

# **The Mighty Dollar: Impact on Global Trade**

**Valentina Bruno**

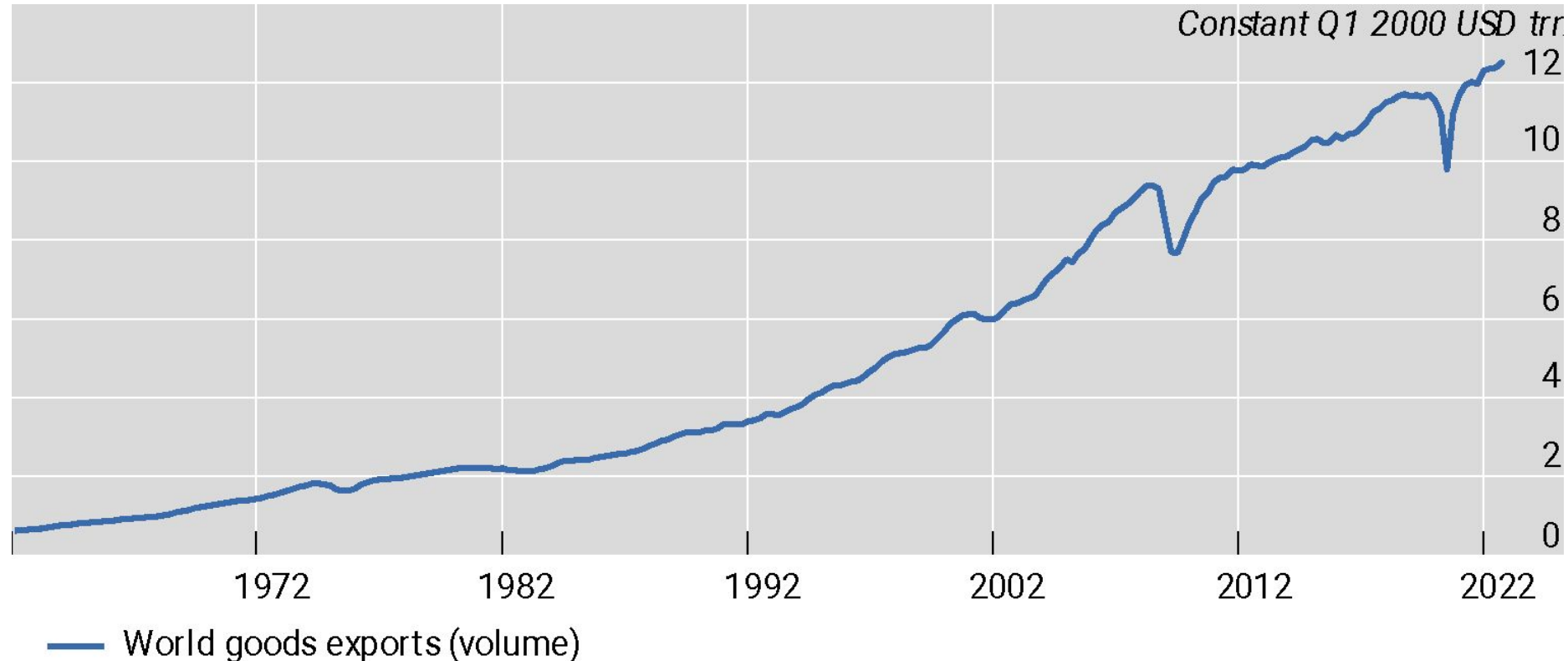
Kogod School of Business  
American University, Washington DC

Presentation at the CFM Annual Investor Meeting, NYC, May 4, 2023

# Roadmap

1. The role of the US dollar outside the US borders as a barometer of global financial conditions
2. What happens in financial markets does not stay in financial markets

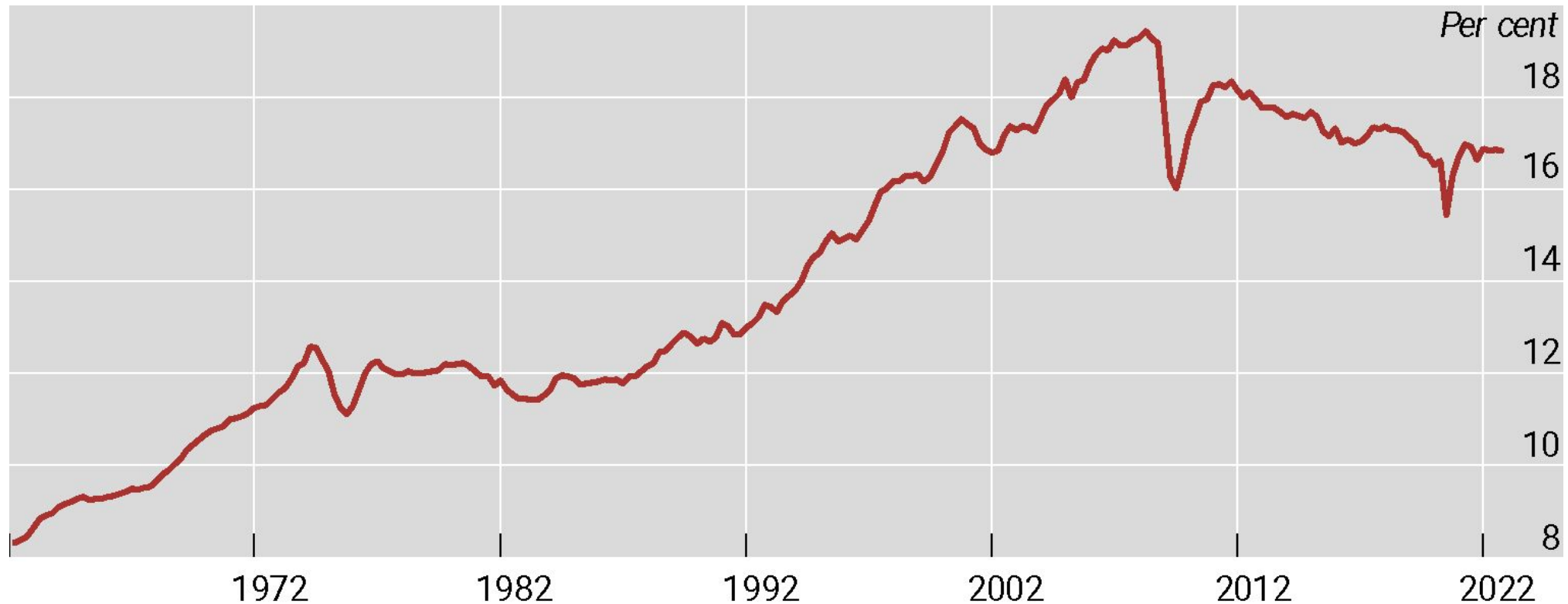
# World trade (in real terms) has grown strongly in the age of globalization



