

## 2022 China Outlook for Industrials Mixed, but Risks Positively Biased

Favor Autos, Automation; Incrementally +ive Elevators, -ive Aero;  
Remain Cautious Machinery

- **Property and Zero-COVID the primary headwinds for 2022...** The property market and COVID-19 are two of the primary headwinds facing the Industrial sector and the broader economy in China in '22. We expect the **recent downturn in the property market**, which began in the second quarter of this year, to **continue through the first half of '22**. We expect China to **stick to its Zero-COVID policy for most of next year** due to structural factors (i.e. low vaccine efficacy, low natural immunity, limited critical care infrastructure), making it **difficult for consumer-facing industries to gain momentum**, while presenting **continued challenges for supply chains**.
- **...But external demand, supply chain, and policy are likely offsets.** On the positive side, a **recovering global economy** should boost external demand, providing a further **tailwind for exports**. The **removal of COVID-related restrictions outside of China**, particularly in key sourcing regions such as the US, Europe, and SE Asia, should **help ease supply chain bottlenecks** on the margin, which we expect to **drive a restocking cycle**. Meanwhile, the gov't has already clearly signaled a **shift in economic policy towards a slightly more pro-growth stance**, prioritizing the stabilization of growth, implying a de-emphasis of structural reform and deleveraging goals in the near-term. There have already been **signs of easing in the property market**, while state media sources suggest an **increase in the special purpose bond quota** in '22, consistent with gov't indications of **"front-loading" fiscal spending**.
- **Net-net, 2022 a mixed bag for Industrials, but risks tilted more positively.** On balance, we see a mixed environment for the Industrial sector in China in '22. That said, we are **less bearish than consensus** and see the risks tilted more positively than negatively over the coming 12 months. For one, **recent policy actions may blunt the property downturn** and set the stage for an earlier bottom than would have otherwise been the case. Meanwhile, **better news on the COVID front may emerge** (e.g. therapeutics, less virulent strain), allowing China to abandon Zero-COVID sooner than we currently expect. Finally, **we are more optimistic on the trajectory for Sino-US trade relations** and believe **reductions in bilateral tariffs are in play** following the Xi-Biden mtg. All three potential developments would provide **incremental tailwinds to growth and improve the '22-'23 outlook**.
- **Autos & Automation favored.** Against this backdrop, our two favorite sectors for '22 within Industrials are Autos and Automation, where we see **further legs to the cyclical recovery**, with **risks skewed to the upside looking towards '23**. Supply chain bottlenecks were a significant headwind to passenger vehicle production in '21. Automotive production lagged retail sales by ~4% over the first eight months of the year, a 10-15% underperformance relative to the '15-'19 experience. The dynamic has been even more extreme for foreign brands, which were disproportionately impacted by global supply chain bottlenecks. Dealer checks further support this view, with many indicating order backlogs for high volume models currently stretch out 2-8 weeks. We expect auto sales in China, currently ~10% below the prior cycle peak in 2017, to continue to recover in '22, with **auto sales growth in the +6-8% range and production outperforming retail sales by 5-10%**, driven by restocking. **Automation orders, meanwhile, remain robust**, driven in large part by the improvement in autos/NEVs and an improved industrial capex outlook following heated years of the Sino-US Trade War, as well as growing confidence in the potential for an upgrade of the Industrial base based on the 14th Five Year Plan goals.

### Automotive sector view: **Positive**

OEMs: GM, F, Daimler, BMW, Volkswagen, Stellantis, Great Wall

Suppliers: ADNT, BWA, JCI, LEA, TEN, ALV, Valeo, VC

### Automation sector view:

**Positive**

ROK, ABB, EMR, HON, SIE, SU, Yaskawa, Fanuc, SMC, Mitsubishi Electric

### Elevator sector view: **Neutral**

Kone, OTIS, ThyssenKrupp, Yungtay, Schindler

### Commercial Vehicle sector view: **Neutral**

CMI, TEN, Daimler, Volvo, Scania, Volkswagen

### Commercial Aerospace sector view: **Neutral**

OEMs: BA, Airbus

Suppliers: SPR, TDG, RTX, HEI, Safran, Rolls Royce

### Construction & Mining sector view: **Negative**

CAT, Komatsu, Volvo, CNH, HCM, TEX, MTW

- Elevators cycle likely extended.** While we previously expected the risks for Elevator orders to be skewed to the downside for '22, given peak orders in '21 and deteriorating property market trends, recent moves to loosen restrictions and increase credit availability for developers and mortgages have reduced the overall downside risk and **raised the probability that orders could be flat or up next year.** In recent weeks, conversations with industry contacts in the Elevator sector indicate the more **dovish signals have already had a positive impact on sentiment.** On the other hand, client feedback suggests investor caution due to the sharp decline in residential starts in 2H21, which is commonly perceived to be a leading indicator for orders. While the decline in starts is a legitimate cause for concern, we would note the following: 1) the volume of completions has lagged starts by over 50% in each of the last four years, leaving a large pipeline of projects for completion, 2) starts hit a new peak in '19, while completions remains ~10% below its prior peak, 3) in the prior cycle, completions peaked three years after the peak in starts, 4) elevator orders peaked the same year as the peak in completions. As such, **we do not necessarily believe the recent decline in starts portends an imminent decline in Elevator orders.** We believe order activity will remain more resilient than investors expect, with greater room for upside than downside relative to expectations. We currently **expect Elevator orders to be +0-5% y/y in '22.**
- Incrementally cautious on Aerospace.** The persistence of China's Zero-COVID policy has significantly reduced the appetite for domestic travel (~45% of APAC departures) in recent months. Conversations with industry contacts revealed **deferred business and leisure travel until at least after the Beijing Olympics,** reflecting concern about being caught in a web of quarantine and movement restrictions after the slightest increase in new cases. After hitting a peak in 2Q21 where domestic flight departures exceeded pre-pandemic high by ~15%, **Chinese domestic flights have oscillated between 50-90%** of their pre-pandemic average due to COVID-19 restrictions in 2H21. We **expect Chinese domestic travel to continue to oscillate within this range for the foreseeable future,** as the government continues to adhere to a Zero-COVID policy, leaving us cautious towards the outlook for a recovery in air travel in China.
- Remain cautious Machinery despite positive fiscal stimulus signals.** While the shift towards a more pro-growth fiscal policy posture should keep infrastructure construction stable, we **do not expect the magnitude of any incremental stimulus to be sufficient to reverse the decline in excavator or commercial vehicle sales.** Both categories are coming off a five-year super-cycle, with fleets recently upgraded and refreshed, with prior demand drivers (e.g. lower price, emissions change, overloading crackdown, etc) less of a factor today. Conversations with industry contacts indicate expectations for a **20-40% decline in excavator sales and a 10-20% decline in heavy-duty truck sales in '22.**
- COVID still the biggest wild card.** In our view, the biggest wild card for China in '22 remains the **trajectory of COVID-19,** as it **carries significant implications for consumer activity and government policy.** An earlier transition away from China's Zero-COVID policy would provide a significant boost to economic activity, with the Commercial Aerospace sector most directly impacted, followed by Autos (i.e. supply chain and demand) and Property (i.e. demand), while reducing the impetus for policy support. Two factors that could drive an earlier than expected transition towards a "living with COVID" policy would be either the emergence of a milder variant or the introduction of therapeutics that could break the link between new cases and hospitalizations.
- Top Picks: BMW, LEA, Valeo, ALV, Siemens, Fanuc, Yaskawa, OTIS, KONE.**

**Table 1: 2022 Outlook by Sector**

Sector	Metrics	2022 Growth Outlook (Y/Y%)
Autos	Sales	+6% to +8%
	Production	+11% to +13%
Elevator	Orders	+0% to +5%
Excavator	Sales	-20% to -40%
H/D Trucks	Sales	-10% to -20%

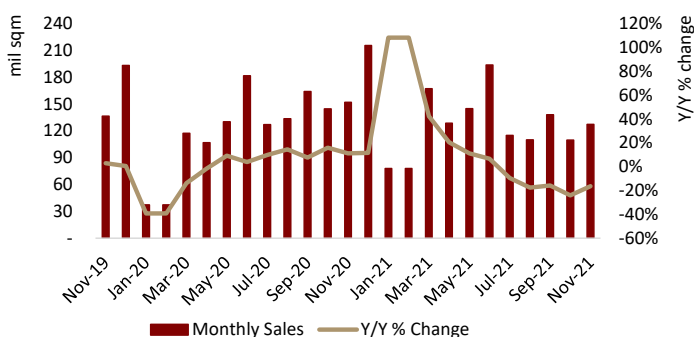
Source: Silk Road Research.

