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Understanding supply chains in the Indo-Pacific region

Ari Van Assche



Renewed policy focus on global value chains



"What we want to know is: What are the implications of supply-chain crisis for cookie?"



Today's plan



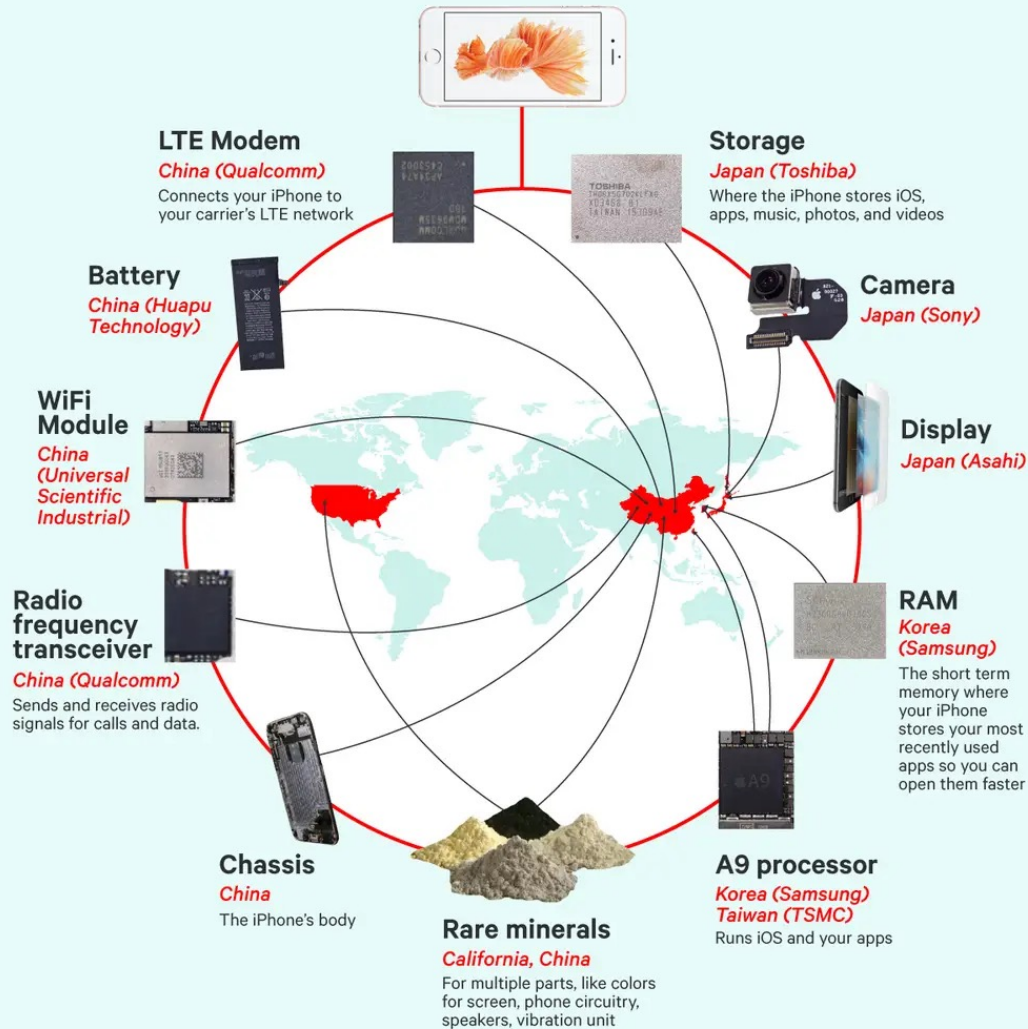
Asia's growing role in global value chains

Orchestrating global value chains

Weaponizing global value chains

Quo vadis?

