Farewell, COVID-0.

- The direction is clear China gradually reopens. Cases will surge, confusion will grow, and market will be volatile. Stay positive.
- The longer-term trend of the Dollar begins to turn down, boding well for risk assets.
- Hang Seng appears to be emerging from epic depression. Internet platforms should outperform as China reopens and demand for home deliveries soars.

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Chinese version:

《再见了,"清零"》

Reopening, But with Zigzags.

"The Chinese are always very well protected by the bravest among them."

- Henry Kissinger, "On China".

November is epic. The NASDAQ Golden Dragon Index (**PGJ**) that tracks the performance of Chinese ADRs soared close to 42%, the best performance ever in the history of the index. KraneShares CSI China Internet ETF (**KWEB**) surged 48%, also its best ever. During last week's trading alone, this index rocketed 24%. Since our report "*Mai! Mai! Mai!*" on October 31, 2022, and our follow-up tweet to preview what was to come in the last few weeks, on/off-shore Chinese indices have added close to two trillion USD to their capitalization.

Figure 1: Comparison of COVID cases between HK and Mainland during re-opening.



Source: Bloomberg, GROW Research

The market seems to swing from calling our view about China's imminent re-opening an "absurd rumor" to embracing our view with real money in no time. As John Templeton said, "Bull markets are born on pessimism, grown on skepticism, mature on optimism, and die on euphoria."



Confusions started to grow, as many cities start to adjust their pandemic management policies. The hotel we are staying in, for instance, had been locked down twice in November. And staffs were clearly under duress during these periods when confronted by emotional guests. As we traveled around the Yangtze Delta, our health code turned from green to yellow like autumn leaves, shutting us out of many venues where our meetings were supposed to be. It takes a lot to stay optimistic in such conditions.

Will China backpedal on its pandemic policy change?

Many telltale signs suggest that backpedaling is unlikely. We compare China mainland's new COVID cases with that of Hong Kong over the past 18 months. We note that the number of new local cases currently has reached new high (not shown in chart), while the number of new cases is at the same level as the COVID wave back in March in Shanghai (Figure 1). But in March, Shanghai quickly lockdown to contain the virus spread, while Hong Kong adopted a different strategy to gradually open at measured pace.

Since then, Hong Kong is almost reopened, and the success of Hong Kong Rugby Sevens is a strong testament of Hong Kong's pandemic management strategy. It sets a good example of how best to manage COVID, as the virus has mutated into a less virulent form.

Note that, despite surging number of COVID cases, China did not re-initiate lockdowns, but instead continues to steadily push forward the "20 Measures". The zigzags in the chart showing the increase of cases suggest that reopening is proceeding gingerly, probably two steps forward and one step back. But its direction is very clear.

As China reopens further, the number of cases will continue to climb, economic activities will likely be affected. And there will be a real test on China's stringent healthcare resources. Healthcare workers will bear much of burden in this monumental reopening task. They are the bravest of all among us, and they are protecting the Chinese people.

Continued COVID Disturbance Likely

How will the market perform amid rising confusions and chaos? Many investors have posted this tough question to us. After all, the market has responded very well to our timely call, and to some almost too well. As volatility will likely increase in the coming months due to the adjustments of COVID policy, forecasting in a volatile environment will become even more challenging.

In our 2023 outlook report "A Cyclical Recovery" published on 20 November 2022, we laid out three key uncertainties that the market needs to overcome in the coming 12 months, namely, no more COVID-0, improving Chinese Property and likely US Recession. We consider this the base case, and the on/off-shore Chinese markets should have seen their lows for the cycle. As such, any improvement to this base case should add to our return. We are now witnessing the resolution of the first two uncertainties. And it is happening faster than anticipated.

However, as mainland China gradually reopens, COVID cases will surge. And judging from the performance of the Hang Seng index in the past three years of COVID, surging cases can pressure the market (**Figure 2**).



| NR COVID 10.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 1

Figure 2: The performance of Hang Seng & CNH has been closely correlated with HK COVID cases.

Source: Bloomberg, GROW Research

Of course, there have been other factors that affect the Hang Seng's performance. But rising cases will likely arouse confusion and thus chaotic expectations and market volatility. It will put public communication, the healthcare system and supply chain to the real test. But with three years of experience managing the pandemic, the market should cope better than before, especially when valuation is so depressed. Nevertheless, investors should get prepared for market volatility ahead.

In the near term, the internet platform companies should fare better. Intuitively, as cases soar, people will choose to stay home to minimize the contagion risks. Public communication will also encourage restrictive mobility. Demand for food delivery is set to rise. It is similar to the situation when COVID broke out initially when demand for internet shopping surged.

Longer-term outlook for the Chinese markets continues to improve. In **Figure 3**, let us look at the Hang Seng as an example. We can see that our long-term allocation indicator seems to be re-emerging from its epic depression. This is happening just as COVID-0, one of the important uncertainties we laid out, is being finetuned. And the "Three Arrows" to rescue the property sector have been shot.

Of course, there is no guarantee that the Hang Seng will rise from such protracted depression very quickly. But the odds are good, and we should "be greedy when others are fearful".



Figure 3: The Hang Seng Index is emerging from historic depression.



Source: Bloomberg, GROW Research

USD Long-term Trend Starting to Turn Down

Interestingly, as the Hang Seng starting to rise from ashes, the long-term trend of the US Dollar is also starting to turn down. In **Figure 4**, we show that US current account deficit, a dominant source of global liquidity, seems to be arriving at an important low. The US current account deficit and its cycle tend to lead the Dollar cycle by a few years. The expanding US current account deficit over the past few years has been fueled by the US demand for foreign goods, suggesting a weaker dollar in the coming years.

