AT A GLANCE

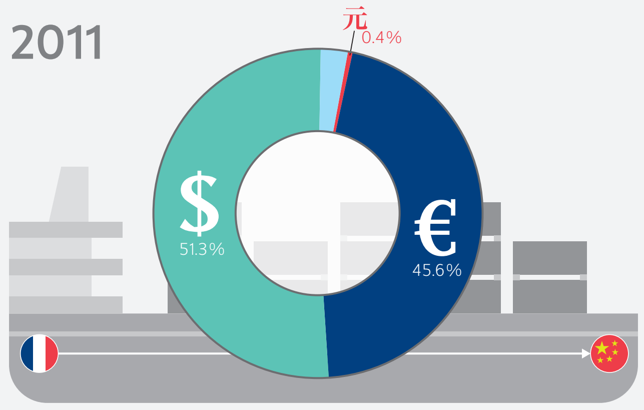
Geopolitical tensions fuel currency competition but US dollar and euro remain hard to displace

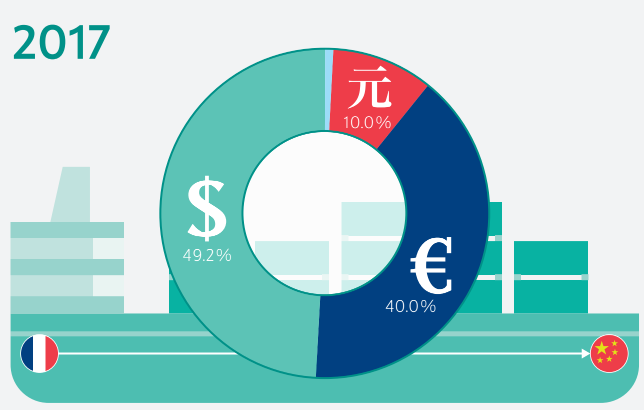
By Sonali Chowdhry

- Geopolitical frictions and uncertainty in US policy are prompting countries to reduce their dependence on the US dollar and promote local currencies in international trade
- China stands out with an active strategy to promote the renminbi globally, to match its increasing economic and geopolitical influence
- French customs data shows growing use of renminbi in exports to China, led by large firms in the consumer goods sector
- However, renminbi's use in global trade and payment flows is still limited and is not displacing US dollar and the euro
- Any transition to a multi-polar currency order will likely be protracted with very heterogeneous dynamics across sectors and companies

Despite China's efforts to promote its currency, US dollar and euro continue to dominate trade

Shares of invoicing currencies in French exports to China





Sources: Direction Générale des Douanes et Droits Indirects (DGDDI); author's own calculations.

FROM THE AUTHOR

"Which currency is used to settle global trade flows has macroeconomic implications. With the right measures, the euro could strengthen its position as an invoicing currency, especially given US policy uncertainty and the still limited global use of alternatives like China's renminbi."

— Sonali Chowdhry —

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ABSTRACT

Geopolitical frictions and high levels of uncertainty in US policy are driving countries to reduce dependence on the US dollar and implement new policies to promote their own currencies for settling cross-border trade. This Weekly Report analyzes the reactions of firms to such measures, focusing on China's efforts to promote the renminbi globally. Leveraging detailed French customs data, the findings show that China's renminbi push spurred rapid growth in the currency's use in firm-level exports to China, driven by large and experienced exporters in consumer goods sectors. Crucially, renminbi adoption remained confined to China, displacing neither the US dollar nor the euro as the preferred invoicing currencies in other markets. These results highlight the limits to currency promotion efforts. Any transition to a multi-polar currency system is therefore likely to be gradual, with sharp disparities across firms and industries.

Escalating trade tensions between the United States, the European Union (EU), and China, alongside the surge in geopolitical risks, have triggered new debates over whether established currencies, particularly the US dollar, can sustain their influential position in a fragmenting global trading system.

Amid these shifts, several countries—from Brazil, Russia, India, and China to many across Africa—are pursuing bilateral agreements and developing new payment platforms that prioritize the use of local currencies to settle cross-border transactions. While these initiatives are partly motivated by economic factors, such as mitigating the exchange rate risk for domestic businesses, they are also increasingly driven by geopolitical considerations. The imposition of sanctions on banking systems and the potential realignment of supply chains into competing blocs have intensified efforts to reduce dependence on the US dollar and its related financial infrastructure. More recently, unprecedented uncertainty in US trade policy, questions regarding independence of the US Federal Reserve, and the debt load from tax cuts under the "One Big Beautiful Bill Act" are also undermining confidence in the US dollar's stability.