## Mixed Backdrop for 2022 - Headwinds vs. Tailwinds

The property market and COVID-19 are two of the primary headwinds facing the Industrial sector and the broader economy in China in 2022. We expect the recent downturn in the property market, which began in the second quarter of this year, to continue through at least the first half of 2022. We expect China to stick to its Zero-COVID policy for most of next year, making it difficult for consumer-facing industries to gain momentum, while presenting continued challenges for supply chains.

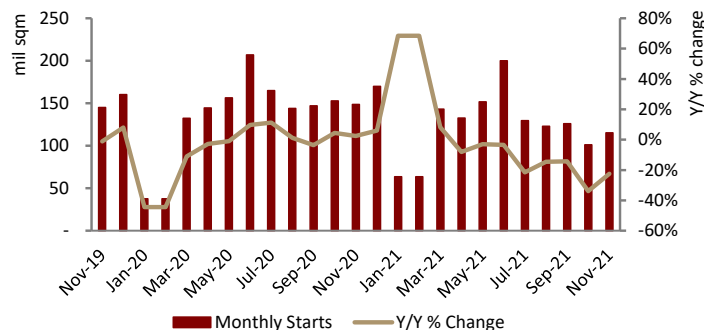
Land sales have been falling since 2019 and are down ~30% from the recent peak in 2018. Residential property sales and starts turned negative in July '21 and April '21, respectively. Residential sales are on track to be roughly flat this year (1H21 +29% y/y, 2H21 Nov to-date -17%), while residential starts are on track to decline by ~10% (1H21 +6%, 2H21 Nov to-date -22%). The acceleration in the decline in both during the second half of the year has had a negative impact on industry sentiment, with industry contacts citing the property market as one of the primary drivers of downward pressure on the economy. This is particularly true for the Construction Equipment and Commercial Vehicle sectors, which are highly exposed to property construction activity. Industry contacts expect the decline in residential starts to continue well into next year given the lag relative to land sales and the government's continued efforts to curb speculative activity in the property market. Based on our conversations, industry expectations for residential starts in 2022 currently fall in the negative 5-10% range.

**Exhibit 1: China Residential Sales - National (Floor Space)**



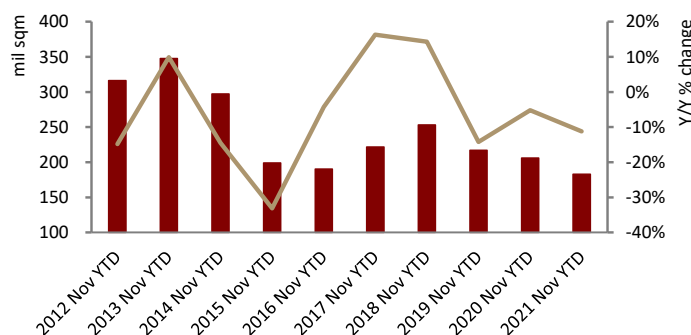
Source: Silk Road Research, CREIS

**Exhibit 2: China Residential Starts - Monthly (National)**



Source: Silk Road Research, CREIS

**Exhibit 3: China Land Sales**



Source: Silk Road Research, Wind

On the COVID front, while there is an expectation that increased herd immunity from vaccinations and natural infections will allow most Western countries to gradually emerge from the pandemic in 2022, little is expected to change in China from the perspective of managing the pandemic. Despite vaccination rates that are among the highest in the world, we believe three factors are likely to keep China from abandoning its Zero-COVID policy: 1) vaccines deployed reportedly offer less protection compared to mRNA alternatives deployed in the West, 2) the general population enjoys less natural immunity due to relatively low infection rates to-date, and 3) insufficient critical care capacity to deal with even a modest surge in new cases (see Table 3).

**Table 2: China vaccination rates relative to rest of Asia****14-day Average Daily COVID Case Count and Vaccination Rates Across Major Countries**

Country	14-day Avg Daily Case Count	Daily Case 14-day Trend	Restrictions	Partially Vaccinated Rate (%)	Latest Fully Vaccinated Rate (%)
China	79	↑	↓	18.6	80.8
Singapore	559	↓	↓	0.0	87.0
Hong Kong	4	↓	=	3.1	60.8
Malaysia	4,527	↓	↓	1.2	77.9
Japan	127	↓	↑	1.5	77.9
South Korea	6,179	↑	↑	2.6	81.6
Australia	1,829	↓	↑	3.3	75.3
Indonesia	204	↓	=	15.9	37.8
Philippines	263	↓	↑	16.0	38.8
Thailand	4,017	↓	=	9.2	62.4
Vietnam	14,987	↑	↑	17.5	61.6
Taiwan	10	↑	=	14.0	63.8
USA	120,584	↑	n.a	11.5	60.6
Europe	365,099	↑	n.a	4.2	59.8
Asia	79,257	↓	n.a	12.2	52.9
World	621,882	↑	n.a	10.0	46.6

Source: Silk Road Research, Worldometers, Our world in data, Ministry of Health

**Table 3: Headlines on Sinovac/Sinopharm Efficacy**

Headlines
Omicron: China's Sinovac says third shot could help fight variant, as Hong Kong study fails to reveal antibodies with two (SCMP)
Sinovac booster shot shows 94% neutralization efficacy against Omicron: company (Global Times)
Sinovac vaccine offers lower protection against severe disease from COVID-19: MOH, NCID study (Channel News Asia)
China's Sinovac offers inadequate protection against Omicron, study shows (Financial Times)

Source: Silk Road Research, Gov.cn.