Figure 4: Expanding US current account deficit bodes ill for the dollar in the coming years.



Source: Bloomberg, GROW Research

5 December, 2022

GROW Research



Such relationship between the US current account deficit and the Dollar is no coincidence. The Fed loosens its monetary policy to stimulate US demand that buys imports while exporting Dollar liquidity via the US current account deficit. The mirror image is China's ballooning current account surplus and strong export growth. This is indeed what had happened in the past three years of COVID.

Now, as the Fed tightens, US demand will cool, pressuring US growth and shrinking Dollar liquidity. As US demand cools, US inflation pressure will ease, Chinese exports will weaken, Chinese growth outlook will be murky, too. It remains to be seen whether the flurry of strong policies to support the Chinese property sector will be effective. Odds are they will, but will take some time.

Please note that our discussion here regarding the Dollar is for a longer-term cycle that measures in years rather than days. Nevertheless, recent palpable weakness in the Dollar can be the prelude to what is to come. And a weaker dollar bodes well for commodities, emerging markets, and other dollar-priced risk assets.

Conclusion

China is finally adjusting its COVID-0 policy. Although cases are surging, China is pushing forward its new "20 Measures", instead of backpedaling. More and more cities are announcing easing measures rather than lockdown like before. And the Tier-1 cities, such as Guangzhou, are taking the lead. By now, no one should doubt where "COVID-0" is heading.

The longer-term trend of the US dollar also starts to turn down. A weaker Dollar can support risk assets later. As China reopens, cases will rise, confusion will grow, and market will be volatile. That said, both on/offshore indices are making a historic comeback at a dizzying speed, and we are staying the course.

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Appendix 1: Performance of major asset classes (weekly)