Measures to promote local currencies thus reflect broader concerns among countries not only about strategic dependence on key export markets and suppliers, but also the perceived geopolitical risk of relying on US-centric financial systems, where the US dollar occupies the unique position as the dominant invoicing and global reserve currency. However, efforts to reduce reliance on the US dollar must contend with the advantages of the established financial and payment system, where capital mobility, ample availability of safe assets, and network effects reinforce the use of the US dollar.[1]

This Weekly Report engages with these cross-cutting issues by examining how some central banks and governments are promoting the use of their own currencies for settling

1 Carol Bertaut, Bastian von Beschwitz, and Stephanie Curcuru, "'The International Role of the U.S. Dollar,' Post-COVID Edition," Washington, Board of Governors of the Federal Reserve System, 2023 (available online, accessed July 14, 2025; this applies to all other online sources in this report unless stated otherwise).

DOI: https://doi.org/10.18723/diw_dwr:2025-31-1

international trade. In particular, it focuses on the case of China, which provides a unique setting for investigating these questions.

As part of its tightly controlled financial system, China essentially prohibited its firms from settling international trade in renminbi until 2012. However, strategic ambitions to expand its geopolitical influence and reduce exposure to the US dollar prompted a major shift in China's currency regime toward promoting the use of renminbi globally.

This Weekly Report exploits detailed customs data from France, the leading renminbi clearing hub[2] within the Eurozone, to examine the effect of these currency promotion policies on the invoicing decisions of firms exporting to China. The empirical findings reveal which firms are willing to adopt a new currency and, therefore, the conditions under which alternative currencies may gain meaningful traction in the global trading system.[3]

Customs data shows how firms choose currencies to settle global trade

In recent years, several central banks have intensified efforts to promote the use of their currencies to settle bilateral trade. Initiatives such as China's Cross-Border Interbank Payment System (CIPS), India's Rupee Vostro Accounts Framework, and the Pan-African Payment and Settlement System (PAPSS) reflect broader strategies aimed at eliminating payment frictions in cross-border transactions, reducing firms' exposure to exchange rate fluctuations, and fostering regional financial integration. These policies also have a geopolitical dimension, with the intention of asserting economic sovereignty and expanding the global footprint of their respective currencies.

To assess the heterogeneous effects of such currency promotion efforts and uncover the mechanisms driving shifts in currency use, it is important to examine the behavior of individual firms. Firms' invoicing practices are shaped by a range of factors, including perceptions of currency stability, global pricing conventions, and access to instruments for managing exchange rate risk. Firms also respond to geopolitical factors, such as sanctions risk, that influence their decisions over trading partners and currencies.[4] Thus, the shift away from leading currencies like the US dollar and the euro is unlikely to be automatic or uniform. Instead, adoption of alternative currencies will depend on firm-level characteristics, the sector-specific structure of markets, the credibility of institutions supporting alternative currencies, and the incentives provided.

Table

Summary statistics on French exporters

	Top 100	100–1000	Others
Share in total extra-EU exports (in percent)	48.0	29.0	23.0
Number of destinations per firm (mean)	83.8	52.5	4.6
Number of products per firm (mean)	281.3	130.4	8.6
Number of currencies per firm (mean)	11.0	5.1	1.2
Number of currencies per firm-product (mean)	2.7	1.8	1.2
Number of currencies per firm-product-destination (mean)	1.2	1.1	1.0

Note: French customs data from 2011–2017. The top 100 firms are defined in terms of their total extra-EU exports.

Source: Direction Générale des Douanes et Droits Indirects (DGDDI).