Annual world goods exports volume data interpolated to quarterly frequency using world goods exports value data (due to data constraints), based on Chow-Lin method for temporal disaggregation.

Sources: IMF; WTO; BIS.

# Exports as a proportion of world GDP

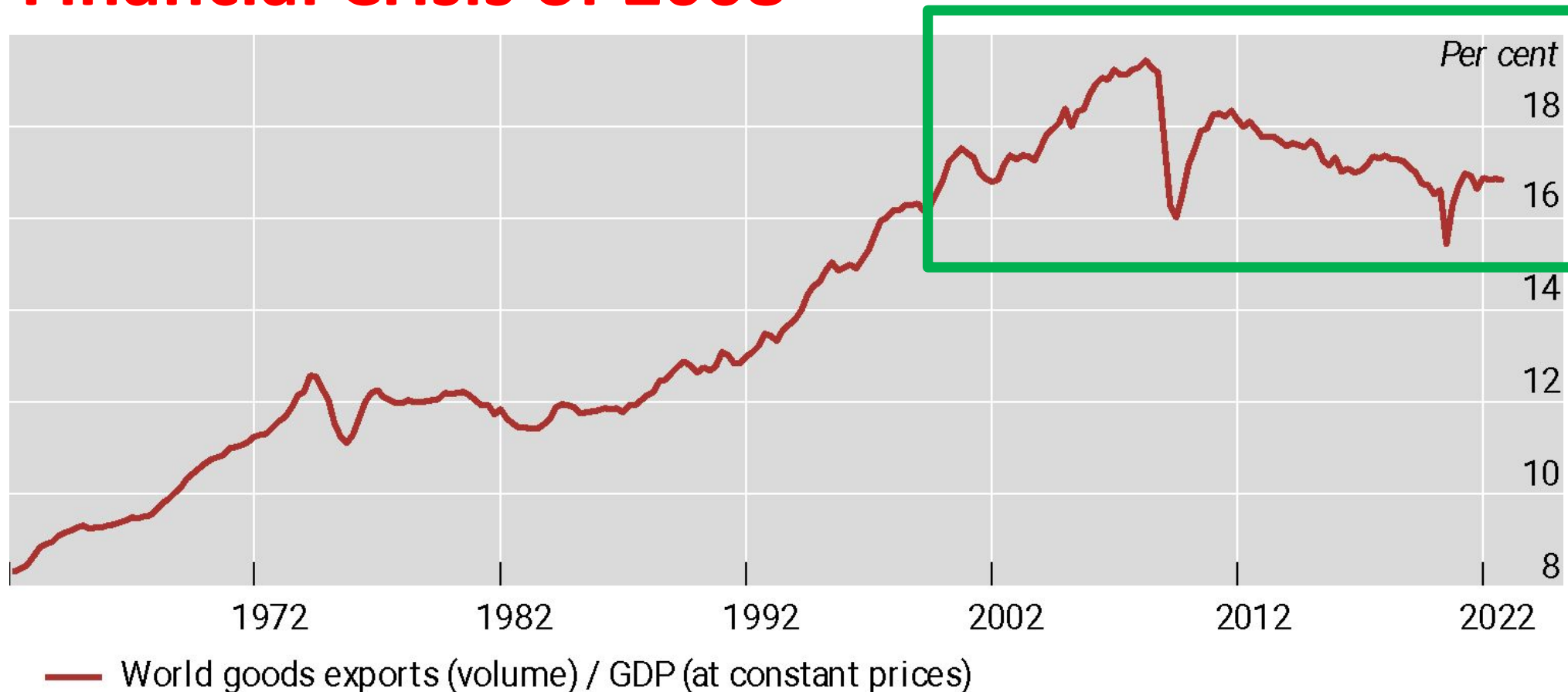


— World goods exports (volume) / GDP (at constant prices)

Ratio of world goods exports to world GDP, both in constant prices at Q1 2000 USD. Annual world GDP data backdated and interpolated to quarterly frequency using a constructed quarterly world GDP aggregate for a smaller sample of economies (due to data constraints). Annual world goods exports volume data interpolated to quarterly frequency using world goods exports value data (due to data constraints). Based on Chow-Lin method for temporal disaggregation.

