

The Geography of Capital Allocation in the Euro Area*

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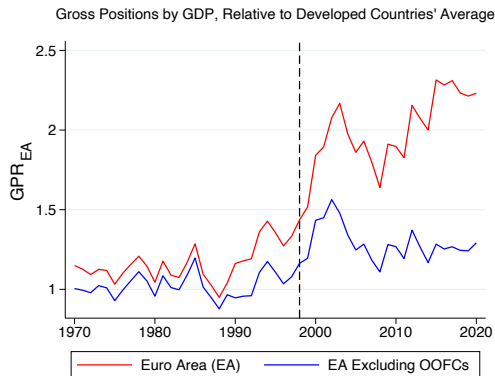
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* Views are those of the authors and do not necessarily reflect those of the ECB.

Luxembourg, Ireland, Netherlands: Onshore Offshore Financial Centers

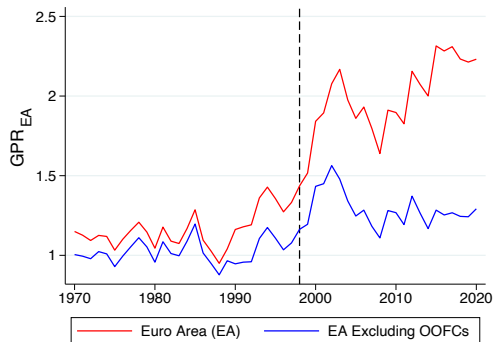
Luxembourg, Ireland, Netherlands: Onshore Offshore Financial Centers



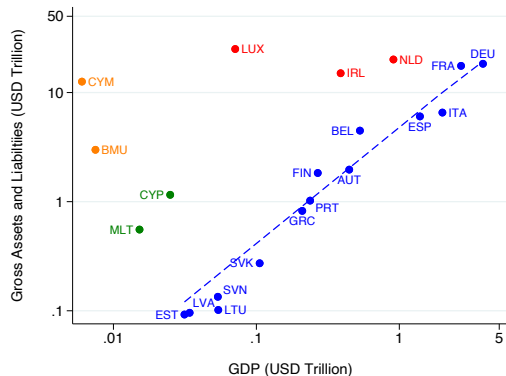
(a) Excess growth of Euro Area gross positions

Luxembourg, Ireland, Netherlands: Onshore Offshore Financial Centers

Gross Positions by GDP, Relative to Developed Countries' Average



(a) Excess growth of Euro Area gross positions



(b) Specialness of OOFs

$$GP_{EA} = \frac{\sum_{i \in EA} (A_i + L_i)}{\sum_{i \in EA} GDP_i} \rightarrow GPR_{EA} = \frac{GP_{EA}}{\sum_{i \in DM} GP_i \frac{GDP_i}{\sum_{i' \in DM} GDP_{i'}}}$$

DM = {USA, JPN, GBR, CHE, AUS, NZL, KOR, NOR, CAN}

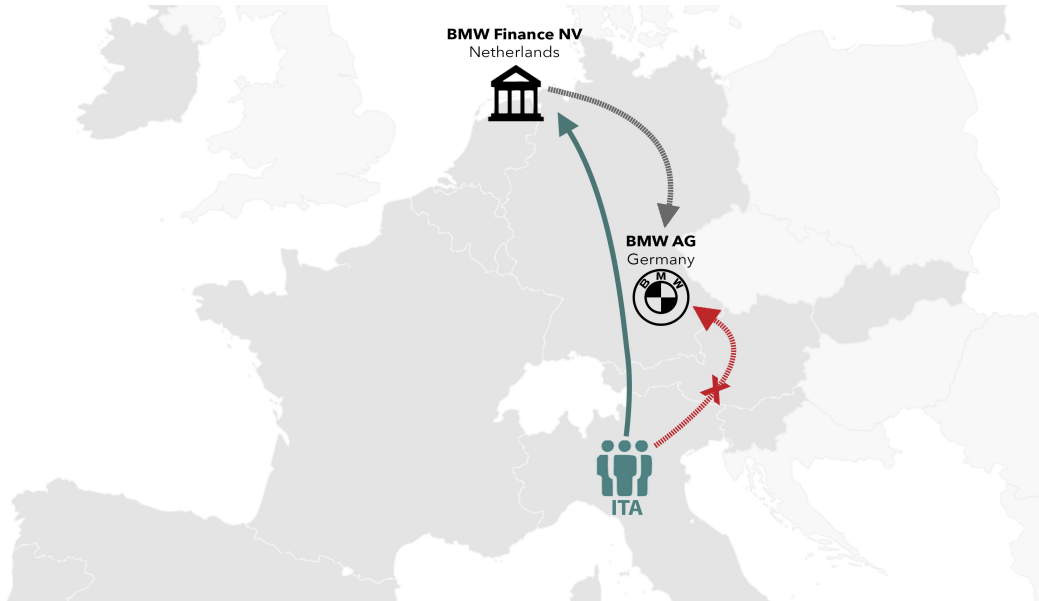
The Role of European Financial Centers in Capital Allocation



