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# **China Auto Sector**

# Mixed picture ahead as inventory risk lingers

China's passenger-vehicle (PV) retail sales volume fell 1% YoY in first four months of 2023, 2% higher than our forecast made in Dec 2022. Wholesale volume also rose 7% YoY YTD, 3% higher than our prior forecast, largely due to doubled PV exports in the first four months of 2023.

Automakers in China started to cut inventories in Apr 2023, as we had expected. However, the tricky implementation of the China IV-b from 1 Jul 2023 could make inventory movement more uncertain in the next few months. Yet, inventories at dealers in China rose by 0.15mn units YTD. 74% of the increment was from NEVs.

■ We raise our forecasts for China PV sales in 2023. Our underestimates of China's YTD PV retail sales volume mainly came from internal-combustion engine (ICE) cars, as the price war has probably boosted ICE sales. We raise our China PV retail sales volume forecast in 2023E by 0.1mn to 20.1mn units, or 1.9% YoY decline. We revise up our China PV wholesale volume forecast in 2023E by 0.6mn to 23.18mn units, or 1.6% YoY decline, as we raise PV export forecast by 0.5mn units to 3.7mn units in 2023E.

We cut our 2023 passenger NEV retail sales volume forecast in China by 0.1mn to 7.1mn units to factor in uncertainties in macro economy and price war from ICE vehicles. We maintain our China NEV wholesale volume forecast in 2023E as 8.3mn units amid stronger exports.

■ Range trade, Li Auto, and what is next: Although consensus at the beginning of 2023 was more pessimistic, such beat in YTD auto sales volume did not translate into share price gains so far. Only Li Auto (our top pick) and BYD-H posted positive share price returns YTD. Inventories remain high and new orders become much more volatile than before. That, along with declining capacity utilization, could prolong the price war. We believe our range trading suggestion in our outlook report on 7 Dec 2022 was correct but become more difficult in practice, as investors focus on ultra short-term data and events which resulted in shorter trading window and smaller amplitude of a wave. We still expect a bumpy recovery in the auto industry, as we noted earlier this year.

Dealers underperformed OEMs in terms of YTD share price, as we predicted in our outlook report. We suggest investors watch for opportunities in dealers in 2H23, should discounts at dealers start to stabilize. Earnings visibility could be higher for dealers than OEMs in 2H23, in our view.

■ NEV, NEV: NEV will still be the focal point for investors and the divergence of NEV brands has become apparent this year. That could mean, there is not much time left for brand building, especially for those which attempt to go upmarket. We expect NEV market share to rise sequentially for the remainder of the year with new NEV rollouts. We projected about 110 new NEV models to be launched in 2023 and only about 25 new NEV models were rolled out in the first five months of 2023. Quite a few key models are scheduled to be rolled out in Jun 2023. In this report, we summarize key auto data in the first four months of 2023 from different perspectives, such as customer flow, new orders, retail sales, inventories and discounts, as well as incorporate our takeaways from a recent channel check for different NEV brands.

# OUTPERFORM (Maintain)

**China Auto Sector** 

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Source: CATARC, CMBIGM

#### Stocks Covered:

Sideks Covered.								
Name	Ticker	Rating	TP (LC)					
Li Auto	LIUS	BUY	44					
Li Auto	2015 HK	BUY	172					
NIO	NIO US	BUY	21					
Geely	175 HK	BUY	15					
GWM	2333 HK	BUY	12					
GWM	601633 CH	BUY	32					
GAC	2238 HK	BUY	7.5					
GAC	601238 CH	BUY	14					
EVA	838 HK	BUY	3					
Yongda	3669 HK	BUY	8.5					
Meidong	1268 HK	HOLD	17					
Xpeng	XPEV US	HOLD	9					
Xpeng	9868 HK	HOLD	35.1					
BYD	1211 HK	HOLD	230					
BYD	002594 CH	HOLD	240					

Source: Bloomberg, CMBIGM

#### Related Reports:

"China Auto Sector – A trough in the short term?" – 16 Mar 2023



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# **Company Watch List and Channel Checks**

#### **Great Wall Motor**

Great Wall's wholesale volume, including pick-up trucks, jumped 73% YoY to about 93,000 units in Apr 2023 on low base, underperforming the overall industry's 88% YoY increase. Retail sales volume of PVs and pick-up trucks combined rose 46% YoY and 3% MoM to about 69,000 units last month, leading to an inventory restocking of about 2,200 units. Great Wall's inventory level is about 1.8 months now after two-month of slight inventory restocking.

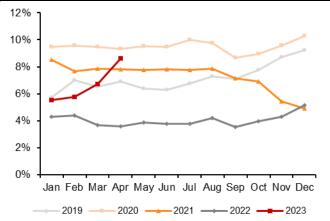
Great Wall's cumulative wholesale volume fell 7% YoY to about 310,000 units in the first four months of 2023. Despite its plethora of upcoming new models, we believe Great Wall's 1.6mn-unit sales target for 2023 is too aggressive. We maintain our FY23 sales-volume forecast of 1.25mn units.

Discounts at Great Wall's dealers widened to the highest since Jan 2021, based on our calculations. We expect Great Wall's discounts at dealers to remain high before new models play a meaningful contribution.

We conducted a channel check for the Wey Lanshan PHEV at a temporary exhibition stand in a shopping mall in Shenzhen. As noted in our previous report, the main selling point of the Lanshan is its competitive pricing with similar space and functionalities with its peers. We believe Lanshan's sales volume to be significantly higher than previous Wey models. On the other hand, we are of the view that Wey's dealers are still not good at selling premium vehicles. Dealers believe Lanshan's largest advantage among leading NEV startups is its residual value in three years, which is not quite appealing to customers, in our view. We expect Lanshan's sales volume to still significantly trail Li Auto's L8.

The Haval *Xiaolong PHEV* (RMB 139,800-156,800) and *Xiaolong Max PHEV* (RMB 159,800-179,800) were rolled out on 15 May 2023 with competitive pricing, as we had expected before. We believe Great Wall is on track to catch up in the PHEV segment, although it still needs to pay more attention to details in both spacing and functionalities in order to compete with leading peers, apart from aggressive pricing.

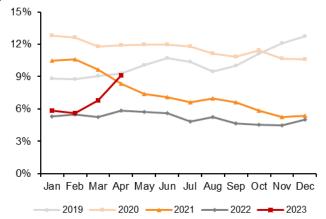
Figure 1: Great Wall Motor discounts at dealers



Source: ThinkerCar, CMBIGM

Figure 2: Geely discounts at dealers

Source: ThinkerCar, CMBIGM



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#### Geely

Geely's wholesale volume rose 58% YoY and 3% MoM to about 114,000 units in Apr 2023, with Geometry soaring 153% YoY driven by the *Panda mini EV.* Zeekr's sales volume almost quadrupled YoY to about 8,100 units last month. NEVs accounted for 26% of Geely's total wholesale volume last month. Retail sales volume at Geely rose 76% YoY and 4% MoM to about 91,000 units last month.

