$35.03	\$42.78	\$30.37	\$33.75	\$41.71
Overtime	\$0.47	\$0.52	\$0.63	\$0.48	\$0.53	\$0.64	\$0.46	\$0.51	\$0.63
Profit Share	\$4.41	\$4.41	\$4.41	\$6.13	\$6.13	\$6.13	\$7.10	\$7.10	\$7.10
Inflation Bonus	\$0.72	\$0.00	\$0.00	\$0.72	\$0.00	\$0.00	\$0.72	\$0.00	\$0.00
Lump Bonuses Pro-rated	\$0.66	\$0.00	\$0.00	\$0.72	\$0.00	\$0.00	\$0.72	\$0.00	\$0.00
Signing Bonus Prorated	\$1.08	\$0.60	\$0.60	\$1.32	\$0.60	\$0.60	\$1.08	\$0.60	\$0.60
Total Payroll	\$38.91	\$40.08	\$47.95	\$41.07	\$42.28	\$50.15	\$40.45	\$41.96	\$50.03
Active Healthcare	\$10.12	\$10.73	\$12.78	\$10.12	\$10.73	\$12.78	\$7.09	\$7.65	\$9.64
Pension	\$3.49	\$5.01	\$5.79	\$3.63	\$5.23	\$6.02	\$3.59	\$5.20	\$6.00
Statutory	\$2.72	\$2.81	\$3.36	\$2.87	\$2.96	\$3.51	\$2.83	\$2.94	\$3.50
Other Benefit	\$2.00	\$2.04	\$2.16	\$2.00	\$2.04	\$2.16	\$2.00	\$2.04	\$2.16
All-In Wage	\$57.25	\$60.66	\$72.04	\$59.70	\$63.24	\$74.62	\$55.95	\$59.78	\$71.34
Annual Wage	\$119,071	\$126,182	\$149,846	\$124,166	\$131,540	\$155,212	\$116,382	\$124,342	\$148,397
<i>Per Hour Worked</i>	\$66.15	\$70.10	\$83.25	\$68.98	\$73.08	\$86.23	\$64.66	\$69.08	\$82.44

Source: Center for Automotive Research; Company Reports; Wells Fargo Securities, LLC estimates

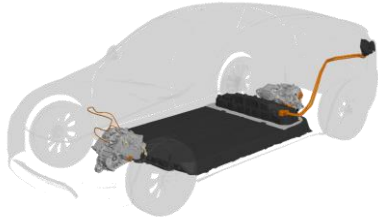
What Will UAW Contract Cost?

- Estimate Contract Adds **\$1.3-\$1.8B by 2027**
- Labor Cost Gap ~\$550/Vehicle Currently vs. Average EBIT Per Vehicle of ~\$4,000
- Added Cost from UAW Labor Costs at Battery Plants
- Right to Strike Over Plant Closing Risk

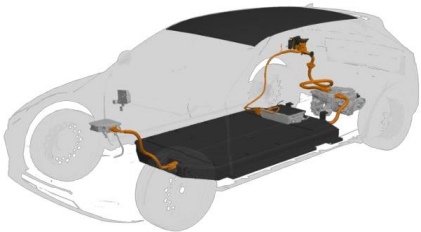
Estimated Impact of Contracts on Detroit 3						
	Ford		GM		STLA	STLA
	2024E	2027E	2024E	2027E	2024E	2027E
Employees	57,000		46,000		40,500	
Est Annual Wage Increase	\$5,848	\$30,774	\$7,499	\$31,171	\$8,084	\$32,139
Labor Cost in \$M	\$333	\$1,754	\$345	\$1,434	\$327	\$1,302
Est. Retirees	138,000		380,000		92,000	
Est. Lump Sum	\$1,000	\$500	\$1,000	\$500	\$1,000	\$500
Retiree Cost \$M	\$138	\$69	\$380	\$190	\$92	\$46
Total Cost	\$471	\$1,823	\$725	\$1,624	\$419	\$1,348