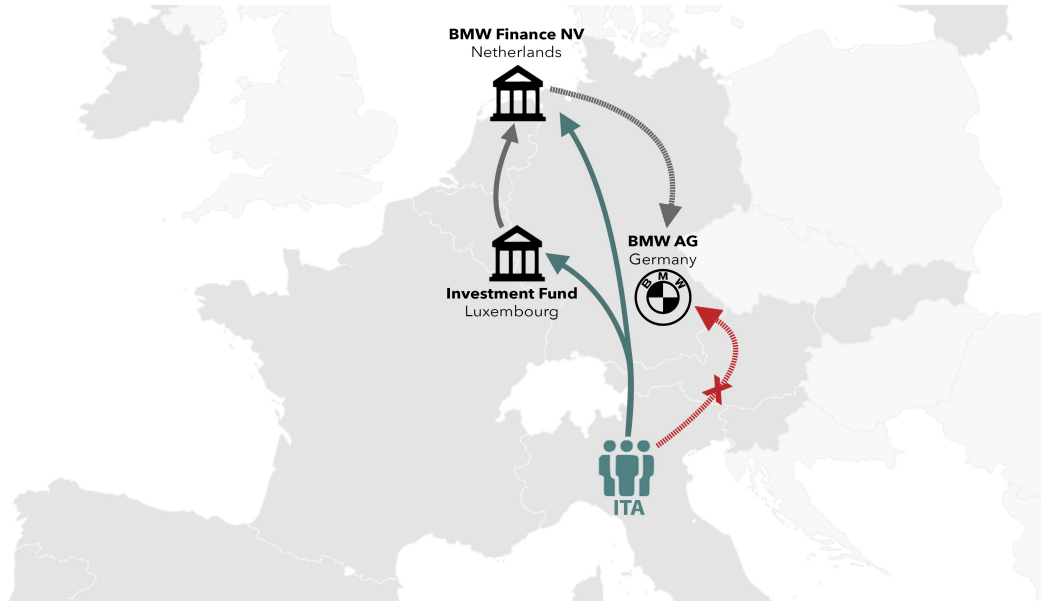
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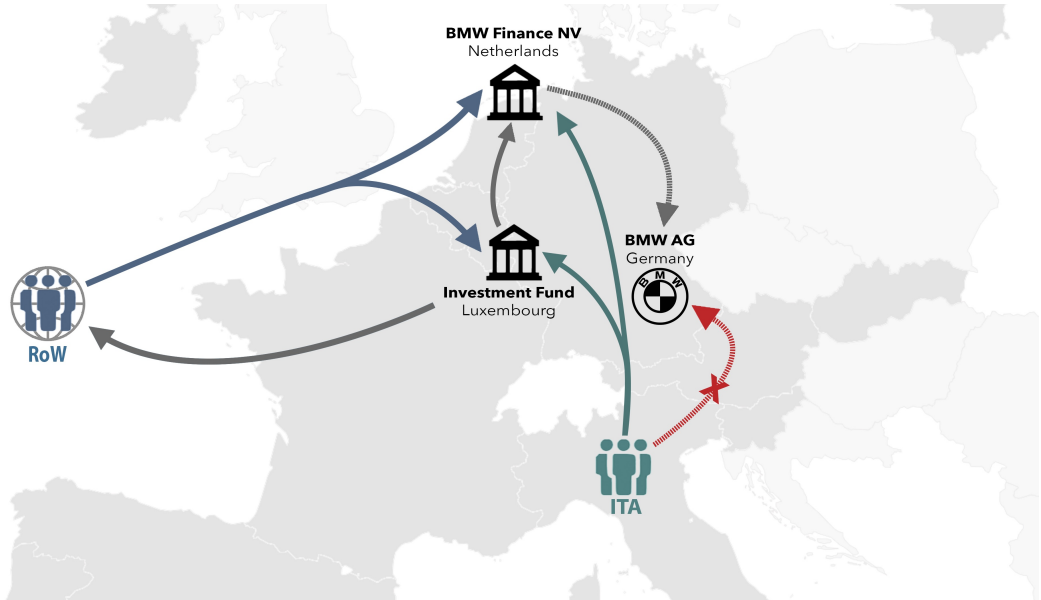
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