Crucially, the choice of invoicing currency represents an active, endogenous decision at the firm level, linked directly to profit optimization. Thus, it constitutes a key margin of adjustment available to firms in the face of economic shocks. At the macroeconomic level, these firm-level decisions have far-reaching consequences, influencing exchange rate pass-through into prices, the transmission of global economic disruptions, and the spillover effects of US and EU monetary policy decisions on third countries.[5]

However, information on the use of invoicing currencies is not available at the granular firm-level in Germany's administrative customs data. Thus, to examine these issues, we draw upon data from a neighboring EU economy, France. French customs data provide detailed information on the export transactions of firms, disaggregated by destination country, product category, and invoicing currency. The dataset analyzed in this report covers the 2011 to 2017 period, encompassing approximately 250,000 firms trading more than 4,600 distinct product categories across 150 non-EU partner countries and involving over 120 unique currencies.[6]

This customs data reveals substantial heterogeneity both across and within firms over 2011–2017 (Table). First, export activity is highly concentrated: the top 100 firms (in terms of total exports) alone account for 48 percent of aggregate export value from France to all destinations outside the EU. These top firms also tend to be highly diversified, exporting a wide range of products across multiple markets and often invoicing in multiple currencies even for the same product. In contrast, smaller exporters typically rely on a single invoicing currency.

2 A renminbi clearing hub is a financial center where renminbi transactions can be settled through designated banks authorized by the People's Bank of China.

3 This Weekly Report is based on the author's paper: Sonali Chowdhry, "Renminbi rising? Exporters' response to China's currency internationalization." *DIW Discussion Paper* 2085 (2024) (available online).

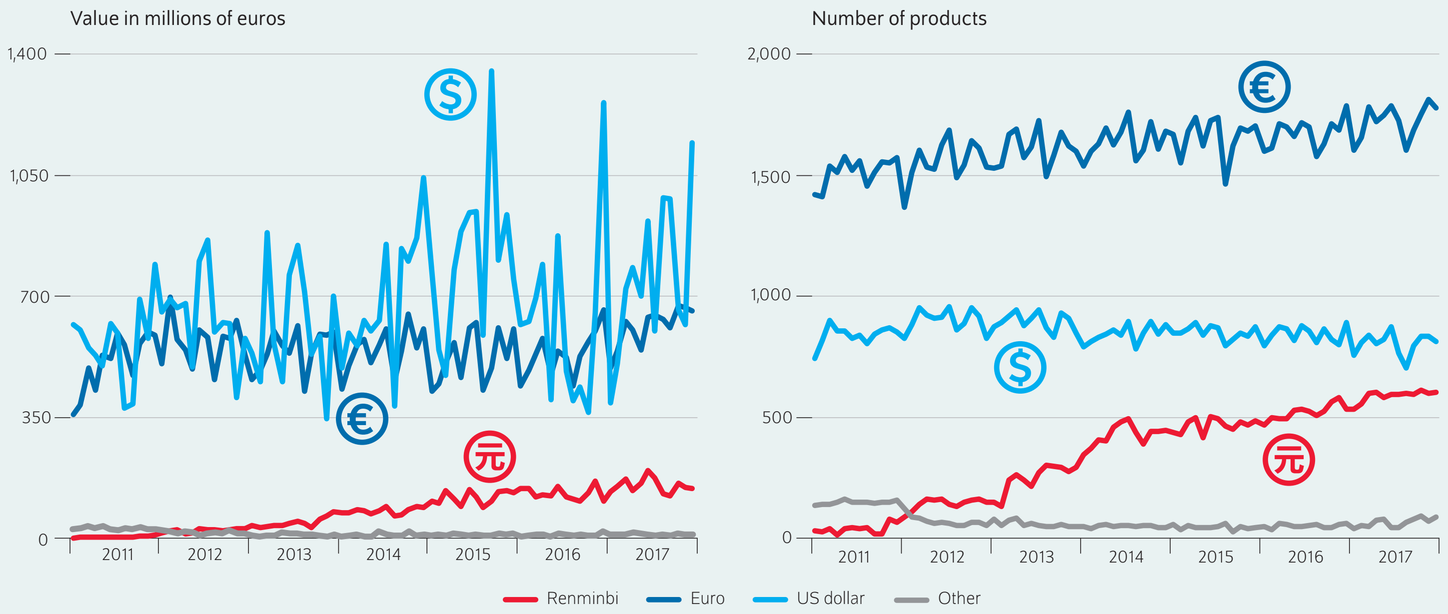
4 Maxim Chupilkin, Beata Javorcik, Aleksandra Peeva, and Alexander Plekhanov, "Exorbitant privilege and economic sanctions," *EBRD Working Paper* 281 (2023).