sset Class		2/12/2022	25/11/2022	18/11/2022	11/11/2022	4/11/2022	28/10/2022	21/10/2022	14/10/2022	7/10/2022	30/9/2022	23/9/2022
ASCI Index		, ali	دار	, l		, nt	ر بار م	ما ا	, n l	, Ja.,		
MSCI World		1.34%	1.48%	-0.42%	6.56%	-1.42%	3.34%	3.23%	-1.94%	1.74%	-2.55%	-4.97%
MSCI DM		1.09%	1.68%	-0.57%	6.66%	-2 <mark>.1</mark> 0%	4.01%	3.61%	-1.70%	1.64%	-2.45%	-5.09%
MSCI EM		3.49%	-0.21%	0.78%	5.73%	4.66%	-2 <mark>.2</mark> 5%	0.20%	- <mark>3.8</mark> 3%	2.51%	- <mark>3.3</mark> 2%	4.05%
MSCI China		8.19%	-3 <mark>.2</mark> 4%	4.02%	5.81%	10.98%	-8.98%	-2.70%	-6.18%	1.52%	-2.64%	-5.68%
MSCI AC Asia Ex. Japar	1	4.37%	-0.43%	1.72%	7.64%	5.06%	-2.64%	-1.44%	4.17%	1.96%	-3.74%	4.28%
MSCI Europe		0.67%	1.65%	0.32%	3.44%	1.52%	3.55%	1.29%	-0.18%	1.04%	-0.56%	4.31%
tock												
U.S.	S&P 500	1.13%	1.53%	-0.69%	5.90%	-3. <mark>3</mark> 5%	3.95%	4.74%	-1.55%	1.51%	- <mark>2.9</mark> 1%	-4.65%
Chinese Mainland	SHCOMP	1.76%	0.14%	0.32%	0.54%	5.31%	-4. <mark>0</mark> 5%	-1.08%	1.57%	0.00%	-2.07%	-1.22%
	SZCOMP	3.05%	-2.22%	0.56%	-0.11%	7.50%	-4.46%	-0.88%	3.78%	0.00%	-2.63%	-2.09%
HK SAR, China	HSI	6.27%	-2.33%	3.85%	7.21%	8.73%	-8.32%	-2 <mark>.2</mark> 7%	-6.50%	3.00%	-3.96%	-4.42%
Japan	Nikkei 225	-1.79%	1.37%	-1.29%	3.91%	0.35%	0.80%	-0.74%	-0.09%	4.55%	-4.48%	-150%
South Korea	KOSPI	-0.42%	-1.56%	5.74%	3.53%	2.50%	0.00%	0.03%	-0.91%	3.59%	-5.87%	-3.89%
Germany	DAX	-0.08%	0.76%	1.46%	5.68%	1.63%	4.03%	2.36%	1.34%	1.31%	-1.38%	3.59%
U.K.	FTSE 100	0.93%	1.37%	0.92%	-0.23%	4.07%	1.12%	1.62%	-1 <mark>.8</mark> 9%	1.41%	-1.78%	-3.01%
France	CAC 40	0.44%	1.02%	0.76%	2.78%	2.29%	3.94%	1.74%		1.82%	-0.36%	-4.84%
	CAC 40	0.4/1/0	1.0/2/0	0.70%	2.7070	2.49/0	3.34/0	1.7470	1.11%	1.0/2/0	-0.30%	-4.04/0
oomberg Barclays Indices		1 (00/	0.000	0.5	2.000/	0 40/	2 500/	0 000/	1 20/	0 100/	o. <mark>≣</mark> 20/	2 440/
Global		1.60%	0.89%	0.51%	3.86%	-0.94%	2.50%	-0.69%	-1.42%	-0.39%	-0.12%	-2.44%
China		1.44%	-0.11%	-0.81%	2.00%	-0.17%	0.05%	-0.71%	-1.08%	0.00%	-0.01%	-1.20%
Global + China		1.60%	0.89%	0.51%	3.87%	-0.94%	2.49%	-0.69%	-1.42%	-0.39%	-0.72%	-2.44%
U.S.		1.54%	1.05%	0.48%	2.29%	-0.78%	1.65%	-1 <mark>.0</mark> 7%	-1 <mark>.1</mark> 9%	-0.25%	-0 <mark>.9</mark> 9%	-1.56%
Europe		1.50%	0.90%	1.59%	5.56%	- <mark>1.7</mark> 5%	4.02%	0.16%	-1 <mark>.2</mark> 7%	-0.63%	-0.04%	-4.78%
Asian Pacific		2.19%	0.22%	-0. <mark>5</mark> 3%	4.80%	-0.18%	1.71%	-1 <mark>.3</mark> 7%	- <mark>2.0</mark> 0%	0.06%	-0 <mark>.9</mark> 9%	-1 <mark>.0</mark> 2%
EM		2.19%	1.45%	1.75%	2.41%	-0.30%	1.99%	-1 <mark>.2</mark> 0%	-1. 6 9%	0.33%	-2.44%	-1.76%
Treasuries		1.72%	0.75%	0.39%	4.37%	-1.07%	2.76%	-0 70%	-1.47%	-0. <mark>5</mark> 2%	-0. <mark>.</mark> 9%	-2.41%
Corporate		1.58%	1.35%	1.16%	3.45%	-0.74%	2.38%	-0.69%	-1.47%	-0.07%	-1.36%	-2.52%
High Yield		1.41%	1.34%	0.98%	2.78%	-0.66%	2.77%	0.05%	-1.38%	1.12%	-1.88%	-2 <mark>.4</mark> 4%
ommodity		,		,								