Sources: Jordà-Schularick-Taylor Macrohistory Database; IMF; World Bank; WTO; Global Financial Data; national data; BIS.

# Trade growth has stagnated since the Great Financial Crisis of 2008



Ratio of world goods exports to world GDP, both in constant prices at Q1 2000 USD. Annual world GDP data backdated and interpolated to quarterly frequency using a constructed quarterly world GDP aggregate for a smaller sample of economies (due to data constraints). Annual world goods exports volume data interpolated to quarterly frequency using world goods exports value data (due to data constraints). Based on Chow-Lin method for temporal disaggregation.

Sources: Jordà-Schularick-Taylor Macrohistory Database; IMF; World Bank; WTO; Global Financial Data; national data; BIS.

# When the US dollar is strong.....

A) Non-US firms  
Competitiveness  
improves, Economic  
Activity picks up

B) Financial conditions  
tighten, Economic  
activity drops

C) I'll ask ChatGPT

# Global trade relative to GDP has fluctuated with financial conditions, as measured by the broad dollar index



Bruno and Shin (2023) "Dollar and exports" <https://www.bis.org/publ/work819.htm>



Bank for International Settlements @BIS\_org · Apr 28

...

Dollar credit to non-banks outside the US shrank by 4% during 2022, a rate not seen since the Great Financial Crisis. Credit growth across the three major currencies has diverged, reflecting funding costs and exchange rate developments #BISStatistics [bit.ly/3n7KpmC](https://bit.ly/3n7KpmC)

## Strong appreciation of the US dollar...

1/2 < || >

Strengthening of the exchange rate







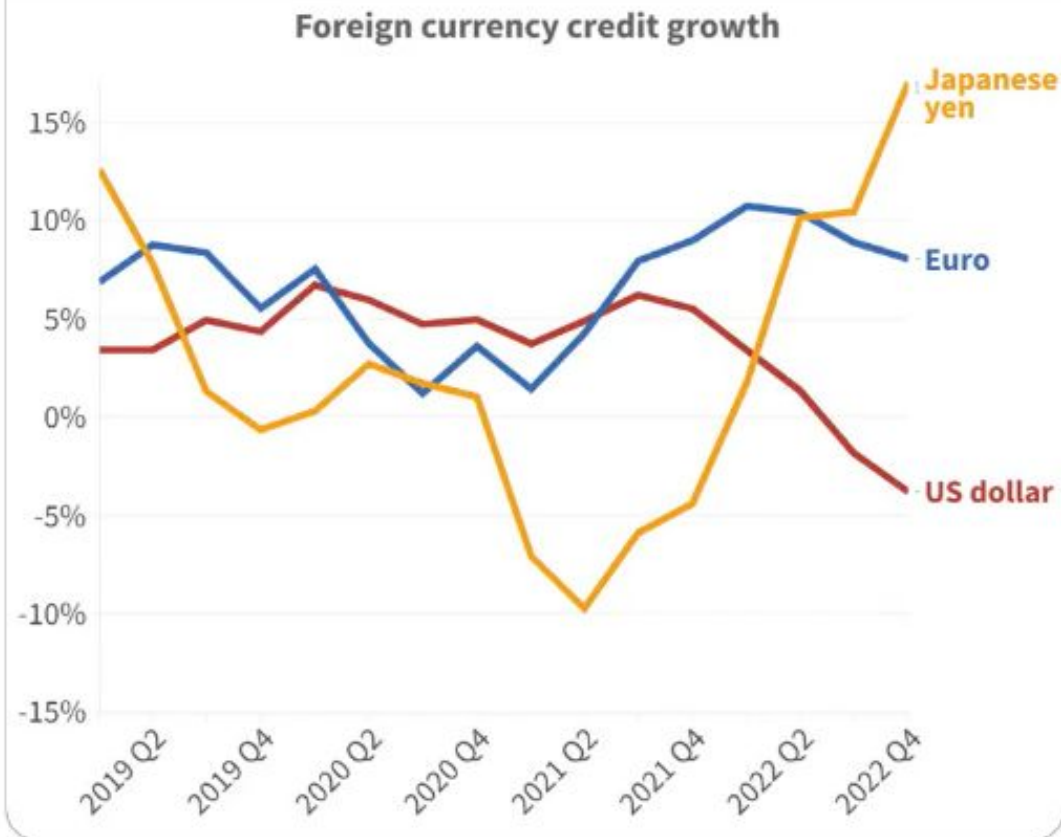
Bank for International Settlements @BIS\_org · Apr 28

...