5 Emine Boz et al., "Patterns of invoicing currency in global trade: New evidence." *Journal of International Economics* 136 (2022): 103604; Giancarlo Corsetti et al., "The Simple Geometry of Transmission and Stabilization in Closed and Open Economies," Staff Report, no. 209 (2007): 65–129; Tony Zhang, "Monetary policy spillovers through invoicing currencies," *The Journal of Finance* 77.1 (2022): 129-161.

6 The customs data is provided by DGDDI (Direction Générale des Douanes et Droits Indirects) in France, for access details see https://www.comite-du-secret.fr. Product categories are defined at the 6-digit level following the Harmonized System (HS), an internationally standardized classification for traded goods.

Figure 1

Evolution of monthly French exports to China by invoicing currency



Source: Direction Générale des Douanes et Droits Indirects (DGDDI); author's own calculation.

Following China's reforms, use of the renminbi in French exports to China increased. Yet it did not replace either the US dollar or euro.

The case of China shows that companies do react to currency promotion efforts, but unevenly

To examine which firms respond to currency promotion efforts and how they adjust their invoicing practices, we focus on trade between France and China. In addition to being the third-largest destination for EU goods exports and the largest source of the bloc's imports, China is pursuing an ambitious strategy to encourage the use of the renminbi for international trade settlement.

Leveraging detailed micro-data from France, we investigate how firms' invoicing decisions evolved in response to this major policy push. This section outlines the key reforms undertaken by China to facilitate renminbi use and the dynamics of renminbi adoption, identifying which types of firms used renminbi when exporting to China and the persistence of these firm-level decisions over time.

China has spent over a decade advancing renminbi's role in global trade flows

Since joining the World Trade Organization (WTO) in 2001, China has become a major trading economy. By 2009, it was the world's largest goods exporter, accounting for 9.6 percent of global merchandise exports and surpassing other leading exporters, including Germany, Japan, and the US. However, unlike these nations, China's domestic currency remained peripheral to international capital markets due to the numerous restrictions around its use.

Several factors motivated a shift in China's policy toward renminbi promotion and internationalization over the past fifteen years. The first factor was the need to lower transaction costs for Chinese firms and to promote their international competitiveness.[7] The second was to enhance China's financial stability by decreasing dependence of domestic exporters and importers on the US dollar. Another driver was China seeking to elevate the renminbi to match its economic and geopolitical influence.

A key step toward renminbi promotion was the issuance of Circular Yinfa No. 23 in 2012 that permitted all China-domiciled firms to settle international trade in renminbi unless they were specifically blacklisted.[8] With this new regulation, China removed strict prohibitions on the global use of renminbi by its firms. By eliminating the need for prior approval for cross-border renminbi payments, the number of firms eligible to trade in renminbi expanded.

Alongside this crucial regulatory change, China has implemented a series of measures to promote the renminbi. The People's Bank of China (PBoC) signed several swap agreements with other central banks, including the European Central Bank (ECB), in 2013. These agreements increase

7 Barry Eichengreen and Xia Guangtao,"China and the SDR: Financial liberalization through the back door," *Quarterly Journal of Finance* 9, no. 3 (2019).

8 Yinfa No. 23, "Notice of PBC, MOC, GAC, SAT, and CBRC on Relevant Issues Pertaining to Administration over Enterprises Engaging in RMB Settlement of Export of Goods", 2012 (available online).

the liquidity of the renminbi and provide renminbi lending of last resort to foreign firms. In October 2015, it further launched the Cross-border Interbank Payment System (CIPS) to facilitate transfers between domestic and foreign entities.[9]

In 2016, the renminbi was also included within the International Monetary Fund (IMF) basket of Special Drawing Rights, providing a further boost to the currency's international reputation as a suitable vehicle for trade transactions.[10] While these developments have eased several constraints on renminbi use, the reform process is still ongoing. This is clearly reflected in China's 14th Five Year Plan (2021–2025), which sets long-term targets up to the year 2035, one of the plan's stated objectives is to "promote the internationalization of the renminbi."