loomberg Commodity Inde	х	-0.39%	0.11%	-1.8%	-0.52%	5.13%	0.44%	-2.11%	-2.96%	5.06%	-0.81%	-3.72%
Energy		-4.37%	0.88%	-2.04%	-5.14%	7.75%	3.44%	-7.00%	-4.98%	10.87%	-0.63%	-6.90%
- 07	Natural Gas	-14.33%	9.13%	7.27%	-7. 2 7%	13.44%	3.47%	-18.29%	-3.10%	-0.25%	-3.26%	-10.48%
	WTI Crude	4.85%	-4.78%	9.13%	-3.60%	5.59%	3.17%	0.48%	-7.06%	16.54%	0.95%	-7.10%
	Brent Crude	2.41%	-3.49%	-6.90%	-2.71%	5.12%	2.66%	1.32%	-5.99%	14.81%	-0.11%	-5.54%
	Heating Oil	0.01%	-6.73%	-1.56%	-6.66%	2.99%	4.45%	-1.32%	-3.34%	24.74%	2.03%	0.68%
	-	0.33%	-3.32%	-8.01%	-3.52%	6.34%	3.39%	0.71%		15.39%	2.67%	-2.83%
Danais va Mastal	Unleaded Gasoline	la la	7		7		· · ·	ı	-5 <mark>.3</mark> 3%		1	7
Precious Metal		3.56%	0.45%	-1.30%	5.21%	3.45%	-0.44%	1.55%	-5 <mark>.2</mark> 2%	3.17%	0.92%	-1.83%
	Gold	2.31%	-0.01%	-0.81%	5.52%	1.93%	-0.69%	0.45%	-3.53%	2.23%	0.99%	-1.66%
	Silver	7.59%	1.95%	-2.87%	4.25%	8.55%	0.42%	5.51%	- <mark>10.</mark> 78%	6.39%	0.68%	-2.43%
Industrial Metal		8.21%	-1.52%	-3.98%	7.14%	6.17%	-0.93%	-0.47%	-0.59%	2.76%	-1. <mark>8</mark> 6%	-4.62%
	Aluminum	6.06%	-0.30%	-6 <mark>.6</mark> 5%	6.04%	7.51%	-1.11%	1.49%	1.09%	-0.76%	2.08%	-4 <mark>.9</mark> 3%
	Copper	7.77%	-3.09%	-1.19%	4.45%	6.47%	0.15%	-4 <mark>.2</mark> 3%	0.29%	6.26%	-0.23%	-4 <mark>.9</mark> 9%
	Nickel	5.46%	-3.55%	-0.03%	5.35%	1.86%	-3. <mark>5</mark> 8%	-0.24%	-1.38%	0.40%	-0.61%	-4.79%
	Zinc	13.61%	0.10%	-5 <mark>.8</mark> 8%	13.05%	7.55%	0.77%	0.79%	-3.23%	6.38%	-9. <mark>8</mark> 5%	-3.65%
Agriculture		-2.00%	-0.18%	-1.17%	-1.32%	3.65%	-1.89%	0.26%	-0.70%	0.67%	-1.17%	-0.35%
-	Grains	-2.61%	-0.44%	-0.63%	-2.8%	2.27%	-1.04%	-0.26%	0.05%	-0.82%	-0.01%	0.07%
	Softs	0.57%	-0.67%	-2.02%	1.72%	7.75%	-7 <mark>.5</mark> 9%	-3.04%	-3.70%	1.53%	-1.15%	-0.20%
Livestock		1.02%	-0.69%	1.57%	0.60%	-1.4%	-0.84%	4.77%	1.83%	0.84%	-3.17%	-2.98%
	Live Cattle	0.48%	-0.47%	1.70%	-0.25%	-0.88%	0.38%	3.15%	-0.19%	0.68%	-1.01%	-1.61%
	Lean Hogs	2.17%	-1.17%	1.30%	2.52%	-3. <mark>6</mark> 3%	-3. <mark>3</mark> 9%	8.36%	6.61%	1.21%	-7.94%	-5.88%
reign Exchange	Econ riogs	2.1/70	1.4//0	1.30/0	2.JK/0	J. 10 J. 10	J (2 / 0	0.3070	0.01/0	1.211/0	y 470	4. 0 070
		1320/	0010/	o cho	4 1 40/	1 410/	1 50/	0.450/	0.600/	0000	2 100/	0.700/
US Dollar Index		-1.33%	-0.91%	0.60%	-4.14%	-101%	-1 <mark>.1</mark> 5%	0.46%	0.60%	-0.95%	3.12%	0.70%
USDCNY		- <mark>1.5</mark> 6%	0.63%	0.32%	-1 <mark>.2</mark> 2%	-0.63%	0.53%	1.08%	0.00%	-0.17%	2.02%	0.87%
MSCI EM Currency		1.27%	0.28%	-0.37%	2.41%	0.69%	-0.38%	-0. <mark>7</mark> 8%	0.29%	-0.35%	-1.11%	-1.00%
USDHKD		-0.32%	-0.11%	-0.19%	-0.17%	0.00%	-0.01%	0.00%	0.00%	0.01%	0.00%	0.01%
JPYUSD		-3. <mark>5</mark> 1%	-0.84%	1.12%	<u>-5.3</u> 3%	-0.70%	-0. <mark>6</mark> 9%	2.35%	0.35%	1.00%	0.27%	0.32%
EURUSD		1.35%	0.68%	-0.21%	3.92%	0.96%	1.44%	-0.23%	-0. 9%	1.19%	-3.28%	-0.26%
GBPUSD		1.55%	1.70%	0.51%	3.96%	0.67%	1.17%	0.78%	-0.75%	2.86%	-4.91%	-1.46%

