

On 1 July 2026, the CEPII and the OFCE merged to form the *IFE* (Institut Français d'Économie). Affiliated with Sciences Po and operating as an independent and nonpartisan center for applied economic research, it is set to become a leading voice in economic debate both in France and across Europe.

Two Tales of Recent Globalization: With and Without Tax Havens

Simon Keller & Vincent Vicard

Summary

The current narrative portrays modern services – such as financial, digital, and business services – as the new engine of globalization, sustaining global trade openness despite shocks like the pandemic, geopolitical tensions, and protectionist policies.

This paper qualifies this view by showing the outsized role of tax havens, which now account for over 25% of global modern services trade (up from 12% in the late 1990s), far exceeding their 4% share of global GDP.

Multinational enterprises' tax avoidance strategies may inflate recorded trade flows of modern services, particularly in tax havens.

A back-of-the-envelope calculation shows that the growth of modern services trade is 25% larger when including trade with tax havens over 2005–2022, and 35% larger over 2005–2019, highlighting their disproportionate impact on globalization metrics.



Controversies over the future of globalization have flourished in recent years, amid the Covid-19 pandemic, the war in Ukraine and the return of protectionist policies during Trump's second presidency. Some interpret the new geopolitical landscape and weaponization of trade as signs of a retreat from globalization as we knew it. Others, however, point to the resilience of trade – despite recurring shocks like Brexit, the US-China trade war, and the pandemic – as evidence of the world trading system's enduring continuity.

The future of globalization remains uncertain. A careful assessment of the current state of global trade and its recent transformations is essential for informing discussions about potential paths forward. Several recent papers and reports

highlight the growing role of trade in services as a driver of trade openness over the past decade (see, e.g., Antras, 2021; Baldwin *et al.*, 2024; McKinsey, 2022; WTO, 2025). Since the Global Financial Crisis, global trade openness has plateaued at a high level, masking diverging trends. While trade in goods and traditional services (such as travel and transport) stagnated in the 2010s, modern services – including business services, royalties, financial services, and telecommunication, computer and information services – continued to grow rapidly, even during the pandemic and subsequent period of geoeconomic fragmentation.

This policy brief questions the narrative of services as the new engine of globalization by showing the outsized role of tax havens in modern services trade over the past quarter-century. These jurisdictions are central to multinational enterprises' (MNE) tax avoidance strategies, which generate cross-border transactions (potentially fictitious or with no real substance) that artificially inflate recorded service flows.¹

Tax havens accounted for over 25% of world trade of modern services in 2023, well above their 4% share in global GDP and up from around 12% in the late 1990s. Trade in goods and traditional services does not exhibit the same growing overrepresentation of tax havens seen in modern service trade. Econometric results confirm that tax havens have disproportionately high exports and imports in most categories of modern services, particularly financial services, charges for the use of intellectual property (IP), and technical, computer, information (TCI) and other business services

(1) Hebous and Johannesen (2021) and Parra-Ramirez and Vicard (2025) show how tax avoidance by MNEs affects trade in services between high-tax countries and tax havens. See also Damgaard *et al.* (2019), Coppola *et al.* (2021) and Delatte *et al.* (2022) on the role of tax havens in global capital flows.

(OBS). And particularly so in recent years. A back-of-the-envelope calculation shows that the growth of modern services trade is 25% larger when including trade with tax havens over the period 2005–2022, and even 35% larger over 2005–2019, though their growth still outpaces that of trade in goods.

The outsized role of tax havens in trade in services qualifies the narrative that services are the new engine of globalization and calls into question the real economic gains from some recorded trade in services. It also reinforces the view of an increasingly complex and opaque globalization where tax havens serve as central intermediaries in MNEs' foreign networks.

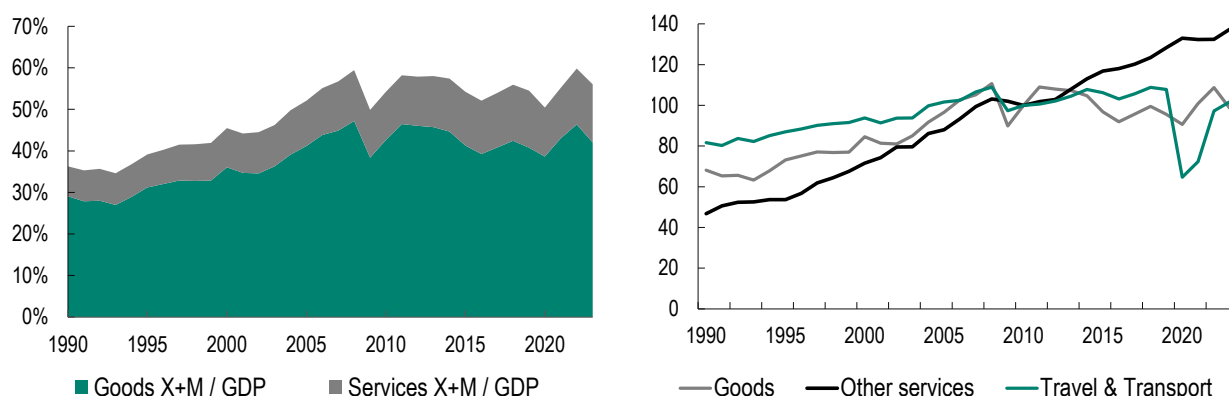
1. Services as the new engine of globalization