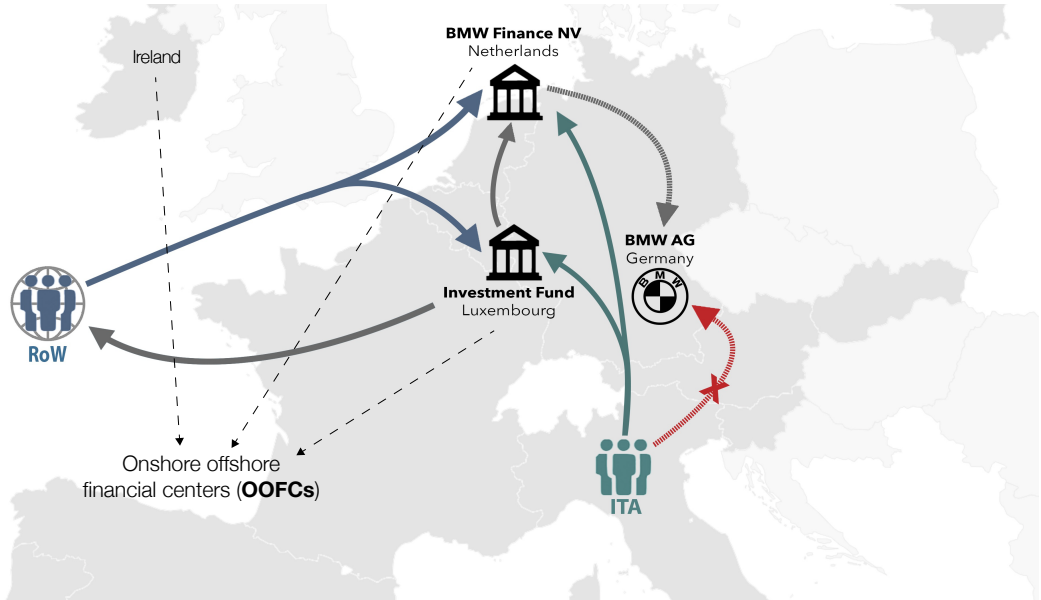
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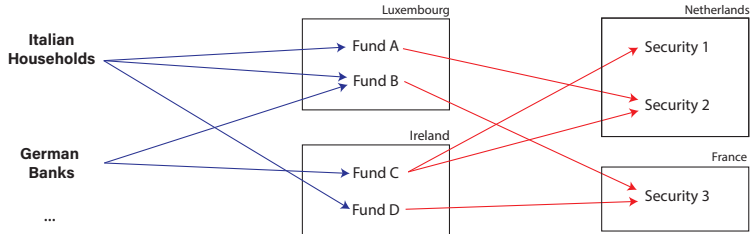