Source: Bloomberg, GROW Research (Updated on 12/3/2022, same below)



Appendix 2: Performance of major asset classes (annual)

Appendix 2.			2021	2020	2010	2010	2017	2016	2015	2014	2012	2012	2011	2010	2000
Asset Class MSCI Index		2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
MSCI World		-16.1%	16.8%	14.3%	24.0%	-11 2%	21.6%	5.6%	-4.8%	2.1%	20.3%	13.4%	-9.4%	10.4%	31.5%
MSCI DM		-15.4%	20.1%	14.1%	25.2%	-10.4%	20.1%	5.3%	-2.7%	2.9%	24.1%	13.4%	-7.6%	9.6%	27.0%
MSCI EM		-21.0%	-4.6%	15.8%	15.4%	-16.6%	34.3%	8.6%	-17.0%	-4.6%	-5.0%	15.1%	-20.4%	16.4%	74.5%
		-21.0% -26.8%	-4.0% -2 <mark>2.4</mark> %	26.7%	20.4%	-20.3%	52.3%	-1.4%	-10.1%	4.7%	0.4%	18.7%	-20.4% -20.4%	2.6%	58.9%
MSCI AC Asia Ev. Ia	nan	-20.8%	-2 <mark>2.4</mark> %	22.5%	15.4%	-26.3%	38.7%	2.9%	-1017%	2.2%	0.4%	19.4%	-19 2%	17.0%	68.3%
MSCI AC Asia Ex. Ja MSCI Europe	ipaii	-20.8% -8 <mark>.</mark> 0%	22.4%	-5.4%	22.2%	-10,4%	7.3%	-0.5%	5.5%	4.1%	16.4%	13.4%	-10.9%	8.0%	27.1%
Stock		-olh/ ₀	22,41/0	-3 H-70	22,270	-1311/0	7.370	-0.p/o	3.970	4.170	10.4%	13/4/0	-10,5%	ο.ψ/ο	2/11/0
U.S.	S&P 500	-14 6%	26.9%	16.3%	28.9%	-6.2%	19.4%	9.5%	-0.7%	11.4%	29.6%	13.4%	0.0%	12.8%	23.5%
Chinese Mainland	SHCOMP	-13.3%	4.8%	13.9%	22.3%	-24.6%	6.6%	-12.3%	9.4%	52.9%	-6.7%	3.2%	-2 <mark>1</mark> .7%	-14.3%	80.0%
Chinese iviainianu	SZCOMP	-19.2%	4. 6 % 8. 5 %	35.2%	35.9%	-33.2%	-3.5%	-14.7%	63.2%	33.8%	20.0%	1.7%	-21.7% -32.9%	7.5%	117.1%
HK SAR, China		-19.2%	nd .	-3.4%	9.1%	-3 <u>3.</u> 2%	-3.5% 36.0%	0.4%	-7.2%	1.3%	20.0%	22.9%	-3 <u>2.</u> 9% -20.0%	7.3% 5.3%	52.0%
,	HSI Nikkoi 225	-3.5%	-14 1% 4.9%	16.0%		-13.0%	19.1%		9.1%	7.1%	56.7%		-20.0% -17.3%	-3.0%	
Japan	Nikkei 225	-	1	- 1	18.2%	- 3	- 1	0.4%		,		22.9%	2	1	19.0%
South Korea	KOSPI	-18.2%	3.6%	30.8%	7.7%	-17.3%	21.8%	3.3%	2.4%	-4.8%	0.7%	9.4%	-11.0%	21.9%	49.7%
Germany	DAX	-8.5%	15.8%	3.5%	25.5%	-18.3%	12.5%	6.9%	9.6%	2.7%	25.5%	29.1%	-14.7%	16.1%	23.8%
U.K.	FTSE 100	2.3%	14.3%	-14.3%	12.1%	-12,5%	7.6%	14.4%	-4.9%	-2.7%	14.4%	5.8%	-5.6%	9.0%	22.1%
France	CAC 40	-5.7%	28.9%	-7 1%	26.4%	-11 0%	9.3%	4.9%	8.5%	-0.5%	18.0%	15.2%	-17.0%	-3.8%	22,3%
Bloomberg Barclays In	aices	- Fl - o /	, lbar		- 4	. 6.,	- Uni	2 100	a bar	a kar	a bar	. 1.,	- 40,	- 1-,	- 1
Global		-15 1%	-4 7%	9.2%	6.8%	-1.2%	7.4%	2.1%	-3.2%	0.6%	-2.6%	4.3%	5.6%	5.5%	6.9%
China		-6.6%	8.4%	9.8%	3.4%	3.5%	6.2%	-5.2%	3.9%	8.0%	1.3%	5.1%	9.2%	6.4%	1.8%
Global + China		-15 1%	-4 7%	9.2%	6.6%	-0.9%	7.3%	1.7%	-2.9%	0.9%	-2.5%	4.3%	5.8%	5.6%	6.8%
U.S.		-11 4%	-1.5%	7.5%	8.7%	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%
Europe		-20.3%	-9 <mark>.</mark> 7%	13.4%	4.1%	-4.4%	14.6%	0.3%	-9 <mark>.</mark> 3%	-2.4%	6.8%	12.9%	-0.1%	-4.5%	10.4%
Asian Pacific		-13.7%	-5.0%	6.6%	3.7%	2.7%	5.2%	5.3%	-0.5%	-6.8%	-14.6%	-7 <mark>.</mark> 0%	7.3%	17.2%	0.0%
EM		-14.9%	-1.7%	6.5%	13.1%	-2.5%	8.2%	9.9%	1.3%	4.8%	-4.1%	17.9%	7.0%	12.8%	34.2%
Treasuries		-16.4%	-6 6%	9.5%	5.6%	-0.4%	7.3%	1.7%	-3.8%	-0.8%	-4.3%	1.8%	6.3%	5.9%	2.6%
Corporate		-15 4%	-2.9%	10.4%	11.5%	-3.6%	9.1%	4.3%	-3.6%	3.1%	0.3%	11.2%	4.3%	5.8%	19.2%
High Yield		-12.2%	1.0%	7.0%	12.6%	-4.1%	10.4%	14.3%	-2.7%	0.0%	7.3%	19.6%	3.1%	14.8%	59.4%
