Discussion of

# The rise and fall of global currencies over two centuries

by Roger H. Vicqery

Georgios Georgiadis <sup>‡</sup>

‡<sub>ECB</sub>

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The views expressed in the paper are those of the authors and not those of the ECB.

## Summary

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- ► Has unipolar international monetary system been the historical norm?
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### Findings

- ▶ 1825-1914: Multipolar international monetary system with Mark, Franc, Pound
- ▶ 1919-1938: Rise of dollar at expense of Pound and Franc
- ▶ 1948-2020: Exceptionally stable global unipolar dollar dominance

#### Comments Evaluating currency status Parallel universes? How much attention should we point to y-o-y variation in global currency weights? Other comments

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#### Evaluating currency status

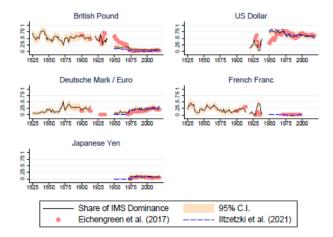
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## Evaluating dominant (global) currency status

- Gopinath and Stein (2020, 2022): Network externalities give rise to feedback loop between trade invoicing and demand for deposits (How does Mukhin's (2021) evolution of the international price system fit in?)
- Egorov and Mukhin (2020): Optimal to stabilise FX against dominant currency
- Accumulate dominant-currency reserves to intervene in FX markets
- ► Global FX reserves shares indicate dominant currency status
- ► Correlations with candidate dominant currencies proxy for share in global FX reserves

## Evaluating currency status

Figure 4: Estimated Global Currency Dominance and Actual Share of Global Reserves



## The paper's empirical approach

- ► To which candidate global currency *d* is currency *i* "pegging"?
- ► Simple correlational approach with rolling window-regressions *w*:

$$\Delta \left(\frac{\text{Currency }i}{\text{Silver ounce}}\right)_{it} = \alpha^{(w)} + \sum_{d=1}^{D} \beta_{i,d}^{(w)} \cdot \Delta \left(\frac{\text{Global currency }d}{\text{Silver ounce}}\right)_{it} + \epsilon_{it}^{(w)}$$
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► Measure of currency *d*'s role is

$$\sum_{i=1}^{N} \left[ \frac{I(\widehat{\beta}_{i,d}^{(w)} > 0)\omega_i}{\sum_{j=1}^{N} I(\widehat{\beta}_{j,d}^{(w)} > 0)\omega_j} \right] \cdot \left[ \frac{\frac{1}{\operatorname{var}(\widehat{\beta}_{i,d}^{(w)})} \max\left(\widehat{\beta}_{i,d}^{(w)}, 0\right)}{\sum_{j=1}^{N} \frac{1}{\operatorname{var}(\widehat{\beta}_{i,d}^{(w)})} \max\left(\widehat{\beta}_{j,d}^{(w)}, 0\right)} \right]$$

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What about regional shocks (e.g. to silver production)? Control for GDP growth and inflation correlation for country subset using Macro History Database?

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## Key finding: Dollar dominance over 1948-2020 historically exceptional

