<u>The Precariousness of the Chinese Economy, its Possible Collapse, and Afflictions form Global Pressures and Trends</u>

(First written 09/13/2022)

BLUF: The Chinese Economic Miracle (CEM) is over and China's economic future is precarious. China will likely fall into the middle-income trap as inbound capital and technology flows fall. Credit issues will prevent a rebound of the housing sector and the return of CEM growth rates. China will likely manipulate its domination of key supply chains to constrain Western efforts to accelerate reshoring, decoupling, and the return of strategic autonomy. China's manufacturing sector will continue to grow as capital is redirected from the property sector towards it, but will suffer from reduced technology transfers and acquisitions. China will focus on political control over economic growth, and will play on nationalist sentiment as its output legitimacy falters.

The CME overlapped with capital and globalization's heyday; near-zero percent interest rates and venture capital allowed for the relocation of simple assembly manufacturing to China. From the 2010s to the 2020s, as China became a manufacturing powerhouse and natural growth slowed, the Chinese economy adopted a development model more suited to borrowing than growth. State owned corporations and local governments became incredibly overleveraged, using loans to fuel increasingly unproductive ventures which contributed to GDP figures but not much more. As of 12/2023, local governments have accumulated over $9 trillion USD of debt, over 50% of China's GDP.

During the CME the property sector, a primary funding source for local governments via land-leases, began to swell and lead to several corporations to adopt Ponzi scheme growth strategies relying on near-zero rates. This resulted in the housing sector accounting for 25% of GDP, 70% of household wealth, and producing a surplus of 1.4 billion units. After the pandemic, interest rates increased by more than 10-fold, increasing the servicing costs for Chinese debt to rise and new loans to plummet. Credit restrictions by Beijing caused major real estate developers to default, slowed the housing sector, and thus strained the finances of local governments, whose debt accounts for over 50% of Chinese GDP.

During the CME, China acquired vast amounts of technology through forced or coerced technology transfers during mergers and acquisition in China (see solar panels, integrated circuits, electric vehicles). These were seconded by outright economic or industrial espionage and thirdly academic collaboration. As China's competitiveness decreases, targets of economic industrial espionage strengthen their counter-intelligence efforts, and Western reshoring accelerates, China's access to newer technologies will decrease. This is exacerbated by increasing restrictions on advanced technologies, specifically semi-conductors, however a certain level of domestic innovation is expected.

In conclusion, the factors that drove the CEM have been greatly degraded or reduced, and China's economic future is precarious. While redirected capital flows and subsidies to the manufacturing sector will ensure its growth, reduced demand within China, increasingly trade barriers in developed markets, and reshoring to these markets will challenge demand for its products. This is exacerbated by a shrinking population and low-level assembly manufacturing sector, China's main industry. This is to exclude the increasing fragility of global supply chains, upon which China relies on greatly as the second most globalized country in the world. Please see the most recent analysis (2024) for how important this is, and a fact-sheet below for a quick synthesis of key points.

Daniel A. Melo

- The CEM was due to a mix of:
  - Coerced technology transfers.
  - Outright intellectual property theft.
  - Industrial and Economic Espionage.
  - Cheap capital.
  - Access to foreign markets while employing strong protectionist measures.
  - A highly speculative housing market resembling a Ponzi Scheme accounting for 25% of GDP.
- The main drivers of the Chinese economy are now sputtering;
  - Western capital, joint ventures, and academic exchanges, the main sources of tech transfers, are slowing.
  - Key targets for espionage are strengthening counter-intelligence measures.
  - Global interest rates have skyrocketed alongside Chinese credit defaults while credit ratings have dropped.
  - Western markets have or will enact protectionist measures against
  - The housing market has burst; developers are defaulting, prices and sales have plummeted, and a considerable portion of household wealth has been squandered.
- Debt has skyrocketed in the past decade and a half:
  - Local governments boost growth with debt-fueled and unproductive infrastructure projects, with much of it (est. 50% of GDP) hidden within transparent Local Government Financing Vehicles (LGFVs).
  - Central government debt, when coupled with that of LGFVs and corporate debt had brought total Chinese debt levels to est. 320-350%.
- The collapse of the housing sector has and will continue to be a major downward pressure on the Chinese economy.
  - The sector accounted for 25% of GDP, and held approximately 70% of Chinese household wealth. This has made its collapse a serious development.
  - Local tax revenue is dominated by land leases; the collapse of the market has slowed or halted newer leases, reducing local government revenues.
    - This compounds with highly indebted local governments to create financial crises at the local level.
  - Using business practices that can best be described as Ponzi schemes major developers have created countless concrete shells, and a surplus of 1.4 billion homes.
- External Factors:
  - A surge in interest rates has increased China's debt servicing costs while stopping its debt-based approach to economic growth.
  - Reshoring to NAFTA and secondly other emerging markets will rob China of its economic foundation: low-level manufacturing.
  - Vietnamese, Mexican, Indian, and Malaysian labor is cheaper and more educated than Chinese labor while offering friendlier business and IP regulations.
    - Flows of capital and joint-ventures to these countries are increasing.
  - The death of globalization and the return of regionalism will seriously afflict China, the second most globalized country in the world.
    - While regional ties are increasing, regional destabilization or war will greatly harm regional ties.
      - This is truer as the Indo-Pacific becomes more divided along ideological lines.
  - Protectionist barriers to Chinese advanced manufacturing goods and continued embargoes for advanced technologies will be impactful.

        - It is hoped barriers will reduce the return on investment for the automation of production lines for advanced goods, while forcing demand to remain in lower-income markets.
        - Embargoes of advanced technologies will hamper Chinese "innovation", and critically the development and production of newer dual-use technologies and goods.
            - WRT semi-conductors, this includes radar systems, quantum computing, C4ISR, AI, and other key dual-use applications.
- ASML's export ban to China will be highly significant, but will take time to take to take effect.
    - Specifically, Chinese EUVL and UVL machines will work for some time before repairs, now embargoed, are needed.
    - Secondly, it will take years before the next generation of lithography is developed and put to work.
    - It is predicted China will not be able to develop the next generation of lithography nor develop its own lithography machines.