The recent history of globalization is often divided into two distinct periods: the age of hyperglobalization and the age of slowbalization. Beginning in the mid-1990s, advances in information and communication technologies, declining trade barriers, and the integration of former communist countries and China into the world trading system fueled a rapid expansion of global value chains (GVCs), led by multinational enterprises. This era of rapid growth in trade openness ended with the Global Financial Crisis, giving way to a plateau during the 2010s (Antras, 2021). Figure 1 illustrates these trends; the global openness ratio (exports plus imports over GDP) increased from less than 40% in 1990 to nearly 60% in 2008, before stabilizing at this high level. The 2010s were thus not a period of deglobalization but more of a normalization during which trade increased at a similar pace as domestic production. This stability is remarkable given the succession of major crises since 2016: Brexit, the US-China trade war, the Covid-19 pandemic, the war in Ukraine, and the protectionist policies of Trump's second presidency starting in 2025.

The slowbalization period masks shifting patterns of trade; since the late 2010s, the growth of modern service trade has outpaced that of goods, positioning services as the new engine of globalization (Baldwin *et al.*, 2024; McKinsey, 2022). Traded services fall into two broad categories: traditional services (transport and travel) and modern services, including in particular financial services, IP, and TCI.² While trade in traditional services stagnated as a share of GDP (and plummeted in 2020 due to the pandemic), as did trade in goods, trade in modern services has surged since 2010, even during the Covid-19 crisis (Figure 1b).

(2) Figure A1 in the appendix shows that IP, TCI, financial services, and OBS form the bulk of modern trade in services. Among those, the first two categories of services have increased faster than the rest of modern services over the period 2000–2023.

Figure 1 – World trade openness (export + import / GDP) and growth of trade in goods and services (base 100 = 2010)



Note: X+M/GDP stands for sum of exports and imports over GDP.

Source: CEPII-CHELEM-BOP..BOP.

Advances in information and communication technologies have indeed increased the tradability of modern services. Concurrently, manufacturing activities have become increasingly intertwined with services, reflecting the growing servitization of production. As a result, intermediate services, such as back-office services including accounting, call centers and IT support, account for a growing share of cross-border service trade, particularly in high-income economies.

Several factors support the continued rapid growth of modern services trade. Barriers to trade in services remain large but are more technology-driven than policy-driven. Unlike for final services, continued advances in digital technologies are likely to further reduce the transaction costs in international trade of intermediary services (e.g. automatic translation). And demand is strong in high-income countries while export capacity is large in emerging economies (Baldwin *et al.*, 2024).

2. Nuancing the narrative: the role of tax havens in trade in modern services

The narrative on the role of modern services in the recent globalization period overlooks a critical aspect: the geography of service trade. Indeed, 13 countries commonly listed as tax havens accounted for more than a quarter of global trade in modern services in 2023, far exceeding their share in global GDP. Tax havens are jurisdictions characterized by “very low tax rates and other tax attributes designed to appeal to foreign investors” (Dharmapala and Hines, 2009), including the provision of opacity for the transactions of firms or individuals. It is now well documented that tax havens are central to international capital flows. Half of global foreign direct investments passes through them (Damgaard *et al.*, 2019; Delatte *et al.*, 2022). Here we focus on a list of 13 tax havens – Bahamas, Belgium, Bermuda, Cyprus, Hong Kong, Ireland, Luxembourg, Malta, Marshall Islands, Netherlands, Panama, Singapore, and Switzerland –

that includes the largest tax havens considered in recent studies on tax avoidance, with trade data available over a long period of time (1990–2023).³

Together, these 13 countries accounted for 4% of global GDP in 2023. They are small open economies characterized by large trade openness. They account for 12% to 15% of world trade in goods throughout the period (Figure 2, left panel). In the 1990s, their share of global trade in services aligned closely with their share in goods trade. However, starting in the early 2000s, their role in services trade expanded sharply, reaching 22% of total service trade by 2023. This growth is not driven by traditional services where the tax havens’ share remains flat, similar to goods trade (Figure 2, right panel). Instead, the rise is entirely driven by modern services. Tax havens now account for over a quarter of global trade in modern services. They have doubled their share since the late 1990s.⁴

The concentration of intangible trade flows in a small number of tax havens raises questions about the true nature of these flows. Just as tax havens act as intermediaries in financial flows – generating what Damgaard *et al.* (2019) term “phantom FDI” – MNEs’ tax avoidance strategies may create artificial cross-border service transactions. These flows, often lacking real economic substance, can inflate recorded global trade openness.

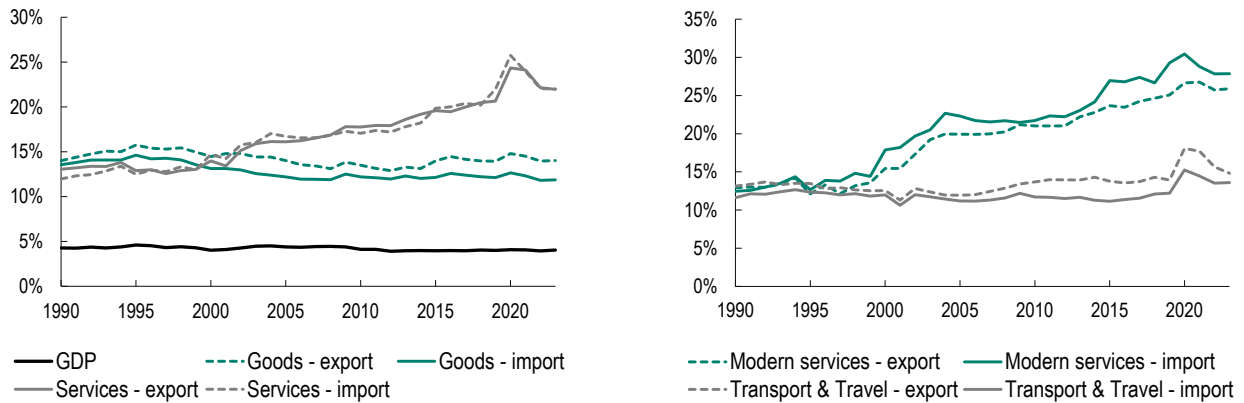
A significant portion of modern service flows to tax havens potentially consists of intra-firm transactions between affiliates of an MNE. Information on intra-firm versus arm’s-length trade is limited, available only for the US and specific categories of