How Big of a Deal Is This?

- ▶ Not possible to assess cross-border holdings in Euro Area without addressing these issues
- ▶ **LUX and IRL funds** manage 40% of cross-border equity and bond holdings of Euro Area
 - ▶ LUX and IRL fund assets €7.5tn, compared to €2tn for Germany, €240bn for Italy
- ▶ **Securities issuance**: 33% of cross-border corporate bond holdings in Euro Area in OOFCS
- ▶ Opaque ownership: 43% of LUX, IRL fund shares have unknown owners in int'l statistics

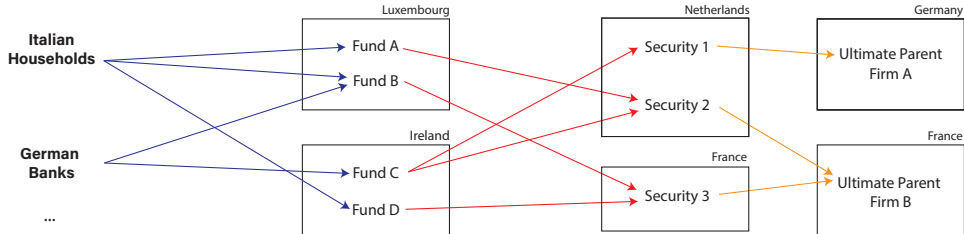
Methodology: Unwinding Holdings Intermediated Through OOFCs

- ▶ Throughout, we rely on multiple data sources:
 - ▶ **ECB SHS**: Each EA country's security holdings, including of fund shares in LUX and IRL
 - ▶ **Morningstar**: Each fund's complete holdings of securities worldwide
- ▶ Merging them allows us to look through entire intermediation chain



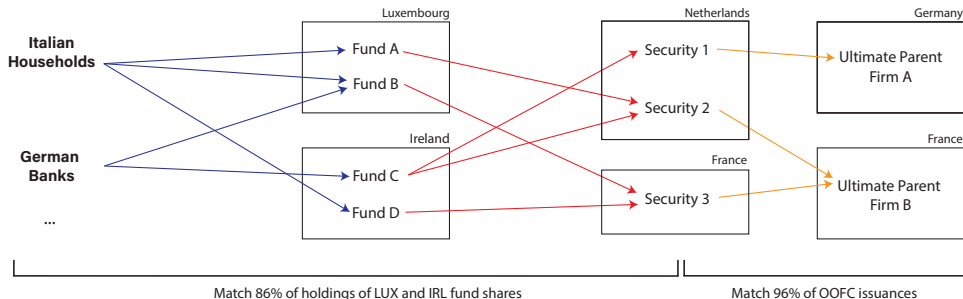
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The Impact of Our Fund Unwind on Portfolios

$$\begin{array}{ccccccc} & & \textcircled{1} & & \textcircled{2} & & \textcircled{3} \\ \text{Observed} & = & \textit{Direct Portfolio} & + & \textit{Indirect Portfolio} & + & \textit{Indirect Portfolio} \\ \text{EA Portfolio} & & \text{of EA Investors} & & \text{of EA Investors} & & \text{of RoW Investors} \end{array}$$

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The Impact of Our Fund Unwind on Portfolios



Consequences at aggregate EA level:

← Removing portfolio 3

1. Gross external position smaller
2. Euro and domestic exposures larger

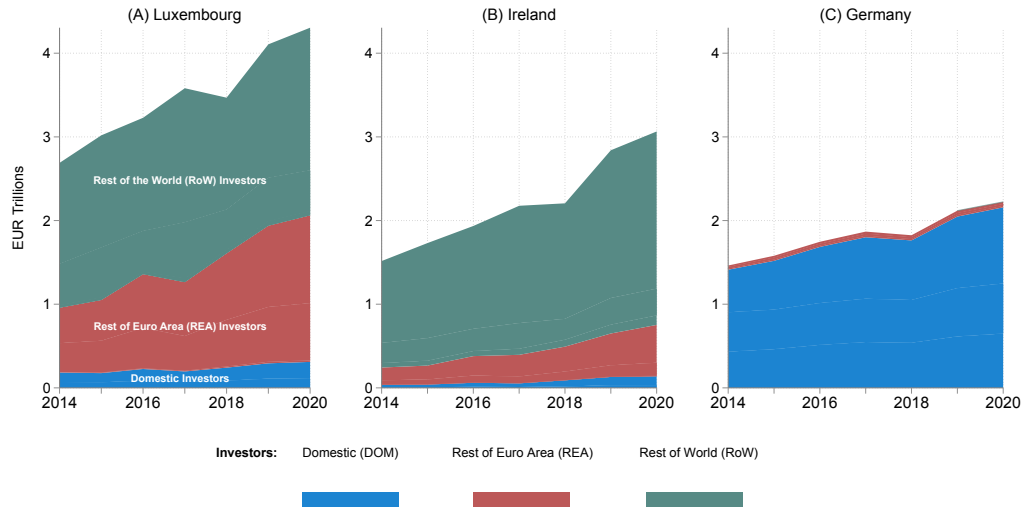
Consequences at individual EA country level:*