**Table 4: China COVID Scenario Analysis**

<b>China total population (pop)</b>	<b>1,447,402,781</b>		
<b>Vaccinated rate (%)</b>	<b>80.8%</b>		
<i>No. of fully vaccinated people (pop)</i>	<i>1,169,501,447</i>		
<b>Unvaccinated rate (%)</b>	<b>19.2%</b>		
<i>No. of unvaccinated people (pop)</i>	<i>277,901,334</i>		
<b>No. of ICU beds per 100,000 people (est)</b>	<b>3.6</b>		
<b>Total no. of ICU beds available (est)</b>	<b>52,107</b>		
<b>Calculations</b>	<b>Bear</b>	<b>Base</b>	<b>Bull</b>
<b>% of infections</b>	<b>50.0%</b>		
<i>Total no. of infected people (unvaxx'd)</i>	<i>138,950,667</i>		
<b>Mild or no symptoms</b>	<b>50.0%</b>	<b>75.0%</b>	<b>98.0%</b>
<i>No. of people with mild or no symptoms</i>	<i>69,475,333</i>	<i>104,213,000</i>	<i>136,171,654</i>
<b>Require oxygen supplementation</b>	<b>15.0%</b>	<b>10.0%</b>	<b>1.0%</b>
<i>No. of people requiring oxygen</i>	<i>20,842,600</i>	<i>13,895,067</i>	<i>1,389,507</i>
<b>ICU (close monitoring)</b>	<b>10.0%</b>	<b>8.0%</b>	<b>0.5%</b>
<i>No. of people in ICU under monitoring</i>	<i>13,895,067</i>	<i>11,116,053</i>	<i>694,753</i>
<b>ICU (critically ill)</b>	<b>25.0%</b>	<b>7.0%</b>	<b>0.5%</b>
<i>No. of people in ICU critically ill</i>	<i>34,737,667</i>	<i>9,726,547</i>	<i>694,753</i>
<b>ICU demand : supply (est)</b>	<b>934:1</b>	<b>400:1</b>	<b>27:1</b>

Source: Silk Road Research, Worldometers

In other words, the pandemic is far from over in China. The structural elements that drove China's Zero-COVID policy to-date are likely to remain in place for most of 2022. We view expectations that China will transition away from its zero-tolerance approach towards new cases following the Beijing Olympics as overly optimistic. As a result, certain segments of the Industrial economy, particularly those dependent upon the movement of consumers, such as travel, auto sales, property sales, are likely to struggle to gain momentum next year. In addition, supply chain bottlenecks, which many expect to ease as we move through the year, may end up persisting longer than expected due to COVID-related restrictions affecting Chinese port capacity.

On the positive side, a recovering global economy should boost external demand, providing a further tailwind for exports. The removal of COVID-related restrictions outside of China, particularly in key sourcing regions such as the US, Europe, and Southeast Asia, should help ease supply chain bottlenecks on the margin, which we expect to help to drive an inventory restocking cycle. Meanwhile, the government has already clearly signalled a shift in economic policy for 2022 towards a slightly more pro-growth stance, prioritizing the stabilization of growth early in the year and implying a de-emphasis of structural reform and deleveraging goals over the near-term. As a result, fiscal and monetary policy are likely to remain supportive in 2022. There have already been signs of easing in the property market at the local government level, while state media sources suggest there will be an increase in the quota for special purpose bond issuance in 2022, consistent with government indications that it would "front-load" fiscal spending in 2022 to stabilize growth.

**Table 5: Headlines on Signs of China Property Market Easing**

Several small and medium-sized banks in Shenzhen lower mortgage interest rates (Caijing)
China supports debt issuance by developers to fund acquisitions (CN Stock)
NAFMII: To focus on the registration and issuance of medium and long-term debt financing instruments (China Securities Journal)
China's central bank urges backing for affordable housing in Shanghai (Reuters)
Xi'an adjusts housing regulations (China Securities Journal)
Real estate financing returns to normal as loans continue to rise in November (Sina Finance)
Chengdu encourages real estate projects to quicken their listing and sales processes (China Securities Journal)
Chengdu city allows developers to use 95% of pre-sale housing funds (Global Times)
Major Chinese cities cut land auction prices by up to 20 per cent to lure cash-strapped developers amid market gloom (SCMP)
Financing conditions ease as property developers issue bonds (Global Times)
Local authorities are finding ways to soften the blow of China's tight real estate policies without incurring Beijing's wrath (SCMP)
Some Beijing banks ease property credit lending (Sina Finance)
Chinese cities come out with measures to support home sales (Global Times)
Third round of land sales, many regions lower requirements for land sales (China Securities Journal)
Real estate financing levels have returned to normal in October (CN Stock)

Source: Silk Road Research, press reports.

**Table 6: Key Takeaways from China Central Economic Work Conference 2021**

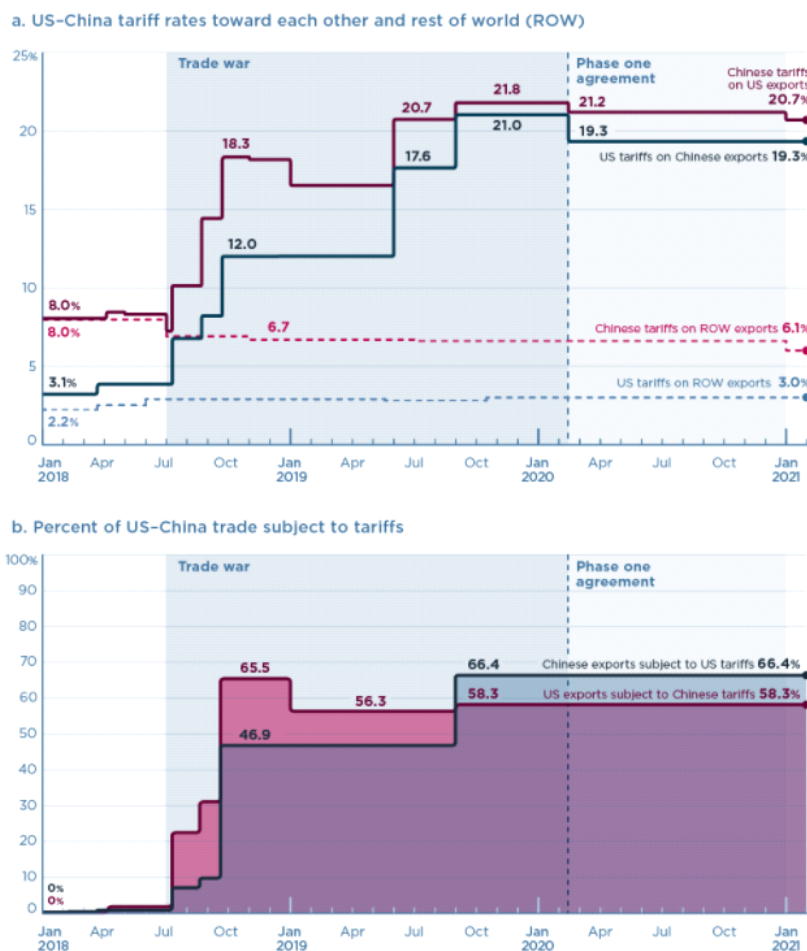
Key areas	Statements
Economic Work in 2022	Economic work next year to focus on <b>a) Stability, b) Steady improvements, c) Respective regions and departments to shoulder responsibility to maintain stable macro economic environment, d) Proactively introduce policies in all areas that are beneficial to economic stabilization.</b>
Macro Policy	Continued push for proactive monetary policy and stable fiscal policy.
	<b>To guarantee strong fiscal expenditure and accelerate fiscal expenditure</b>
	Launch new tax reduction policies
	Strengthen support for SMEs and manufacturing enterprises
	<b>Appropriately "front-load" infrastructure investment</b>
	Guide financial institutions to enhance support towards the real economy, in particular, SMEs and areas such as technological innovation and green development.
	Maintain the "six areas of stability" and "six areas of guarantee", in particular the guarantee of employment, people's livelihood and market entities
	Resolutely curb new hidden local government debt
Property Market	To focus on maintaining economic operation within a reasonable range, strengthening and improving macro controls and intensifying the cross-cyclical adjustment of macro policies
	To accelerate development of rental market
	Accelerate construction of affordable housing
	<b>Support commercial home market to fulfil reasonable housing demand of home buyers</b>
Resources	<b>Push for property policies by province to promote positive circulation and healthy development of the property market.</b>
	To understand and grasp the supply and guarantee of primary products.
	To promote resource conservation and recycling in the production process, and raise awareness of conservation and low-carbon from the consumption perspective.
	Enhance the capacity of domestic resource production and accelerate development and application of advanced mining technologies for oil and gas and other resources
	Accelerate the construction of a waste recycling system
	The gradual withdrawal of traditional energy should be based on the safe and reliable replacement of new energy.
Structural Policy	Ensure the clean and efficient use of coal, increase the capacity of new energy consumption, and promote the optimal combination of coal and new energy.
	Deepen structural supply-side reforms
	Focus on smoothing domestic circulation and achieve breakthroughs in supply constraints
	Upgrade core manufacturing capabilities
	Accelerate digitization and upgrading within traditional industries

Source: Silk Road Research, Gov.cn.