tax havens have doubled their share since the late 1990

(3) Data for the Marshall Islands start in 2005 and for Bermuda in 2006. In the econometrics below we extend the number of tax havens considered following the list of Tørsløv *et al.* (2023).

(4) Ireland, Luxembourg, Singapore, Belgium, the Netherlands and Malta are the main drivers of the growth in the tax havens’ share of total services trade. On the contrary, the share of Hong Kong decreases over our time period (see appendix Table A.1).

Figure 2 – Tax havens share in global GDP and trade in goods and services



Source: CEPII-CHELEM-BOP.

services. The Bureau of Economic Analysis reports affiliated and unaffiliated trade in services for the category IP, which represents 14% of US exports of services and 8% of US imports of services in 2022. Intra-firm transactions represent 72% of total US imports and exports in this category. When focusing specifically on trade with tax havens, this share rises to 85% and 92% respectively.⁵

How much do tax avoidance strategies distort our understanding of globalization when using aggregate global data? To assess their quantitative impact, we compute the growth of trade in services removing tax havens and compare it to the actual growth

of trade in modern services. We use bilateral trade data from the Bilateral Trade in Services (BITS) database produced by the IMF, which covers 12 categories of trade in services following the Sixth Edition of the Balance of Payments Manual (Li *et al.*, 2025). We combine it with

the list of tax havens from Tørsløv, Wier and Zucman (2023), which includes the 13 tax havens listed above.⁶

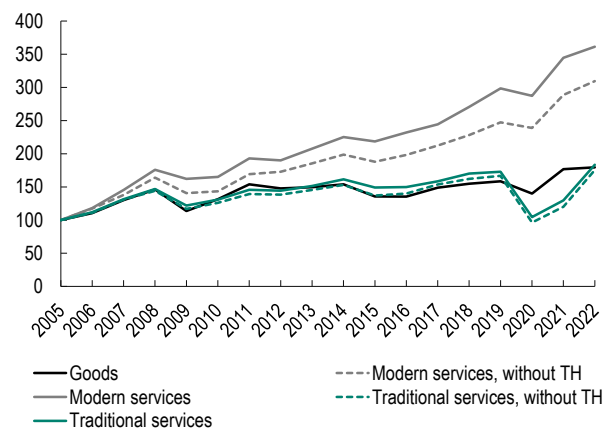
The results reported in Figure 3 show a growing gap between trade in modern services and the counterfactual without tax havens. Over the 2005–2022 period, the growth of modern services is 24.8% larger when including tax havens than when they are excluded as origin or destination. The gap grows particularly large (34.7%) over 2005–2019, and narrows slightly between 2019 and 2022. The difference is much less

(5) Information on trade by affiliation is available for Bermuda, Switzerland, Ireland, Luxembourg, Netherlands, Panama, and Singapore for exports (45% of total US exports of IP) and Switzerland, Ireland, Luxembourg, Netherlands, and Singapore for imports (24% of total US imports of IP).

(6) We use a balanced sample at the country pair level over the period 2005–2022. Our final dataset includes 65 origin countries (including Belgium, Bahrain, Switzerland, Cyprus, Hong Kong, Ireland, Malta, the Netherlands and Singapore as tax havens) and 60 destination countries (including Belgium, Switzerland, Cyprus, Hong Kong, Ireland, Luxembourg, Malta, the Netherlands and Singapore as tax havens).

pronounced for trade in goods or traditional services. However, trade in modern services continues to grow significantly faster than trade in goods.

Figure 3 – Growth of world exports, with and without tax havens (2005=100)



Note: TH stands for Tax Haven.

Source: Authors' computation from IMF BITS database.

3. Tax avoidance strategies affect trade in services beyond royalties

The standard intellectual property-based instrument of tax avoidance involves the location of intangible assets in a tax haven and payments of royalties by other affiliates located in high-tax countries. Such arrangements inflate the exports of royalties (the service category “charges for the use of IP”) of tax havens. The now-defunct “double Irish with a Dutch sandwich scheme” (Setser, 2019), which routed royalty payments through a Dutch affiliate between two Irish entities, further amplified both imports and exports of royalties in tax havens. As Figure 4 shows, tax havens accounted for a disproportionate 35% share of global trade in this service category in 2023.