Source: Company Reports; Wells Fargo Securities, LLC estimates

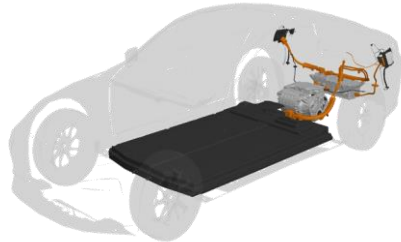
BEV Teardown Series: What We Tore Down



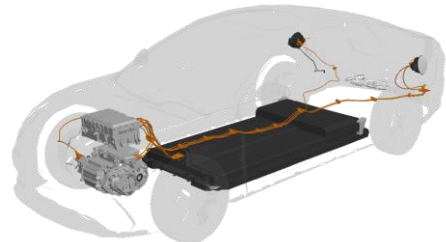
Tesla Model Y - Source: A2Mac1; Wells Fargo Securities, LLC



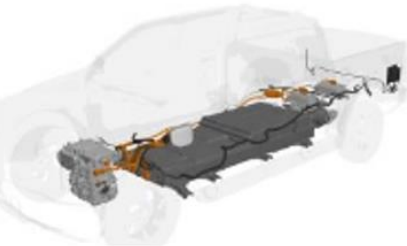
Hyundai Ioniq 5 - Source: A2Mac1; Wells Fargo Securities, LLC



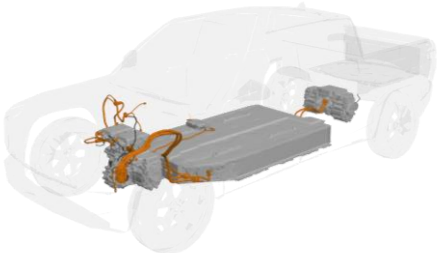
XPeng P7 - Source: A2Mac1; Wells Fargo Securities, LLC



BYD Han - Source: A2Mac1; Wells Fargo Securities, LLC



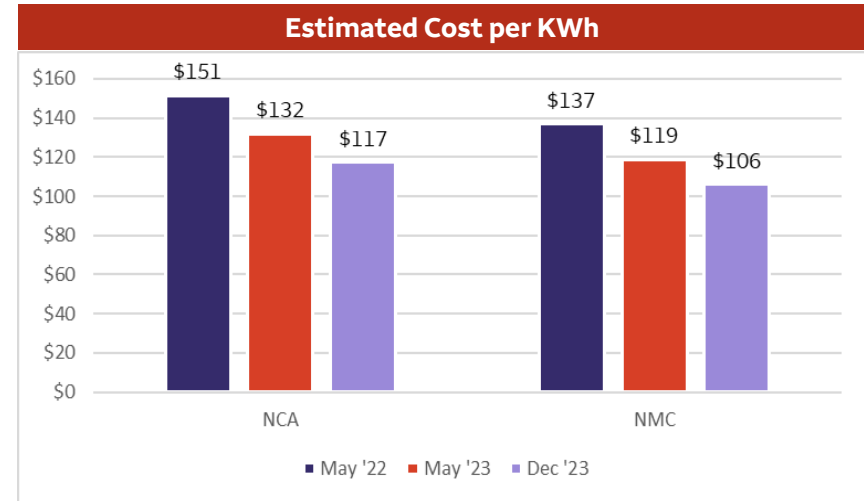
Ford Lightning - Source: A2Mac1; Wells Fargo Securities, LLC