## Risks Skewed to the Upside

On balance, we see a mixed environment for the Industrial sector in China in 2022. That said, we are less bearish than the consensus view and see the risks tilted more positively than negatively over the coming 12 months. For one, recent policy actions may blunt the current property downturn and set the stage for an earlier bottom than would have otherwise been the case. Meanwhile, better news on the COVID front may emerge (e.g. therapeutics, less virulent strain), allowing China to abandon its Zero-COVID policy sooner than we currently expect. Finally, we are more optimistic on the trajectory for Sino-US trade relations and believe reductions in bilateral tariffs are in play for 2022 following the recent Xi-Biden virtual meeting. All three potential developments would serve as important tailwinds for the economy and likely improve the outlook for 2022 and 2023.

**Exhibit 4: US-China trade war tariffs**



Source: Peterson Institute for International Economics

**Table 7: Headlines on Positive Progress on Sino-US Relations**

China-US biz community upbeat after Xi-Biden meeting (Global Times)
Xi stresses mutual respect, peaceful coexistence, win-win cooperation in China-U.S. relations (People's Daily)
Chinese, U.S. heads of state hold virtual meeting to steer China-U.S. relations (People's Daily)
Opinion: Summit Sets the Right Course for China-U.S. Relations (Caixin)
Commentary: Xi-Biden virtual meeting charts course for bilateral ties (People's Daily)
Editorial: Xi-Biden virtual summit sends positive signal (Global Times)
World sees China-US interactions as equal, fair (Global Times)
Clinton Predicts Changes in U.S. Tariffs on China (Caixin)
Reciprocal' lowering of trade tariffs could ease inflation, Janet Yellen says (SCMP)

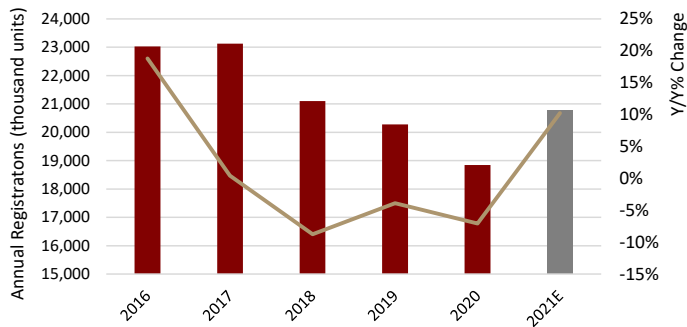
Source: Silk Road Research, press reports.

## Sector Preferences

### Favourite Sectors - Autos and Automation

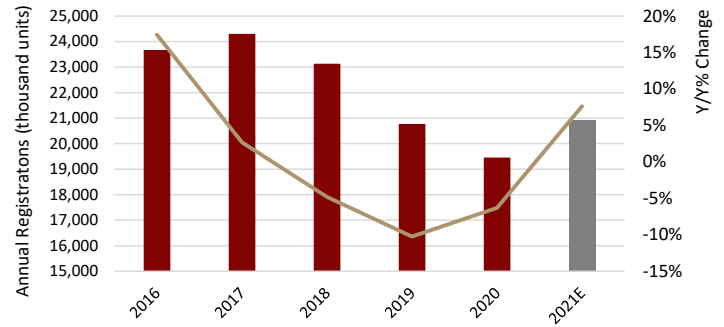
Against this backdrop, our two favourite sectors for 2022 within Industrials are Automotive and Automation, where we see further legs to the cyclical recovery in both end markets, with risks skewed to the upside.

**Exhibit 5: Passenger Vehicle Registrations - Annual**



Source: Silk Road Research, CPCA, Insurance Association of China

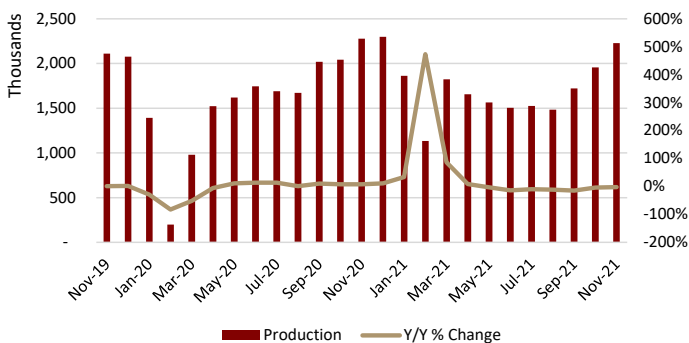
**Exhibit 6: Passenger Vehicle Production - Annual**



Source: Silk Road Research, CPCA, Insurance Association of China

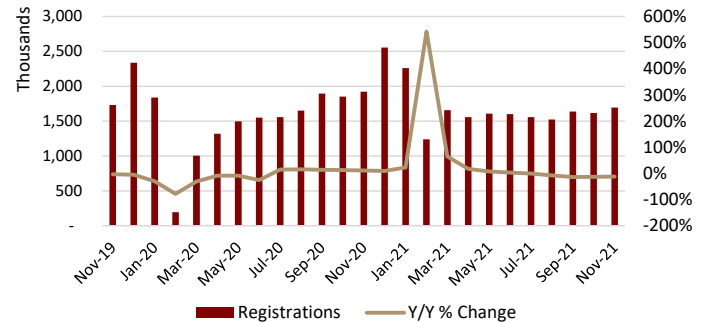
Supply chain bottlenecks were a significant headwind to passenger vehicle production in 2021, driving dealer inventory levels, particularly for foreign brands, to the lowest point since the stimulus-fuelled boom in '16-'17.

**Exhibit 7: Passenger Vehicle Production**



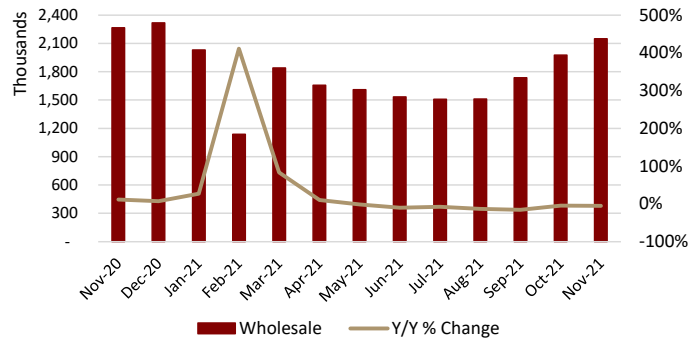
Source: Silk Road Research, China Passenger Car Association (CPCA)

