



NEW DATA: DIGGING INTO THE NET-INFLOW ANALYSIS WITH THE REST OF THE WORLD

22 AND 23 AUGUST 2024 | BASEL

12TH IFC BIENNIAL CONFERENCE 2024

GONÇALO AMADO



BANCO DE
PORTUGAL
EUROSISTEMA



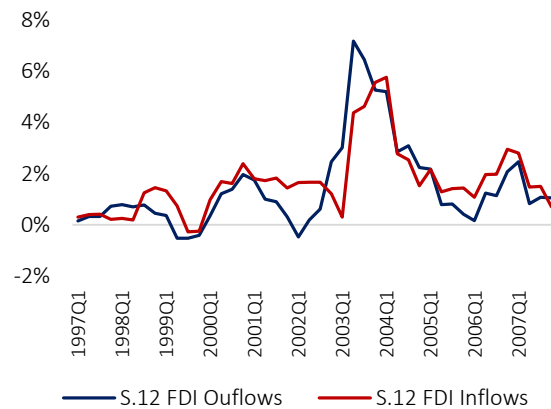
MOTIVATION

- ❑ The economic analysis does not provide numerical benchmarks for determining **what is a 'good' current account balance** (Milesi-Ferretti and Blanchard 2009).
- ❑ The net values of the financial account, translated by its balance, **hide financial phenomena** that can only be perceived by separating assets and liabilities (Obstfeld 2012).
- ❑ Some authors have explored the relevance of gross capital flows (Forbes and Warnock 2012, Broner et al. 2013, Pérez 2019). A country may maintain **relatively stable** external balances while concealing **potentially destabilizing** gross capital flows (Kohler 2022, 2023).
- ❑ The examination of gross external capital flows by instrument, functional category, or sector is frequently **overlooked** (some exceptions: Borio and Disyatat 2011, Avdjiev et al. 2018).
- ❑ ***What do these flows mean for the Portuguese economy?*** A pioneering approach that combines external statistics with quarterly financial accounts, using data from Banco de Portugal.

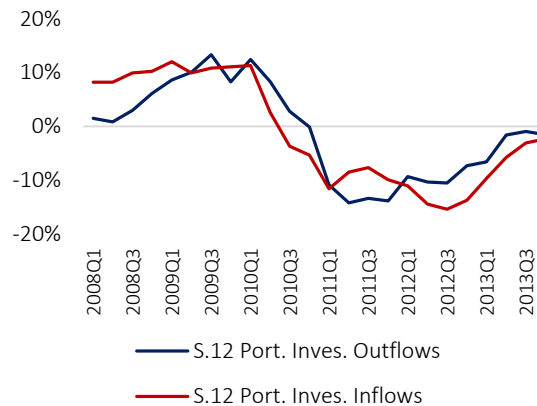


STYLIZED FACT 1: GROSS CAPITAL FOREIGN INFLOWS AND OUTFLOWS BY FINANCIAL CORPORATIONS ARE CORRELATED.

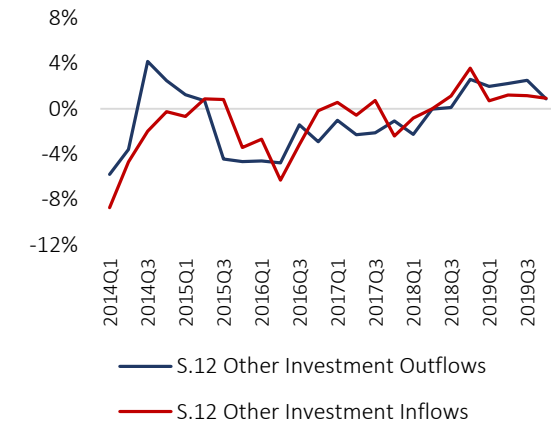
- ❑ Considering external statistics by functional category and sector, correlation matrices were built for different periods, allowing the identification of **three stylized facts**.
- ❑ There are examples of correlations between **capital inflows and outflows** by financial corporations (including Central Bank) towards the rest-of-the-world. The key to understanding the process of capital outflows and inflows involves this sector.