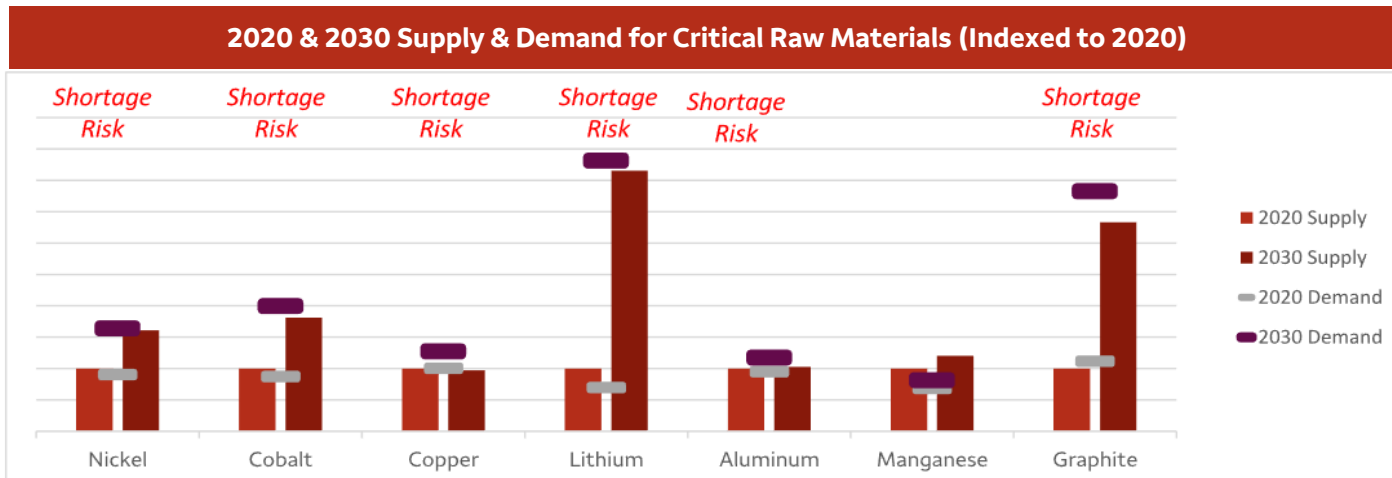
Rivian R1T - Source: A2Mac1; Wells Fargo Securities, LLC

Battery Raw Mat Risks

- Critical BEV raw material prices rose dramatically in 2022, severely impacting BEV economics (Nickel & Lithium)
- Current Pricing Back to 2021 Levels
- Long Term Raw Mat Cost Risk Remains



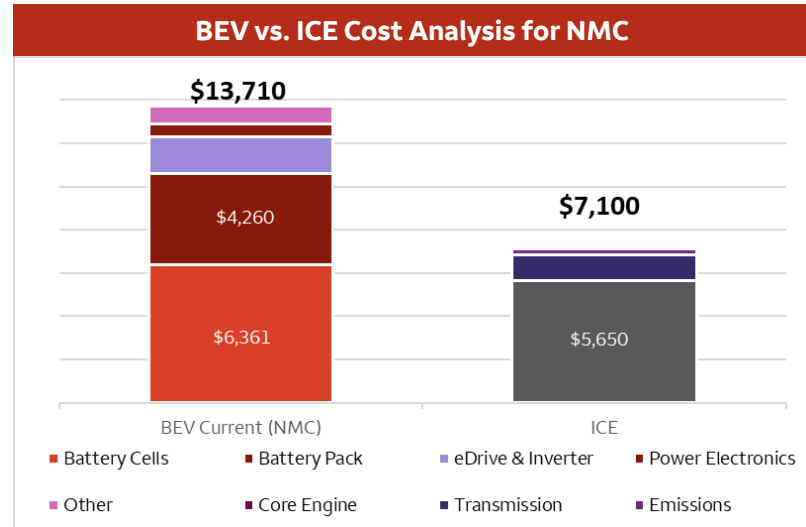
Source: A2Mac1; Wells Fargo Securities, LLC