**Exhibit 8: Passenger Vehicle Registration**



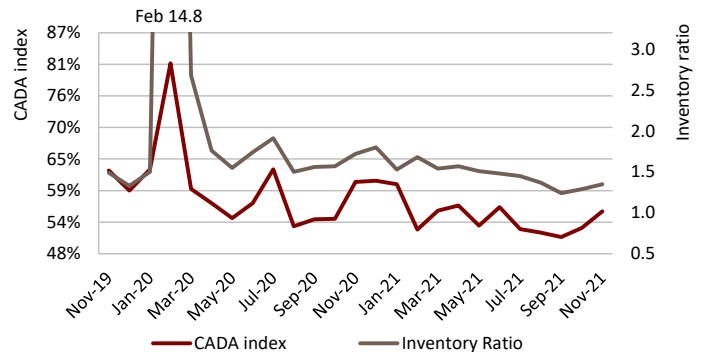
Source: Silk Road Research, CPCA, Insurance Association of China

**Exhibit 9: Passenger Vehicle Wholesale**



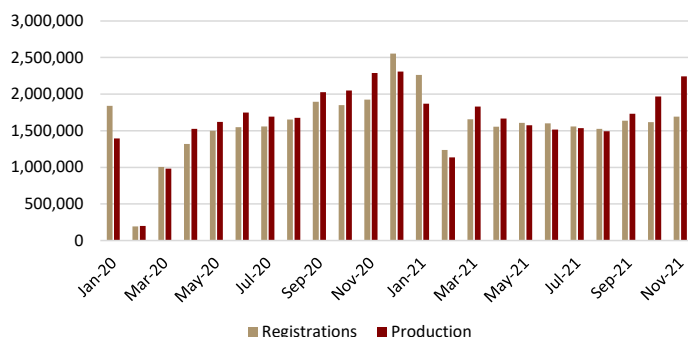
Source: Silk Road Research, CPCA, Insurance Association of China

**Exhibit 10: Auto Dealer Inventory Trends**

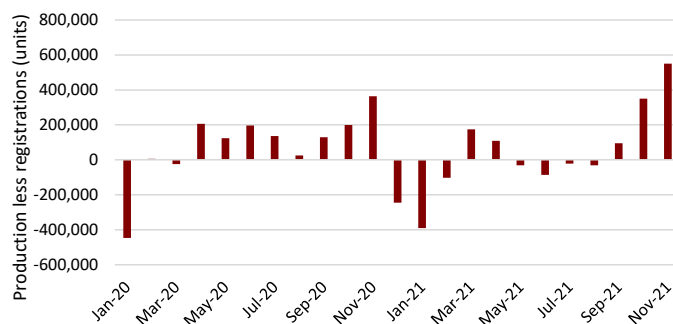


Source: Silk Road Research, China Automobile Dealers Association

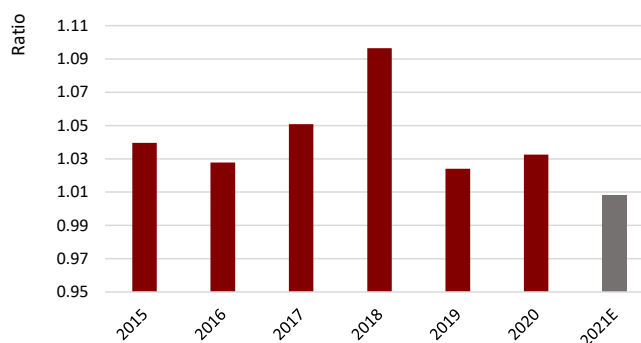
Automotive production lagged retail sales (as measured by insurance registrations) by ~4% over the first eight months of the year, a 10-15% underperformance relative to the 2015-2019 experience of automotive production consistently exceeding retail sales by 6-11%. The dynamic in 2021 has been even more extreme for foreign brands, which were disproportionately impacted by global supply chain bottlenecks. Retail sales for foreign brands exceeded production by ~4% through November '21, while production exceeded retail sales by a whopping ~14% for domestic brands.

**Exhibit 11: Passenger Vehicle Production vs. Registrations**

Source: Silk Road Research, IAC, CPCA.

**Exhibit 12: Passenger Vehicle Production vs. Registrations Gap**

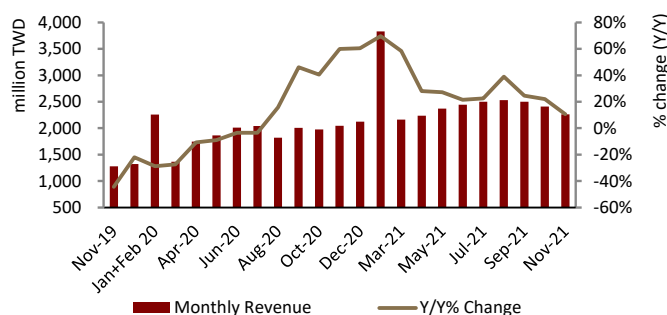
Source: Silk Road Research, IAC, CPCA.

**Exhibit 13: Passenger Vehicle Production to Registrations Ratio**

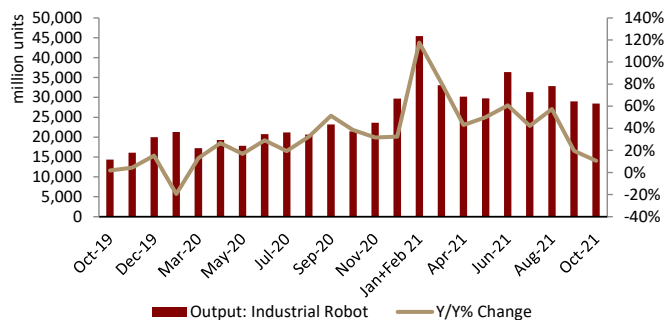
Source: Silk Road Research, CPCA, Insurance Association of China

Our dealer checks further support the view that dealer inventory levels remain at historically low levels, with many dealers indicating order backlogs for high volume models currently stretching out two to eight weeks. We expect auto sales in China, currently ~10% below the prior cycle peak in 2017, to continue to recover in 2022, with auto sales growth in the +6-8% range and production outperforming retail sales by 5-10%, driven by dealer restocking activity.

Automation orders, meanwhile, remain robust, driven in large part by the improvement in automotive sales after three years of declines (2018-2020) and the rapid growth in demand for NEVs, which has solidified the outlook for new capacity investment. We estimate demand from the automotive sector accounts for 40-50% of automation orders in China.

**Exhibit 14: Monthly Revenue- Hiwin**

Source: Silk Road Research, Hiwin

**Exhibit 15: Industrial Robot Production**

Source: Silk Road Research, Wind Information, National Bureau of Statistics (NBS)

In addition to the strength in demand from the automotive sector, Automation industry contacts report a broad-based improvement in the industrial capex outlook reflecting both, a cyclical recovery following a decline in capex trends during the automotive downturn and the heated years of the Sino-US Trade War (2018-2019), as well as growing confidence in the potential for an upgrade of the Industrial base in China based on the 14th Five Year Plan goals of increased self-reliance in high tech supply chains and digitization.