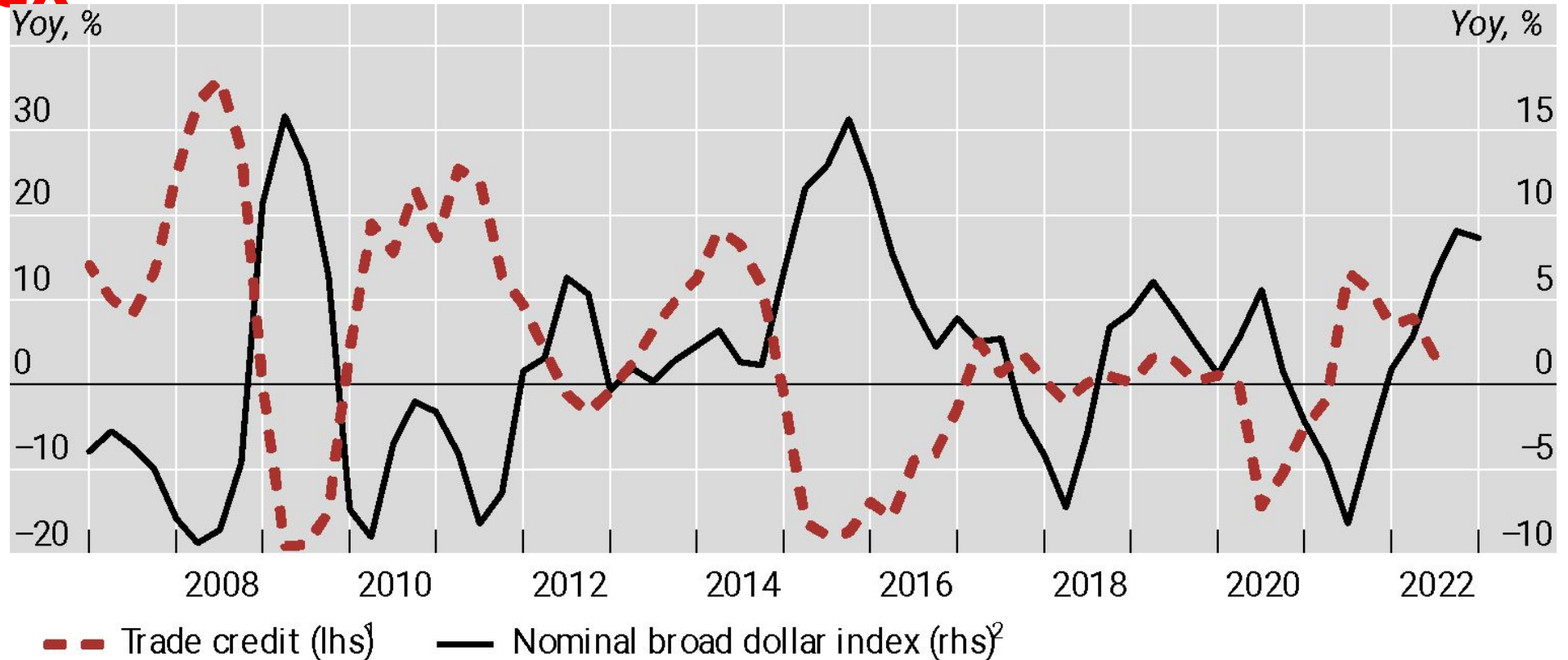
Dollar credit to non-banks outside the US shrank by 4% during 2022, a rate not seen since the Great Financial Crisis. Credit growth across the three major currencies has diverged, reflecting funding costs and exchange rate developments [#BISStatistics](#) [bit.ly/3n7KpmC](https://bit.ly/3n7KpmC)

### ... resulted in lower growth in dollar credit abroad

2/2 < || >



# Annual growth of trade finance from banks follows closely the movements in the broad dollar index



<sup>1</sup> Total trade finance volume reported to the BIS by nine central banks. <sup>2</sup> Federal Reserve Board trade-weighted nominal dollar index, broad group of major trading partners of the US ("broad"), based on trade in goods and services. An increase indicates appreciation of the US dollar.

Sources: Federal Reserve Bank of St Louis, FRED; BIS.

# First takeaway

- **The US dollar is a barometer of global financial conditions: when it appreciates, financial conditions tighten and credit supply drops (and viceversa)**
- **The direction of the underlying broad US dollar exchange rate will give a sense of the underlying currents for the global economy**