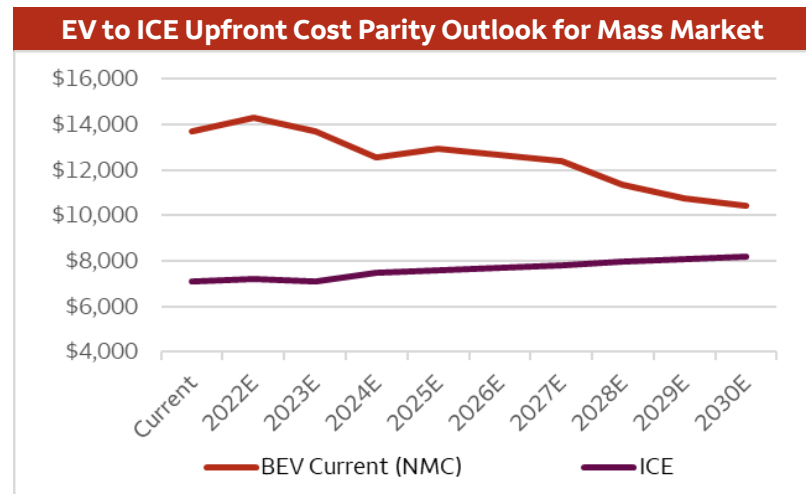
Source: USGS; Cobalt Institute; Copper Institute; IHS; Bloomberg; Wells Fargo Securities, LLC estimates

BEV-ICE Parity Still in the Future

- Pack & E-Powertrain Also Add Cost
- All-In NMC-based BEV powertrain is ~\$6.6k more costly than ICE
- Average global OEM profit ~\$4k per vehicle.
- We estimate cost parity will not occur until after 2030



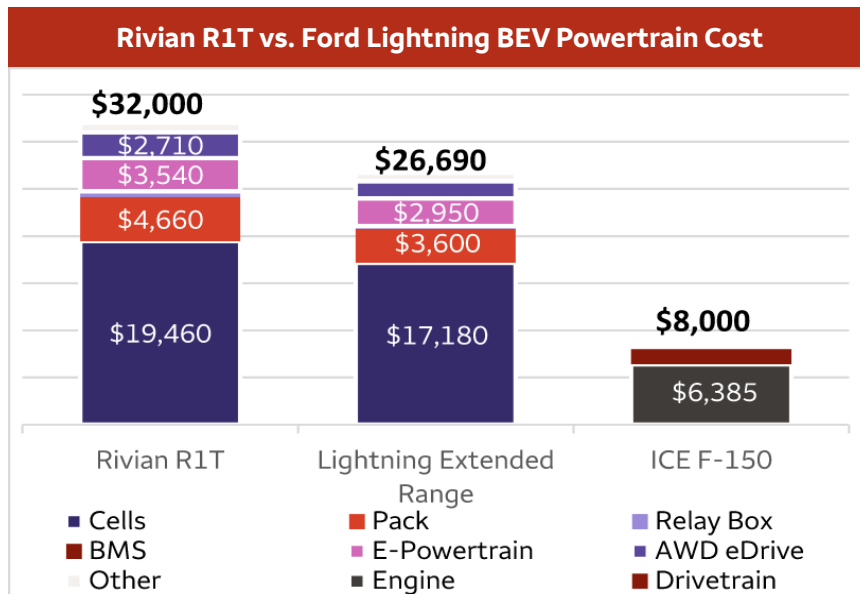
Source: A2Mac1; Wells Fargo Securities, LLC



