## SAMSA

China 0-COVID Policy: effects on the Global Supply Chain and Inflation

Global Markets – March 2022

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#### Introduction

China's recent strict 0 policy COVID measures are causing turmoil across the supply chain and is ramping up inflation across the Eurozone and the US. The policy will be discussed in further detail in addition to the most affected asset classes and the predicted outlook on future inflation and supply chain problems.

#### **0-COVID** policy

China - home to about a third of the manufacturing worldwide – has been hit by a new wave of Omnicron infections across the nation causing entire cities to completely lockdown. Numerous factories have had to temporarily close down adding even more problems to the already turbulent supply chain (Swanson & Bradsher 2022). Companies such as Toyota and Volkswagen have announced that they will be suspending operations in highly affected cities such as Tianjin (Swanson & Bradsher 2022) (Figure 1). China's effort to keep infections stable before the

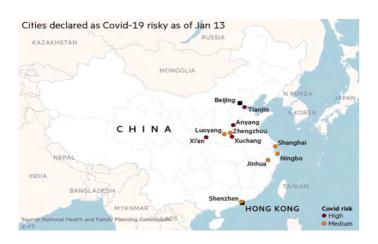


Figure 1: Most affected areas in China as of Jan 13 (Hille et al 2022)

upcoming winter olympics has been one of the contributing factors to the rising cost of raw materials, increasing transportation costs, rising back-orders and supply shortages across sectors (Swanson & Bradsher 2022).

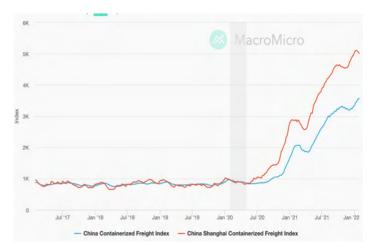


Figure 2: China Containerized Freight Index & China Shanghai Containerized Freight Index (CCFI MacroMicro 2022)

The China Containerized Freight index, a composite of the prices of contrainers leaving all major ports in China, increased from 853.9 on July 3rd, 2020 to 3565.33 on January 28th, 2022 (figure 2). To try and somehow limit the effect of COVID on such supply problems, China has been experimenting with narrowly focused targetted lockdowns such as shutting down high infection shops and restaurants instead of the entire neighbourhood or city (Swanson & Bradsher 2022).

#### Manufacturing

Several asset-classes, such as manufacturing in particular, have been heavily affected by the lockdowns and are starting to hit record lows in terms of output and supply. The China Caixin an index measuring the Manufacturing PMI, performance of the manufacturing sector that ranks companies based on new orders, output, employment, suppliers delivery times and stock of items purchased, fell to a 23-month of 49.1 in January 2022. (figure 3)

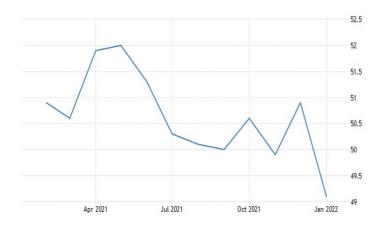


Figure 3: China Caixin Manufacturing PMI Index (CCM PMI 2022)

Prices have already responded given the limited supply produced with both Chinese producer prices and export prices steadily increasing since January 2021 (figure 4 and 5)

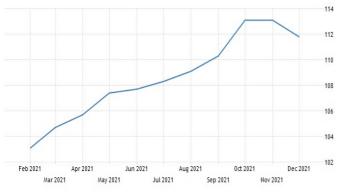


Figure 3: China Producer Prices (China Producer Prices 2022)

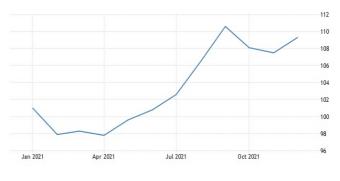


Figure 4: China Export Prices(China Export Prices 2022)

#### **Inflationary Pressure**

The US in particular is feeling the effects of the prolonged supply chain problems with inflation rising 7%. the highest 1982 rate since to (tradingeconomics.com-Inflation 2022). Gasoline prices, in particular, surged 49.6% with also used cars (37.4%), new vehicles (11.8%) and food at home (6.5%) the biggest contributors to the rising costs (tradingeconomics.com-Inflation 2022). The Fed Chair Jerome Powell explained the core issue in a banking meeting last Tuesday: "What we have now is a mismatch between demand and supply. We have very strong demand in areas where supply is constrained, particularly around goods..." (Pickert 2022). Similarly, China is also experiencing record inflation with the energy sector in particular even causing revised GDP growth expectations. Both Citi & Goldman have cut China's GDP growth expectations citing energy shortages & the property slowdown as the main reasons for the cut (He 2021).

China's producer price index rose 10.7% back in September 2021, the largest increase since 1996 (He 2021). The rise is mainly caused by the rapid surge in coal prices as China is one of the biggest consumers of coal, consuming more than half of the world's coal (figure 2) (He 2021).

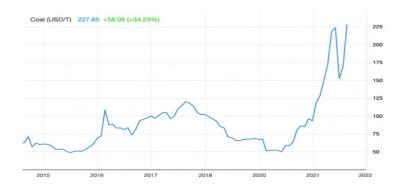


Figure 5: Coal price (tradingeconomics.com-coal 2022)

While China's exports fell in early 2020, the number of exports has steadily recovered despite the various supply chain disruptions and factory closures (figure 3) (Hale et al 2022). Year on year exports have risen 30% contributing to a trade surplus of 676bn USD (Hale et al 2022).

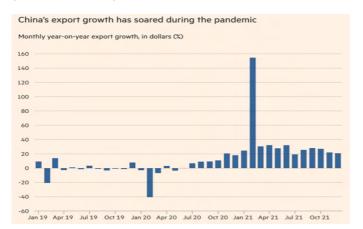
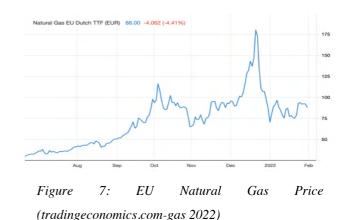


Figure 6: China – Monthly YoY exports (Hale et al 2022)

The Eurozone also experienced record inflation of 5% mainly driven by soaring energy and food prices (Arnold 2022). The biggest contributor to the high is the soaring natural gas price which almost doubled since Christmas due to uncertainties such as the slowing supply of Russian gas (Arnold 2022). Contrary to the Fed, which has stated that it will slowly start raising rates around March, the ECB is expected to quickly stop its quantitative easing program and somehow start to decrease expected inflation (Arnold 2022).



The price of goods rose by about 0.4% mainly due to rising prices of food, alcohol and tobacco while the core-inflation (inflation excluding volatile contributors) remained steady at around 2.6% (Arnold 2022). Most economists however expect inflation to decrease as energy prices stabilize and the global supply chain bottlenecks ease with the final wave of Omnicron coming to an end (Arnold 2022).

### Conclusion /Outlook

The outlook for China is increasingly looking more and more pessimistic as Goldman, Citi and Morgan Stanley have all cut their GDP growth projections. Morgan Stanley for example has cut China's first quarter YoY GDP growth from 4.9% to 4.5% (Kao 2022). Reasons for the cut, as also mentioned by the other banks, mainly stem from the harsh zero-covid policy as economic costs are starting to outweigh the benefits of such strict lockdowns. (Kao 2022). The IMF has also recently in a report criticized China and stated that its economic imbalances have worsened and that a lot of sectors require urgent reforms (Wei 2022). China's factory closures and lockdowns are also expected to create "ripple" effects across the world as such policies will continue to raise prices and require serious intervention from central banks (Bala 2022).

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