Commodity		le le				ď			-	et.	d	·	ď	5n	t.
Bloomberg Commodit	y Index	15.4%	27.1%	-3.5%	5.4%	-13 0%	0.7%	11.4%	-24 7%	-17.0%	-9 <mark>.</mark> 6%	-1.1%	-13 4%	16.7%	18.7%
Energy		45.2%	52.1%	-42.9%	9.4%	-144%	-5.2%	15.9%	-38 9%	-3 <mark>9</mark> .4%	5.1%	-9.4%	-16.0%	-10 7%	-5.5%
	Natural Gas	59.2%	27.9%	-42 2%	-3 <mark>8</mark> .5%	-2.1%	-3 <mark>7</mark> .0%	10.0%	-40 0%	-30.7%	4.9%	-30.7%	-47,1%	-4 <mark>0</mark> .7%	-51 6%
	WTI Crude	22.3%	61.5%	-50 9%	31.6%	-22 0%	4.1%	6.7%	-44.4%	-417%	6.8%	-118%	-3.7%	3.7%	4.2%
	Brent Crude	38.3%	65.5%	-318%	32.7%	-16 6%	13.2%	25.0%	-45 6%	-47,6%	7.2%	7.5%	16.8%	11.3%	28.4%
	Heating Oil	84.7%	58.2%	-3 <mark>8</mark> .5%	22.0%	-174%	13.9%	33.0%	-429%	-3 <mark>8</mark> .8%	0.3%	5.4%	10.6%	8.2%	20.3%
	Unleaded Gasoline	35.9%	69.5%	-31.2%	41.5%	-29,7%	1.8%	6.1%	-12.7%	-4 <mark>3</mark> .8%	1.9%	25.6%	14.4%	12.9%	74.4%
Precious Metal		-3.4%	-6.1%	25.1%	14.6%	-6.4%	9.9%	9.1%	-115%	-6.7%	-30.8%	6.2%	4.5%	42.5%	29.0%
	Gold	-3.6%	-4.3%	20.5%	15.6%	-4.7%	11.7%	7.4%	-10 9%	-1.8%	-28.7%	6.0%	9.6%	28.5%	22.7%
	Silver	-2.8%	-12 3%	41.9%	11.5%	-11 9%	4.8%	13.6%	-128%	-20 5%	-3 <mark>6</mark> .7%	7.0%	-10 2%	81.6%	47.4%
Industrial Metal		-2.7%	30.3%	15.9%	4.7%	-2111%	28.1%	19.5%	-26.9%	-6.9%	-13.7%	0.6%	-24.3%	16.1%	79.7%
	Aluminum	-144%	27.0%	22.8%	5.0%	-228%	28.0%	15.4%	-25.2%	-16 6%	-8.8%	4.9%	-24.5%	29.4%	129.6%
	Copper	-10 4%	38.9%	3.5%	-5.8%	-18.5%	29.9%	9.4%	-23.0%	-3.1%	-20.8%	-4.1%	-21.7%	5.2%	33.6%
	Nickel	-9.5%	27.9%	18.1%	-3.2%	-22 9%	28.5%	56.9%	-28 0%	3.5%	-7.0%	8.9%	-27.8%	-9.0%	98.0%
	Zinc	38.6%	25.1%	16.2%	29.8%	-18.0%	24.4%	11.5%	-42.7%	7.3%	-20.1%	-10.3%	-24.7%	32.0%	54.6%
Agriculture		8.4%	26.6%	16.0%	-0.4%	-12 5%	-11 9%	1.8%	-15.7%	-9 8%	-14.3%	3.9%	-14.4%	38.3%	13.5%
•	Grains	10.4%	20.9%	18.9%	-3.2%	-7.4%	-12.1%	-6.2%	-19.5%	-9 4%	-16.9%	18.1%	-14.5%	30.1%	-1.8%
	Softs	-7.6%	43.9%	2.5%	2.1%	-23 8%	-15.6%	12.8%	-9.9%	-10 1%	-16 9%	-22 5%	-14.0%	59.7%	44.0%
Livestock		5.4%	8.6%	-23.7%	-8.0%	-3.6%	5.4%	-5.9%	-18 9%	11.5%	-3.6%	-3.6%	-2.4%	9.1%	-15 2%
	Live Cattle	1.2%	-0.1%	-18.2%	-0.9%	0.6%	8.1%	-7.7%	-143%	22.0%	-5.1%	-4.0%	-1.1%	14.8%	-9.9%
	Lean Hogs	14.2%	25.1%	-31.8%	-20.9%	-12.7%	1.8%	-3.8%	-26.1%	-4.4%	-2.1%	-3.0%	-4.6%	0.2%	-22.6%
Foreign Exchange	J.				4					,			•	,	-
US Dollar Index		9.3%	6.4%	-6.7%	0.2%	4.4%	9.9%	3.6%	9.3%	12.8%	0.3%	-0.5%	1.5%	1.5%	-4.2%
USDCNY		11.0%	-2.5%	-6.3%	1.2%	5.7%	-6.3%	6.9%	4.6%	2.5%	-2.8%	-1.0%	-4.5%	-3 <mark>.</mark> 4%	0.0%
MSCI EM Currency		-5.1%	0.9%	3.3%	3.1%	-3 <mark>.</mark> 8%	11.4%	3.5%	-7.1%	-4.8%	-1.9%	5.5%	-2.6%	7.9%	13.9%
USDHKD		-0.1%	0.6%	-0.5%	-0.5%	0.2%	0.7%	0.1%	-0.1%	0.0%	0.0%	-0.2%	-0.1%	0.2%	0.1%
JPYUSD		16,7%	11.5%	-4.9%	-1.0%	-2 <mark>.</mark> 7%	-3 <mark>.</mark> 7%	-2.7%	0.4%	13.7%	21,4%	12.8%	-5.2%	-12.8%	2.6%
EURUSD		-7.3%	-6.9%	8.9%	-2.2%	-4.5%	14.1%	-3.2%	-10 2%	-12.0%	4.2%	1.8%	-3.2%	-6.5%	2.5%
GBPUSD		-y.5% -9.3%	-1.0%	3.1%	3.9%	-4.5% -5.6%	9.5%	-16,3%	-1012 <i>%</i> -5.4%	-5.9%	1.9%	4.6%	-0.4%	-0.5% -3.5%	10.8%
001 000		2.070	1.070	3.1/0	3.570	J-0/0	5.570	10,570	J-170	20/0	1.5/0	7.070	U.H/0	J ₀ 70	10.070

