Portfolio Strategy

Driven by premium analytics and hedge fund actions

Electric Vehicle Manufacturers

Stocks, ETFs, Structured Products, Call Options

May 2023

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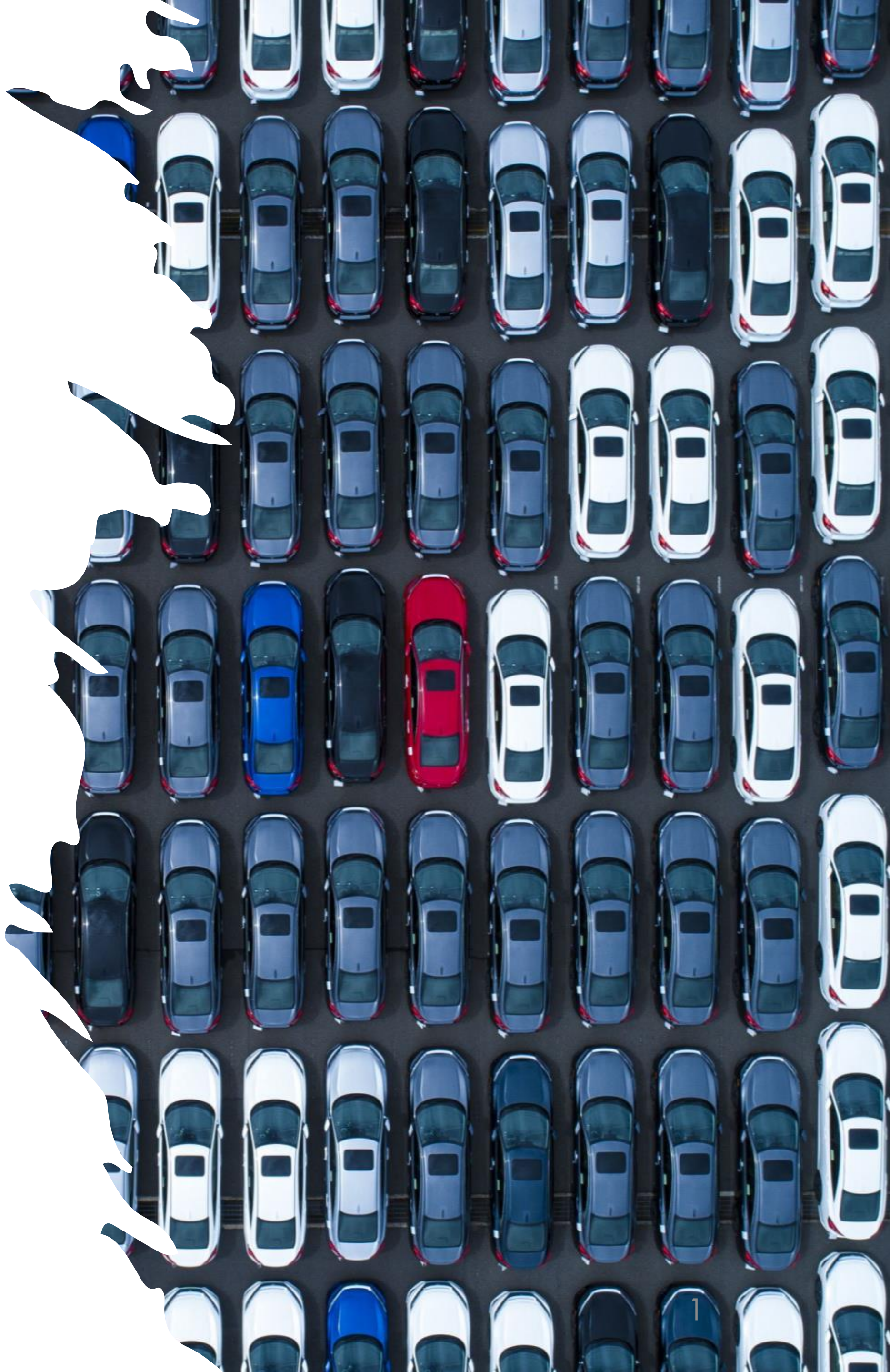