Geely's inventory level remained the same MoM in Apr 2023, about 3 months, based on our calculations. Geely's average discounts at dealers widened MoM to 25-month high in Apr 2023, based on our calculations. That was in line with our argument in a report published on 16 Mar 2023, as the company raised the rebates for the Emgrand L PHEV significantly in Feb in order to compete with BYD and raised its rebates for the Xingyue L, Xingrui and Boyue L in Mar 2023, based on our channel checks.

Based on our channel checks, the *Zeekr 001* now offers a coupon of RMB 20,000 for optional configurations and 2-year zero-interest auto finance mortgage with a principal of RMB 200,000. Such coupon is RMB 8,000 for the *Zeekr X*, which will start delivery in Jun 2023.

About 60% of customers bought the Zeekr 009 MPV for business purpose, based on our checks at a store in Shenzhen. We note the Zeekr 009 has no middle aisle in the second row, which may not be user-friendly to those families who use the third row quite often, as they need to adjust the seats in the second row forward in order to get into the two seats in the third row. We are of the view that seats in both second and third rows for the Zeekr 009 are as comfortable as BYD's Denza 09. We think the Denza 09 could attract more customers given its easy use of the third row (three seats with a middle aisle in the second row) and lower pricing.

Geely's cumulative wholesale volume rose 10% YoY to about 440,000 units in the first four months of 2023, amounted to 26% of its full-year target of 1.65mn units. We maintain our FY23 sales forecast of 1.53mn units. The company will launch its brand-new *Galaxy L7 PHEV* based on the e-CMA platform in Jun 2023, which should be very important for its valuation, in our view.

#### **BYD**

BYD's PV wholesale volume almost doubled YoY and rose 2% MoM to about 210,000 units in Apr 2023. BYD's retail sales volume rose 96% YoY but dropped 8% MoM to about 177,000 units last month, which led to an inventory restocking of about 17,000 units.

Although BYD has the lowest discounts (about 3%) and inventories (about 1.5 months) at dealers among automakers which adopt dealer sales network, its rising discounts and inventories partially reflect the heightened competition. In fact, BYD has been lowering the average selling prices with facelifted versions of the *Qin*, *Tang*, *Han* and *Song* since the beginning of 2023 in a bid to grab market share.

BYD has also been expanding its model mix with wider price ranges in order to withstand the competition. It will have at least four brands to cover different price ranges, including the BYD brand (below RMB 250,000), the Denza brand (RMB 350,000-450,000), the F brand (likely RMB 400,000-600,000) and the Yangwang brand (RMB 800,000-1,200,000).

Denza targets 210,000-unit sales volume in 2023 with a monthly sales volume target of 15,000 units for the *D9*. A new mid-size SUV, the Denza *N7*, which is equipped with BYD's



proprietary intelligent air suspension system DiSus-A ("Yunnian" in Chinese), will be rolled out in Jun 2023, followed by a mid-to-large-size SUV N8 in 2H23.

Denza now adopts direct-sales model with 300 stores already opened and targets 500 stores in the medium term. What could be tricky is that we calculate Denza's inventories at dealers to be about 7,700 units as of Apr 2023 based on insurance data, which is rare in the direct sales model.

BYD's cumulative PV wholesale volume rose 92% YoY to about 760,000 units in the first four months of 2023. We maintain our FY23 PV sales forecast of 2.74mn units for BYD, or about 230,000 units per month on average, which is more conservative than investors' expectation of about 3-4mn units in 2023. We believe such monthly volume forecast is in line with BYD's new order intake in recent months.

Figure 3: BYD discounts at dealers

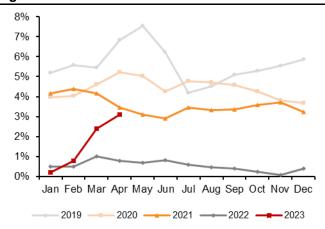
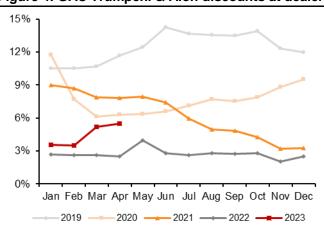


Figure 4: GAC Trumpchi & Aion discounts at dealers



Source: ThinkerCar, CMBIGM

Source: ThinkerCar, CMBIGM

#### **Guangzhou Automobile Group**

Total wholesale volume at GAC Group rose 43% YoY and dropped 24% MoM in Apr 2023, weaker than the industry average, which was mainly dragged by GAC Honda (+6% YoY) and GAC Toyota (+5% YoY). Sales volume of GAC Aion more than quadrupled YoY to about 41,000 units last month.

Retail sales volume of Aion rose 179% YoY but dropped 15% MoM to about 37,000 units, leading to an inventory increase of 4,300 units as of Apr 2023. We estimate Aion's inventory level to be about 1.9 months now. We project Aion's FY23 wholesale volume to reach 420,000 units, assuming an inventory destocking in 2H23. We are of the view that Aion's profitability now could be key to GAC's valuation given its monthly volume has already reached 40,000 units.

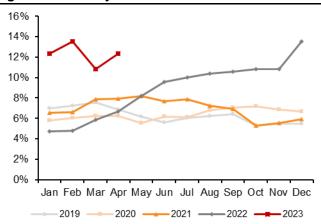
GAC Toyota's retail sales volume rose 24% YoY and 14% MoM to about 73,000 units in Apr 2023, resulting in an inventory cut of about 1,200 units. We calculate the inventory level at GAC Toyota to be about 1.5 months as of Apr 2023. Yet, GAC Toyota's discounts at dealers still rose MoM in Apr 2023. Similar to last year, we believe GAC Toyota has been struggling between its 1mn-unit sales target and rising incentive costs to dealers. It could be even more difficult for GAC Toyota to achieve its sales target this year, in our view.

Wholesale volume of GAC Honda declined 64% MoM to only 25,000 units in Apr 2023, which led to an inventory cut of about 22,000 units. We estimate GAC Honda's current inventory level to be still high, at more than 2 months amid its sluggish retail sales. We



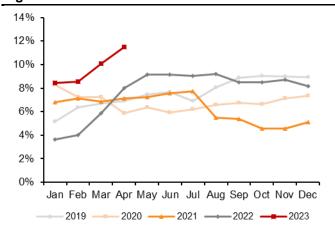
expect GAC Honda to further cut its inventories but probably at a slower pace in the next few months, as its discounts at dealers remain all-time high.

