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Markets in High Resolution

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The RMB is Infected

- The Coronavirus outbreak is an **adverse supply shock** of indeterminate magnitude
- Monetary policy **cannot counter the real-side effects** of a supply shock
- PBoC would have to **make up for the shortfall in real economic activity with inflation**
- This is **inconsistent with holding USDCNY** around 7.0

This piece is laid out in **three brief sections**:

- The economics of adverse supply shocks
- Stories informing the guesswork
- The Trade: Structure and Execution

An Adverse Supply Shock

This concept is much simpler than it looks! A negative supply shock (AS_0 to AS_1) quite logically lowers output and raises prices. Using monetary policy to push the demand curve from AD_0 to AD_1 can push output back up but **raises prices higher still**.

A Stylized Example: Monetary Ease in Reaction to an Adverse Supply Shock

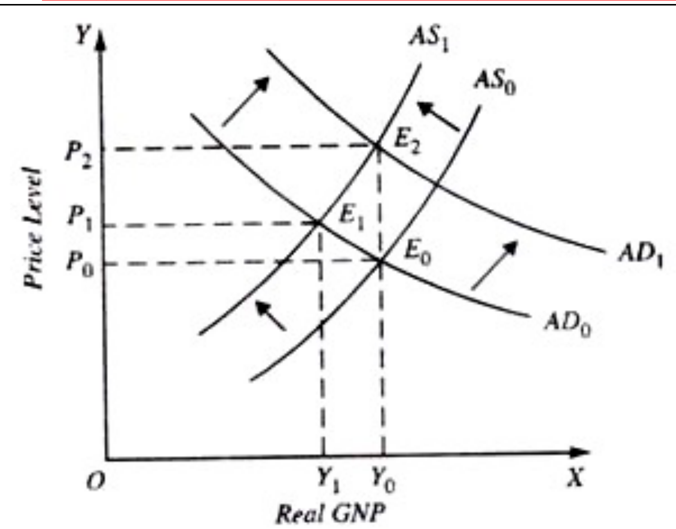

Fig. 26.2. *Further Surge in Inflation Rate if Aggregate Demand is Raised to get out of Stagflation*

- AS_0 -> AS_1
  - Lowers output (Y_0 -> Y_1)
  - Raises Prices (P_0 -> P_1)
- AD_0 -> AD_1:
  - Raises output (Y_1 -> Y_0)
  - Raises Prices FURTHER (P_1 -> P_2)

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The virus presents a real-world example that monetary policy operates in "nominal space," not "real space." **Easing monetary policy is not going to get people out of their homes and into the factories**.

Of course, given the precarious finances of industrial China, the PBoC must stabilize nominal GDP to avoid a debt-deflation spiral - but they can only do so through the inflation component. The contribution of the real component of nominal GDP growth will be determined by the progression of the coronavirus (and that contribution is presently **deeply negative**).

There will be endless talk about myriad "fiscal measures" but any such measures will end up being largely money-financed through the expansion of bank credit (banks are the big buyers of local government debt, for instance).

The PBoC will be easing monetary policy for the purpose of making up for a shortfall in real growth with inflation. (Not to say the official statistics will ever register it as such, but that's what needs to happen). **There is no scenario in which this both "works" and remains consistent with RMB stability**, short of draconian restrictions on the foreign exchange market.

Yes, they can stick USDCNY at 7.0 if they insist on doing so, by effectively closing down the foreign exchange market (denying access to RMB sellers and/or dictating that all trades must go through at government-dictated rates). However, this causes two problems:

- It **short-circuits the immediate inflationary currency-translation impulse** to local-currency commodity prices

- With heightened economic and political anxiety, capital will naturally want to flow out and the rate of exporter repatriation will decline. Adherence to the "only what comes it is allowed out" system of FX rationing, in conjunction with an aggressive monetary easing, **will lead to severe FX shortages** – a further and wholly unnecessary impediment to economic activity.

I **can't imagine that Xi Jinping will choose the USDCNY 7.0 hill to die on**. Yes, Chinese policymaking can be downright stubborn at times, but the cost-benefit analysis strongly recommends focusing policy energy elsewhere at this point

So How Bad is the Adverse Supply Shock?

The best we can do here is informed guesswork. I anticipate a partial return to work next week in lesser-effected areas, but **the best case is 3-4 more weeks of fairly widespread economic**

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disruption, over which time frame the Chinese economy will be running at a deeply negative real growth rate.
The critical consumer holiday has already been all but wiped out and industrial China is currently in as close to a sudden stop as you'll ever see. Unless this virus starts to clear up imminently, forecasts of a mere slowdown in the growth rate are non-credible.