However, MNEs' global tax strategies extend beyond royalties tied to intangible assets. Setser (2020) highlights several well-documented tax avoidance strategies in the US case,⁷ emphasizing that many US digital companies export R&D services to their Irish affiliates – entities that hold rights to worldwide sales through, e.g., cost-sharing arrangements – while exporting communication and software services from Ireland to markets where their products are sold.⁸ Such arrangements inflate both tax havens' exports of communication and software services and imports of R&D services. Note that these transactions can be routed through Caribbean affiliates, further inflating trade in services from/to tax havens. Setser (2020) suggests that MNEs' affiliates in tax havens could import other business consulting services as part of similar strategies. OBS account for 40% of trade in modern services, with tax havens representing a quarter of these cross-border transactions (Figure 4 and Appendix Figure A.1).

tax avoidance strategies can artificially inflate both exports and imports of tax havens across different categories of services

(“Manufacturing services on physical inputs owned by others” and exports of goods by the tax haven.⁹)

Tax avoidance strategies can thus artificially inflate both exports and imports of tax havens across different categories of services. As Figure 4 highlights, tax havens accounted for nearly 35% of global trade in IP and financial services in 2023. Their share remains substantial, around 25%, for other categories, including OBS and TCI.

4. Further evidence from regressions

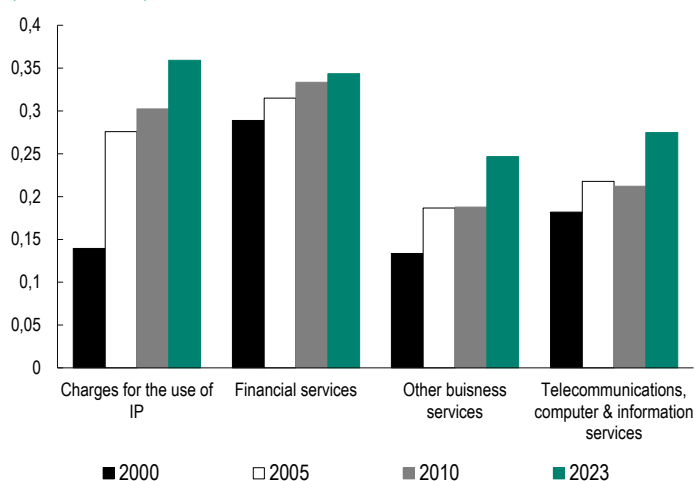
We now turn to regression analysis to provide descriptive evidence of the magnitude of the tax haven premium in different categories of trade in services, controlling for the other characteristics affecting bilateral trade flows. Following Hebous and Johannesen (2021), we estimate a gravity equation as follows:

$$T_{odt} = e^{\beta_1 \log GDP_{ot} + \beta_2 \log GDP_{dt} + X_{odt} + TH_o + TH_d + FE_t + \epsilon_{odt}},$$

where T_{odt} is bilateral exports from country o to country d at time t . Our key variables of interest, TH_o and TH_d , are dummy variables indicating whether the origin or destination country is a tax haven, respectively. Since these variables are country-specific, we cannot include origin-time and destination-time fixed effects to account for inward and outward multilateral resistance terms. We include GDP_{ot} and GDP_{dt} to control for the size of the exporting and importing country. X_{odt} includes all standard bilateral determinants of trade flows: (log) distance, contiguity, common language or colonial history, regional trade agreements and European Union membership. Our preferred estimation uses PPML with a panel from 2005 to 2022 with year fixed effects (FE_t).

Our primary data source is the IMF's BiTS database for bilateral trade in services. It is complemented for gravity variables and trade in goods by the November 2022 release of the CEPII Gravity database (Conte *et al.*, 2022). The list of 41 tax havens, from Tørsløv *et al.* (2023), includes the 13 countries considered above. Due to limited data availability for some smaller jurisdictions, the effective number of tax havens in our analysis ranges from 26 to 32, depending on the year.¹⁰ We start by estimating equation (1) for aggregate bilateral trade in services (column (1) in Table 1). The results show that flows with tax havens as origin or destination are 2.5¹¹ times higher than average. Focusing on modern services only, the effect is even larger; bilateral trade with tax havens as origin

Figure 4 – Share of tax havens in selected categories of services (credit + debit)



Source: CEPII-CHELEM-BOP.

Tax-related service imports by tax havens also arise through contract manufacturing. This occurs when an MNE affiliate in a tax haven contracts a foreign firm to manufacture its products while retaining ownership of the inputs and outputs all along the production process. From a balance-of-payments perspective, since no change in ownership occurs, such contract manufacturing is recorded as imports of processing services

(7) In the case of Germany and France, Hebous and Johannesen (2021) and Parra-Ramirez and Vicard (2025) find that service categories at risk of serving tax avoidance include IP, TCI, Financial services, OBS and Transport services.

(8) Parra Ramirez and Vicard (2025) show that more than half of cross-border payments by credit cards for services of French households are made to tax havens, in particular Luxembourg, Malta, Cyprus and Ireland.

(9) See Khder *et al.* (2020) for an illustration of the impact for Ireland.

(10) Gibraltar, Isle of Man, and Jersey are unavailable in the Gravity database. The number of observations with tax havens as origin or as destination is above 30,000 and around 8,000 for sectoral trade.

(11) The interpretation of estimated coefficients of dummies as semi-elasticities in the PPML specification requires taking the exponential.