**Table 8: China 14th Five-Year Plan Macro Targets**

Macro Targets	14th FYP	Target	13th FYP	Meet target (Y/N)	Target
	Target		Actual		
Average annual GDP growth	Maintain within reasonable range; Annual GDP growth rate to be set based on actual conditions	> 6.5%	5.7%	N	7.0%
Household disposable income growth	To be similar to pace of GDP growth	> 6.5%	6.5%	Y	> 7.0%
Services as % of GDP	-	56.0%	~54%	N	47.0%
Urbanization rate	65.0%	60.0%	>60%	Y	51.5%
New urban jobs (millions)	Surveyed urban unemployment rate of less than 5.5%	> 50.0	~66	Y	45.0
Digital service economy industrial value-added as % of GDP	0.1	-	7.8%	-	-
Research & development	More than 7% growth annually; To target higher than 13th five-year plan	2.5% of GDP	~2.2%	N	2.2% of GDP
Patents per 10,000 citizens	12.0	12.0	13.3	Y	3.3

Source: Silk Road Research, State Council, National Bureau of Statistics, Government officials' statements

**Table 9: 14th Five-Year Plan - Top Goals**

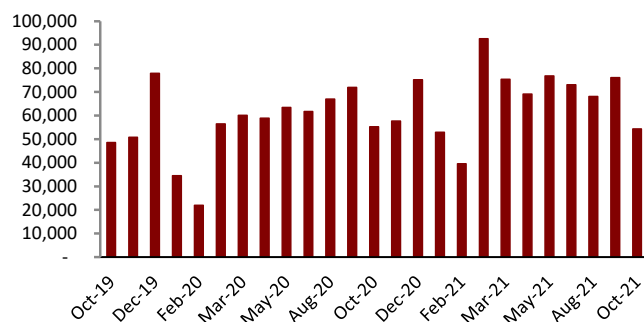
Key Areas of Focus		SRR Thoughts
1	New achievements in economic development; Economic growth to maintain within reasonable range; Annual GDP growth determined based on actual conditions	In the 13th Five Year Plan, growth goal was to "maintain at 'mid-to-high' pace"; Change in language supports increased focus on quality over quantity
2	Strengthen national strategic scientific and technological strength; Improve technological innovation mechanism (i.e intellectual property reform)	Not new, but rephrased and described science and technological independence and self-reliance as strategic support for national development; Also likely a legacy of Sino-US trade war
3	Accelerate modernization of industrial system; To implement "strong manufacturing hub" strategy	Not new, but rephrased to underscore focus on strategic new industries (NEVs, aviation, high-end machinery, new materials, biological technologies)
4	Push dual circulation consumption model (domestic and international circulation), with main focus to boost domestic consumption	New
5	Accelerate development in digitization; Establish digital economy (i.e. big data, cloud computing)	Not new. Rephrased from 13th FYP, but message unchanged
6	Deepen reform; Fully develop the decisive role of the market in resource allocation	Not new. Rephrased from 13th FYP, with increased focus on the role of the market in resource allocation
8	Push high-quality agricultural development	Not new. Prioritization was lowered in the 14th FYP vs. 13th FYP (was listed as #4 in the 13th FYP).
7	Accelerate "green" development	Not new. Prioritization was upgraded in the 14th FYP vs. 13th FYP.
9	Improve social civilization	Not new.
10	Enhance people's livelihoods	Not new. Rephrased with less emphasis on poverty relief and more on improving quality of life (longer lifespan, access to healthcare services, etc)

Source: Silk Road Research, State Council of the People's Republic of China.

### Incrementally Positive – Elevators

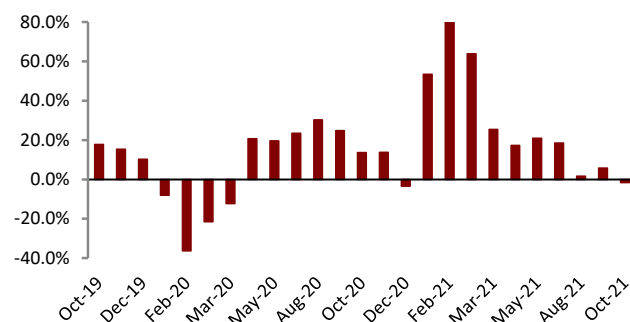
We are incrementally positive on the Elevator sector. While we previously expected the risks for Elevator orders to be skewed to the downside for 2022, given peak orders in 2021 and deteriorating property market trends, recent moves by policymakers to incrementally, albeit modestly, loosen property market restrictions and increase credit availability for developers and mortgages (see Table 4) have reduced the overall downside risk, in our view, and raised the probability that orders could be flat or up next year.

**Exhibit 16: China Elevator Orders**



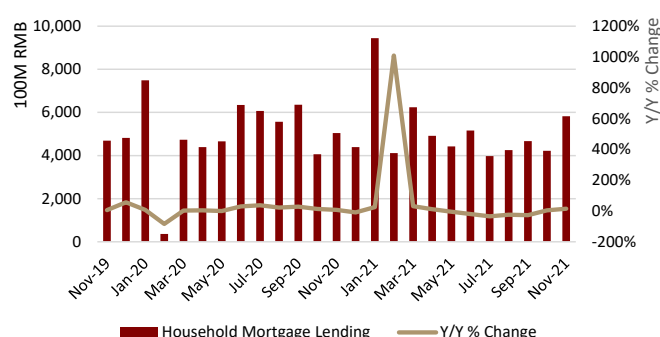
Source: Silk Road Research

**Exhibit 17: China Elevator Orders (Y/Y % change)**



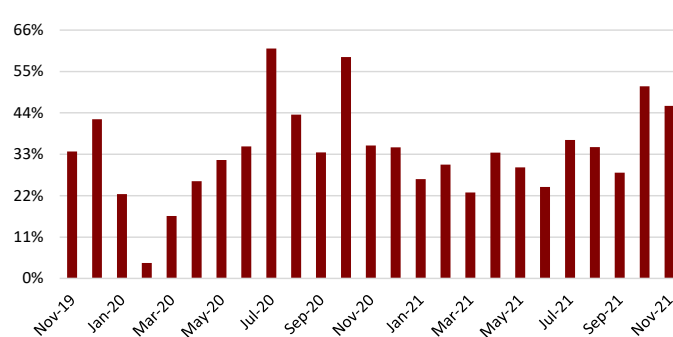
Source: Silk Road Research

**Exhibit 18: New Yuan Loans - Household Mortgage Component**



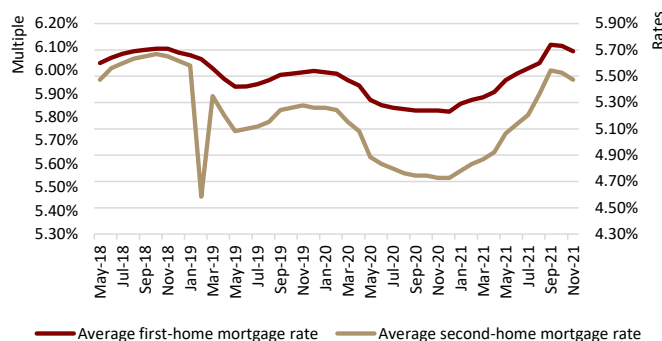
Source: Silk Road Research, The People's Bank of China (PBOC)

**Exhibit 19: Household Mortgage Lending as % of Total New Yuan Loans**



Source: Silk Road Research, The People's Bank of China (PBOC)