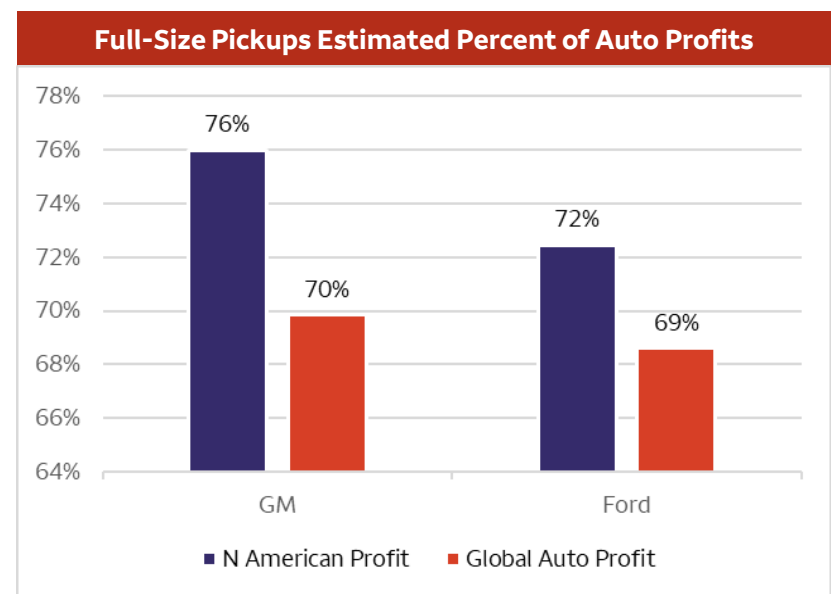
Source: A2Mac1; Wells Fargo Securities, LLC

Pickup Profits At Risk

- BEV Economics Worse for Pickups
- Full-Size Pickups Account for Most of GM & Ford Profits
- Pickups are ~3% of Global Unit Sales, But are ~14% of Global Profits & ~41% of N America Profits



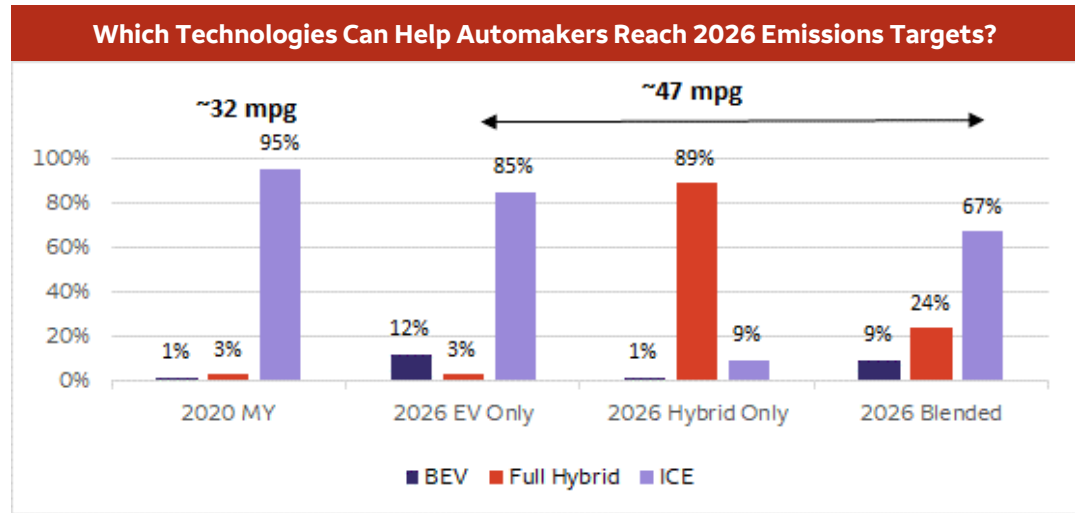
Source: A2Mac1; Wells Fargo Securities, LLC