And 3-4 weeks is just a guess. It could well be 3-4 months before activity levels are returning to normal.

The Chinese government is under immense pressure. Putting humanitarian concerns aside and looking strictly at economics (which is probably a depressingly good approximation of the CCP's approach), there is some optimal balance between quarantine and resumption of economic activity.

An abundance of caution in virus-control will keep workers off the job longer than might be necessary. On the other hand, a too-early return to work risks a more widespread outbreak that leads to even more widespread plant closures a few weeks down the road.

The optimal balance is unknowable, but there is little ground for confidence that the Chinese government will guess the proper answer. There is great risk that allowing widespread work returns next week could create a problem that's orders of magnitude larger a month down the road. I suspect the risk lies in this direction.

Here are some of the stories from recent days with which I've informed my guesswork. Perhaps they'll help inform yours.

- Experimental Gilead drug may help treatment, but testing will take several months
- WHO spokesman: There are no known effective therapeutics against this coronavirus
- Shortage of testing kits is limiting growth rate of confirmed cases
- Experts see no peak in cases for several weeks amidst debate over the efficacy of city lockdowns
- Real estate sales are at a virtual standstill in many major cities, putting developers' pre-sale dependent cash flow models at risk
- Foxconn plans to get back to work on Monday:

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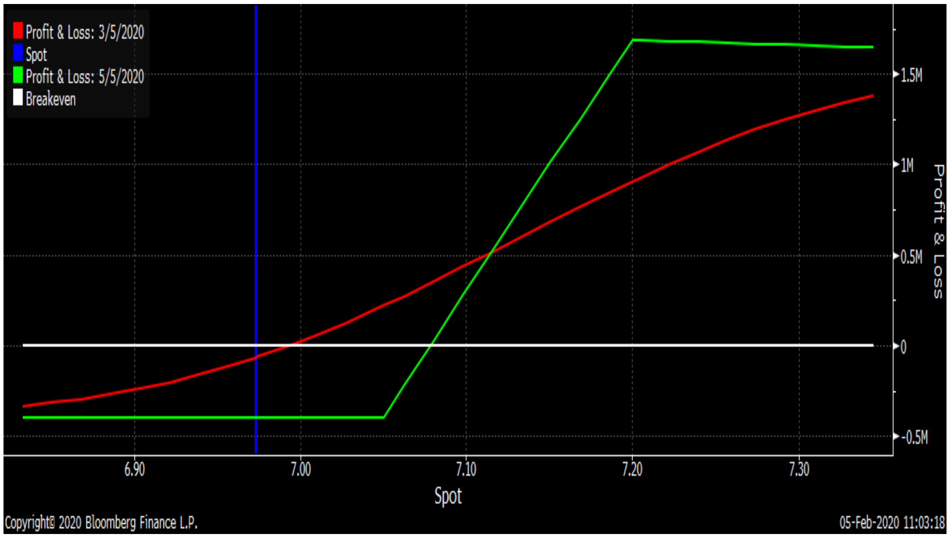
- Yicai estimates that 60% of firms aim to re-start production by mid-February in light of acute financing difficulties
- Huawei and some tech companies remain up and running under special exemption order
- Hyundai shuts down three plants in S. Korea for lack of a China-supplied part
- Disney expects Shanghai and Hong Kong theme parks to be shut for two months
- Wenzhou (Zhejiang Province, 800km from Wuhan) under lockdown
- Another Zhejiang metropolis also possibly being placed in lockdown
- Caixin questions the official narrative that the virus originated in the wildlife market

The Trade: Buy USDCNH

How to structure this depends on style, portfolio objectives, and personal preference:

- The old-fashioned way: Buy USDCNH 6.9730, S/L 6.8900, T/P 2.1900
- “Set it and forget it” hedge for the generalist: Buy a 3-month 7.05 / 7.20 USDCNH call spread for ~40bps. This pays out ~3.4x at expiry:



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- My personal preference (as someone who was more actively involved) would be to pay 1% premium for a 6-month 7.0800 USDCNH call
    - It's easy to envision a 2-vol pop in implieds, good for ~50bps on this option
    - A move to 7.05-7.10 provides great opportunity for active delta-management
    - 6-month tenor is a sweet spot to benefit from any official effort to squeeze CNH shorts by squeezing CNH liquidity and spiking the forward points
    - The outright option provides true "tail insurance" in the event of political volatility (which can't be completely discounted here).
    - If virus risk unwinds in short order and USDCNH collapses towards 6.90 you can probably still salvage half of the 100bps in premium