Table 1 – Aggregate regression results

	(1)	(2)	(3)	(4)	(5)
	Services	Modern	Travel & transport	Goods	Modern post 2015
Log GDP origin	0.815*** (0.059)	0.953*** (0.063)	0.704*** (0.056)	0.847*** (0.050)	0.954*** (0.063)
Log GDP destination	0.856*** (0.028)	0.925*** (0.057)	0.801*** (0.025)	0.875*** (0.025)	0.926*** (0.057)
Log distance	-0.467*** (0.042)	-0.467*** (0.062)	-0.438*** (0.072)	-0.467*** (0.076)	-0.468*** (0.062)
Contiguity dum.	-0.100 (0.115)	-0.547*** (0.148)	0.376*** (0.094)	0.685*** (0.176)	-0.546*** (0.148)
Common language	0.766*** (0.111)	0.984*** (0.148)	0.453*** (0.124)	-0.066 (0.123)	0.984*** (0.146)
Common colonizer	0.338 (0.267)	0.035 (0.230)	0.546* (0.289)	1.135*** (0.285)	0.026 (0.229)
Colonial history	0.577*** (0.153)	0.370* (0.224)	0.772*** (0.115)	0.621*** (0.179)	0.370* (0.223)
RTA	0.224* (0.123)	0.167 (0.115)	0.407*** (0.090)	0.351*** (0.102)	0.168 (0.118)
European Union	0.447*** (0.118)	0.644*** (0.127)	0.289** (0.144)	0.076 (0.145)	0.643*** (0.127)
Tax haven origin	0.937*** (0.171)	1.235*** (0.171)	0.331 (0.247)	0.348** (0.135)	1.126*** (0.169)
TH origin* post 2015					0.202* (0.112)
Tax haven destination	0.925*** (0.180)	1.268*** (0.239)	0.395*** (0.150)	0.632*** (0.231)	1.202*** (0.239)
TH destination* post 2015					0.123 (0.081)
Constant	-24.213*** (1.378)	-29.479*** (1.630)	-21.698*** (1.599)	-9.963*** (1.580)	-29.500*** (1.638)
Observations	176,908	73,875	82,290	159,573	73,875
FE Year	Yes	Yes	Yes	Yes	Yes

Source: Authors' computation.

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. RTA stands for Reciprocal Trade Agreement; TH for tax haven; FE for fixed effects.

or destination is around 3.4 and 3.5 times larger, respectively (column (2)). At this level of aggregation, the impact of tax haven status on imports and exports is similar.

In contrast, for traditional services, tax haven status is not significantly associated with larger trade flows as an origin, and only slightly so as a destination (column (3)). These findings are consistent with the expectation that the impact of tax avoidance strategies falls predominantly on modern services.

Comparing with trade in goods further underscores the distinct role of tax havens in modern services trade. Column (4) shows statistically significant coefficients on tax havens, but lower

in magnitude than for modern services. These positive coefficients, however, are entirely driven by Belgium and the Netherlands (see column (8) in appendix Table A.2), likely due to the well-documented Rotterdam effect,¹² which is unrelated to their tax haven status. Excluding these two countries from the estimation does not affect the results for services trade.

Finally, we examine whether the inflated trade flows involving tax havens have increased over time. Column (5) focuses on modern services and introduces interaction terms between the tax haven dummies and a post-2015 indicator variable. The results provide evidence that tax havens have played a larger role in world trade of modern services after 2015, in line with evidence in Figure 2. The coefficient for origin is statistically significant at the 10% level, suggesting a 23% higher difference between tax havens and other countries after 2015. The coefficient for destination is borderline-significant.

Turning to detailed trade data by category of services (Table A.3, we find that the coefficients for tax havens variables are statistically significant and sizable for financial services, IP, TCI, and other business services (OBS). Point estimates are generally larger for tax havens as origins than as destinations. Trade flows to/from tax havens are particularly large for IP (8.1 time larger as origin and 5.3 times larger as destination). These findings align with the tax avoidance strategies discussed in Section 3 but also point to a complex role of tax havens that are both at the origin and destination of IP flows.

The category of OBS includes R&D services, professional and management consulting, and technical services. For this category, flows destined to tax havens are 3.9 times higher than average flows while those

flows with tax havens as origin or destination are 2.5 times higher than average

originating from them are 2.5 times higher. The stronger effect for tax havens as importer is in line with the cost-sharing arrangements where tax haven affiliates pay for the R&D in exchange for licensing rights. The results for manufacturing

(12) The IMF-IMTS (DOTS) bilateral trade in goods database may overestimate the trade of the Netherlands since the reporting standard considers flow transiting through Rotterdam as destined to or originated from the Netherlands while its actual destination or origin is another member state (Cotterlaz & Vicard, 2025).

services on physical inputs owned by others are also sizeable and in line with the tax strategies outlined in Section 3. Imports of tax havens are 4.1 times larger while their exports are not statistically different from average.

Finally, tax haven status has no impact on trade in travel, construction and personal services¹³ categories that are not expected to be influenced by the tax strategies of MNEs.

The econometric results therefore confirm the disproportionate and growing role of tax havens in modern services trade. The significant coefficients on tax havens as both origins and destinations suggest that tax havens are not merely specialized in these services but also intermediaries in MNEs' complex networks. Moreover, the widespread significance of tax haven coefficients across service categories indicates that their role in services trade is more complex than the narrow tax avoidance schemes of individual MNEs might imply.

tax havens are not merely specialized in these services but also intermediaries in MNEs' complex networks

Conclusion

The narrative of services as the new engine of globalization is compelling, but it risks overstating the depth and nature of global economic integration. Our analysis reveals that the tax havens now account for over a quarter of global trade in modern services, a share that has doubled since the late 1990s. This outsized role is not a reflection of genuine economic activity but rather the result of MNEs' tax avoidance strategies, which inflate recorded trade flows. The growth of modern services trade since 2005 is a quarter higher when tax havens are included than when they are excluded.