US EV makers

As on May 12, 2023

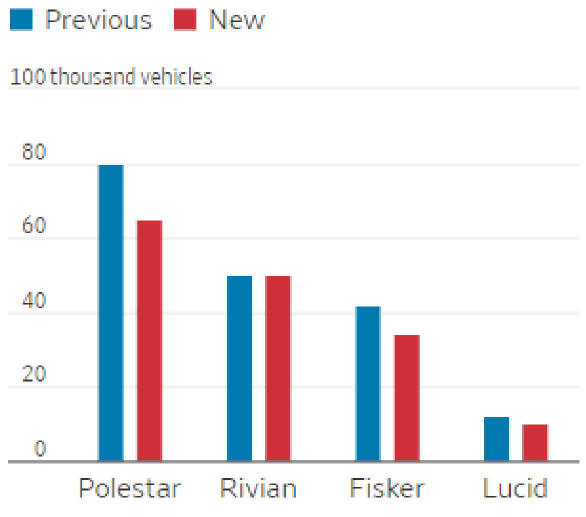
Stock	Last Price	Mcap ($ bn)	P/E 2023E	EPS 2023 E	EPS 2024 E	Liquid cash ($ bn)	Consensus rating	Target price
Tesla	$168	534	49	3.45	4.88	22.4	Moderate buy	xxx
Rivian	$13	13.2	Neg	-5.31	-3.42	11.2	Moderate buy	xxx
Lucid	$7	13.1	Neg	-1.34	-0.98	3.4	Moderate buy	xxx

- **Tesla's sales volume is expected to increase 40% in 2023 and 25% in 2024 driven by increased production of vehicles from its new factories in US and Germany. TSLA's Model Y and Model 3 are the two bestselling EVs in the U.S. and bookings for its to-be-launched Cybertruck is robust at around 1.7 M units**

- **While many EV carmakers continue to face headwinds with their production volume and costs, Tesla has an opportunity to leverage its cost leadership and rapidly grow its market share. The impact of price reduction on many models in Q1 2023 has only slightly shrunk its operating margin.**