**What happens in financial markets does not stay in financial markets.....**

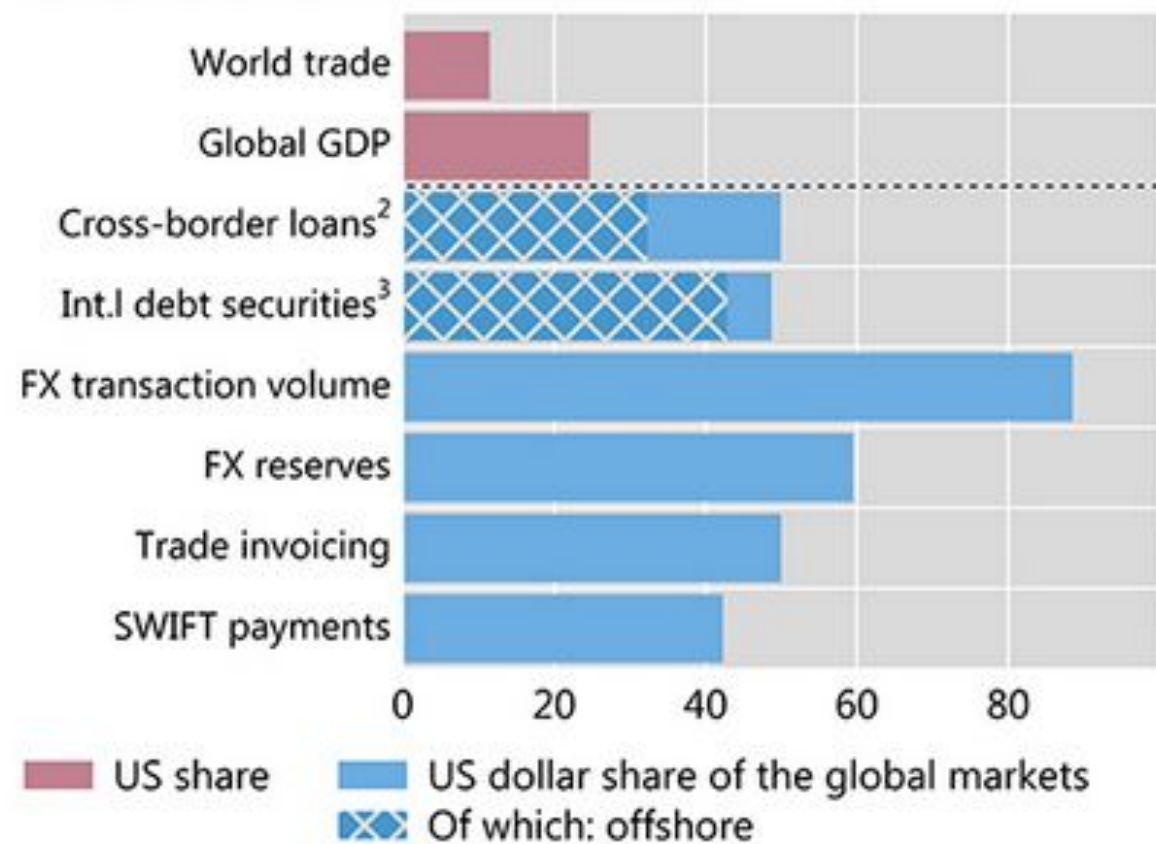
---

## The international role of the US dollar

In per cent

---

### A. International role of the US dollar<sup>1</sup>



Date 1

Date 2

Date 3

Stage 1

Stage 2

Stage 3

Date 1

Date 2

Date 3

Stage 1



Stage 2

Stage 3

Date 1

Date 2

Date 3

Stage 1

Stage 2

Stage 3





Date 1

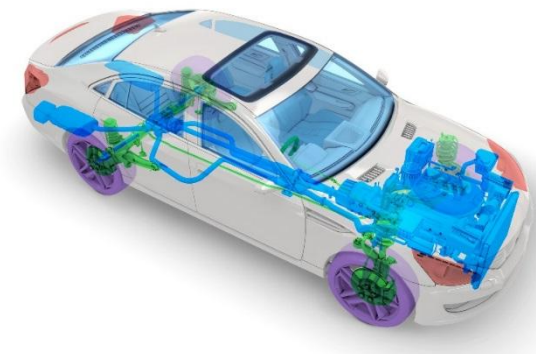
Date 2

Date 3

Stage 1

Stage 2

Stage 3



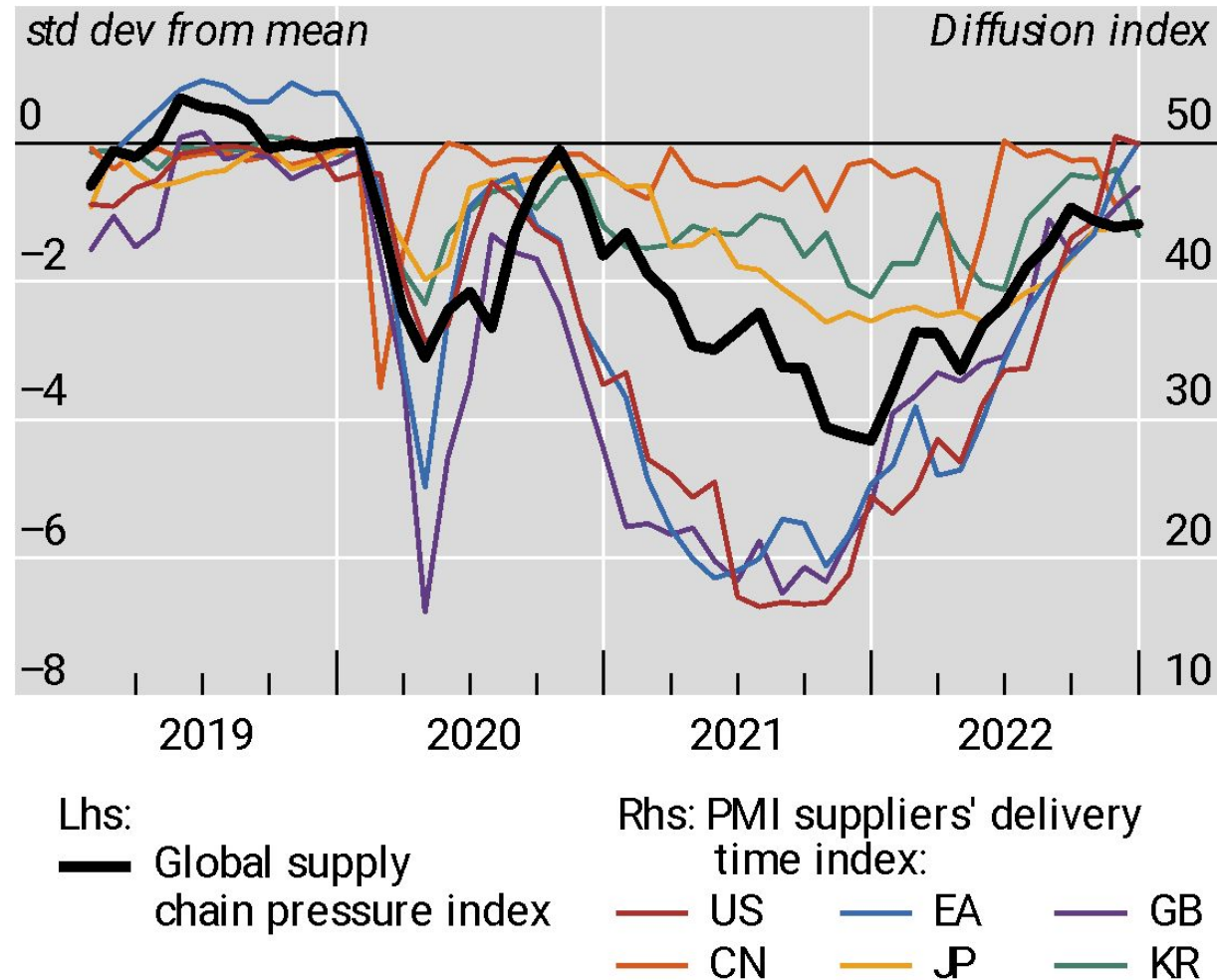
	Date 1	Date 2	Date 3
Stage 1			$v$
Stage 2			$2v$
Stage 3			$3v$