Rising geopolitical tensions and trade conflict with the US have added fresh impetus to this long-standing objective to promote the renminbi. The strategic push has taken on renewed urgency in China, as suggested by recent remarks from the Governor of PBoC. He cautioned against the risks of "excessive reliance" on a single dominant currency, warning that such dependencies could be weaponized and stressing the future role that the renminbi could play in a multi-polar international monetary system.[11]

Reforms induced rapid but skewed growth in renminbi exports to China

During the initial phase of these reforms (2011–2017), the use of the renminbi in French exports to China expanded markedly (Figure 1). The monthly value of renminbi-denominated exports rose from just 2.3 million euro in January 2011 to approximately 145 million euro by December 2017. Although the US dollar and euro remained the dominant invoicing currencies throughout, renminbi's share in French exports to China increased from 0.4 percent to ten percent over this period.

The growing importance of the renminbi is also reflected in the breadth of products invoiced in this currency. By end of 2017, more than 600 products, representing 30 percent of all products exported by France to China, were invoiced in renminbi. While renminbi use increased across several industries, it was particularly pronounced in downstream consumer goods sectors. For example, the share of renminbi in French exports to China was highest in footwear and headwear (61 percent), followed by leather goods (53 percent) and textiles (27 percent).

Box

Estimating the likelihood of local currency invoicing in exports

To analyze the probability that firms invoice their exports in local currencies outside the EU, we estimate a linear probability model with high-dimensional fixed effects. The specification compares the likelihood that a French firm invoices a given product in the local currency (renminbi) when exporting to China, relative to its invoicing behavior for the same product in other non-EU, non-US markets over time. To capture differences across product types, the model is estimated separately for consumer goods, capital goods, intermediate inputs, and raw materials. The specification takes the following form:

$$Local\,currency_{fpdt} = \sum_{\tau=201102}^{201712} \beta^{\tau} \cdot 1\{t=\tau\} \cdot 1\{d=China\} + Z_{dt} + \theta_{fpd} + \theta_{pt} + \varepsilon_{fpdt}$$

In this specification,

- $Local\ currency_{fpdt}$ denotes a dummy variable that takes the value of 1 if a firm f invoiced product p to destination d in its respective local currency at time t and 0 otherwise.
- The term $\sum_{\tau=201102}^{201712} \beta^{\tau} \cdot 1\{t=\tau\} \cdot 1\{d=China\}$ captures the change in the probability of renminbi invoicing over time for exports to China, relative to both the reference month (January 2011) and local currency use in all other export destinations (excluding other EU members and the US).
- Z_{dt} denotes a vector of destination-time varying controls such as the yearly GDP, population, and implementation of a trade agreement with the EU alongside the monthly bilateral exchange rate against the US dollar.
- θ_{fpd} represents firm-product-destination fixed effects. These control for all unobserved, time-invariant characteristics of firms such as managerial quality and product-specific capabilities as well as their familiarity with destination markets.
- θ_{pt} are product-time fixed effects that control for macroeconomic factors that may impact all firms within a sector (e.g. global commodity price shocks).
- ε_{fpdt} is the error term, clustered by firm, product and destination.

Moreover, the growth in renminbi invoicing stands out even when compared to firms' use of local currencies in other export markets. To quantify this China-specific effect, we estimate the probability of local currency invoicing for exports to China relative to other markets over time and compare these patterns across various product types—namely consumer goods, capital goods, intermediate inputs, and raw materials (Box).

The likelihood of local currency invoicing in exports to China increases across consumer goods, capital goods, and intermediate inputs relative to other destinations over time (Figure 2). This suggests that the increase in renminbi use