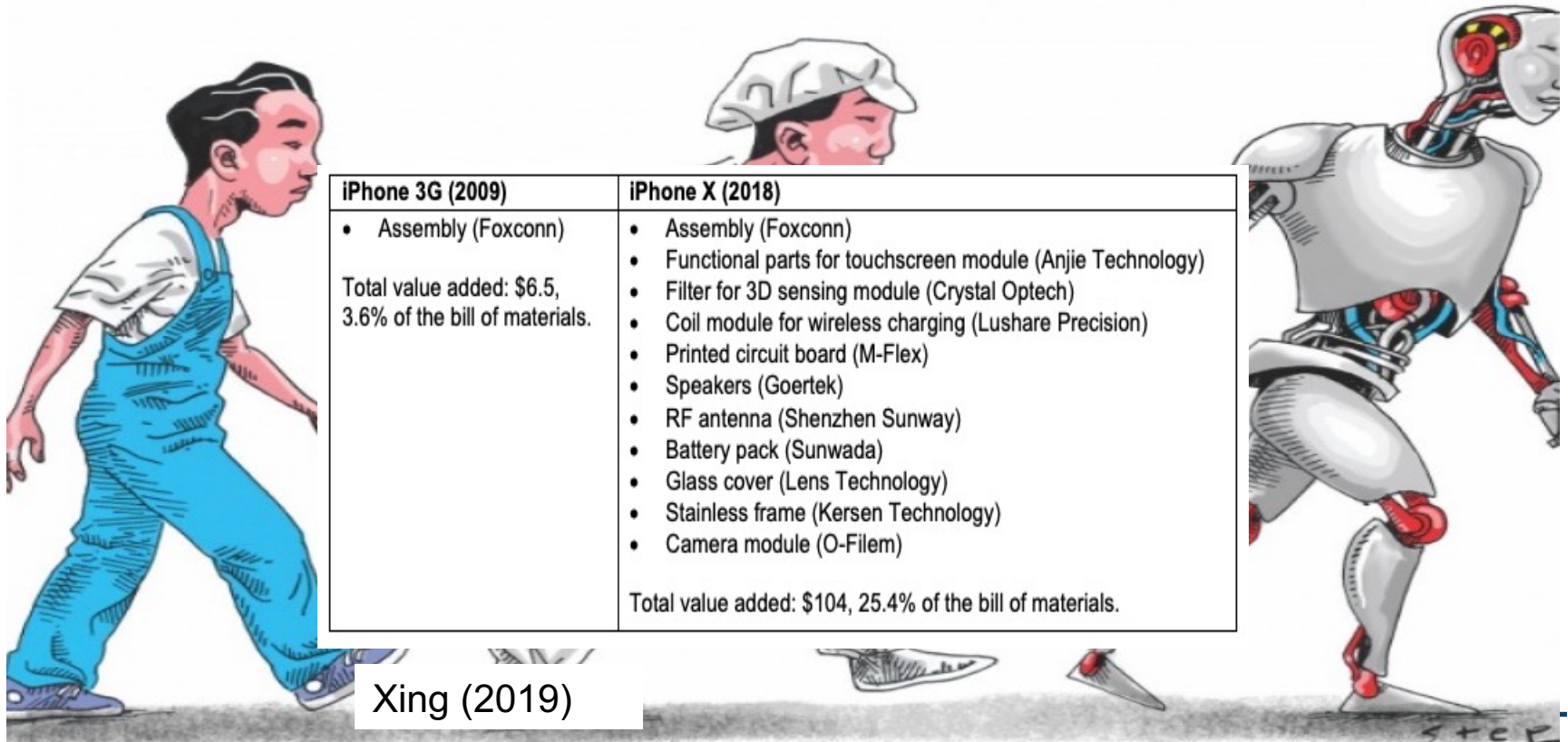
Where the parts of an iPhone 6s come from