Total amount of **FDI** gross inflows and outflows from financial corporations, **1996Q4-2007Q4** (4-quarters moving sum, % GDP). Correl.: **0.85*****.



Total amount of **portfolio investment** gross inflows and outflows from financial corporations, **2008Q1-2013Q4** (4-quarters moving sum, % GDP). Correl.: **0.88*****.



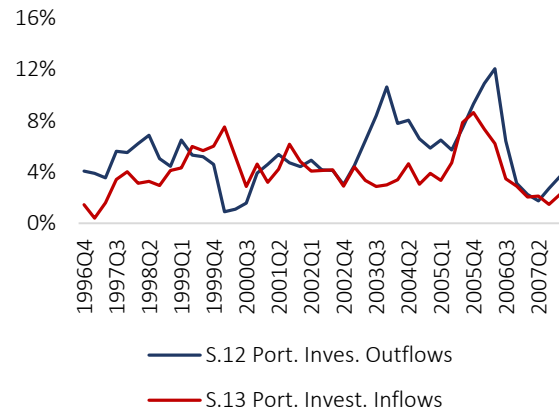
Total amount of **other investment** gross inflows and outflows from financial corporations, **2014Q1-2019Q4** (4-quarters moving sum, % GDP). Correl.: **0.65*****.

Source: author's calculations on Banco de Portugal (BPstat) database.

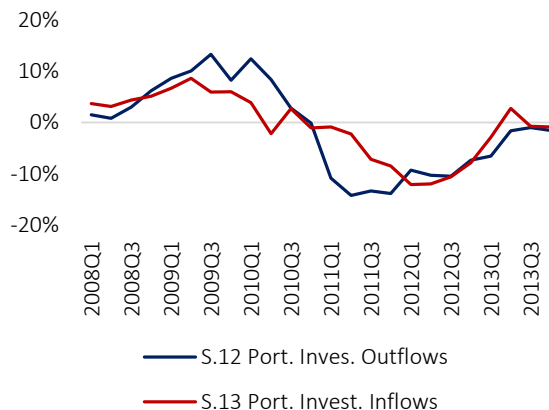


STYLIZED FACT 2: GROSS CAPITAL INFLOWS ON PORTFOLIO INVESTMENT FROM THE GOVERNMENT AND OUTFLOWS FROM THE FINANCIAL SECTOR ARE CORRELATED.

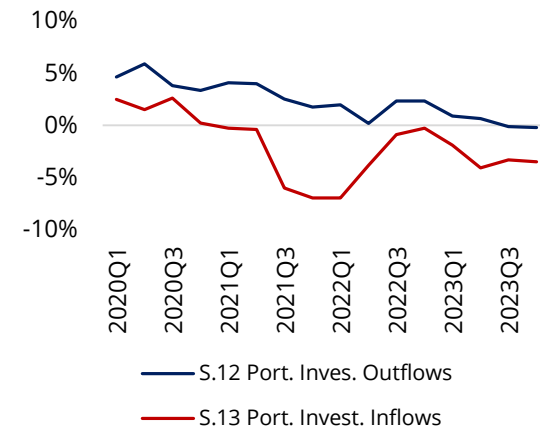
□ These correlations highlight **distinct approaches** of the government and the financial sector towards financial markets.



Total amount of **portfolio investment** gross inflows and outflows from government and financial corporations, respectively, **1996Q4-2007Q4** (4-quarters moving sum, % GDP). Correl.: **0.54****



Total amount of **portfolio investment** gross inflows and outflows from government and financial corporations, respectively, **2008Q1-2013Q4** (4-quarters moving sum, % GDP). Correl.: **0.81*****