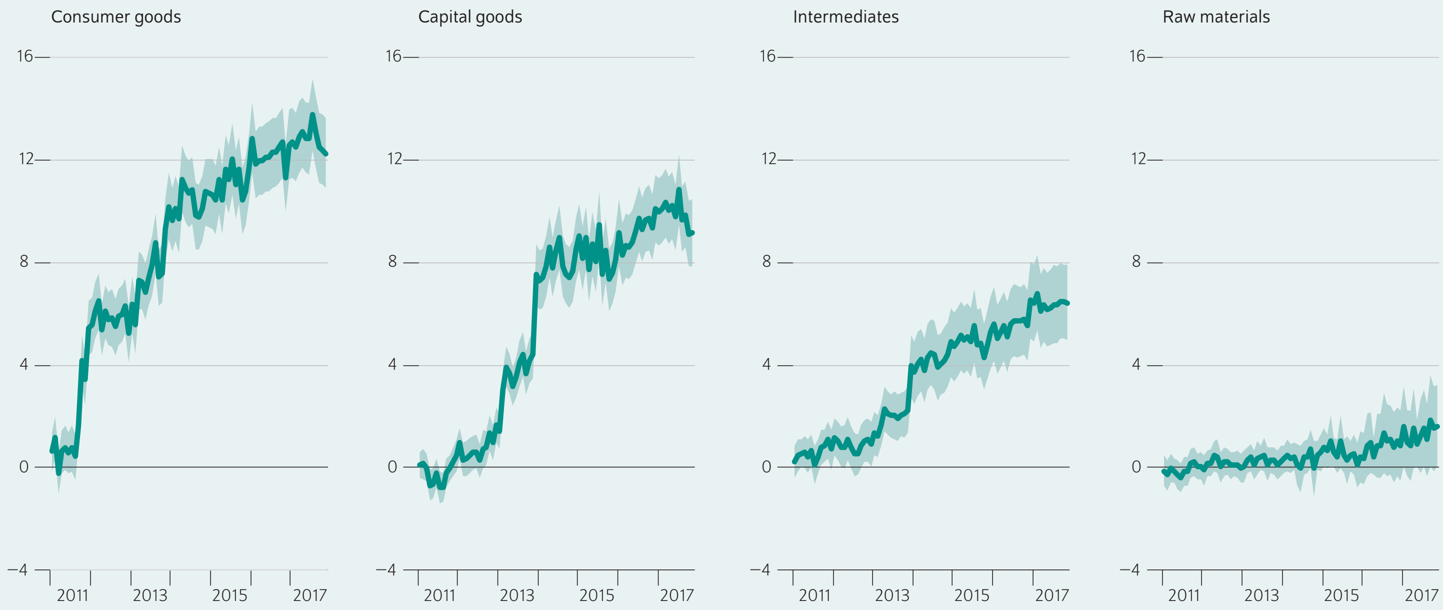
9 Bilateral swap agreements with the PBoC allow foreign central banks to obtain renminbi in exchange for their own currency, enabling them to further provide renminbi liquidity to domestic financial institutions. These institutions can then facilitate renminbi-denominated trade for local firms. The Cross-Border Interbank Payment System (CIPS) provides a dedicated infrastructure for clearing and settling renminbi transactions. Its aim is to reduce reliance on intermediary banks, thereby increasing the speed and efficiency of international renminbi payments.

10 Special drawing rights (SDRs) are an international reserve asset created by the International Monetary Fund (IMF) that countries can exchange for hard currency with other IMF members. Its value is based on the world's five leading currencies: the US dollar, the euro, the Japanese yen, the UK pound, and the Chinese renminbi.

11 For further details, see Thomas Hale and Cheng Leng, "China's central bank chief expects new currency order to challenge dollar," *Financial Times*, June 18, 2025 (available online).

Figure 2

Probability of local currency invoicing in China relative to other markets
Changes in percentage points



Note: Probability of invoicing in Renminbi to China, relative to both the reference period (January 2011) and the firm's local currency invoicing behavior for the same product in other markets. The shaded areas indicate the 95 percent confidence interval.

Source: Direction Générale des Douanes et Droits Indirects (DGDDI); author's own calculation.

French exporters in consumer goods sectors showed the earliest and most pronounced increase in renminbi use.

has been stronger in China under its policy changes and not just driven by a broader, secular trend toward greater local currency pricing by firms across markets.

The results further show that the dynamics of renminbi adoption differ markedly by product types. Raw materials display no statistically significant shift to renminbi in other markets. This is consistent with their homogeneous and commodity-like nature, where globally determined US dollar-denominated pricing leaves little scope for substitution toward local currencies. By contrast, the earliest and most pronounced response to renminbi promotion policies occurred in consumer goods sectors. This likely reflects stronger incentives for firms in downstream industries to adopt local currency invoicing, as their end buyers might be more risk-averse and sensitive to exchange rate fluctuations. Unlike raw materials, firms may also be pricing-to-market in these sectors, setting destination-specific prices and maintaining price stability in the buyers' currency to retain market shares.