← Adding portfolio 2

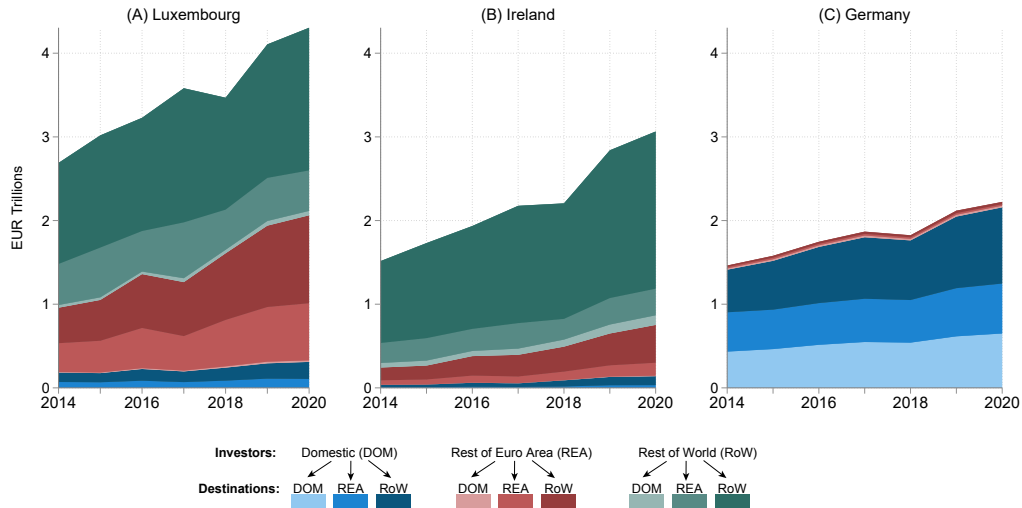
1. Increased diversification through OOFc holdings
2. Euro and domestic exposures smaller

* Excluding Luxembourg and Ireland

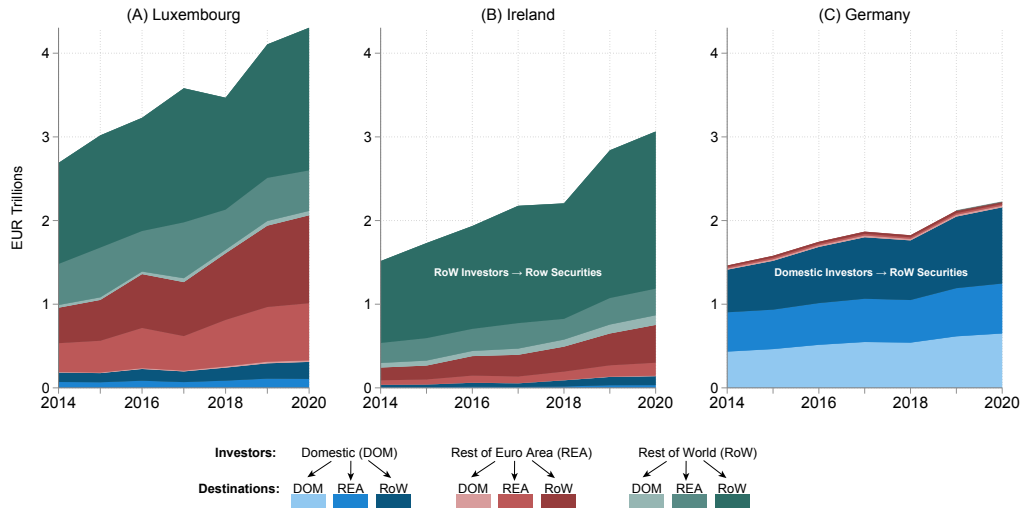
RoW and Euro Area Investors: Different Destinations via LUX, IRL Funds