Source: Bloomberg, GROW Research



Appendix 3: Performance of major stock market sectors (weekly)

	2/12/2022	25/11/2022	18/11/2022	11/11/2022	4/11/2022	28/10/2022	21/10/2022	14/10/2022	7/10/2022	30/9/2022	23/9/2022
S&P 500 GICS Groups Index											
S&P 500 GICS Groups Index	1.13%	1.53%	-0.69%	5.90%	-3.35%	3.95%	4.74%	-1.55%	1.51%	-2.91%	-4.65%
Info. Tech.	1.31%	0.98%	-0.85%	10.03%	-6.89%	4.28%	6.49%	-3.23%	1.64%	-4.19%	-3.59%
Industrials	1.00%	1.90%	-0.23%	4.60%	0.44%	6.73%	4.65%	-0.56%	2.86%	-2.37%	-4.55%
Materials	1.54%	2.92%	-1.61%	7.69%	0.86%	3.34%	6.15%	-1.89%	2.15%	-0.73%	-5.67%
Consumer Staples	1.10%	2.10%	1.69%	2.38%	-1.83%	6.09%	2.16%	1.45%	-0.40%	-3.96%	-2.15%
Health Care	1.91%	1.91%	0.99%	1.78%	-1.59%	5.00%	2.29%	0.80%	1.30%	-1.38%	-3.38%
Consumer Discretionary	2.10%	1.13%	-3.15%	5.93%	-5.78%	0.71%	5.64%	-4.09%	-1.12%	-2.38%	-7.02%
Financials	-0.64%	2.16%	-1.48%	5.72%	-0.83%	6.19%	3.93%	0.20%	1.84%	-2.43%	-5.58%
Energy	-1.97%	0.26%	-2.35%	2.00%	2.37%	2.75%	8.08%	-1.85%	13.86%	1.83%	-9.00%
Real Estate	0.43%	1.99%	-1.83%	7.07%	-1.78%	6.17%	2.79%	-2.36%	-4.15%	-3.95%	-6.44%
Utilities	0.06%	3.04%	0.83%	1.39%	-0.55%	6.48%	1.95%	-2.58%	-2.63%	-8.81%	-3.05%
Telecom	3.31%	1.01%	-0.08%	9.23%	-7.44%	-2.85%	5.03%	-1.86%	1.47%	-3.03%	-5.10%
Shanghai Stock Exchange Sector II	nde										
Info.Tech.	-0.01%	-4.90%	5.34%	-2.63%	7.54%	2.05%	2.80%	1.14%	0.00%	-3.02%	-6.60%
Industrials	0.83%	1.29%	-2.25%	-1.65%	5.42%	-1.34%	-1.13%	4.12%	0.00%	-3.41%	-0.75%
Materials	1.08%	0.88%	-1.44%	4.56%	5.51%	-3.55%	-3.15%	1.25%	0.00%	-4.56%	-0.80%
Consumer Staples	7.14%	-3.77%	0.80%	1.38%	11.11%	-10.57%	-5.32%	-3.72%	0.00%	3.26%	-0.95%
Health Care	0.85%	-5.06%	5.05%	-2.28%	6.99%	-1.35%	2.10%	7.35%	0.00%	4.74%	-5.96%
Consumer Discrentionary	4.88%	-2.30%	-2.02%	-0.45%	10.68%	-4.45%	-4.74%	0.69%	0.00%	-0.36%	-3.02%
Financials	1.44%	2.93%	1.22%	4.05%	2.78%	-5.08%	-2.36%	-0.82%	0.00%	-2.17%	-0.67%
Energy	-1.00%	4.69%	-4.80%	1.02%	0.99%	-3.79%	-2.23%	-0.70%	0.00%	-3.05%	3.22%
Utilities	-0.73%	3.92%	0.69%	0.55%	1.50%	-7.45%	-2.09%	6.98%	0.00%	-3.42%	-0.70%
Telecom	5.10%	0.41%	1.60%	-1.42%	2.41%	-3.84%	0.48%	4.39%	0.00%	-2.02%	-0.64%
Hang Seng Sector Index											
Info.Tech.	11.51%	-7.46%	8.47%	6.81%	16.74%	-11.55%	-5.02%	-9.75%	2.76%	-2.11%	-7.06%
Industrials	3.91%	-2.18%	1.74%	7.70%	8.28%	-6.01%	1.24%	-4.90%	1.75%	-6.24%	-7.16%
Materials	4.53%	1.78%	-0.98%	13.30%	7.04%	-2.35%	-1.38%	-3.40%	4.10%	-7.46%	-4.37%
Consumer	12.49%	-6.26%	2.92%	7.29%	10.40%	-6.52%	-5.13%	-8.60%	5.35%	-3.42%	-4.23%
Financials	3.09%	2.10%	2.05%	8.28%	5.02%	-7.40%	0.59%	-4.23%	2.41%	-5.64%	-2.96%
Energy	-1.40%	3.76%	-1.50%	2.88%	1.06%	-4.37%	1.75%	-3.36%	4.22%	-5.72%	0.41%
Real Estate	0.23%	3.48%	4.49%	11.53%	4.20%	-11.10%	-1.91%	-5.10%	1.87%	-7.16%	-5.86%
Utilities	-1.34%	1.53%	4.03%	4.50%	0.88%	-4.83%	-1.19%	-3.72%	-0.41%	-6.37%	-3.60%
Telecom	-0.27%	4.26%	1.66%	2.19%	0.69%	-3.84%	-0.53%	-1.30%	1.18%	-5.02%	0.18%