Assets	Liabilities
Cash  (1 period old) ( $=v$ )	Equity
Inventories (2 periods old) ( $=2v$ )	Short-term debt
Inventories (3 periods old) ( $=3v$ )	
Receivables Long-term assets	Payables Long-term liabilities

Kim and Shin (2023) "Theory of supply chains: a working capital approach"

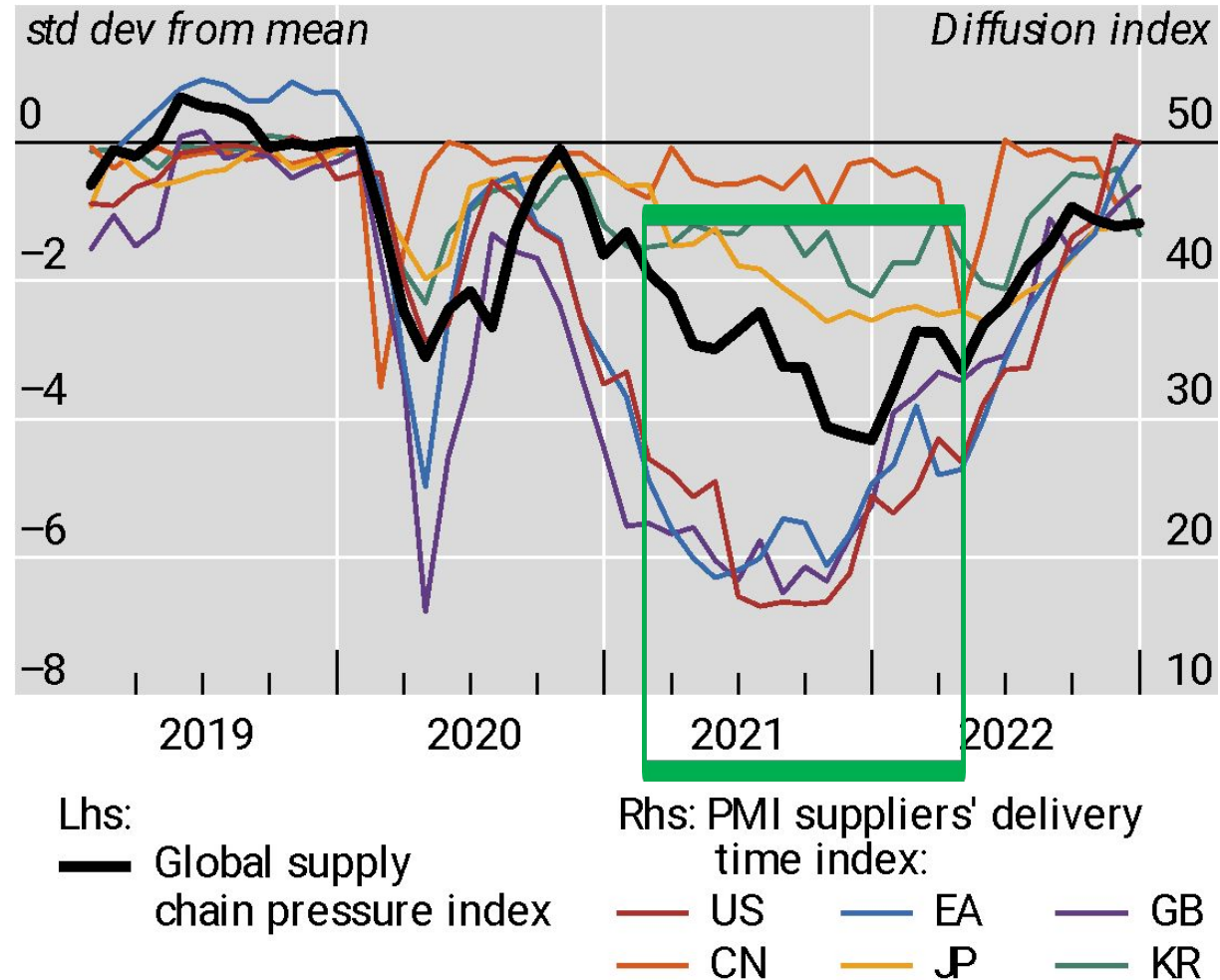
<https://www.bis.org/publ/work1070.htm>

# Supply chain indicators



**For global supply chain pressure index, negative figures indicate higher supply constraints.** For PMI suppliers' delivery time index, a value below 50 indicates delivery times lengthening. Sources: Federal Reserve Bank of New York; IHS Markit; BIS.

# Supply chain indicators



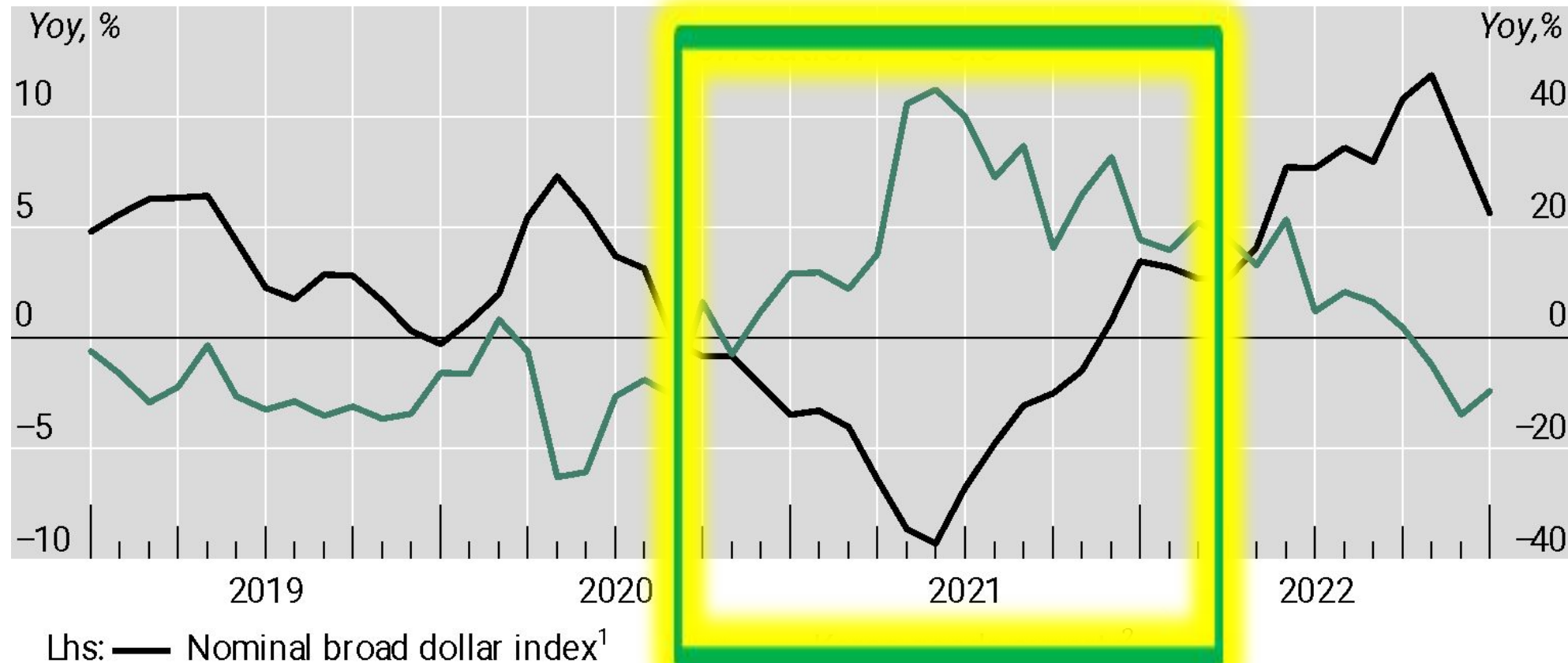
For global supply chain pressure index, negative figures indicate higher supply constraints. For PMI suppliers' delivery time index, a value below 50 indicates delivery times lengthening.

Sources: Federal Reserve Bank of New York; IHS Markit; BIS.

- Weak dollar,  
Lots of lending



# Case of Korean exports: booming in 2021, when the dollar was weak and despite bottlenecks



<sup>1</sup> Federal Reserve Board trade-weighted nominal dollar index, broad group of major trading partners of the US ("broad"), based on trade in goods and services. An increase indicates appreciation of the US dollar. <sup>2</sup> In current prices.

Sources: Federal Reserve Bank of St Louis, FRED; Datastream; national data; BIS.