Deceleration

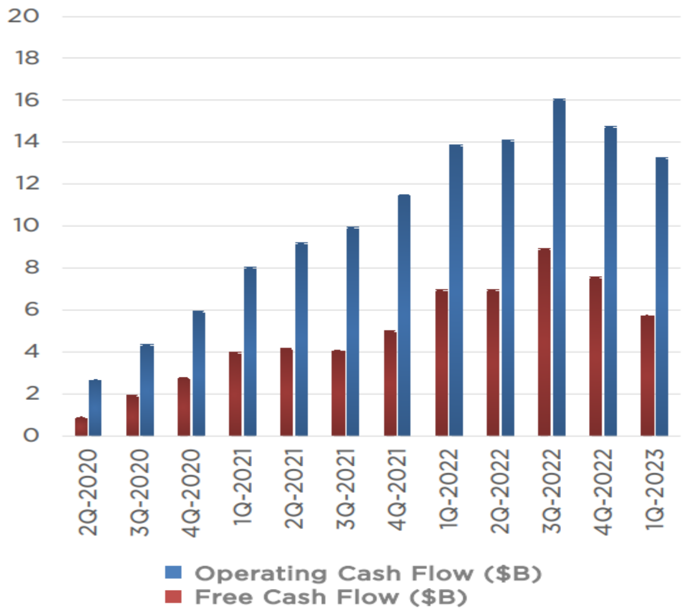
Targeted production in 2023



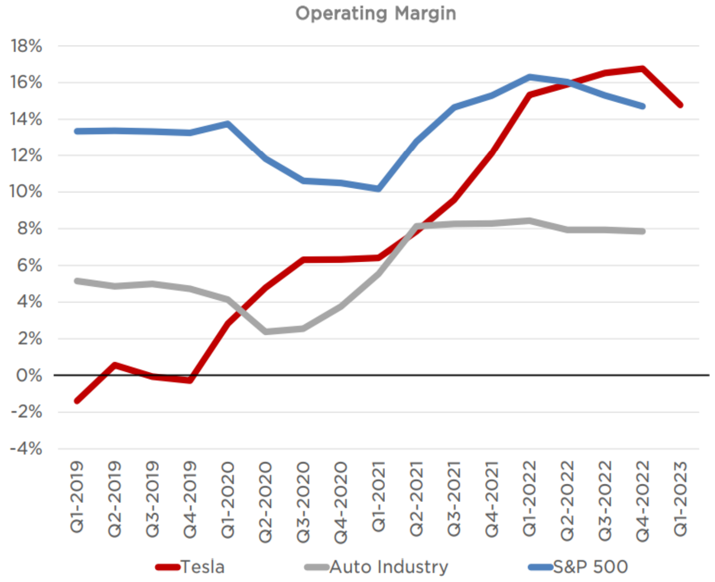
Notes: Mid-point of guidance where applicable; Lucid expects production of more than 10,000

Source: the companies

Tesla Cybertruck



Source: Tesla



Source: Tesla

- **Tesla reported a sharp jump in energy storage deployment during the past three quarters due to ramp-up of its 40 GWh Megapack factory in California.**

- **The company is the main beneficiary of Inflation Reduction Act as its Models Y and 3 became eligible for $7,500 federal EV tax credit from Jan 2023.**

Rivian Automotive

- Rivian has an agreement to supply Amazon with 100K electric delivery vans by 2025. It plans to build a second plant and expand its existing Illinois plant
- Rivian's 2023 production guidance of 50,000 units is 105% higher than the 24,337 units produced in 2022. It had roughly 114K R1T and R1S pickup preorders in the U.S. and Canada
- In Q12023, the company raised $1.5 bn through convertible senior notes and in April 2023 has secured an additional $0.9 B funding from banks to shore up its liquidity.

Lucid Group

- **Lucid has guided a production volume of 10,000 vehicles in 2023 against 7,180 in 2022 driven by higher volumes of Lucid Air pure and launch of its Lucid Air Sapphire sedan.**
- **Like Rivian, Lucid has a strong shareholder backing from Saudi Arabia which has a deal to buy up to 100K vehicles over the next decade Construction of Lucid's new manufacturing facility in Saudi Arabia is well underway, with vehicle re-assembly operations expected to commence in September 2023. The company is also expanding its Arizona plant.**
- **The auto manufacturing industry is notorious for its low margins, high barriers to entry, and high failure rate. There are concerns regarding pricing of Lucid's vehicles and liquidity during the production ramp-up phase**

AMP-2, KAEC, Saudi Arabia – April 2023

Lucid Air Sapphire

Chinese EV makers

As on May 12, 2023

Stock	Last Price	Mcap ($ bn)	P/E 2023E	EPS 2023 E	EPS 2024 E	Consensus rating	Target price
BYD	$61.42	102	24	2.51	3.43	Moderate buy	xxx
Li Auto	$29.44	28.8	118	0.25	0.56	Strong buy	xxx
Nio	$7.95	13.7	Neg	-5.36	-0.09	Moderate buy	xxx
Xpeng	$9.82	8.7	Neg	-1.11	-0.79	Hold	xxx
Polestar (Sweden)	$3.31	8.4	Neg	-0.52	-0.42	Moderate buy	xxx

- **BYD posted a more than five-fold rise in net profit in Q1 2023, driven by a strong 80% YoY growth in sales. However, sequentially profit slumped due to a slowdown in demand and price war. China has ended subsidies to help consumers buy EVs. In 2022**

- **It has sold about 757,384 electrified passenger vehicles in Q12023, up about 94% year over year. Sales of battery-electric vehicles, or BEVs, totaled 104,364 units in April, 82% higher YoY.**