This distortion in recorded trade flows calls for a more nuanced understanding of globalization – one that accounts for the increasing complexity and opacity of cross-border transactions, where tax havens act as critical intermediaries in multinational networks. Ensuring an open global economy in the future requires questioning the gains from this type of trade integration, as well as its impact on global interdependencies and exposure to economic and political shocks.

this distortion in recorded trade flows calls for a more nuanced understanding of globalization

(13) For personal services, tax haven status is not significant as destination but unexpectedly significant as origin, although at the 10% level only and with a lower magnitude than other categories of services.

References

- Antràs, P. (2021). "De-Globalisation? Global Value Chains in the Post-COVID-19 Age". 2021 ECB Forum: "Central Banks in a Shifting World" Conference Proceedings.
- Baldwin, R., Freeman, R. and A. Theodorakopoulos (2024). Deconstructing Deglobalization: The Future of Trade is in Intermediate Services. *Asian Economic Policy Review*, 19(1): i-iii, 1–152.
- Conte, M., Cotterlaz, P. and T. Mayer (2022). The CEPII Gravity Database. *CEPII Working Paper* No 2022–05, July.
- Coppola A., Maggiori M., Neiman B. and J. Schreger (2021). Redrawing the Map of Global Capital Flows: The Role of Cross-Border Financing and Tax Havens. *The Quarterly Journal of Economics*, Volume 136, Issue 3, August 2021, pages 1499–1556.
- Cotterlaz, P. and V. Vicard (2025). Why Origin Matters in Trade Data. *Review of World Economics*, 161(2), 685–703.
- Damgaard, J., Elkjaer, T. and N. Johannesen (2019). What Is Real and What Is Not in the Global FDI Network? International Monetary Fund.
- Delatte A-L., Guillin A. and V. Vicard (2022). Grey Zones in Global Finance: The Distorted Geography of Cross-border Investments, *Journal of International Money and Finance*, 120, p. 102540.
- Dharmapala, D. and J.R. Hines (2009). Which Countries Become Tax Havens? *Journal of Public Economics*, 93(9-10): 1058–1068.
- Hebous, S. and N. Johannesen (2021). At your service! The Role of Tax Havens in International Trade with Services. *European Economic Review*, 135, 103737.
- Khder, M.-B., Montornès, J. and N. Ragache (2020). Irish GDP Growth in 2015: A Puzzle and Propositions for a Solution. *Economics and Statistics*, No 517-518-519.
- Li, N., Meleshchuk, S., Yin, Q., Zhao, D. and R. Zymek (2025). Bilateral Trade in Services: Insights from A New Research Dataset, *IMF Working Paper*, WP/25/163.
- McKinsey (2022). Global Flows: The Ties that Bind in an Interconnected World. McKinsey Global Institute Discussion Paper, November.
- Parra-Ramirez, K. and V. Vicard (2025). The Instruments of Profit Shifting. *CEPII Working Paper*, No 2025-16.
- Setser, B.W.(2019). \$500 Billion in Dividends out of the Double Irish with a Dutch twist (with a bit of Help from Bermuda). Council on Foreign Relations, August 12.
- Setser, B.W. (2020). When the Services Trade Data Tells You More About Tax Avoidance Than About Actual Trade. Council on Foreign Relations, April 20.
- Tørsløv, T., Wier, L. and G. Zucman (2023). The Missing Profits of Nations. *The Review of Economic Studies*, 90(3), 1499–1534.
- WTO (2025). Global Value Chain Development Report 2025 – Rewiring GVCs in a Changing Global Economy. WTO, Geneva.

About the authors

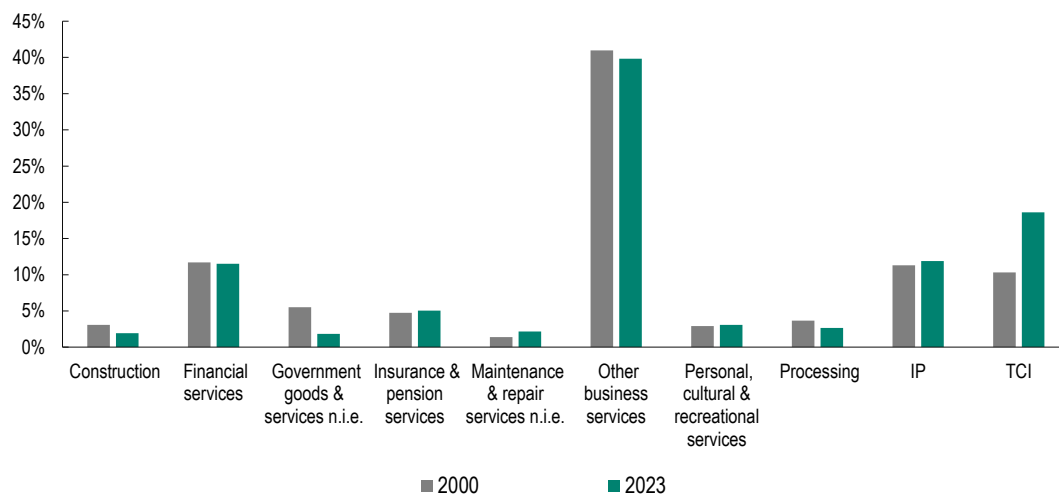
Simon Keller is economist at CEPII.