Figure 5: GAC Toyota discounts at dealers



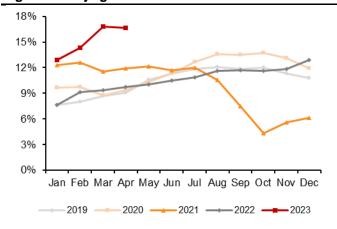
Source: ThinkerCar, CMBIGM

Figure 6: GAC Honda discounts at dealers



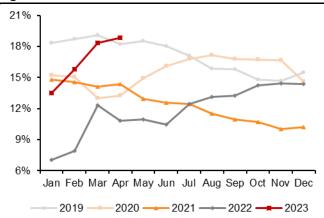
Source: ThinkerCar, CMBIGM

Figure 7: Beijing Benz discounts at dealers



Source: ThinkerCar, CMBIGM

Figure 8: BMW Brilliance discounts at dealers



Source: ThinkerCar, CMBIGM

Discounts for Beijing Benz narrowed a bit MoM amid the launch of new-generation *GLC* in Apr 2023, yet it was still around the highest level since at least 2017. Discounts for BMW Brilliance widened MoM to almost 19% last month, the highest since Apr 2019. BMW raised incentive costs to dealers in May 2023 in a bid to boost its BEV sales and models with higher inventories.



Figure 9: China passenger-vehicle wholesale volume by OEM / brand

	Sales Volume in Apr 2023 (units)	YoY (%)	MoM (%)	Sales Volume YTD (units)	YTD YoY (%)	YTD Market Share (%)
Chinese OEMs	1,020,909	80.0%	-4.9%	3,773,394	18.3%	54.6%
Geely	113,642	57.5%	3.0%	436,095	9.5%	6.3%
Great Wall Motor	74,456	83.5%	6.0%	245,607	-12.6%	3.6%
Changan	103,838	62.6%	-27.8%	479,690	10.2%	6.9%
SAIC-GM-Wuling	66,124	10.5%	25.5%	198,803	-36.8%	2.9%
SAIC	68,256	268.6%	-17.0%	264,711	24.5%	3.8%
BYD	209,467	98.6%	1.6%	757,384	91.5%	11.0%
GAC Motor (incl. Aion)	71,058	134.3%	-5.1%	237,121	42.6%	3.4%
Chery	118,688	125.6%	2.5%	426,453	62.0%	6.2%
Dongfeng	30,055	2.5%	13.6%	101,335	-41.6%	1.5%
FAW	9,423	409.1%	-5.5%	32,209	235.9%	0.5%
BAIC	7,823	72.2%	-53.3%	38,134	50.4%	0.6%
NIO	6,658	31.2%	-35.8%	37,699	22.2%	0.5%
Li Auto	25,681	516.3%	23.3%	78,265	118.1%	1.1%
Xpeng	7,079	-21.4%	1.1%	25,309	-41.9%	0.4%
Weltmeister	0	-100.0%	N/A	0	-100.0%	0.0%
Neta	11,080	25.7%	9.8%	37,256	-4.4%	0.5%
Leap Motor	8,726	-4.0%	41.4%	19,235	-37.3%	0.3%
Jinkang Seres	2,437	-24.9%	-32.8%	14,052	72.1%	0.2%
German Brands	311,352	111.1%	-16.3%	1,239,038	4.6%	17.9%
VW	151,595	122.5%	-12.4%	591,337	-6.7%	8.6%
Audi	43,603	208.6%	-23.8%	171,879	12.9%	2.5%
BMW	49,656	56.4%	-19.4%	222,422	17.0%	3.2%
Mercedes-Benz	46,381	57.4%	-18.2%	202,190	12.5%	2.9%
Jetta	14,177	253.8%	-5.5%	51,210	2.0%	0.7%
Japanese Brands	242,181	32.2%	-25.3%	1,038,137	-22.5%	15.0%
Honda	54,056	34.5%	-53.7%	311,924	-31.8%	4.5%
	138,847	39.0%	-3.0%	511,858	-5.8%	7.4%
Toyota	40,012	5.2%	-27.3%	185,120	-34.5%	2.7%
Nissan	3,884	35.1%	-35.4%	17,784	-53.4%	0.3%
Mazda	4,974	396.4%	101.3%	8,943	-14.3%	0.1%
Mitsubishi American Brands	177,845	373.9%	-0.1%	658,515	17.7%	9.5%
		169.9%	7.9%	•	-9.6%	2.3%
Buick	44,500 23,500	277.1%	86.9%	160,606 66,352	-10.8%	1.0%
Chevrolet	12,000	984.0%			-15.8%	0.6%
Cadillac	12,000		33.3%	39,000		
Ford	,	109.8%	-12.5%	71,147	28.0%	1.0%
Lincoln	3,227	-0.4%	-33.0%	16,246	-18.1%	0.2%
Tesla	75,842	4916.0%	-14.7%	305,164	66.1%	4.4%
Korean Brands	25,838	64.5%	-29.4%	113,447	3.8%	1.6%
Hyundai	16,003	59.8%	-40.8%	75,047	11.0%	1.1%
Kia	9,835	72.6%	2.5%	38,400	-7.9%	0.6%
Others	22,398	42.4%	-7.1%	89,642	-20.2%	1.3%
PSA	7,563	2.1%	-22.5%	27,441	-29.1%	0.4%
Volvo	9,257	73.4%	9.2%	40,086	-5.7%	0.6%
Jaguar	1,999	197.0%	-2.1%	7,747	11.9%	0.1%
Land Rover	2,376	114.1%	-5.9%	9,362	25.2%	0.1%
Total	1,800,523	86.3%	-10.4%	6,912,173	6.4%	100.0%