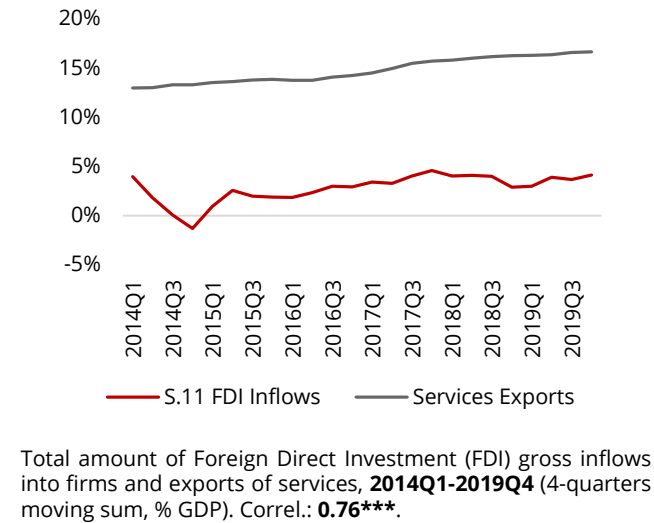
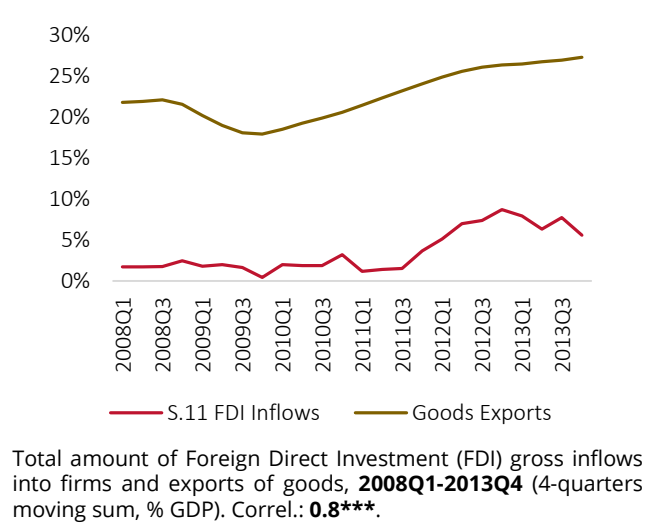
Total amount of **portfolio investment** gross inflows and outflows from government and financial corporations, respectively, **2020Q1-2023Q4** (4-quarters moving sum, % GDP). Correl.: **0.71*****

Source: author's calculations on Banco de Portugal (BPstat) database.



STYLIZED FACT 3: TRADE FLOWS HAVE SMALL CORRELATION WITH GROSS FINANCIAL FLOWS.