Source: Bloomberg, GROW Research



Appendix 4: Performance of major stock market sectors (annual)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
S&P 500 GICS Groups Index														
S&P 500 GICS Groups Index	-1 <mark>4</mark> .6%	26.9%	16.3%	28.9%	-6.2%	19.4%	9.5%	-0.7%	11.4%	29.6%	13.4%	0.0%	12.8%	23.5%
Info. Tech.	-22.7%	33.4%	42.2%	48.0%	-1.5%	36.9%	12.0%	4.3%	18.2%	26.2%	13.1%	1.3%	9.1%	59.9%
Industrials	-3.5%	19.4%	9.0%	26.8%	-15.0%	18.5%	16.1%	-4 7%	7.5%	37.6%	12.5%	-2.9%	23.9%	17.3%
Materials	-7 <mark>.</mark> 8%	25.0%	18.1%	21.9%	-16.4%	21.4%	14.1%	-10.4%	4.7%	22.7%	12.2%	-116%	19.9%	45.2%
Consumer Staples	-0.1%	15.6%	7.6%	24.0%	-112%	10.5%	2.6%	3.8%	12.9%	22.7%	7.5%	10.5%	10.7%	11.2%
Health Care	-1.1%	24.2%	11.4%	18.7%	4.7%	20.0%	-4.4%	5.2%	23.3%	38.7%	15.2%	10.2%	0.7%	17.1%
Consumer Discretionary	- <mark>29</mark> .8%	23.7%	32.1%	26.2%	-0.5%	21.2%	4.3%	8.4%	8.0%	41.0%	21.9%	4.4%	25.7%	38.8%
Financials	-8.4%	32.5%	-4.1%	29.2%	-14.7%	20.0%	20.1%	-3.5%	13.1%	33.2%	26.3%	-1 <mark>8</mark> .4%	10.8%	14.8%
Energy	62.6%	47.7%	3 <mark>7</mark> 3%	7.6%	-2 <mark>0</mark> .5%	-3.8%	23.7%	-2 <mark>3</mark> .6%	-10,0%	22.3%	2.3%	2.8%	17.9%	11.3%
Real Estate	-24.9%	42.5%	-5.2%	24.9%	-5.6%	7.2%	0.0%	1.2%	26.1%	-1.5%	16.2%	7.9%	28.0%	20.8%
Utilities	-1.3%	14.0%	-2.8%	22.2%	0.5%	8.3%	12.2%	-84%	24.3%	8.8%	-2.9%	14.8%	0.9%	6.8%
Telecom	-3 <mark>5</mark> 1%	20.5%	22.2%	30.9%	-164%	-6.0%	17.8%	-1.7%	-1.9%	6.5%	12.5%	0.8%	12.3%	2.6%
Shanghai Stock Exchange Secto	or Index												<u> </u>	
Info.Tech.	-3 <mark>4</mark> .9%	-0.2%	22.5%	65.4%	-341%	-4.9%	-269%	60.0%	36.5%	46.8%	-141%	-39.2%	27.2%	100.4%
Industrials	-14.1%	14.3%	25.3%	13.7%	-23.6%	5.5%	-150%	10.7%	68.0%	-3.2%	-4.3%	-3 <mark>2</mark> .5%	-4.9%	62.9%
Materials	-192%	15.9%	22.7%	29.0%	-30.1%	27.3%	-7.6%	-1.0%	38.9%	-24.0%	9.1%	-3 <mark>5</mark> 1%	-3.2%	132.8%
Consumer Staples	-20,4%	-6.9%	81.6%	47.5%	-19.3%	43.8%	1.1%	24.1%	15.1%	7.7%	4.5%	-221%	12.7%	89.9%
Health Care	-215%	-8.8%	57.4%	24.3%	-26 4%	18.2%	-114%	45.8%	6.3%	32.6%	10.3%	-312%	33.8%	88.4%
Consumer Discrentionary	-209%	-6.9%	81.6%	47.5%	-19.3%	43.8%	1.1%	24.1%	15.1%	7.7%	4.5%	-221%	12.7%	89.9%
Financials	-13 2%	-12 7%	-3.0%	29.6%	-174%	23.4%	-7.8%	-9 7%	82.0%	-9 9%	20.9%	-139%	-2 <mark>6</mark> .8%	99.9%
Energy	25.6%	29.6%	-113%	2.4%	-26.3%	6.4%	-3.9%	-15.0%	24.0%	-3 <mark>3</mark> .0%	-4.3%	-23.5%	-10 9%	125.7%
Utilities	-12 7%	39.4%	-3.8%	3.4%	-11 1%	-3.0%	-205%	6.2%	73.1%	-1.2%	3.4%	-172%	-16.8%	54.2%
Telecom	-6.5%	9.2%	-6.2%	29.9%	-29.8%	12.1%	-7.6%	56.0%	34.6%	30.6%	-22.8%	-38,8%	4.6%	61.1%
Hang Seng Sector Index								·					,	
Info.Tech.	-30 5%	-32 3%	69.6%	23.7%	-29.6%	92.3%	18.2%	22.3%	8.9%	70.0%	36.5%	-18 6%	-7.0%	205.1%
Industrials	-26.0%	-18 8%	-15 9%	15.7%	-10.2%	48.8%	-1.8%	-2.6%	3.1%	-9.9%	42.9%	-26 5%	4.5%	61.2%
Materials	-15 1%	9.4%	30.0%	-0.4%	-29.5%	30.5%	21.0%	-18.7%	-1.1%	-21.9%	8.1%	-424%	4.4%	114.7%
Consumer Goods	-24.6%	19.1%	-271%	51.3%	-6.5%	-10.3%	-11 1%	11.2%	10.1%	-24.3%	9.3%	116.6%	-5 <mark>2</mark> .6%	33.7%
Consumer Services		6.7%	-22 <mark>.</mark> 6%	39.7%	3.6%	-23.9%	-30.5%	40.1%	22.2%	-20,6%	25.3%	70.6%	-62 1%	50.4%
Financials	-112%	-6.8%	-6.9%	7.5%	-14.8%	31.2%	-3.1%	-10.0%	7.6%	3.0%	24.2%	-24 <mark>6</mark> %	-0.7%	57.8%
Energy	16.7%	20.5%	-33.7%	-4.1%	-2.8%	11.4%	14.3%	-31.3%	-173%	-16,2%	12.7%	-15 1%	16.5%	77.3%
Real Estate	-260%	-18 8%	-15 9%	15.7%	-10.2%	48.8%	-1.8%	-2.6%	3.1%	-9.9%	42.9%	-26 5%	4.5%	61.2%
Utilities	-35 0%	17.6%	-9.4%	-0.9%	1.2%	15.7%	-7.4%	-8.1%	6.2%	13.8%	15.0%	2.8%	6.2%	15.8%
Telecom	5.6%	0.5%	-29,9%	-9.7%	-3.4%	-1.0%	-6.0%	-5.1%	11.5%	-10 2%	11.7%	2.7%	8.4%	-4.7%

Source: Bloomberg, GROW Research

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