Source: CPCA, CMBIGM



Figure 10: China passenger-vehicle monthly retail sales volume by OEM / brand

	Retail Sales Volume Apr 2023 (Units)	YoY %	MoM %	Volume YTD (Units)	YTD YoY %
Chinese OEMs					
Geely (incl. Lynk & Co, Geometry, Maple)	83,094	67.5%	2.2%	314,600	-7.9%
Zeekr	7,948	268.1%	25.6%	23,306	123.0%
Great Wall	54,714	54.8%	11.9%	198,038	-21.9%
Changan	94,839	89.1%	-1.8%	363,548	16.5%
SAIC Motor	22,375	42.8%	11.9%	88,920	-38.5%
GAC Trumpchi	27,329	80.3%	7.6%	97,008	7.1%
GAC Aion	36,711	179.4%	-14.9%	116,722	132.5%
BYD	177,417	96.4%	-7.9%	639,489	81.3%
SAIC-GM-Wuling	50,221	16.6%	1.8%	205,218	-23.9%
BAIC Magna	977	9.9%	-5.3%	3,055	6.6%
Voyah	1,826	71.6%	8.1%	5,325	8.3%
NIO	7,007	32.0%	-32.6%	39,372	27.1%
Lixiang	26,242	523.9%	21.3%	80,342	122.7%
Xpeng	6,842	-23.0%	-4.3%	24,895	-42.8%
Weltmeister	178	-94.6%	-30.2%	890	-94.0%
Neta	9,657	7.3%	16.6%	31,467	-12.1%
Leapmotor	8,182	-0.6%	141.6%	13,472	-49.9%
Human Horizons	379	19.9%	-26.4%	1,439	-14.3%
Jinkang Seres	4,477	48.2%	25.5%	14,486	108.1%
Foreign OEMs	,			,	
SAIC VW	95,414	78.8%	13.5%	327,334	-5.6%
FAW VW	140,578	82.2%	-1.0%	498,691	2.7%
Beijing Benz	50,926	48.0%	-1.3%	191,458	5.2%
BMW Brilliance	54,422	75.9%	-13.9%	217,041	10.8%
FAW Toyota	62,398	70.3%	3.9%	208,839	-1.9%
GAC Toyota	73,218	23.8%	13.8%	249,044	-8.4%
Dongfeng Honda	36,864	-5.6%	-19.4%	144,039	-33.4%
GAC Honda	46,979	11.5%	-2.0%	157,389	-28.1%
Dongfeng Nissan	50,176	13.6%	2.9%	191,579	-27.3%
GAC Mitsubishi	1,886	12.3%	46.4%	5,929	-51.8%
SAIC GM	79,557	83.8%	16.7%	243,455	-17.3%
Changan Ford	9,728	3.4%	5.5%	36,895	-27.9%
Tesla China	40,717	2249.5%	-46.2%	177,716	60.6%
GAC FCA	6	-98.5%	-33.3%	33	-99.1%
Volvo Asia Pacific	11,165	69.0%	3.9%	39,011	1.6%
Chery JLR	4,735	71.6%	-6.2%	16,950	20.2%
Beijing Hyundai	18,390	87.1%	1.8%	70,947	-6.1%
Yueda Kia	0	-100.0%	-100.0%	17,349	-48.4%
Total Volume (excl. imports)	1,545,410	60.9%	-2.2%	5,592,464	-1.2%
Imports by Brand	1,510,110			-,,	
Lexus	10,699	4.2%	0.3%	40,546	-28.4%
BMW	8,229	27.9%	-10.2%	35,310	-8.9%
Mercedes-Benz	13,317	32.3%	-13.3%	56,137	5.1%
Porsche	7,174	24.7%	-14.8%	29,354	22.8%
Audi	4,879	91.6%	-11.8%	17,552	12.6%
	59,259	30.1%	-9.6%	238,246	-1.2%
Total Imports	19 719				

Source: CATARC, CMBIGM



# **Leading Indicators and Channel Checks**

The leading indicators below, including number of leads, customer flows, and new orders generated, for Tesla, NIO, Lixiang, Xpeng, BYD and Aion are based on data from a sample size of 96 stores (15-18 stores for each brand) in 15 major cities in China.

## Number of leads: Tesla still leads, BYD rose most MoM

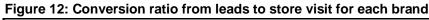
Number of leads per store of Li Auto returned to the average level among its peers in Apr 2023 after a spike in Feb 2023 due to the *L7* debut. BYD's number of leads per store rose 8% MoM in Apr 2023, driven by new model launches, including the *Seagull* and facelifted *Qin Plus*. Tesla's number of leads per store is still the highest among all the six brands. It rose 5% MoM in Apr 2023, which could partially explain Tesla's price hike on 2 May 2023, in our view. Number of leads per store for the other three brands (NIO, Xpeng and Aion) was largely stable MoM in Apr 2023 (from -1% to 1%).

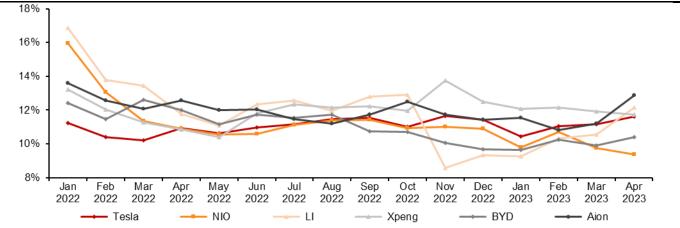
The conversion ratios from leads to store visit for all the brands rose MoM, except for NIO and Xpeng. The average of such ratios for all the six brands has been rising gradually from all-time low in Jan 2023, probably implying higher intention for car purchases. Customers may wait for the launch of NIO's new *ES6* and *ET5* wagon, which may have resulted in a low conversion ratio for NIO in Apr 2023.

4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr 2022 2022 2022 2022 2022 2022 2022 2022 2022 2022 2022 2022 2023 2023 2023 2023 NIO BYD Tesla Xpeng Aion LI

Figure 11: Number of leads per store on average for each brand

Source: Thinkercar, CMBIGM





Source: Thinkercar, CMBIGM



### Customer flow: Rose MoM except for Xpeng and NIO

Customer flow per store for BYD rose 12% MoM in Apr 2023, the most among its peers, aided by the *Seagull* and new *Qin Plus* rollouts. Such numbers rose 1-7% MoM for Li Auto, Tesla and BYD, as the conversion ratios from leads to store visits rose last month for these three brands. Customer flow per store for Xpeng has been falling from a high level in Jan 2023 and the launch of the *P7i* in Mar 2023 did not help lift customer flow. Customer flow per store for NIO fell 1% MoM in Apr 2023.

The conversion ratios from store visit to order generation retained largely stable MoM for the six brands in Apr 2023. BYD still had the highest ratio (9%) among the six brands in Apr 2023, although such number has decreased from a high level in Dec 2022. Such ratio for Li Auto also fell from a historical high level in Feb 2023 to an average level among peers in Apr 2023. NIO has the lowest conversion ratio from store visit to new order generation in Apr 2023, followed by Xpeng.