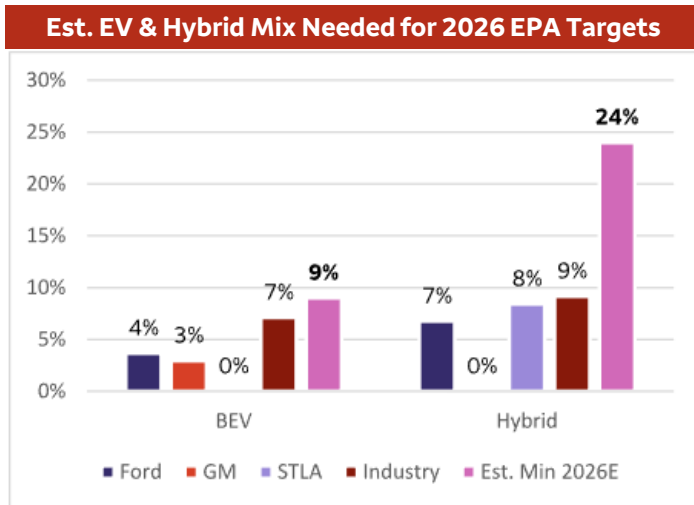
Source: Company websites; Wells Fargo Securities, LLC

US Regulations Force Sales of BEVs

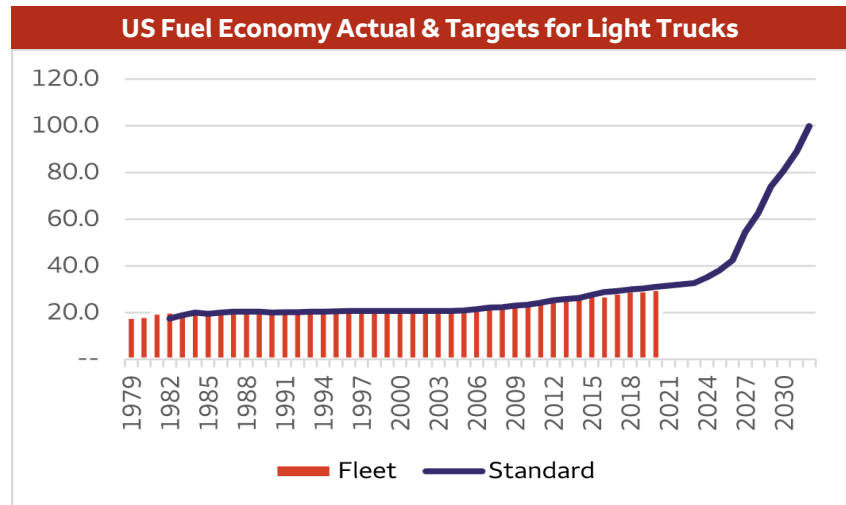
- EPA's Targets to 2026 Imply 9-12% BEV
- Detroit 3 at -4% Currently
- EPA 2032 Proposal Implies 67% BEV by 2032