**Exhibit 20: Nationwide average first-home mortgage rates**

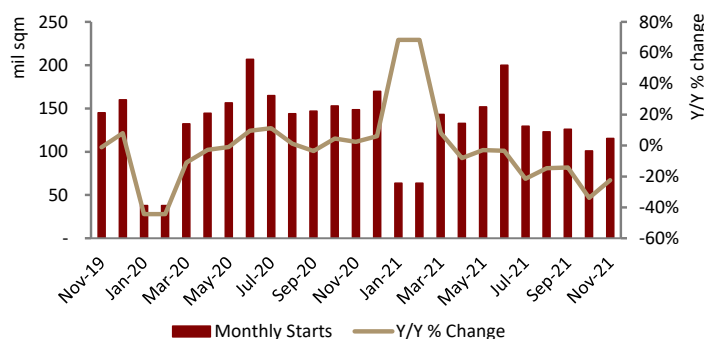


Source: Silk Road Research, Rong360, KE Holdings

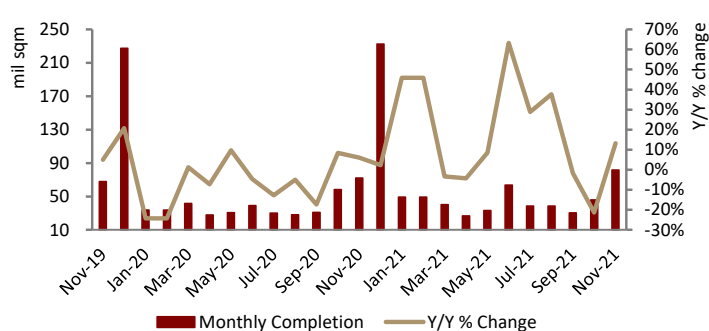
In recent weeks, conversations with industry contacts in the Elevator sector indicate the more dovish signals from government officials have already started to have a positive impact on industry sentiment. Some of our more cautious industry contacts have raised the low end of their expectations for 2022 Elevator orders growth from -10% to -5% or roughly flattish. On the other hand, recent client feedback suggests investor sentiment has turned more cautious on the sector due to the sharp decline in residential starts in 2H21, which is commonly perceived to be a leading indicator for orders.

While the decline in starts is a legitimate cause for concern, we would note the following: 1) the volume of residential completions has lagged starts by over 50% in each of the last four years, leaving a large pipeline of existing projects coming up for completion over the next few years, 2) residential starts hit a new peak in 2019, while completions remains ~10% below its 2014 peak indicating a slowdown project life-cycle (industry contacts estimate average project life-cycle at ~3 years vs. ~18 months five years ago), 3) in the prior cycle, residential completions peaked three years after the peak in starts (2014 vs. 2011), 4) elevator orders peaked the same year as the peak in completions.

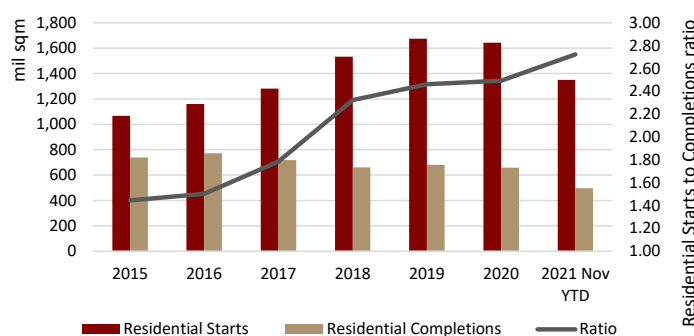
As such, we do not necessarily believe the recent decline in starts portends an imminent decline in Elevator orders, with financing availability and developer liquidity an important determining factor for the continuation of construction activity. The pipeline of projects, combined with the recent easing of credit availability and property market restrictions (see Table 3) in certain regions, suggests the probability for a significant downturn in Elevator orders in 2022 is very low. While we are not calling for another year of strong growth in orders next year, we do believe order activity will remain more resilient than investors expect, with greater room for upside than downside. We currently expect Elevator orders to be +0-5% y/y in 2022.

**Exhibit 21: China Residential Starts - Monthly (National)**

Source: Silk Road Research, CREIS

**Exhibit 22: China Residential Completions - National (Floor Area)**

Source: Silk Road Research, CREIS

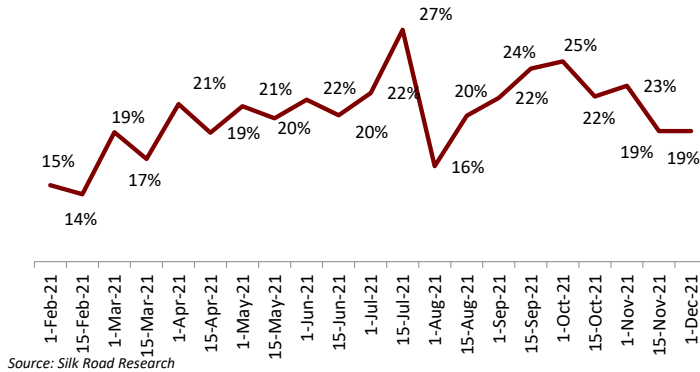
**Exhibit 23: China Residential to Completions Ratio**

Source: Silk Road Research, CREIS.

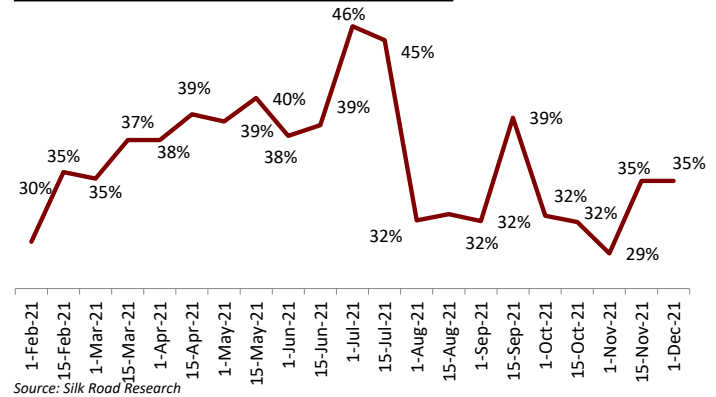
### Incrementally Negative - Commercial Aerospace

On the Aerospace front, we would note that the persistence of China's Zero-COVID policy has significantly reduced the appetite for domestic travel (~45% of total APAC departures) in recent months. Travelers have had to contend with repeated snap travel restrictions throughout 2021 following sporadic outbreaks of COVID-19 in China.

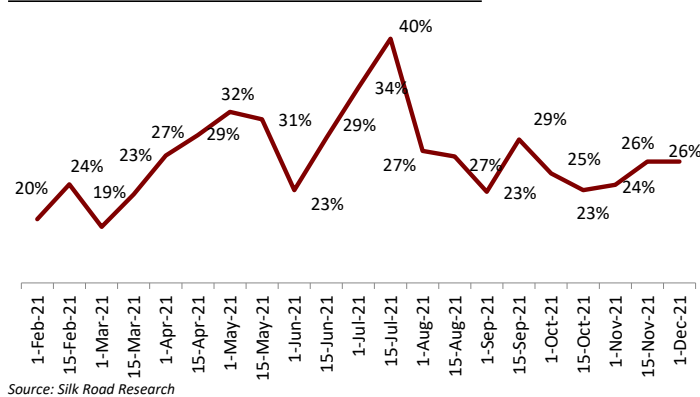
**Exhibit 24: The % of respondents indicating last trip via commercial aviation occurred over the last two months:**



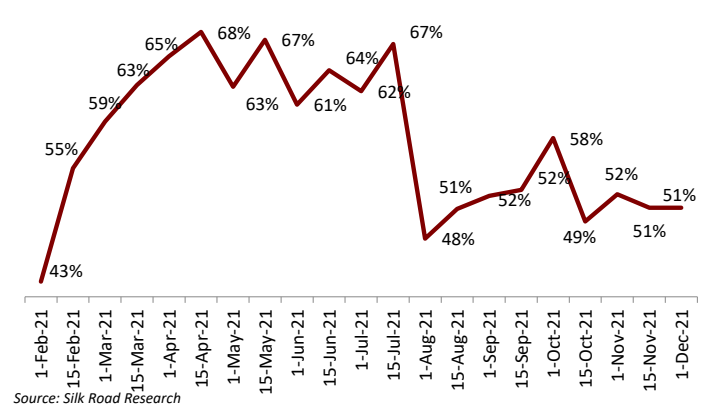
**Exhibit 25: The % of respondents expecting next trip via commercial aviation to occur over the next three months:**