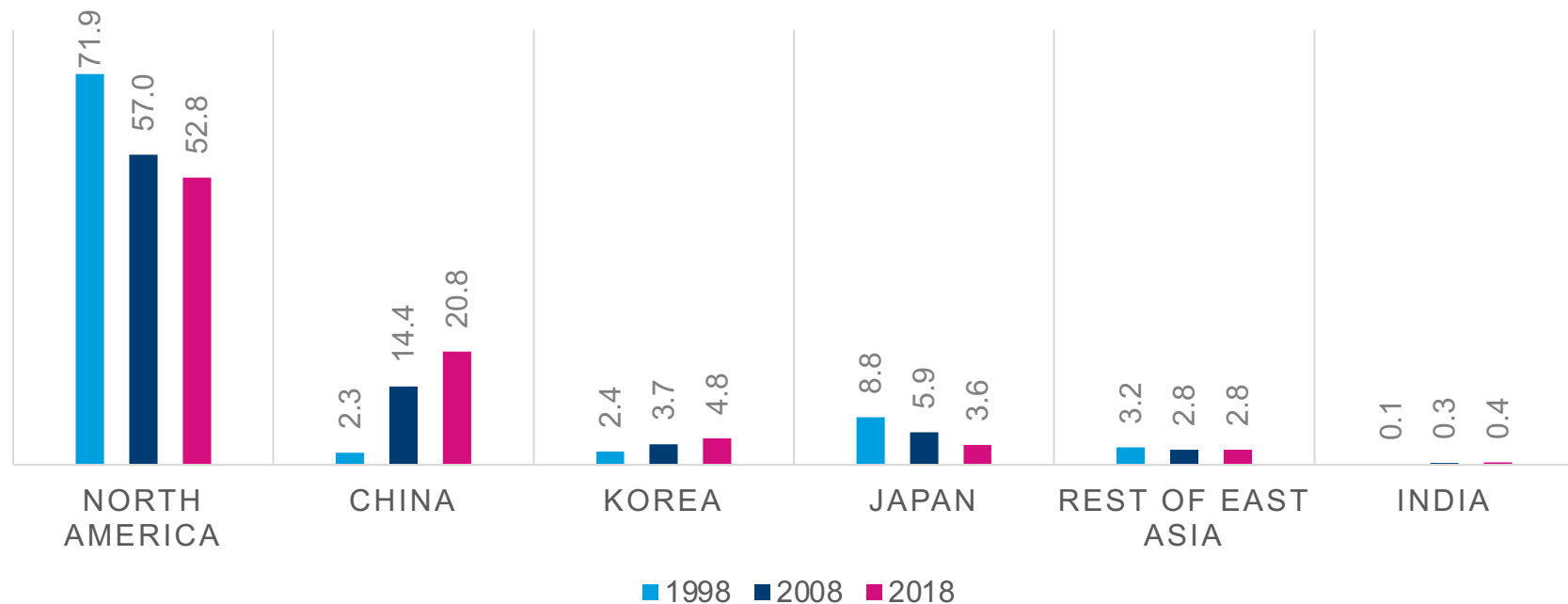
SOURCES: iFixit, CNet

TECH INSIDER

Economic upgrading



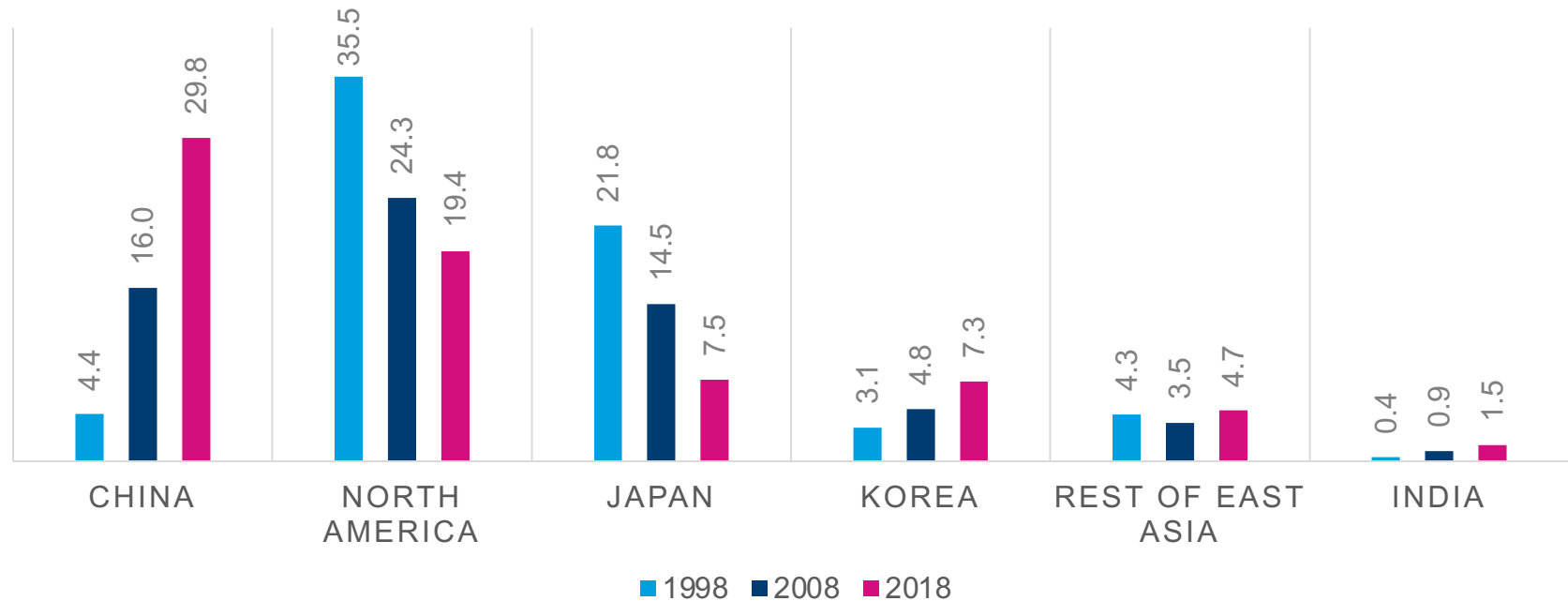
GVC income derived from North American electronics demand