Beyond consumer goods, capital goods and intermediate inputs also experienced a notable increase in the probability of renminbi invoicing, albeit more gradually. Taken together, these findings highlight that while currency promotion efforts can indeed induce shifts in firms' invoicing behavior, the response is shaped by product characteristics.

Large and experienced exporters are the earliest adopters of Renminbi

Which types of firms underpin this increase in renminbi use? The evidence shows that renminbi -invoicing firms are significantly larger, in terms of extra-EU exports, than firms that never adopt the renminbi. These firms serve a wider range of destinations, have broader product baskets, and invoice in multiple currencies globally (Figure 3). Although they represent less than 1.5 percent of all French firms exporting to China, they account for nearly 50 percent of total French export value to the country.

Renminbi invoicing is also closely linked to firms' prior engagement in the Chinese market. Nearly 75 percent of renminbi-denominated exports in any given year come from firm-product combinations where the firm had experience selling that product to China before adopting the renminbi. Over time, these experienced firms also introduced new products to China, invoicing them in renminbi. By contrast, first-time exporters to China rarely choose the renminbi, accounting for just 0.5 percent of renminbi-denominated exports.

Renminbi invoicing also shows strong persistence, suggesting that the adoption is neither temporary nor limited to one-off transactions for these large firms. Once a firm chooses to invoice a product in renminbi, the probability of using renminbi again for the next export of that product to China is close to 90 percent.

Overall, these patterns suggest that firms adopting the renminbi tend to be larger in size with greater international experience. This points to the presence of fixed costs associated with adopting a new invoicing currency, costs that only more established firms may be able to absorb. Beyond fixed costs, firms are more likely to adopt the renminbi for their exports if they also import inputs from China using the renminbi. By reducing the currency mismatch in their cash flows, they can better align changes in input costs with export prices. Finally, renminbi use is also significantly higher among firms that already invoice in local currencies when exporting the same good to other destinations, indicating that firms might be synchronizing their invoicing practices across markets for certain product lines.[12]

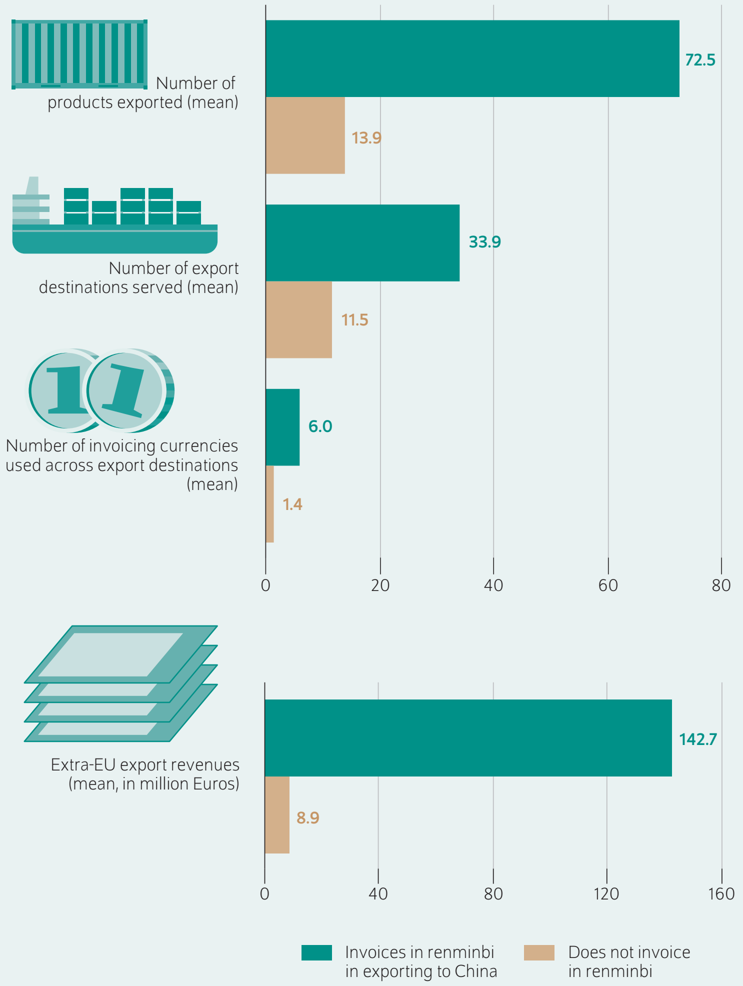
Renminbi still far from displacing established invoicing currencies