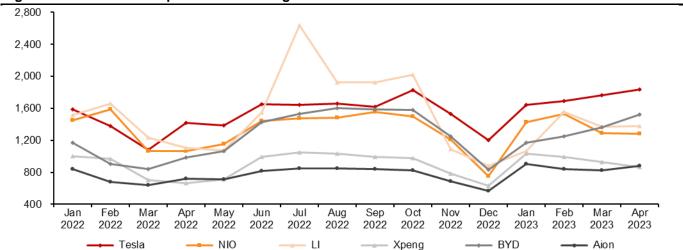


Figure 13: Customer flow per store on average for each brand

Source: Thinkercar, CMBIGM

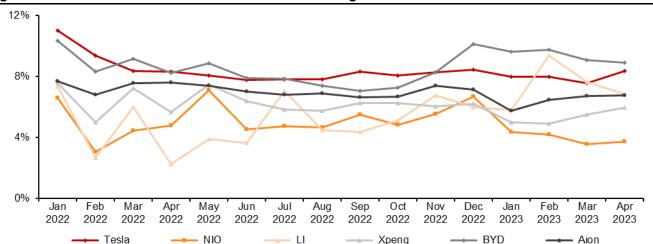


Figure 14: Conversion ratio from store visit to new order generation for each brand

Source: Thinkercar, CMBIGM

#### New orders rose MoM for most NEV brands

In general, new orders per store for these six NEV brands have been rising sequentially since Jan 2023, which could provide some confidence for investors in 2H23. The



divergence between brands also started from this year, with stronger recovery for Tesla, BYD and Li Auto. Aion's new orders per store were the most stable among all the brands in the past 18 months, with the smallest decline in Dec 2022. Aion's new orders per store in Apr 2023 has already exceeded its average level in 2022. Xpeng's new orders per store did not show significant improvement during Mar-Apr 2023 despite the *P7i*'s launch on 10 Mar 2023. NIO's new orders per store have been stagnant this year, which has been reflected by its sales volume in the first four months of 2023. We expect NIO's sales volume for May 2023 to be weak again and the key for the short term lies on the popularity of the new *ES6*.

200 160 120 80 40 0 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr 2022 2022 2022 2022 2022 2022 2022 2022 2022 2022 2022 2022 2023 2023 2023 2023 NIO **Xpeng** - BYD Aion Tesla LI

Figure 15: New orders per store on average for each brand

Source: Thinkercar, CMBIGM

#### Channel checks for NEV start-ups

We are of the view that Li Auto's advantages in space, comfort and functionalities are still apparent among NEV start-ups. Interestingly, Li Auto makes functionalities related to comfort as standard configurations and makes ADAS hardware as optional, whereas NIO does it the opposite way. Based on our channel checks, the Pro version (equipped with Horizon Robotics' chips) for both Li *L7* and *L8* takes up the biggest portion of sales. The Max version of the *L8* has been gaining popularity and the Air version of the *L8* only accounts for a small portion of sales, as those consumers are less price sensitive. In contrast, the Air version of the *L7* accounts for 30-40% of sales. It appears to us that consumers have little incentive to pay premium for ADAS even with a budget of slightly over RMB 300,000.

New orders for Aito have also been recovering sequentially, as a discount of RMB 20,000 is offered by the OEM (except for the Huawei ADAS version) in a bid to revive sales. The comfort of the third row and details of design and manufacturing for the Aito *M7* are significantly worse than the Li *L8*, based on our experience. Consumers also feel that Aito's exterior design is neither stylish nor classic enough, based on a salesperson's feedback. Li Auto's salespersons are generally more professional than other brands', based on our check channels in Shenzhen.

The waiting time for the Xpeng *P7i* is about eight weeks in Shenzhen partially due to the battery supply chain constraints. We see no signal for *G9*'s sales revival in the short term, despite its improvement in comfort and functionalities from the *P7*. We expect incentive costs for the *G9* to widen in a bid to boost sales. It is obvious to us that *G9*, *P7* and *P5* use different design languages and thus share limited components, which partially explains Xpeng's lower gross margin than Li Auto's and NIO's.



## **NEV Segment**

We cut NEV retail sales forecast by 1% to 7.1mn units in 2023 and maintain NEV wholesale forecast of 8.3mn units amid strong exports

In Apr 2023, retail sales volume of passenger NEVs rose 86% YoY and fell 9% MoM to about 493,000 units, or 5% lower than our prior forecast. NEV's market share narrowed to 30.7% in Apr 2023 from 33.0% in Mar 2023. The trailing 12-month NEV market share rose for 34 months in a row to 28.0% as of Apr 2023. The cumulative NEV retail sales volume rose 35% YoY to 1.73mn units in the first four months of 2023, higher than our prior expectation by about 28,000 units.

Individual customers accounted for about 75% of total NEV retail sales in Apr 2023. Such ratio hit a record high of 83% in Jan 2023, as purchases of more price-sensitive ride-hailing cars were pulled ahead of the subsidy phase-out. We expect such ratio to be stable now.

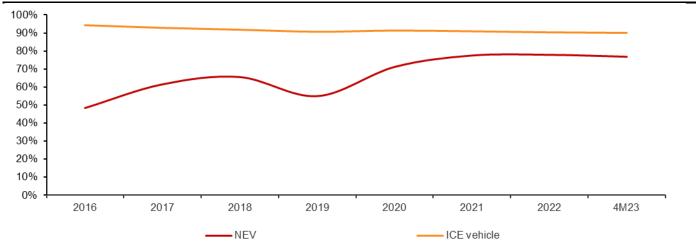


Figure 16: Proportion of NEVs sold to individual customers vs that of ICE vehicles in China

Source: CATARC, CMBIGM

Wholesale volume of passenger NEVs rose 117% YoY and dropped 1% MoM to about 610,000 units in Apr 2023, with a market share of 33.5%. We estimate that about 30,000 units of inventory NEVs were added into dealers last month. NEV inventories at dealers have increased by about 0.11mn units in the first four months of 2023. We estimate the current industrywide NEV inventory level to be about 2.0 months based on our NEV sales forecasts for the next few months. In fact, the figure could be even higher for individual NEV makers because about 18% of total NEVs sold in 2022 were through direct-sales model which is supposed to have minimal inventories.

NEV exports rose 49% MoM to about 87,000 units in Apr 2023, as Tesla almost tripled its China exports MoM. Tesla accounted for 41% of China's total NEV exports in Apr 2023, followed by BYD and MG. The cumulative NEV exports rose 163% YoY to about 290,000 units in the first four months of 2023, exceeding our prior expectation by 16%.

We cut our 2023 passenger NEV retail sales volume forecast in China slightly from 7.2mn units to 7.1mn units to factor in uncertainties in macro economy and price war from ICE vehicles. Although uncertainties remain for China's NEV exports in 2H23 as Tesla's Berlin gigafactory ramps up, we revise up our forecast for China's NEV exports in 2023 by 24% to 0.94mn units, as Chinese automakers rush to export NEVs to offset potential export reduction from Tesla. Accordingly, we keep our 2023 passenger NEV wholesale volume



forecast in China unchanged at 8.3mn units, assuming an inventory restocking of 0.29mn units this year.

We expect NEV market share to rise sequentially for the remainder of the year with new NEV rollouts. We projected about 110 new NEV models or models with NEV powertrain available to be launched in 2023 in our <u>outlook report published on 7 Dec 2022</u>. Only about 25 new NEV models were rolled out in the first five months of 2023, which was slower than our prior expectation. About 30% of new NEV model launches occurred in the first five months of 2022 (vs. 22% in 2023) despite Shanghai lockdowns. We expect several key new models to be rolled out in Jun 2023, including NIO *ES8*, *EC6*, Xpeng *G6*, Geely *Galaxy L7*, Denza *N7*, Aion *Hyper GT*, *Smart #3*, etc.