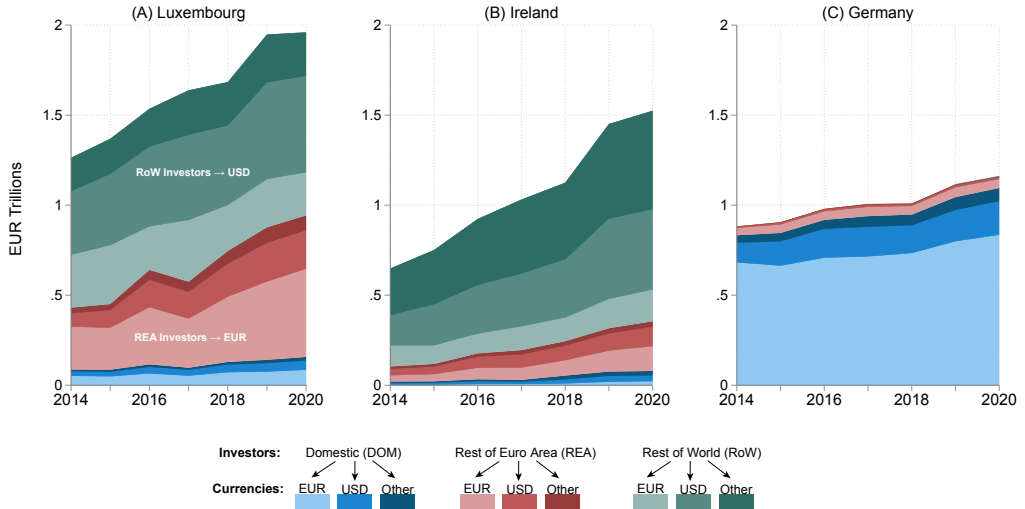
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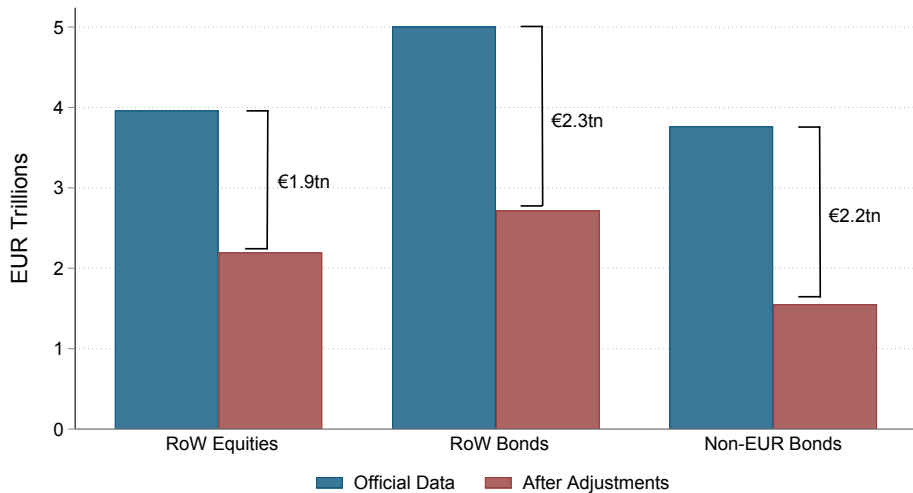
RoW and Euro Area Investors: Different Destinations via LUX, IRL Funds



RoW and Euro Area Investors: Different Currencies via LUX, IRL Funds



Aggregate Consequences for the Euro Area's External Position



⇒ Euro Area's gross external position substantially smaller, with larger Euro exposure

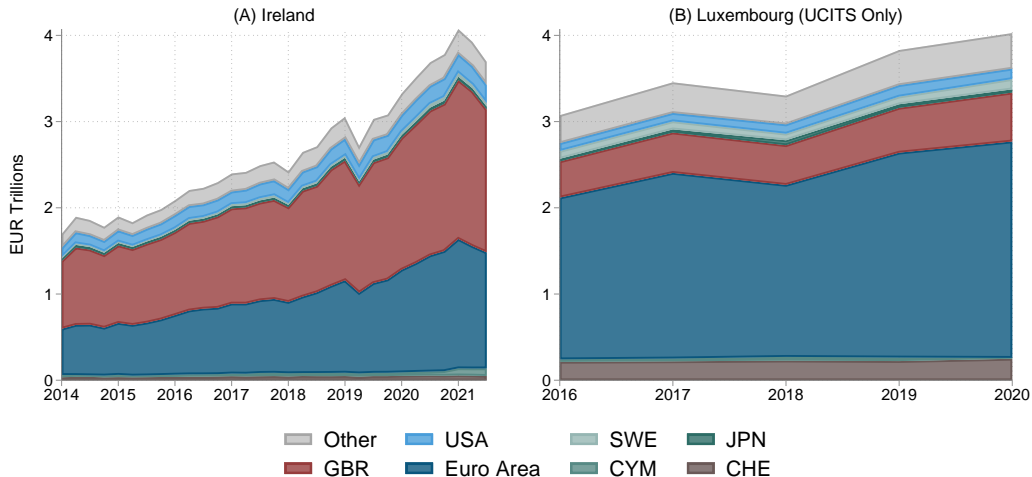
Who Are the RoW Investors in Luxembourg and Ireland Funds?