Source: OECD TIVA

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GVC income derived from global electronics demand



Source: OECD TIVA

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Evolution of the earth's economic center of gravity



¹ Calculated by weighting national GDP by each nation's geographic center of gravity; a line drawn from the center of the earth through the economic center of gravity locates it on the earth's surface. For detailed analysis, see the appendix in the McKinsey Global Institute (MGI) report *Urban world: Cities and the rise of the consuming class*.

Source: MGI analysis using data from Angus Maddison, University of Groningen; MGI Cityscope v2.0

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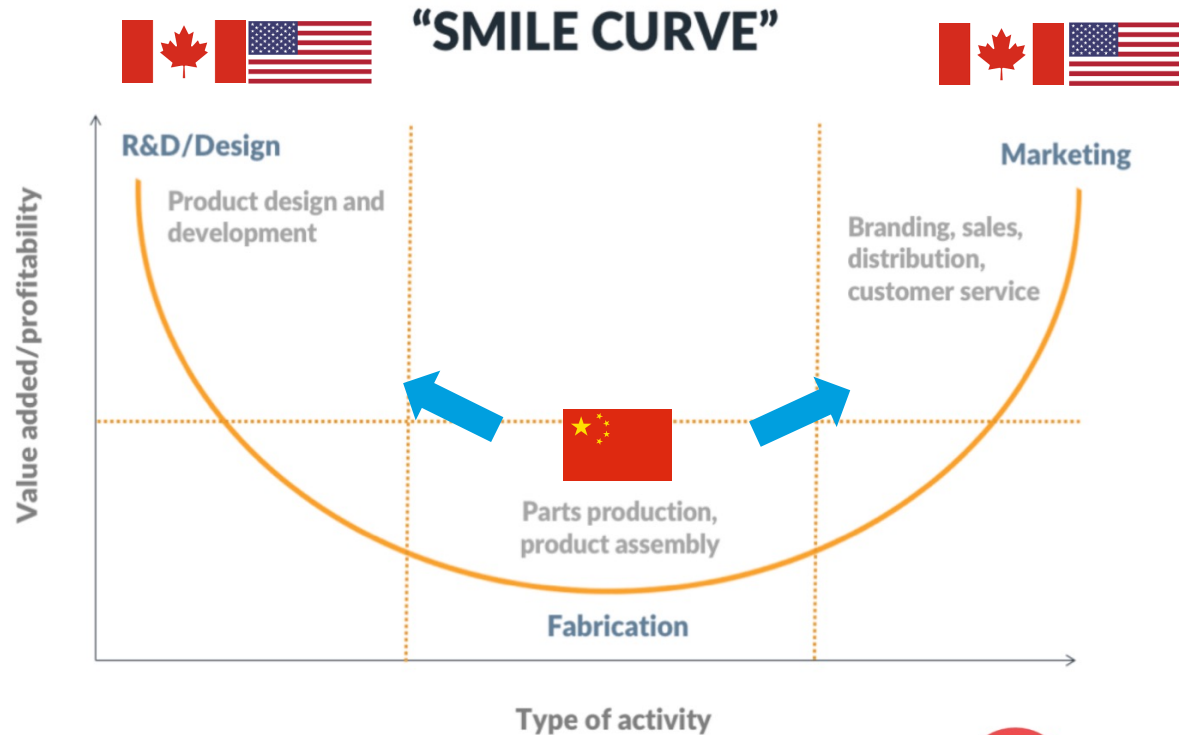
- Positioned at the top of a hierarchical chain, lead firms have the muscle to select which suppliers are included or excluded in GVCs, to determine the terms of supply-chain membership, and to allocate where, when, and by whom value is added

Porter's value chain



Source: Porter (1985)

Smile of value creation



Source: Mudambi (2008)

Sustainability

The New York Times

<https://www.nytimes.com/2021/11/29/world/congo-cobalt-albert-yuma-mulimbi.html>



RACE TO THE FUTURE

Hunt for the 'Blood Diamond of Batteries' Impedes Green Energy Push

Dangerous mining conditions plague Congo, home to the world's largest supply of cobalt, a key ingredient in electric cars. A leadership battle threatens reforms.