- **It is gaining market share over Tesla in China with its Seal sedan highly popular on lower pricing than Tesla's Model 3. Over the next three years, BYD plans to introduce new commercial-vehicle models in China, Europe and Japan. It has allocated a budget of more than $20 billion for its commercial-vehicle unit through 2025.**

Polestar Automotive

- **Polestar enjoys the backing of Volvo and Geely. Besides, it shares an agreement with Hertz for a delivery of up to 65K vehicles over five years by 2026.**
- **Polestar's 2023 vehicle guidance exceeds Rivian and Lucid combined and generated FY22 positive gross margins of ~5%, while both currently produce negative gross margins.**
- **Swedish electric car brand Polestar delivered 12,076 vehicles in Q123 and is expected to deliver 60-70k vehicles in 2023. Polestar 3 (SUV) for North America production was pushed back to early 2024 due to price war from competition, while Polestar 4 (SUV) was launched in China with deliveries expected to kick in Q4 2023.**

Polestar 3

Li Auto

Li L9

- Li Auto's EVs specialize in extended-range operations with a range of over 800 kilometers when run on both its electric motor and gasoline engine. Its vehicles are thus designed to appeal to Chinese long-distance drivers. Its sales are entirely in China
- Vehicle sales increased 97% to $2.67 billion in Q12023 driven by higher units and a higher average selling price. Total vehicle deliveries grew 65.8% YoY.
- Gross profit increased 77% Y/Y to $557.7 million, while gross margin contracting 220 basis points to 20.4% while Adjusted earnings per ADS of $0.200 beat the consensus of $0.010.
- Li Auto sees Q2 FY23 revenue of $3.53 billion - $3.77 billion representing an increase of 177% - 196% Y/Y.

Nio

- **All NIO's new energy vehicles (NEV) are equipped with proprietary battery swapping technologies, providing users the flexibility to charge, swap, or upgrade batteries. Its 1,200+ nationwide battery swap stations in China can perform a battery swap in about 5 minutes (vs. Tesla's fast super-charging network that takes at least half an hour to fully charge a battery). NIO plans to have 4,000+ swap stations by 2025, with a quarter of them outside of China**
- **Development of its own batteries is imperative for increasing its gross margin as battery costs currently account for about 40% of its vehicle costs.**
- **NIO's vehicle innovations should attract new buyers amid an increasing adoption of NEV. NIO's new models (EC7 coupe SUV and ES8 SUV) that will begin delivery in mid 2023 and. It plans to grow its presence in Germany, the Netherlands, Denmark, and Sweden**

Nio EC7 coupe

Tesla as a portfolio holding

Stock	ETFs	Structured Products	Call options
Being the market leader by sales as well as the lowest cost producer of EVs, Tesla is a high-quality stock suitable for moderate to aggressive investors.	How to position in an ETF having a concentrated position in Tesla ?	How to position in a **listed** structured product having Tesla stock as an underlying component ?	How to position in a call option strategy having Tesla as an underlying ?
How to position in Tesla stock ?	There are four passive ETFs having more than a 10% allocation in Tesla	1. **15.54% p.a. structure on Tesla** 2. **20% p.a. structure on Tesla**	Covered call (own stock and sell a call option of a higher strike) to earn option premium
Time horizon: 1-2 years	**Time horizon: 1-2 years**	**Time horizon: 7-12 months**	**Time horizon: 1-12 months**
Portfolio weight: Maximum 5%	Portfolio weight: Maximum 10%	Portfolio weight: Maximum 5%	Portfolio weight: Max 3%
Capital allocation: Invest x % at price P1 Invest xx% of your Tesla allocation at price P2.	Capital allocation: Invest x % at price , P1 Invest xx% of your ETF allocation at price P2.	Coupon remaining: 9% (not callable) Max capital gain: 5% **Max return: 25% p.a.** Buffer: 40% Liquidity: Good	Call option buy is not advised at the stock's current level