## NEV by city-tier: Mini BEVs lose market share in lower-tier cities

NEV market share in all city tiers, on a trailing 12-month basis, rose MoM in Apr 2023 at a similar pace. Every 10 PVs sold in tier-1 cities in China, four of them are now NEVs. Despite declining market share for mini BEVs, trailing 12-month market share for NEVs in tier-4 and below cities continue to rise, surpassing 20%.

The Tesla *Model* Y retained the best-selling NEV model with market share of 10% in tier-1 and -2 cities in the first four months of 2023. The *Wuling Hongguang Mini* still tops in the tier-3 and below cities, with declining market share in the first four months of 2023 (10% vs. 15% in 2022). Market share for mini-size BEVs has been falling as we expected. Mini BEVs accounted for 17% of total BEV retail sales volume nationwide in the first four months of 2023, down from 26% in 2022.

Figure 17: China NEV market share by city tier (trailing 12-month basis)

Market Share	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023
Tier 1	35.8%	37.1%	38.4%	39.6%	39.9%	40.3%	40.5%
Tier 2	25.3%	26.3%	27.1%	28.3%	28.9%	29.2%	29.5%
Tier 3	21.1%	21.9%	22.8%	23.8%	24.4%	24.5%	24.8%
Tier 4 and below	17.1%	17.8%	18.3%	19.4%	19.9%	20.1%	20.4%
Nationwide	23.9%	24.9%	25.7%	26.9%	27.4%	27.7%	28.0%

Source: CATARC, CMBIGM

#### NEV by city type: Cities without ICE restrictions gain market share

We divided cities in China into three types based on whether there are restrictions for ICE vehicle registration or driving. In the first four months of 2023, about 22% of NEV retail sales volume came from the seven regions with new ICE vehicle registration limits (Beijing, Shanghai, Shenzhen, Guangzhou, Tianjin, Hangzhou and Hainan province), down from 24% in 2022, mainly due to Shanghai's cancellation of green license for PHEVs from 2023. Shanghai accounted for 5% of nationwide NEV retail sales in the first four months of 2023, down from 6.4% in 2022. Despite that, China's PHEV retail sales volume YoY growth still outpaced BEV in the first four months of 2023, which underscored our previous argument that Shanghai's green license cancellation for PHEVs should have limited dent on PHEVs.

About 16% of NEV retail sales volume was from cities with driving restrictions (including 24 cities, like Baoding, Chongqing, Wuhan, Xi'an, etc.) in the first four months of 2023, up from 14% in 2022. The remaining 62% of NEV retail sales volume was contributed by cities without license or driving restrictions in the first four months of 2023, rising by 0.7 ppt from that of 2022.



Figure 18: NEV market share by city type

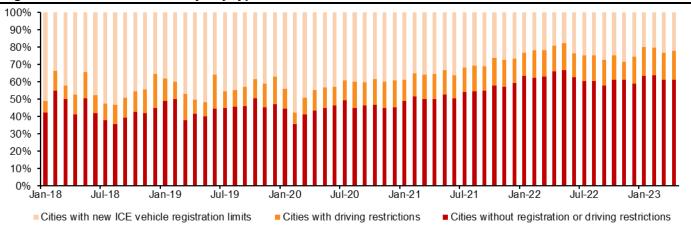
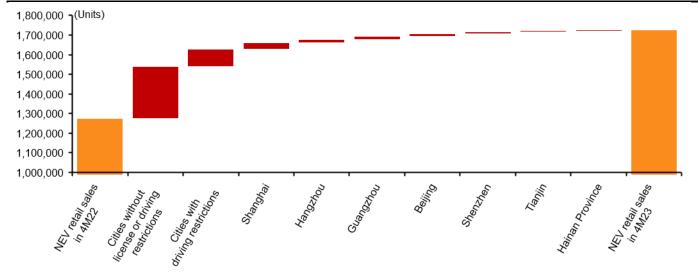


Figure 19: NEV retail sales volume YoY growth contribution by city type in 4M23



Source: CATARC, CMBIGM

China's NEV retail sales volume increased by about 0.45mn units YoY in the first four months of 2023. About 58% of the increment was from cities without license or driving restrictions. Despite the cancellation of green license for PHEVs, NEV retail sales volume in Shanghai rose by about 31,000 units or 56% YoY in the first four months of 2023, due to low comparison base. Therefore, Shanghai retained the NEV retail sales crown among all cities in China in the first four months of 2023. PHEVs only accounted for 7% of total NEV retail sales volume in Shanghai in the first four months of 2023, down from 37% in 2022.



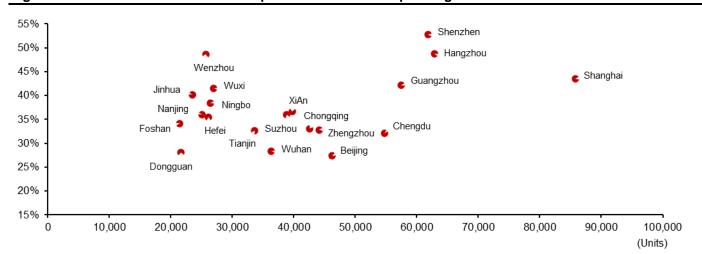


Figure 20: NEV retail sales volume in top 20 cities with corresponding NEV market share in 4M23

Among the top 20 cities in terms of NEV retail sales volume, Shenzhen had the largest NEV market share of 53% in the first four months of 2023, followed by Hangzhou and Wenzhou in Zhejiang. Shanghai ranked the 4th place with 44% of retail sales volume from NEVs in the first four months of 2023. Beijing had the lowest NEV market share (27% YTD) among these 20 cities and was even below the national average, due to its caps on new NEV registrations every year.

### NEV by model: Wuling Hongguang Mini lost the crown to the Model Y

At the model level, the *Wuling Hongguang Mini EV* lost its NEV retail sales crown to the Tesla *Model Y* by about 33,000 units in the first four months of 2023. BYD took up half of the top 10 best-selling NEV models, with the *Song Plus PHEV*, *Dolphin EV*, *Qin Plus PHEV*, *Yuan Plus BEV* and *Song Pro PHEV*. In fact, the combined sales volume of its *Song Plus* and *Song Pro PHEVs* exceeded the *Model Y* in the first four months of 2023.

Excluding those discontinued models, such as the *Li ONE* EREV, *Qin Pro* EV, *Yuan Pro* EV and *Ora Black Cat* EV, three mini-size BEVs (the *Wuling Hongguang Mini EV*, *Chery eQ1* and *Changan Benben E-Star*) posted the largest sales volume YoY decline in the first four months of 2023. Their market share might be partly gained by Changan *Lumin EV*, which posted retail sales YoY growth of 35,000 units in the first four months of 2023.