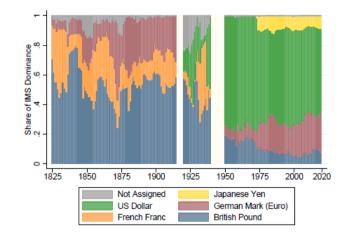


Figure 2: The Rise and Fall of Global Currencies over Two Centuries

## But hardly any data on Eastern Europe, especially Soviet Union

Polity	Region	Coverage starts	Polity	Region	Coverage start
Algeria	Africa	1948	Lithuania	Scandinavia	1992
Argentina	Americas	1948	Malaysia	Asia	1948
Australia	Asia	1948	Mexico	Americas	1948
Austria	Western Europe	1948	Morocco	Africa	1948
Belgium	Western Europe	1948	Netherlands	Western Europe	1948
Brazil	Americas	1948	New Zealand	Asia	1948
Bulgaria	Eastern Europe	1990	Nigeria	Africa	1948
Canada	Americas	1948	Norway	Scandinavia	1948
CFA Zone	Africa	1948	Peru	Americas	1948
Chile	Americas	1948	Philippines	Asia	1948
China	Asia	1978	Poland	Eastern Europe	1986
Colombia	Americas	1948	Portugal	Western Europe	1948
Costa Rica	Americas	1948	Romania	Eastern Europe	1012
Croatia	Eastern Europe	1993	Russia	Eastern Europe	1992
Zech Republic	Eastern Europe	1990	Saudi Arabia	Asia	1948
Denmark	Scandinavia	1948	Singapore	Asia	1948
Egypt	Africa	1948	Slovakia	Eastern Europe	1993
Estonia	Scandinavia	1993	Slovenia	Eastern Europe	1993
Finland	Scandinavia	1948	South Africa	Africa	1948
France	Western Europe	1948	Spain	Western Europe	1948
Greece	Western Europe	1948	Sweden	Scandinavia	1948
Hong Kong	Asia	1948	Switzerland	Western Europe	1948
Hungary	Eastern Europe	1982	Taiwan	Asia	1948
India	Asia	1948	Thailand	Asia	1948
Indonesia	Asia	1948	Turkey	Eastern Europe	1948
Ireland	Western Europe	1948	UAE	Asia	1948
Israel	Asia	1948	United Kingdom	Western Europe	1980
Italy	Western Europe	1948	United States	Americas	1948
Japan	Asia	1948	Uruguay	Americas	1948
Korea	Asia	1948	Vietnam	Asia	1976
Latvia	Scandinavia	1992	Yugoslavia (Serbia)	Eastern Europe	1948

Table 8: Foreign-Exchange Data Coverage and Sources 1948-2020

## Looking at parallel universes?

Would the dollar still be judged to have been globally dominant in a unipolar system over 1948-2020 if the Soviet Union and its member states were accounted for?

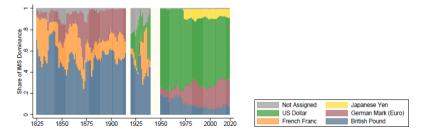
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- Admittedly: limited integration with the world market economy
- But then for 1825-1914: How much were the Franc, Mark and Pound 'universes' integrated?

Figure 2: The Rise and Fall of Global Currencies over Two Centuries



Three segmented, unipolar systems rather than a single, global multipolar system?

#### Comments

Evaluating currency status Parallel universes? How much attention should we point to y-o-y variation in global currency weights? Other comments

## Evolution of currency weights can be quite volatile at yearly frequency

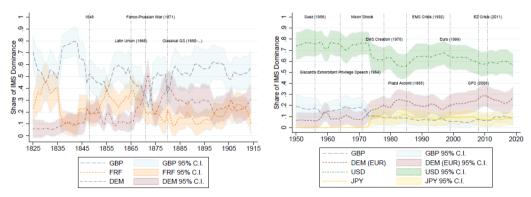
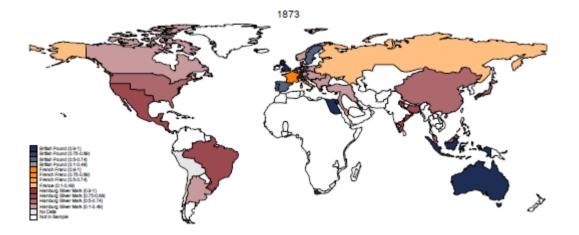


Figure 5: Global Currency Competition in the Long 19<sup>th</sup> Century

#### Figure 7: Global Currency Competition since 1950

## Evolution of currency weights can be quite volatile at yearly frequency



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How much attention should we point to y-o-y variation in global currency weights?

- How much is this volatility due to the impact of large FX changes and outliers in a smaller country sample?
- ► How much due to special events?
- Should we be looking at a smoother metric?
- ► Similar questions about interwar period...

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## Other comments

- ► Can you illustrate graphically how much data you provide compared to existing work?
- Can you illustrate graphically how the sample changes over time (e.g. number of FX) to indicate the potential role of compositional effects?
- Isn't the silver standard in Eastern Europe/Asia prior to 1870 a problem for choosing it as numeraire as for gold prior to 1971?
- ▶ When does coverage for each currency end (e.g.Lombardy-Venetia)?
- ► Why is the pound FX only available from 1980?
- ► A pity the renminbi is not included from, say, 2010...

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## Wrap-up

- ► Impressive data collection effort
- ▶ Unique to shed light on international monetary system from 1825
- Explores role of global currency indirectly based on exchange rate configurations
- Complementary to analyses based on bond/reserves denomination
- Some clarifications may help