Despite this growth in renminbi use, 99 percent of all renminbi-denominated exports from France were directed exclusively toward mainland China, while the remaining one percent went to Hong Kong and Japan. Therefore, renminbi was rarely used as a vehicle currency by French exporters when serving markets beyond China during this period. Its availability displaced neither the US dollar nor the euro, these both continued to be the preferred invoicing currencies for French exports outside the EU.[13]

The latest aggregate payment data from SWIFT confirm that, despite recent gains, the renminbi's global role remains relatively limited.[14] As of June 2025, the renminbi accounted for 2.1 percent of international payment flows outside the Eurozone, ranking sixth globally. In comparison, the US dollar occupied the dominant position with a 58.4 percent share, followed by the euro (13.8 percent) and the UK pound (5.5 percent).[15] Recent data from the IMF and ECB on the composition of aggregate bilateral trade by invoicing currency further shows that, while renminbi use has grown rapidly since 2018, it still accounted for less than two percent of global exports as of 2023.[16]

Figure 3

French extra-EU exporters, invoicing in renminbi or not
Annual mean



Note: Averages are calculated on yearly data at the firm level, 2011–2017.

Source: Direction Générale des Douanes et Droits Indirects (DGDDI); author's own calculation.

Firms invoicing in renminbi are larger and globally diversified.

Conclusion: Renminbi has progressed but cannot easily displace US dollar and euro

This report highlights that currency promotion efforts, such as by China to internationalize the renminbi, can drive meaningful shifts in firm invoicing behavior. However, the shift toward other currencies is driven by a few firms that are large and experienced exporters. The adoption of renminbi is also most pronounced in consumer goods, where exporters may have stronger incentives to facilitate transactions with local firms and households that are unwilling to bear exchange rate risk. Crucially, renminbi use remains overwhelmingly limited to transactions with China itself, without displacing either the US dollar or euro as invoicing currencies in exports to other markets.

12 For further details on the various mechanisms driving selection of firms into renminbi invoicing, refer to Sonali Chowdhry, "Renminbi rising? Exporters' response to China's currency internationalization," *DIW Discussion Paper* 2085 (2024).

13 On average across these years, euro and US dollar-denominated exports accounted for 51.2 percent and 40.15 percent of France's total extra-EU exports, respectively.

14 The Society for Worldwide Interbank Financial Telecommunication (SWIFT) is a global messaging network that enables secure and standardized communication between financial institutions, thereby facilitating cross-border payments.

15 Data from the SWIFT RMB tracker, June 2025 (available online).

16 Anja Brüggen, Georgios Georgiadis, and Arnaud Mehl, "Global Trade Invoicing Patterns: New Insights and the Influence of Geopolitics," European Central Bank (2025) (available online).

Taken together, these findings suggest that efforts to promote different currencies in trade face structural constraints. Sector-specific pricing conventions, powerful network effects, and the fixed costs to firms for managing multiple currencies all reinforce established invoicing practices in global trade. Although geopolitical tensions have intensified interest in local currency use, the transition toward a genuinely multi-polar currency system is likely to be gradual and highly uneven across industries and firms. This heterogeneity in firm responses further underscores the need for granular data to monitor the evolution of currency choices and for guiding future policy interventions.

Within this context of flux, the ECB has an opportunity to signal the credibility and stability of the euro. If it wishes to pursue a "global Euro," as indicated by recent statements from ECB President Christine Lagarde, it will require further measures, including providing liquidity by extending swap lines to a widening network of trade partners as well as lowering transaction frictions by advancing toward a digital euro.[17]

17 Christine Lagarde, "This is Europe's 'global Euro' moment," *Financial Times*, June 17, 2025 (available online).

Sonali Chowdhry is a Research Associate in the Firms and Market Department at DIW Berlin | schowdhry@diw.de

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DIW Berlin — Deutsches Institut für Wirtschaftsforschung e. V.
Mohrenstraße 58, 10117 Berlin
www.diw.de
Phone: +49 30 897 89–0 Fax: –200
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