It appears to us that the low-end BEV market also shows consumption upgrade, as small-size and compact BEVs are gaining market share from mini-size BEVs. The BYD *Yuan* BEVs (including the *Yuan Plus* and *Yuan Pro*) combined posted YoY unit growth of about 42,000 units in the first four months of 2023. The BYD *Dolphin* EV also posted YoY growth of about 49,000 units in the first four months of 2023.

Although no single model had a significant contribution to the nationwide NEV retail sales volume YTD growth based on the chart below, BYD (including Denza) contributed 67% of China's NEV retail sales volume growth in the first four months of 2023.



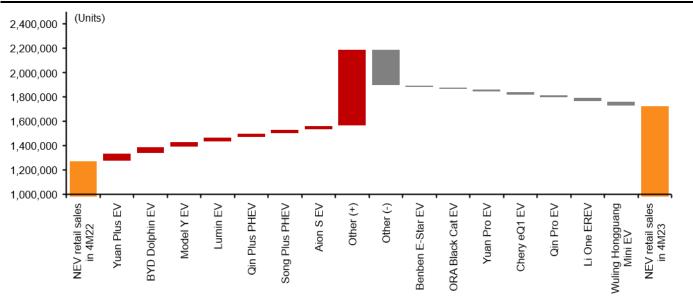


Figure 21: NEV retail sales volume growth contribution by model in 4M23

## BEV brands: Competition becomes even tougher

In the first four months of 2023, total BEV retail sales volume rose 18% YoY to about 1.2mn units. BEV's market share in the NEV segment dropped to 67.7% in the first four months of 2023 from 75.3% in 2022.

BYD and Tesla's market share increased to 25% and 15% in the BEV segment in the first four months of 2023, from 20% and 11% in 2022, respectively. GAC Aion climbed to the third place in the first four months of 2023. Interestingly, these top 3 brands all gained market share compared with last year.

Wuling slipped to the 4th place with market share decline. Chery and Neta also experienced market share decline compared with last year. All three brands were dented by the shrinking mini-BEV segment.

BMW is the only foreign brand among the top 10 list, ranked No.8 in terms of the BEV retail sales volume in the first four months of 2023. BMW posted the highest YTD YoY sales volume growth among the top 10. The *i*3 and *i*X3 contributed about 46% and 48% of BMW's NEV retail sales volume in China, respectively, in the first four months of 2023.

The competition, especially for the 5th-10th positions in China's BEV segment has been intensified. Compared with the top 10 list of 2022, Geely, NIO and BMW were the new joiners in the first four months of 2023, while Dongfeng, VW and Xpeng have been kicked out.



Figure 22: Top 10 BEV brands' retail sales volume in China

Units	Apr 2023	YoY	YTD	YTD YoY	YTD Market Share in BEV Segment
Total BEV	330,929	66.7%	1,169,356	18.4%	100.0%
BYD	79,466	72.6%	291,793	69.3%	25.0%
Tesla	40,717	2249.5%	177,716	60.6%	15.2%
GAC Aion	36,711	179.5%	116,718	132.5%	10.0%
Wuling	32,266	24.8%	109,750	-15.6%	9.4%
Geely	13,197	179.3%	43,794	72.1%	3.7%
Changan	9,314	49.5%	42,292	38.8%	3.6%
NIO	7,007	32.0%	39,372	27.1%	3.4%
BMW	7,582	637.5%	28,093	274.6%	2.4%
Chery	7,131	-42.3%	26,652	-56.3%	2.3%
Neta	7,628	-15.3%	25,743	-28.1%	2.2%

## PHEV brands: Fewer foreign brands in the top 10 list

In the first four months of 2023, total PHEV (EREV included) retail sales volume rose 93% YoY to about 560,000 units. PHEV's market share in the NEV segment increased to 32.3% in the first four months of 2023 from 24.7% in 2022, in line with our previous forecast that PHEV's sales volume growth would outpace BEV's in 2023.

BYD's market share in the PHEV segment dropped slightly to 57% in the first four months of 2023 from 61% in 2022. However, BYD and Denza's market share combined rose to 62% in the first four months of 2023, as BYD-controlled Denza brand climbed to the 3rd place with only one model (the *D9* MPV) on sale.

Lixiang's market share in the PHEV segment rose to 14.4% in the first four months of 2023 from 10.4% in 2022. Li Auto started deliveries of the lower-priced *Air* versions of the *L7* and *L8* from Apr 2023, which could further aid the company's market share improvement. Li Auto's management guided monthly sales volume to exceed 30,000 units in Jun 2023.

Changan Deepal climbed to the 4th position in the PHEV segment in the first four months of 2023, driven by the Deepal *SL03* EREV (about 5,000-6,000 units per month in Mar-Apr 2023), which was launched in Jul 2022. Aito fell into the 6th place in terms of YTD retail sales volume compared with the 3rd position last year, which explains an incentive of RMB 20,000 provided by the OEM.

Only two foreign brands (VW and Mercedes-Benz) are still in the top 10 list, vs. four last year (VW, Mercedes-Benz, Nissan and BMW). Chinese brands' combined market share in the PHEV segment rose to 91% in the first four months of 2023, from 87% in 2022. We expect such trend to continue based on the model pipeline.



Figure 23: Top 10 PHEV (EREV included) brands' retail sales volume in China

Units	Apr 2023	YoY	YTD	YTD YoY	YTD Market Share in PHEV Segment
Total PHEV	161,977	142.6%	556,779	93.2%	100.0%
BYD	88,290	106.1%	316,668	92.9%	56.9%
Lixiang	26,242	523.9%	80,342	122.7%	14.4%
Denza	8,936	20681.4%	28,901	3256.7%	5.2%
Deepal	5,129	N/A	16,860	N/A	3.0%
VW	2,829	43.9%	12,950	32.0%	2.3%
Aito	3,061	3.7%	10,393	55.2%	1.9%
Mercedes-Benz	1,883	6.0%	9,837	9.6%	1.8%
Changan	2,988	150.5%	9,604	96.2%	1.7%
Haval	2,811	N/A	7,043	N/A	1.3%
Geely	1,961	717.1%	6,919	405.8%	1.2%



# **Other Industry Indicators to Watch**

## PV by city tier: Higher-tier cities outperformed YTD

Total PV retail sales volume rose 60% YoY and fell 3% MoM to 1.6mn units in Apr 2023. Tier-1 and -2 cities outperformed tier-3 and below cities in terms of YoY growth in Apr 2023 amid low base. Although tier-1 and -2 cities were more resilient last year amid COVID recurrence, the picture could be mixed this year, in our view.