- ▶ Well-known discrepancy: countries' declared holdings in LUX and IRL fund shares far below LUX and IRL declared liabilities, difference $> \text{€}3$ trillion
 - ▶ Zucman (2013): might be accounted for by hidden wealth in Switzerland
- ▶ The IIP statistical problem:
 - ▶ Missing custodial data:
 - ▶ LUX and IRL record liabilities (fund shares) on immediate counterparty basis
 - ▶ Ultimate owner country does not report since it is unaware assets exist
 - ▶ Incomplete coverage by reporting countries
- ▶ What we show:
 - ▶ Largest non-EA immediate counterparty for IRL and LUX is GBR, major tax havens small
 - ▶ GBR-held funds similar to observed GBR portfolio (e.g., GBP-biased)
 - ▶ UK incomplete coverage: in IMF CPIS does not include households and non-profits

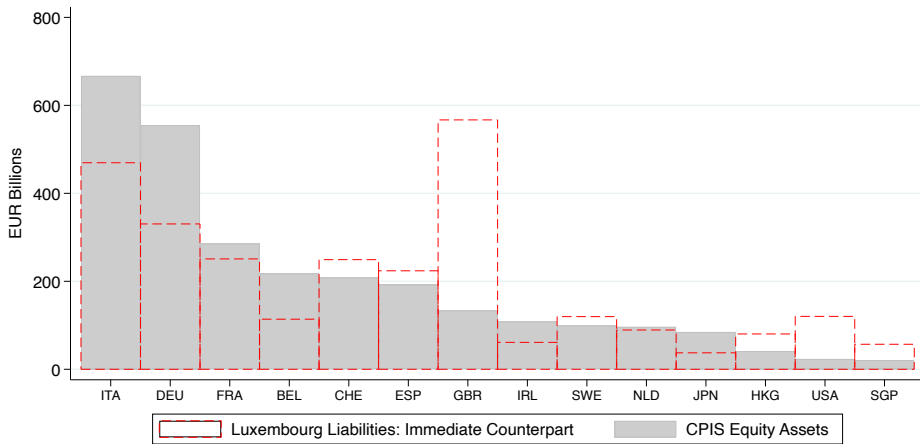
Who Are the RoW Investors in Luxembourg and Ireland Funds?

- New administrative data on immediate owner of fund shares

Ownership of Holdings in Fund Shares: Immediate Counterpart



Who Accounts for the Missing Wealth? Evidence for Luxembourg Funds



- ▶ Switzerland underreporting present, consistent with Swiss custodial data
- ▶ Similar pattern for Ireland funds, GBR large outlier, total gap > €1 trillion

Much More in the Paper

1. North-South asymmetries
2. Allocative effects of OOFC use
3. Formal analysis of portfolios in micro data

Conclusion

- ▶ A new view of capital allocation in the Euro Area
 - ▶ Large role of **onshore offshore financial centers**: Luxembourg, Ireland, Netherlands
- ▶ New estimates allow proper assessment of Euro Area countries' exposures
 - ▶ Resolve intermediation chains through OOFs using new data and methods
- ▶ Takeaways:
 - ▶ Only 50% of wealth in OOFs has known EA holders, who are less globally diversified
 - ▶ Euro Area gross external position up to 50% smaller, more inward-looking
 - ▶ Biases in portfolio allocation in the union: North-South asymmetry, integration tilted towards firms present in OOFs