Source: Company Reports; Wells Fargo Securities, LLC estimates



Source: Wards; EPA; NHTSA; Wells Fargo Securities, LLC estimates

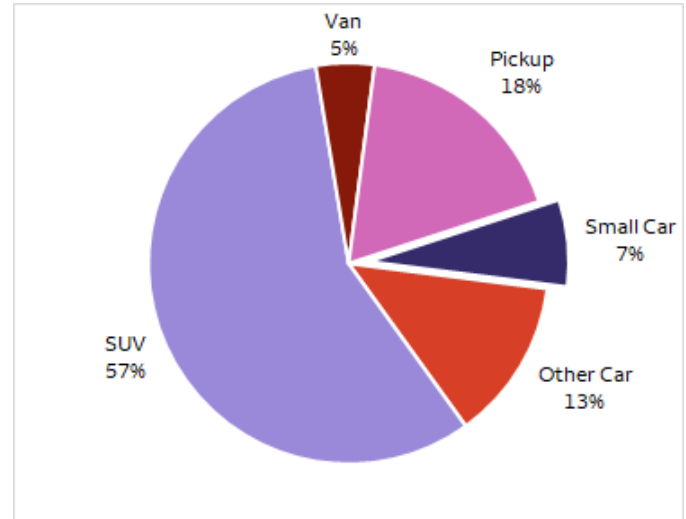


Source: Wards; EPA; NHTSA; Wells Fargo Securities, LLC estimates

Challenges of Sub \$25K BEV

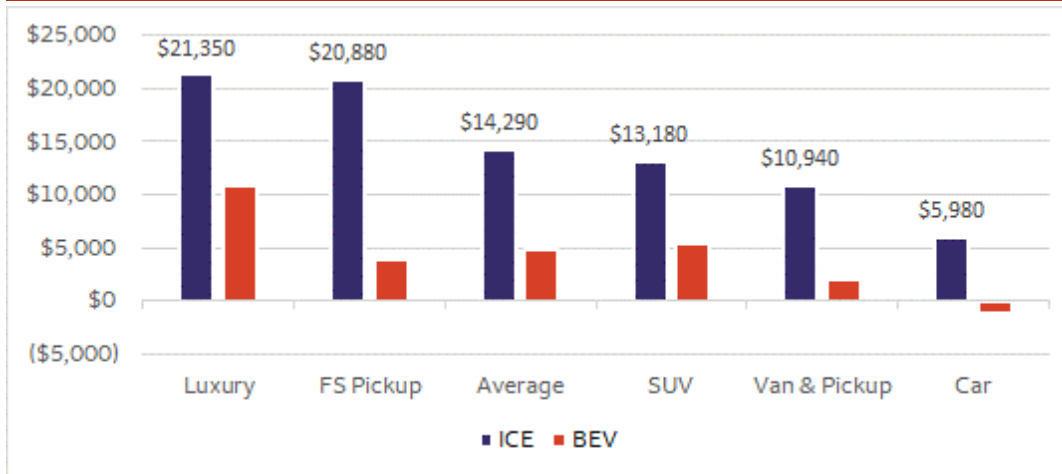
- Will Consumers Want Small Car?
- Are ICE Cars Even Profitable?
- Weight Works Against BEVs
 - Large Car Means Large Battery

US 2023 Auto Sales by Segment



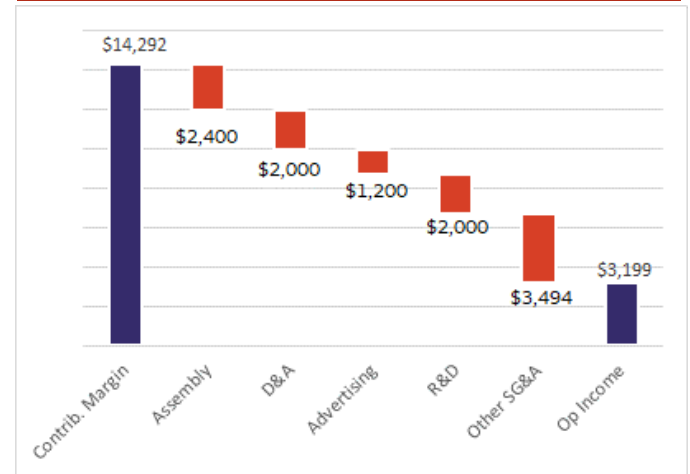
Source: Wards; Wells Fargo Securities, LLC

Estimated Contribution Margin by Segment



Source: Company reports; Wells Fargo Securities, LLC estimates

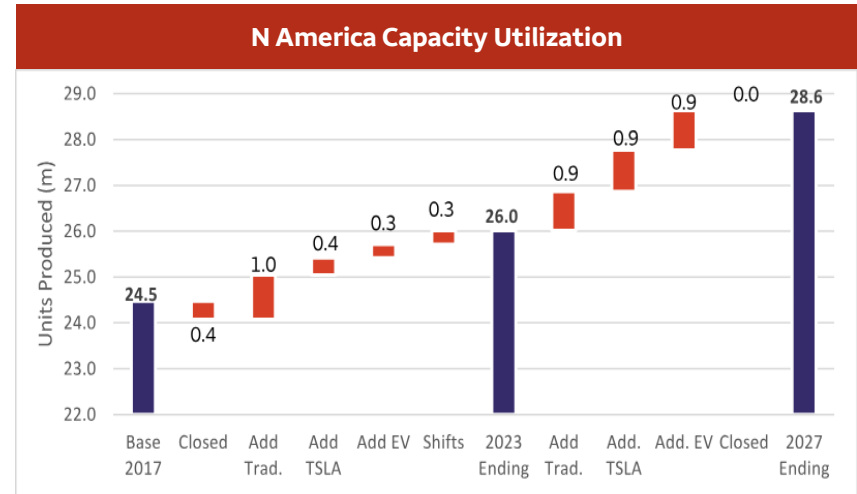
Est. Avg ICE \$ Operating Profit Per Vehicle