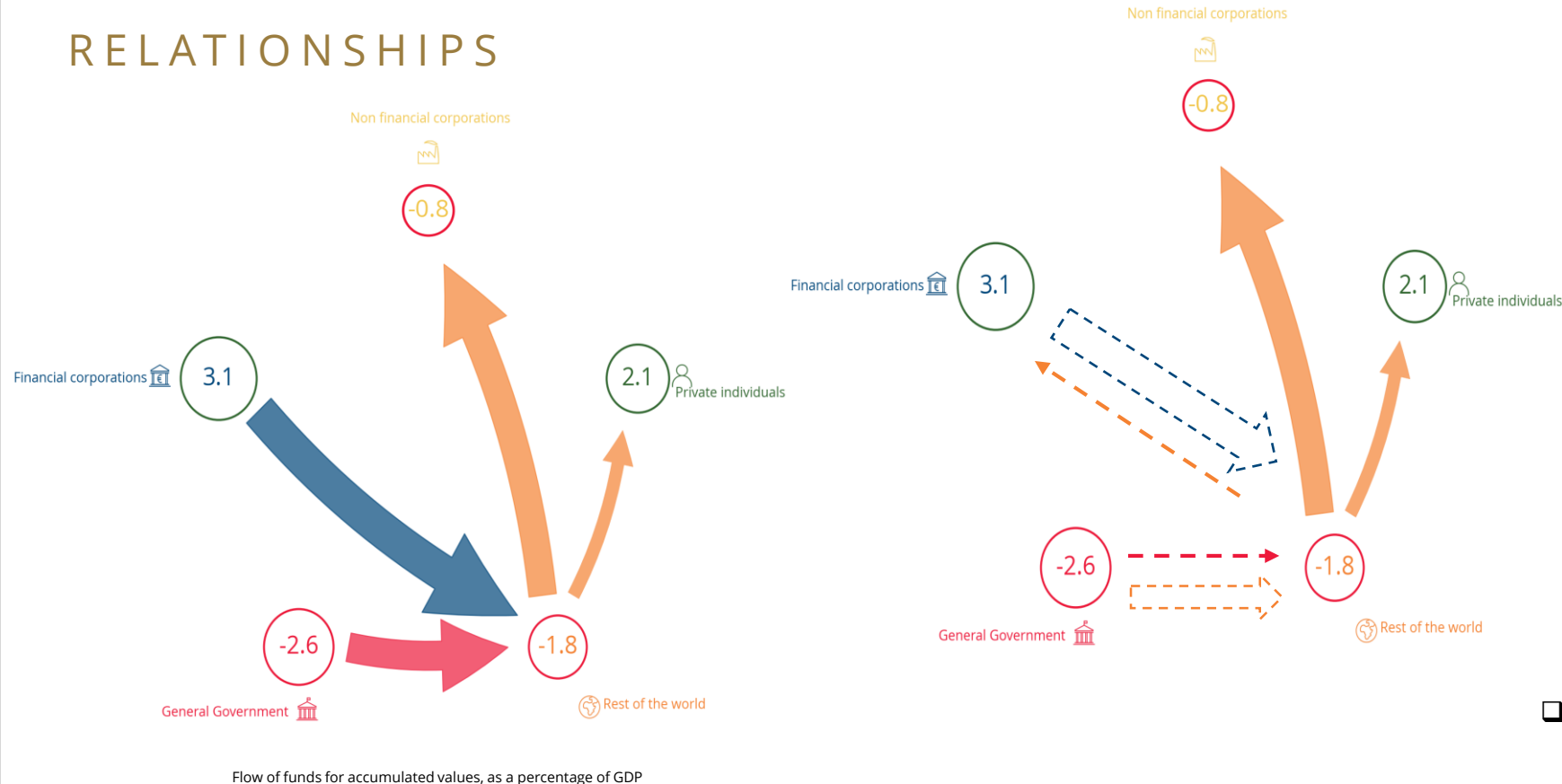
- ❑ *Small correlation between gross financial flows and exports and imports of goods and services and the current account balance. This finding reinforces the argument that there are **capital flows that are quite independent of the current account activity** and are invisible if the analysis is based on net capital flows (Pérez 2019).*
- ❑ **Exceptions:** *strong and significant correlations between exports of goods and services and FDI inflows into firms after the GFC.*



Source: author's calculations on Banco de Portugal (BPstat) database.



2014-2019: FROM A NET-INFLOW ANALYSIS TO GROSS FLOW RELATIONSHIPS



Source: author's calculations on Banco de Portugal (BPstat) database.