Vincent Vicard is director of the international trade department at CEPII.

Contact: vincent.vicard@cepii.fr

Appendix

Figure A.1 – Share of service category in world services flows (credit and debit)



Source: CEPII-CHELEM.BOP.

Note: n.i.e. stands for not included elsewhere

Table A1 – Share of tax havens in world trade in services by country (credit and debit)

	2000-2005	2018-2023
Belgium	1,81%	2,18%
Bahamas	0,08%	0,04%
Bermuda	0,00%	0,01%
Switzerland	2,51%	2,42%
Cyprus	0,18%	0,27%
Hong Kong	2,14%	1,31%
Ireland	2,12%	5,85%
Luxembourg	1,14%	1,97%
Marshall Islands	0,00%	0,00%
Malta	0,09%	0,26%
Netherlands	3,44%	3,88%
Panama	0,10%	0,14%
Singapore	1,82%	4,12%

Source: CEPII-CHELEM-BOP.

Table A2 – Additional regression results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Services OLS	Services PPML	Modern OLS	Modern PPML	Travel & transport OLS	Travel & transport PPML	Goods OLS	Goods PPML	Modern OLS	Modern PPML
Log GDP origin	0.864*** (0.048)	0.815*** (0.057)	1.128*** (0.063)	0.948*** (0.059)	0.980*** (0.059)	0.708*** (0.055)	1.353*** (0.038)	0.083*** (0.003)	1.128*** (0.063)	0.951*** (0.059)
Log GDP destination	0.851*** (0.046)	0.858*** (0.029)	1.073*** (0.055)	0.930*** (0.054)	1.028*** (0.060)	0.802*** (0.025)	1.059*** (0.034)	0.064*** (0.002)	1.073*** (0.055)	0.930*** (0.055)
Log distance	-0.784*** (0.077)	-0.481*** (0.044)	-0.854*** (0.101)	-0.496*** (0.065)	-0.903*** (0.111)	-0.439*** (0.071)	-1.054*** (0.077)	-0.067*** (0.006)	-0.854*** (0.101)	-0.495*** (0.064)
Contiguity dum.	1.007*** (0.174)	-0.048 (0.120)	0.282* (0.167)	-0.443*** (0.158)	0.730*** (0.178)	0.388*** (0.092)	0.870*** (0.190)	0.012 (0.013)	0.281* (0.167)	-0.445*** (0.159)
Common language	0.658*** (0.177)	0.854*** (0.066)	0.945*** (0.210)	1.110*** (0.088)	0.762*** (0.253)	0.478*** (0.121)	0.621*** (0.164)	0.037*** (0.010)	0.947*** (0.210)	1.101*** (0.091)
Common colonizer	0.175 (0.320)	0.174 (0.245)	0.241 (0.312)	-0.196 (0.171)	0.459 (0.424)	0.496* (0.283)	1.227*** (0.306)	0.083*** (0.020)	0.240 (0.312)	-0.196 (0.172)
Colonial history	2.008*** (0.203)	0.528*** (0.149)	1.598*** (0.217)	0.294 (0.209)	1.985*** (0.266)	0.762*** (0.121)	1.300*** (0.279)	0.073*** (0.016)	1.596*** (0.217)	0.301 (0.204)
RTA	0.663*** (0.125)	0.123 (0.113)	0.926*** (0.194)	0.017 (0.100)	0.930*** (0.176)	0.375*** (0.088)	0.489*** (0.109)	0.030*** (0.007)	0.925*** (0.194)	0.023 (0.101)
European Union	0.850*** (0.146)	0.609*** (0.109)	1.030*** (0.200)	0.863*** (0.134)	0.720*** (0.195)	0.346** (0.138)	0.410** (0.174)	0.011 (0.013)	1.031*** (0.200)	0.854*** (0.135)
Tax haven origin	1.714*** (0.216)	1.112*** (0.158)	2.168*** (0.268)	1.410*** (0.170)	0.892*** (0.272)	0.459* (0.259)	0.415** (0.191)	0.015 (0.013)	2.165*** (0.286)	1.298*** (0.166)
TH origin* post 2015									0.009 (0.126)	0.219** (0.109)
Tax haven destination	1.458*** (0.167)	1.127*** (0.165)	1.958*** (0.225)	1.500*** (0.227)	1.145*** (0.217)	0.503*** (0.161)	0.096 (0.386)	-0.008 (0.026)	1.825*** (0.231)	1.462*** (0.233)
TH destination* post 2015									0.304** (0.131)	0.074 (0.092)
Constant	-24.149*** (1.474)	-24.159*** (1.320)	-34.766*** (2.186)	-29.255*** (1.486)	-29.757*** (1.957)	-21.806*** (1.556)	-19.877*** (1.124)	0.591*** (0.080)	-34.766*** (2.184)	-29.351*** (1.497)
Observations	137,338	176,908	66,573	73,875	76,526	82,290	159,573	159,573	66,573	73,875
R-squared	0.637		0.694		0.661		0.733		0.695	
FE Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Belgium-Netherlands	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Source: Authors' computation.

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. OLS stands for Ordinary Least Squares; PPML for Pseudo Poisson Maximum Likelihood; RTA for Reciprocal Trade Agreement; EU for European Union; FE for fixed effects.