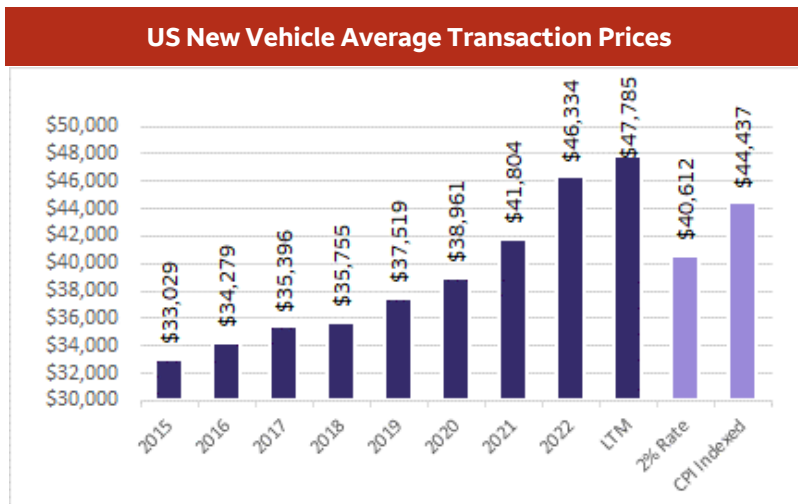
Source: Company reports; Wells Fargo Securities, LLC estimates

Other Challenges for Automakers in 2024

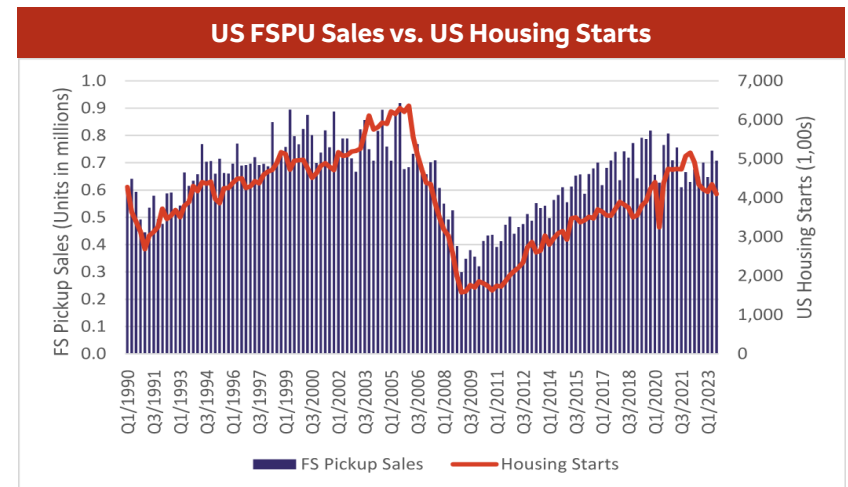
- **Pricing Pressure**
- **Excess Capacity**
 - >4M units of Added Capacity in N America by 2027
 - Europe Flat by Sales in Decline & Imports Rising
- **Pickup Demand**
 - Housing Starts Down
 - Inventory Rising with ~Flat Sales



Source: Wards; Wells Fargo Securities, LLC estimates



Source: Bloomberg; Wells Fargo Securities, LLC estimates



Source: Wards; Wells Fargo Securities, LLC estimates

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