**Exhibit 26: The % of respondents expecting to resume leisure travel via commercial aviation over the next three months:**



**Exhibit 27: The % of respondents that are comfortable traveling for business today:**

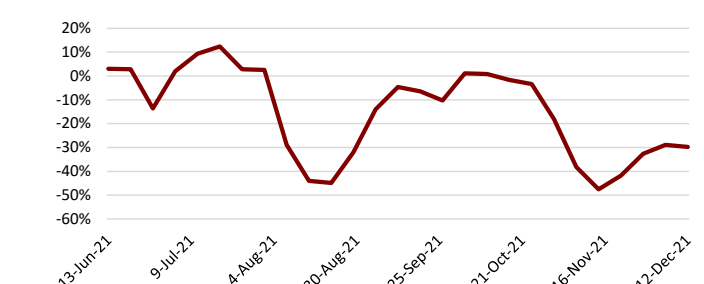


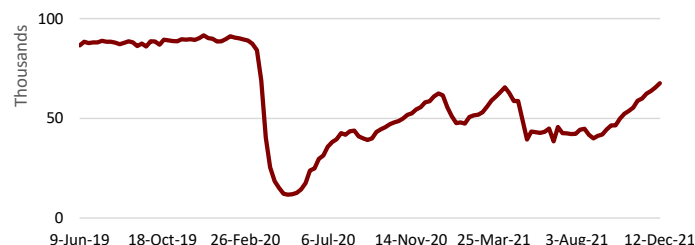
Conversations with industry contacts revealed people deferring business and leisure travel until at least after the Beijing Olympics in February 2022, and potentially beyond, reflecting concern about getting caught in a web of local quarantine and movement restrictions after the slightest increase in new cases in any given location. As a reminder, we note that Zero-COVID means that the link between new cases and hospitalization/death does not factor into the decision to impose travel restrictions. The mandate to manage new cases to zero necessitates swift action at any sign of virus spread.

**Exhibit 28: Weekly Domestic Departures in China - Total**



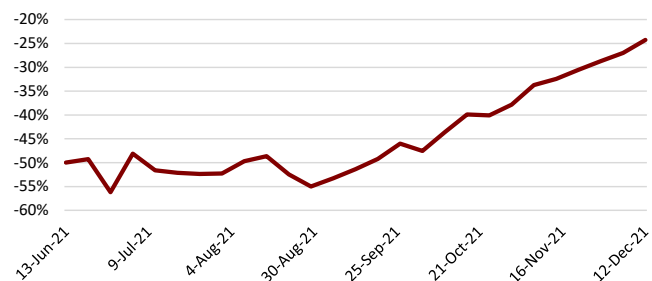
**Exhibit 29: Weekly Domestic Departures in China (Y/Y % Change vs. '19)**



**Exhibit 30: Weekly Domestic Departures in APAC ex-China - Total**

Source: Silk Road Research, Flightstats by Cirium

Notes: Data consists of departures from 954 airports across APAC region

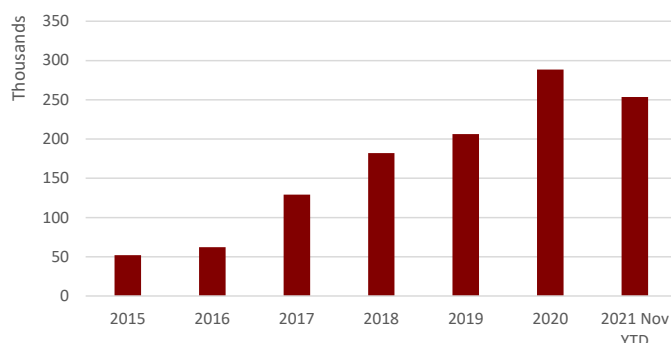
**Exhibit 31: Weekly Domestic Departures in APAC ex-China (Y/Y % Change vs. '19)**

Source: Silk Road Research, Flightstats by Cirium

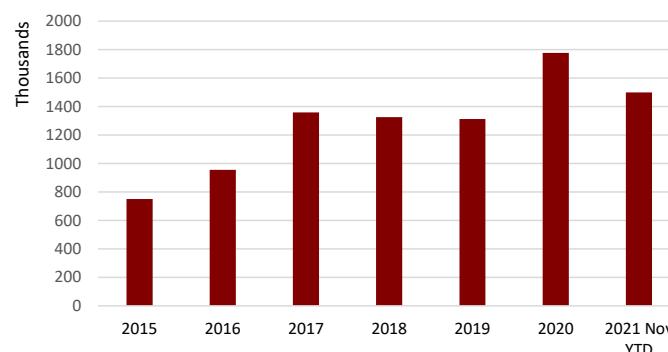
After hitting a peak in Apr-May 2021 where domestic flight departures in China exceeded their pre-pandemic high by ~15%, Chinese domestic flights have oscillated between ~50-90% of their pre-pandemic levels due to restrictions imposed following COVID-19 outbreaks in 3Q21 and 4Q21. We expect Chinese domestic travel to continue to oscillate within this range in 2022, as the government continues to adhere to a Zero-COVID policy, leaving us cautious towards the outlook for a recovery in air travel in China.

### Cautious - Construction Equipment and Commercial Vehicles

Turning to the Machinery sector, while the shift towards a more pro-growth fiscal policy posture should keep infrastructure construction stable, we do not expect the magnitude of any incremental stimulus to be sufficient to reverse the recent decline in excavator or commercial vehicle sales. Both categories are coming off a five-year super-cycle, with equipment fleets recently upgraded and refreshed.

**Exhibit 32: China Excavator Sales - Annual**

Source: Silk Road Research, China Construction Machinery Association (CCMA)

**Exhibit 33: Heavy and Medium Truck Sales - Annual**

Source: Silk Road Research, China Association of Automobile Manufacturers

Part of what drove the strength in new equipment demand over the past few years were emissions cycles for excavators (NS2 to NS3) and trucks (NS5 to NS6), which pulled forward replacement activity in both industries, as buyers took advantage of scrappage incentives and lower prices to buy new equipment ahead of the transition towards new emission standards. In addition, the excavator industry saw a protracted Price War that led to a significant decline in prices, which helped stimulate demand, while the commercial vehicle demand benefited from an intensification of enforcement of weight regulations that drove a massive expansion of the domestic fleet (we estimate 50-80% of fleet operators regularly carried loads exceeding statutory weight limits by over 50% prior to the Overloading Crackdown). These idiosyncratic drivers of new equipment demand are less of a factor in today's market, leaving both sectors exposed to cyclical pressures than were otherwise masked over the past few years.

## COVID Still the Biggest Wild Card

In our view, the biggest wild card for 2022 remains the trajectory of COVID-19 given the implications for consumer activity and government policy. An earlier transition away from China's Zero-COVID policy would provide the biggest boost to the economy and have a direct positive impact on consumer-facing industries, particularly Aerospace (i.e. demand) and Autos (i.e. demand, supply chain). Two factors that could drive an earlier than expected transition would be the emergence of a milder variant of the virus that ends up becoming the dominant strain in the country or the introduction and broad availability of therapeutics that could break the link between new cases and hospitalizations. Both developments would reduce the risk to China's critical care infrastructure in the event of a significant new wave of infections.

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