Table A.3 – Regression results by categories of services

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Manufacturing	Maintenance	Transport	Travel	Construction	Insurance	Financial	IP	TCl	OBS	Personal
	(SA)*	(SB)*	(SC)*	(SD)*	(SE)*	(SF)*	(SG)*	(SH)*	(SI)*	(SJ)*	(SK)*
Log GDP origin	0.869*** (0.176)	0.989*** (0.075)	0.657*** (0.043)	0.709*** (0.075)	0.519*** (0.084)	0.467** (0.196)	0.907*** (0.196)	1.330*** (0.118)	0.738*** (0.050)	0.900*** (0.027)	1.003*** (0.162)
Log GDP destination	0.844*** (0.171)	0.856*** (0.035)	0.783*** (0.024)	0.788*** (0.055)	0.546*** (0.070)	0.989*** (0.115)	0.815*** (0.106)	0.957*** (0.046)	0.906*** (0.060)	0.937*** (0.057)	0.860*** (0.052)
Log distance	-0.666*** (0.137)	-0.298** (0.122)	-0.419*** (0.083)	-0.409*** (0.096)	-0.749*** (0.124)	-1.001*** (0.295)	-0.585*** (0.117)	-0.363*** (0.076)	-0.453*** (0.062)	-0.471*** (0.062)	-0.530*** (0.078)
Contiguity dum.	1.098** (0.490)	0.035 (0.189)	0.151 (0.108)	0.551*** (0.125)	0.350** (0.171)	-1.579*** (0.516)	-1.032*** (0.331)	-0.661*** (0.198)	-0.520*** (0.125)	-0.346* (0.189)	-0.381 (0.235)
Common language	0.088 (0.430)	0.500*** (0.157)	0.318** (0.137)	0.588*** (0.178)	-0.285 (0.199)	2.232*** (0.324)	1.564*** (0.164)	0.510*** (0.196)	0.927*** (0.231)	0.885*** (0.170)	1.294*** (0.130)
Common colonizer	-0.798 (0.532)	0.801*** (0.290)	0.788*** (0.195)	0.282 (0.536)	0.475** (0.206)	-1.507*** (0.473)	-0.204 (0.437)	-1.296*** (0.402)	0.391 (0.329)	0.160 (0.239)	-0.190 (0.440)
Colonial history	0.138 (0.642)	0.248 (0.422)	0.688*** (0.147)	0.806*** (0.165)	0.806*** (0.192)	-1.247** (0.529)	0.267 (0.378)	0.097 (0.349)	0.343 (0.226)	0.503** (0.247)	0.038 (0.230)
RTA	1.183*** (0.239)	0.574*** (0.221)	0.284* (0.151)	0.563*** (0.111)	-0.077 (0.326)	-0.908* (0.532)	-0.121 (0.136)	0.197 (0.225)	0.324** (0.157)	0.218* (0.111)	0.236* (0.122)
European Union	-1.093** (0.529)	0.415*** (0.158)	0.206 (0.135)	0.308 (0.204)	-0.292 (0.264)	0.421 (0.304)	0.750*** (0.184)	0.178 (0.312)	0.832*** (0.194)	0.540*** (0.135)	0.151 (0.188)
Tax haven origin	0.311 (0.438)	0.940** (0.450)	0.749*** (0.250)	-0.211 (0.298)	0.336 (0.219)	1.027*** (0.307)	1.407*** (0.415)	2.087*** (0.342)	1.129*** (0.399)	0.918*** (0.124)	0.588* (0.327)
Tax haven destination	1.418*** (0.341)	0.408*** (0.125)	0.640*** (0.192)	0.138 (0.109)	0.064 (0.159)	0.184 (0.375)	1.021*** (0.261)	1.675*** (0.337)	0.765*** (0.197)	1.350*** (0.253)	0.289 (0.184)
Constant	-27.205*** (3.471)	-33.388*** (1.897)	-21.125*** (1.495)	-22.435*** (2.538)	-12.660*** (1.606)	-18.678*** (4.737)	-26.870*** (4.926)	-40.983*** (2.075)	-26.265*** (1.448)	-29.242*** (1.439)	-31.893*** (4.484)
Observations	29,301	37,693	69,311	70,340	46,902	52,885	55,764	50,827	59,218	63,489	51,857
FE Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Authors' computation.

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. RTA stands for Reciprocal Trade Agreement; FE for fixed effects; IP: charges for the use of intellectual property, TCl: telecommunications, computers, and information services, and OBS: other business services. * Extended balance of payments services classification code.

© CEPII, PARIS, 2026

Centre d'études prospectives
et d'informations internationales
20, avenue de Ségur
TSA 10726
75334 Paris Cedex 07

contact@cepii.fr
www.cepii.fr – @CEPII_Paris
Press contact: presse@cepii.fr

CEPII Policy Brief
CEPII's insights on international economic
policy

CEPII (Centre d'Études Prospectives
et d'Informations Internationales) is a
French institute dedicated to producing
independent, policy-oriented economic
research helpful to understand the
international economic environment and
challenges in the areas of trade policy,
competitiveness, macroeconomics,
international finance and growth.

EDITOR-IN-CHIEF:
VINCENT VICARD

EDITORIAL DIRECTOR:
ANTOINE BOUËT

HEAD OF PUBLICATIONS:
ISABELLE BENSIDOUN

VISUAL DESIGN AND PRODUCTION:
LAURE BOIVIN

ISSN 2270-258X

July 2026

To subscribe to
The CEPII Newsletter:
www.cepii.fr/KeepInformed

All rights reserved. Opinions expressed
in this publication are those of the
author(s) alone.