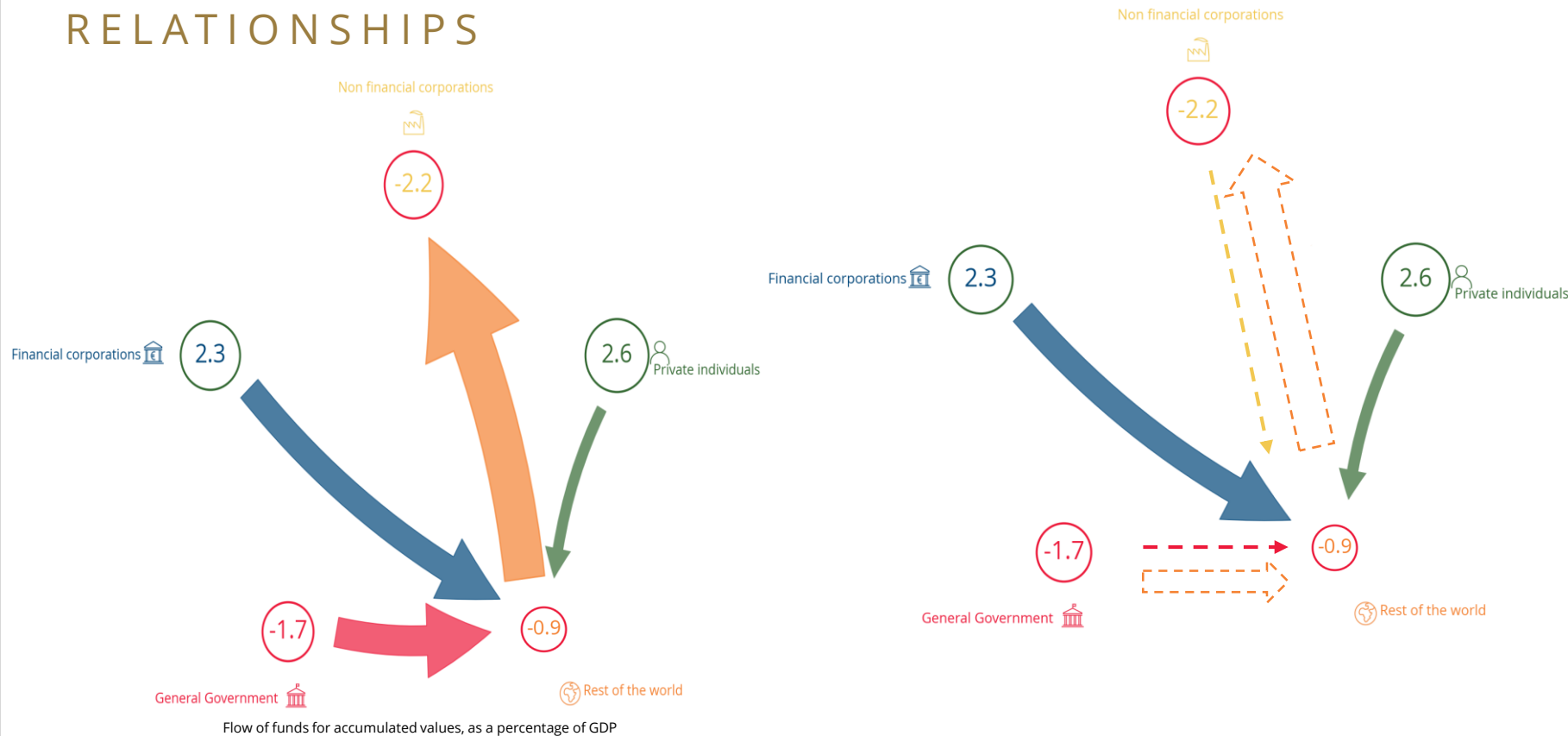
□ The flow of funds allows us to analyze the **balancing item** for each sector and for the total economy vis-à-vis the rest of the world.

□ But we can **go further than a net-inflow analysis**: the detail instrument-by-instrument and sector-by-sector allows the split between assets and liabilities resulting in gross flows.

□ Even when an institutional sector is in a **net borrowing situation**, it can **finance other sectors in gross terms**, a phenomenon not readily apparent in traditional flow of funds analysis.



2020-2023: FROM A NET-INFLOW ANALYSIS TO GROSS FLOW RELATIONSHIPS



- ❑ Two similar net flows can tell **different stories**.
- ❑ The government is **making more investments** abroad than it is receiving in returns from existing assets.
- ❑ Moreover, Government is **decreasing its liabilities** and repaying a greater portion of its existing debt to foreign entities (in form of **securities**).
- ❑ A net flow can hide gross financial flows in **opposite directions**.

Source: author's calculations on Banco de Portugal (BPstat) database.



WHY DIVE INTO THE GROSS CAPITAL FLOWS?

- ❑ Capital flows pose complexity in analysis for both users and policymakers, who **often prioritize examining net flows**.
- ❑ Delving deeply into the balance of payments data and quarterly financial accounts released by the **Portuguese central bank** provides us new insights into gross capital flows, **going beyond the mainstream analysis based on net flows**. These data are compiled and disseminated by national central banks, highlighting their relevance to this audience.
- ❑ Financial corporations played the role **of drivers of financial flows** with foreign countries; the public sector had a **counterbalancing role** to the actions of banks in financial terms; gross capital flows largely operate **independently of trade flows** and the current account balance.
- ❑ Financial interactions among sectors can undergo **substantial changes**, even as the net lending/net borrowing of the total economy **remains relatively stable**.
- ❑ For macroeconomic purposes, when one sector provides net financing to another, it is essential to distinguish whether this net investment manifests as **an increase of gross assets or a diminishment of gross liabilities**. One sector receiving net financing from another, is not excluded from providing financing to other sectors in gross terms.