Rivian as a portfolio holding

Stock	ETFs	Call options
Rivian has a supply agreement with Amazon, a decent reservation count for its SUV/ pickup vans. It seems to have sufficient liquidity to boost its production.	How to position in an ETF having a concentrated position in Rivian?	How to position in a call option strategy on Rivian ?
How to position in Rivian stock ?	There are two passive ETFs having more than a 3% allocation in this stock	Covered call (own stock and sell a call option of a higher strike) to earn option premium
Time horizon: 1-2 years	**Time horizon: 1-2 years**	**Time horizon: 3-18 months**
Portfolio weight: Maximum 3%	Portfolio weight: Maximum 6%	Portfolio weight: Max 1%
Capital allocation: Invest x % of your allocation at price P1 Invest xx% of your allocation at price P2.	Capital allocation: Invest x % at price , P1 Invest xx% of your allocation at price, P2.	An American Call option buy maturing no earlier than Jan 2025. Cost averaging is usually needed in option buying due to time decay

Polestar as a portfolio holding

Stock	Call options
Polestar enjoys the backing of Volvo and Geely. Its vehicle guidance exceeds Rivian and Lucid combined and has a positive gross margin	How to position in a call option strategy on Polestar ?
How to position in Polestar stock ?	Covered call (own stock and sell a call option of a higher strike) to earn option premium
Time horizon: 1-2 years	**Time horizon: 3-18 months**
Portfolio weight: Maximum 3%	Portfolio weight: Max 1%
Capital allocation: Invest x % at price P1 Invest xx% of your allocation at price P2.	An American Call option buy maturing no earlier than Jan 2025. Cost averaging is usually needed in option buying due to time decay

BYD as a portfolio holding

ETFs	Structured Products
How to position in an ETF having a concentrated position in BYD ?	How to position in a **listed** structured product having BYD stock as an underlying component ?
There are three passive ETFs having more than a 3% allocation	Multi-barrier reverse convertible on BYD, Li Auto and Xpeng
Time horizon: 1-2 years	**Time horizon:11 months**
Portfolio weight: Maximum 6%	Portfolio weight: Maximum 3%
Capital allocation: Invest x % at price P1 Invest xx% of your allocation at price P2.	Coupon remaining: 20% (not callable) **Max return: 18% p.a.** **Buffer: 55%** Liquidity: Good

Nio as a portfolio holding

Stock	ETFs	Call options
NIO's vehicles are equipped with proprietary battery swapping technologies, providing users the flexibility to charge, swap, or upgrade batteries in just 5 min	How to position in an ETF having a concentrated position in Nio?	How to position in a call option strategy on Nio?
How to position in Nio stock ?	There are three passive ETFs having more than a 3% allocation in this stock	Covered call (own stock and sell a call option of a higher strike) to earn option premium
Time horizon: 2-3 years	**Time horizon: 2-3 years**	**Time horizon: 3-18 months**
Portfolio weight: Maximum 3%	Portfolio weight: Maximum 6%	Portfolio weight: Max 1%
Capital allocation: Invest x % of your allocation at price P1 Invest xx% of your allocation at price P2.	Capital allocation: Invest x % at price , P1 Invest xx% of your allocation at price P2.	An American Call option buy maturing no earlier than Jan 2025. Cost averaging is usually needed in option buying due to time decay

Li Auto as a portfolio holding

ETFs	Structured Products
How to position in an ETF having a concentrated position in Li ?	How to position in a **listed** structured product having Li Auto stock as an underlying component ?
There are two passive ETFs having more than a 3% allocation	Multi-barrier reverse convertible on BYD, Li Auto and Xpeng
Time horizon: 1-2 years	**Time horizon:11 months**
Portfolio weight: Maximum 6%	Portfolio weight: Maximum 3%
Capital allocation: Invest x % at the current price Invest xx% of your allocation at price P1.	Coupon remaining: 20% (not callable) **Max return: 18% p.a.** **Buffer: 55%** Liquidity: Good

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