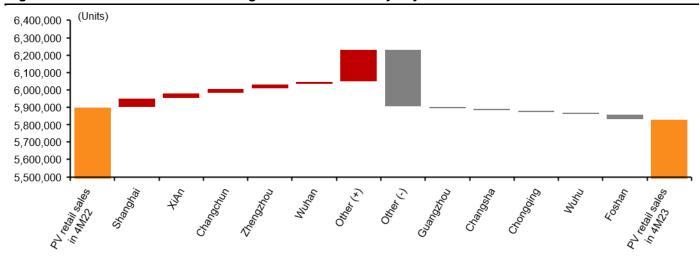
Figure 24: China auto retail sales growth by city tier

Retail Sales YoY Growth	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	YTD
Tier 1	16.8%	14.0%	13.2%	-48.6%	28.2%	17.7%	97.6%	8.5%
Tier 2	5.1%	-1.4%	13.2%	-43.2%	17.4%	13.0%	63.5%	2.4%
Tier 3	-8.4%	-23.8%	6.7%	-39.4%	-0.2%	9.8%	52.9%	-4.9%
Tier 4 and below	-16.1%	-19.4%	11.6%	-42.8%	2.9%	6.4%	40.4%	-9.3%
Nationwide	-1.2%	-7.9%	11.5%	-42.8%	11.2%	11.5%	59.5%	-1.2%

Source: CATARC, CMBIGM

The low base effect caused by COVID last year dominated the city-level retail sales volume YoY growth in the first four months of 2023. Shanghai, Xi'an, Changchun and Zhengzhou posted the largest YoY retail sales volume growth in the first four months of 2023.

Figure 25: PV retail sales volume YoY growth contribution by city in 4M23



Source: CATARC, CMBIGM

## Chinese-brand trailing 12-month market share reached 44.7%

Cumulative retail sales volume for Chinese brands rose 6% YoY in the first four months of 2023, outpacing the overall industry by 7 ppts, thanks to higher NEV penetration in China. Interestingly, Chinese brands' market share decreased in both NEV and ICE segments YTD. Chinese-brand NEV retail sales volume rose 32% YoY in the first four months of 2023, underperforming the overall NEV segment by 3 ppts. Excluding NEVs, retail sales volume of Chinese-brand ICE vehicles fell 13% YoY in the first four months of 2023, weaker than the overall ICE segment by 2 ppts.

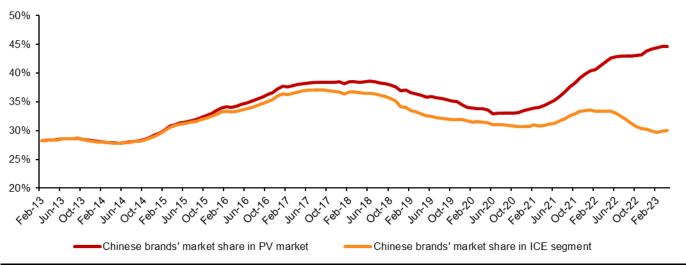
German brands achieved market share gain in both NEV and ICE segments in the first four months of 2023. Chinese brands largely grabbed market share from Japanese brands, as



Japanese brands posted the largest retail sales volume decline among all brands in the first four months of 2023 (-21% YoY).

The trailing 12-month market share for Chinese brands rose to 44.7% as of Apr 2023. We project Chinese brands to gain market share for a third consecutive year in 2023, aided by NEVs.

Figure 26: Chinese brands' market share (trailing 12-month basis)



Source: CATARC, CMBIGM

## Traditional luxury outperformed for eight months in a row

The total retail sales volume of traditional luxury brands rose 5% YoY to 0.95mn units in the first four months of 2023, outperforming the overall industry by 6 ppts, partly due to low base. We have been expecting a slight underperformance for traditional luxury brands compared with the overall industry in 2023. Luxury market share, on a trailing 12-month basis, increased to 15.1% as of Apr 2023.

Figure 27: China traditional luxury auto market share by city tier (trailing 12-month basis)

Market Share	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023
Tier 1	21.3%	21.1%	20.9%	20.7%	20.8%	21.0%	20.9%
Tier 2	18.3%	18.4%	18.4%	18.3%	18.4%	18.4%	18.4%
Tier 3	10.6%	10.7%	10.8%	10.8%	11.0%	11.1%	11.2%
Tier 4 and below	7.0%	7.1%	7.2%	7.3%	7.4%	7.4%	7.5%
Nationwide	14.7%	14.8%	14.9%	14.8%	15.0%	15.1%	15.1%

Source: CATARC, CMBIGM

Mercedes-Benz retained the No.1 place among the traditional luxury brands in China in the first four months of 2023, with about 3,200 units more vehicles sold than BMW. The German "Big Three" (Mercedes-Benz, BMW, Audi) accounted for market share of 73.5% YTD, up from 72% in 2022. The competition between BMW and Mercedes-Benz could be interesting again this year, as BMW has revised down its 2023 China sales-volume target to a similar level of Mercedes-Benz's.

The competition between Lexus, Cadillac and Volvo for the 4th place this year could also be intensifying. Porsche targets a slight YoY sales volume decline to 90,000 units in 2023, although we expected it to be one of few traditional luxury brands to post sales volume



growth in 2023. Smart grabbed the 10th place from MINI in the first four months of 2023, with its Smart #1 EV ramping up.

Figure 28: Top 10 traditional luxury auto brands' retail sales volume in China

Units	Apr 2023	YoY	YTD	YTD YoY	YTD Market Share in Luxury Segment
Total Luxury	255,890	64.4%	951,382	4.6%	100.0%
Mercedes-Benz	66,658	44.4%	255,554	4.8%	26.9%
BMW	62,651	67.6%	252,351	7.5%	26.5%
Audi	54,693	104.6%	191,550	2.5%	20.1%
Cadillac	17,871	122.1%	50,775	-0.3%	5.3%
Volvo	12,783	64.0%	45,889	4.6%	4.8%
Lexus	10,699	4.2%	40,546	-28.4%	4.3%
Porsche	7,174	24.7%	29,354	22.8%	3.1%
Land Rover	7,243	72.6%	27,648	29.2%	2.9%
Lincoln	5,902	20.5%	20,536	-15.5%	2.2%
Smart	4,426	N/A	16,962	N/A	1.8%

Source: CATARC, CMBIGM



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Stock with potential return of over 15% over next 12 months

HOLD

Stock with potential return of +15% to -10% over next 12 months

SELL

Stock with potential loss of over 10% over next 12 months

NOT RATED : Stock is not rated by CMBIGM

OUTPERFORM : Industry expected to outperform the relevant broad market benchmark over next 12 months

MARKET-PERFORM : Industry expected to perform in-line with the relevant broad market benchmark over next 12 months

UNDERPERFORM : Industry expected to underperform the relevant broad market benchmark over next 12 months

#### CMB International Global Markets Limited

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