“Batteries containing cobalt reduce overheating in electric cars and extend their range, but **the metal has become known as “the blood diamond of batteries”** because of its high price and the perilous conditions in Congo, the largest producer of cobalt in the world. As a result, **carmakers concerned about consumer blowback** are rapidly moving to find alternatives to the element in electric vehicles, and they are increasingly looking to other nations with smaller reserves as possible suppliers.”

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Traditional Compliance model

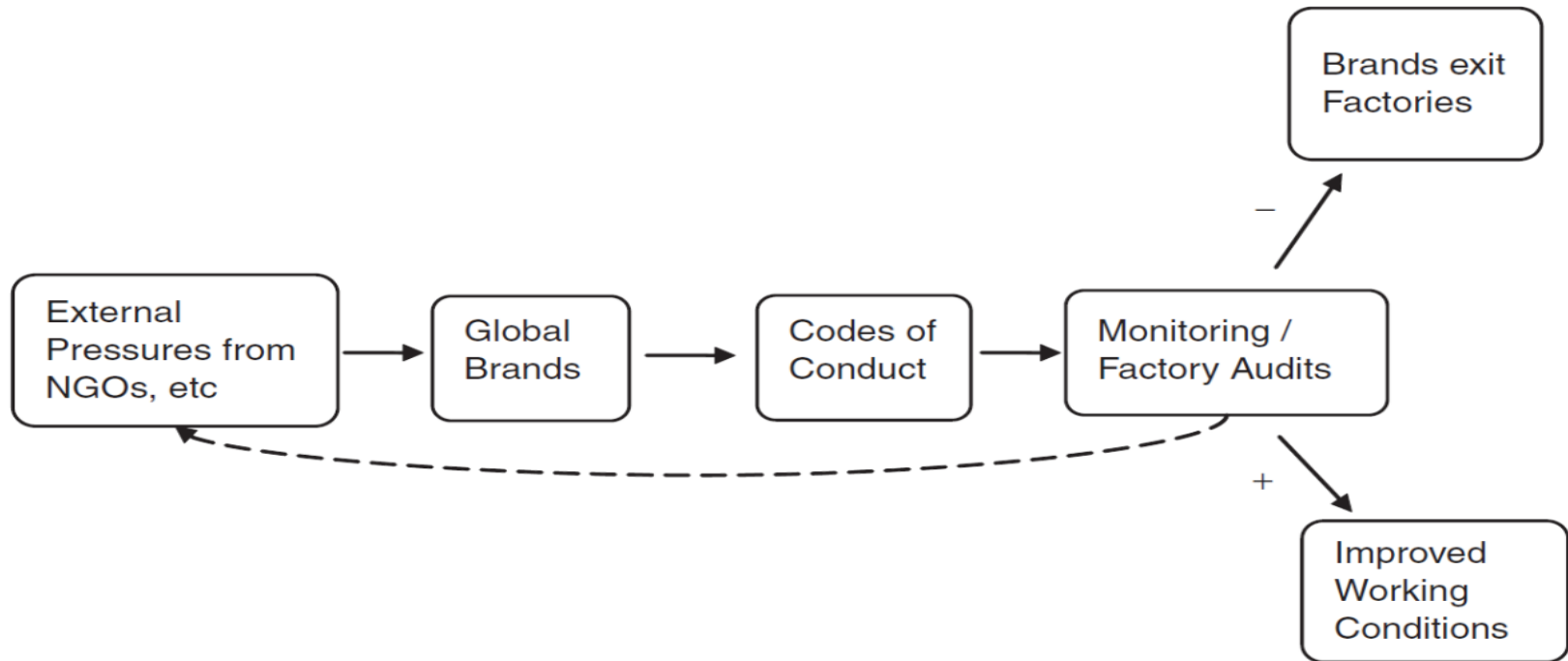


Figure 1. Traditional model of code of conduct or compliance.

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Harnessing the power of global value chains

- Governments can push their own economic and non-economic objectives by harnessing the power of lead firms – pushing them to reconfigure their GVCs.