# Concluding remarks

- **Dollar is a barometer of global financial conditions:** when the dollar is strong, financial conditions tighten (and viceversa)
  - Monitoring of exchange rates as a gauge of global financial conditions may be a useful complement to other market indicators for investment purposes.
- **What happens in financial markets does not stay in financial markets:**
  - For trade, the drop in dollar credit supply negatively affects working capital costs and the operation of supply chains with a negative effect on exports.
  - Building and sustaining supply chains are finance-intense activities, so when financing conditions tighten and banks pull back from dollar funding, some global value chains may no longer be viable.

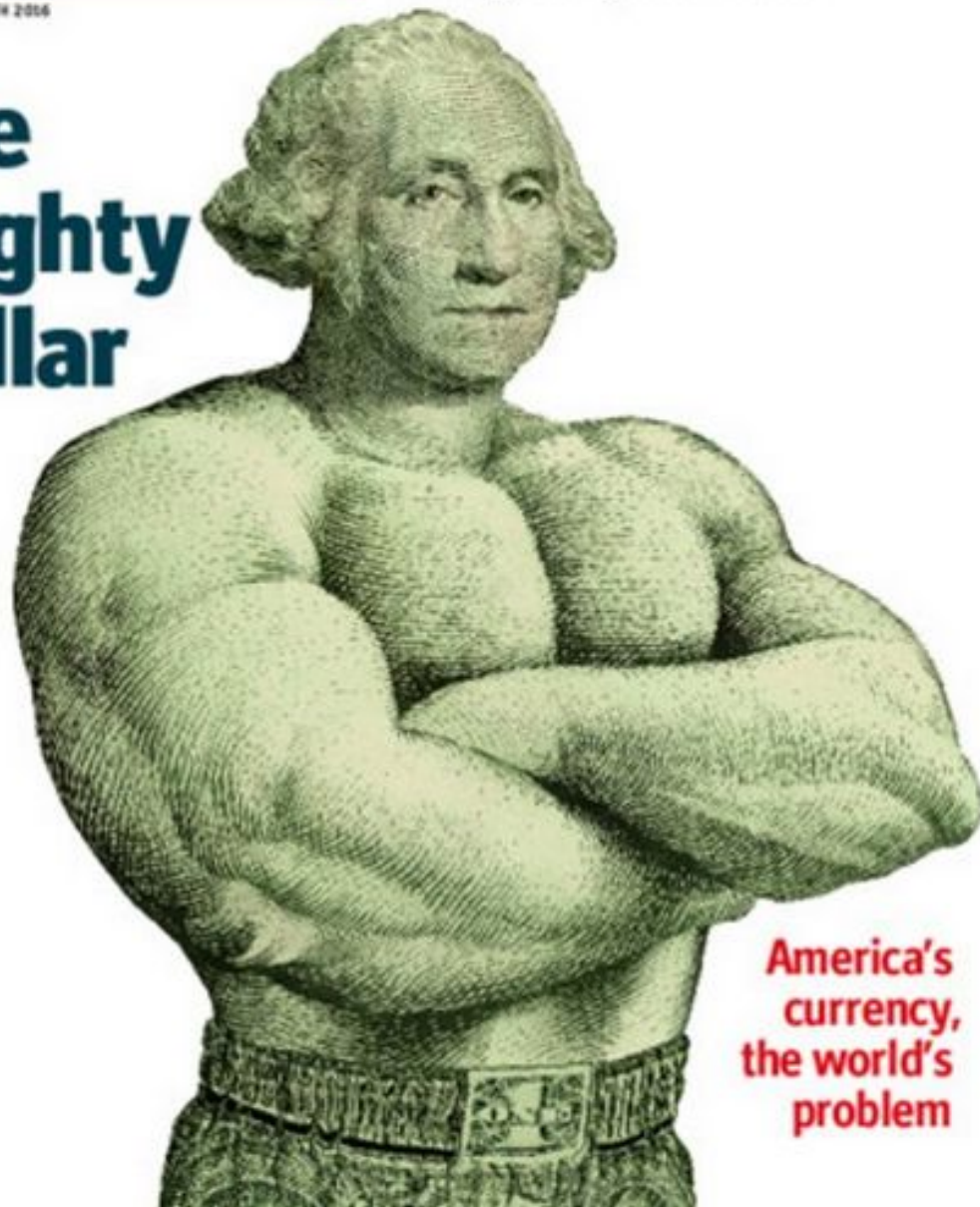
**ECONOMIST**

What Trump means for school reform

Getting ketchup out of a bottle

DECEMBER 30th-6th 2016

# The mighty dollar



**America's  
currency,  
the world's  
problem**



# References

Bruno, V., and H. S. Shin. 2015. Cross-border banking and global liquidity. *Review of Economic Studies*, 82:535–64.

Bruno, V., S-J. Kim, and H. S. Shin. 2018. Exchange rates and the working capital channel of trade fluctuations. *American Economic Review Papers and Proceedings* 108:531–36.

Bruno and Shin. 2023. Dollar and exports. *Review of Financial Studies*, forthcoming.

Shin. 2023. Global value chains under the shadow of Covid [https://www.bis.org/author/hyun\\_song\\_shin.htm](https://www.bis.org/author/hyun_song_shin.htm)

Kim and Shin. 2023. Theory of supply chains: a working capital approach.  
<https://www.bis.org/publ/work1070.htm>

<https://twitter.com/hyunsongshin?lang=en> ; <https://www.valentina-bruno.com/>