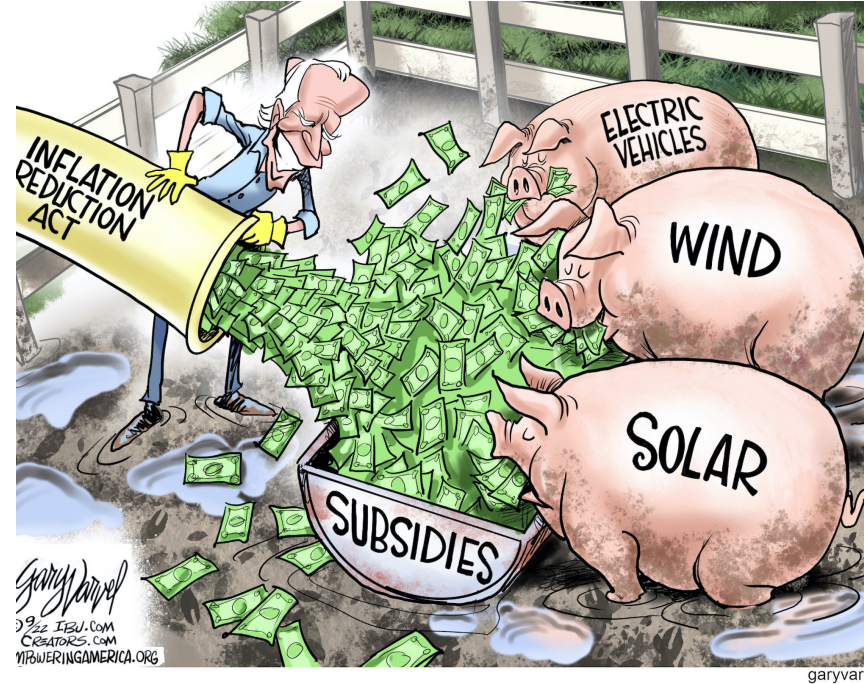
Uyghur Forced Labor Prevention Act



“Any goods, wares, articles, and merchandise mined, produced, or manufactured wholly or in part” in the XUAR should be assumed to be the product of forced labor unless proven otherwise by “clear and convincing evidence.”

Inflation Reduction Act

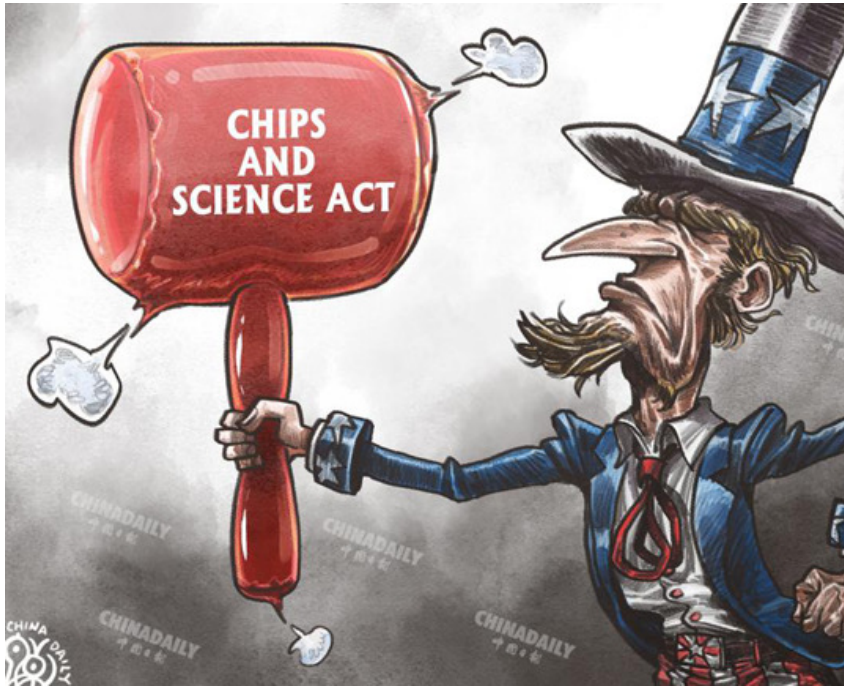
- Provides federal tax credits of up to US\$7,500 to electrical vehicles that are classified as North American in terms of manufacturing and parts.
- “One South Korean official called the legislation a “betrayal” and suggested that it could damage cooperation in other areas of the relationship.



garyvar

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US Chips and Science Act



- Any semiconductor company that receives federal financial assistance cannot conduct any significant transactions that materially expands China's semiconductor manufacturing capacity for ten years

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Toward a fracturing of the global trading system?

