A Typology of Captive Financial Institutions in Luxembourg: Lessons from a New Database

Gabriele di Filippo & Frédéric Pierret

Statistics Department

Banque Centrale du Luxembourg

1. Definition of Captive Financial Institutions (CFIs)

Captive financial institutions and money lenders (CFIs)
Classified in sector S127 (financial sector)

Can be found in MNEs' structures and located
btw the headquarters and the operating affiliates

Meaning of term « captive »
« Captive » as owned and controlled by and typically for the sole use of an organisation: the parent

Main purpose
- Holding and finance activities
- *e.g.* holding of participations, treasury management, cash pooling, intragroup lending, *etc.*

Geographical location
- Financial centres
- access to various financing means, infrastructure, tax, regulatory and institutional advantages


Diagram 1: Example of a hypothetical complex structure of MNE
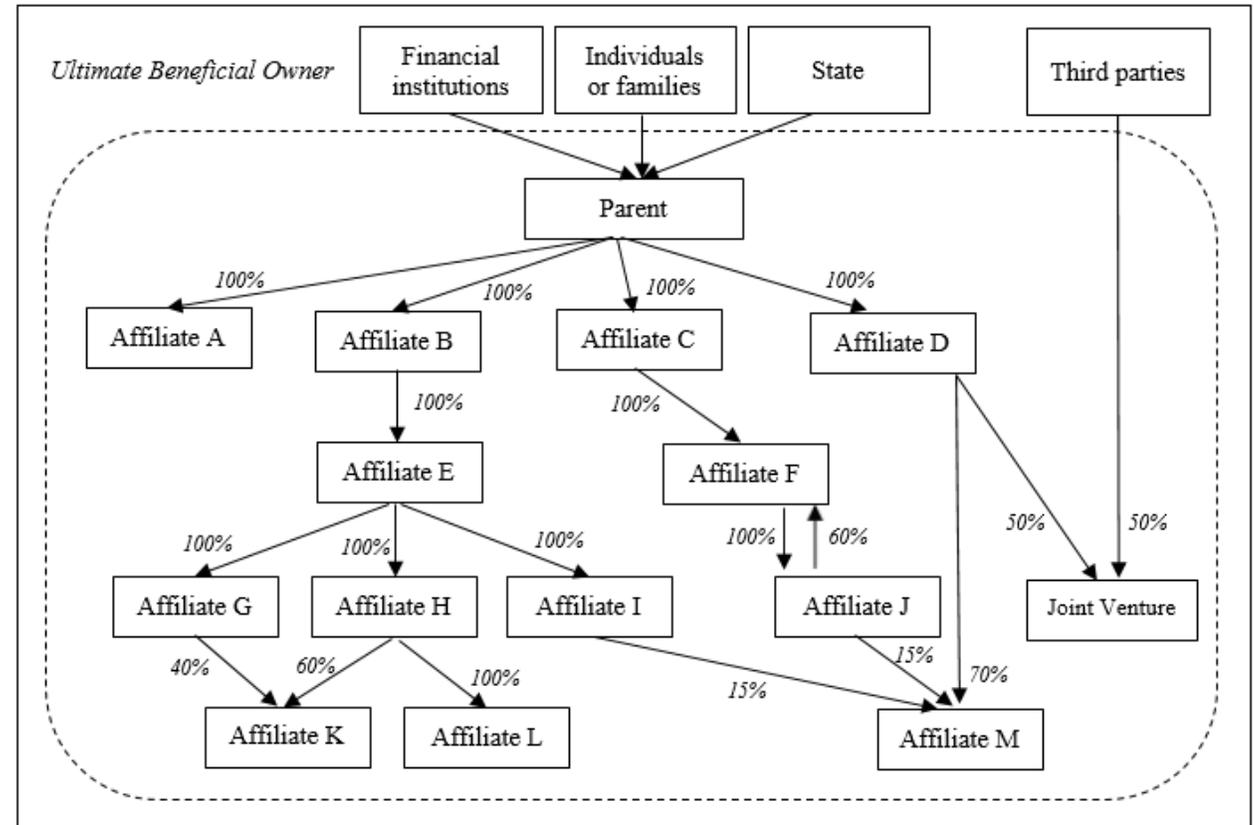
Source: Adapted from UNCTAD (2016)

2. Importance of CFIs in Luxembourg

Chart A: Sectoral decomposition of inward and outward stocks of foreign direct investment in Luxembourg
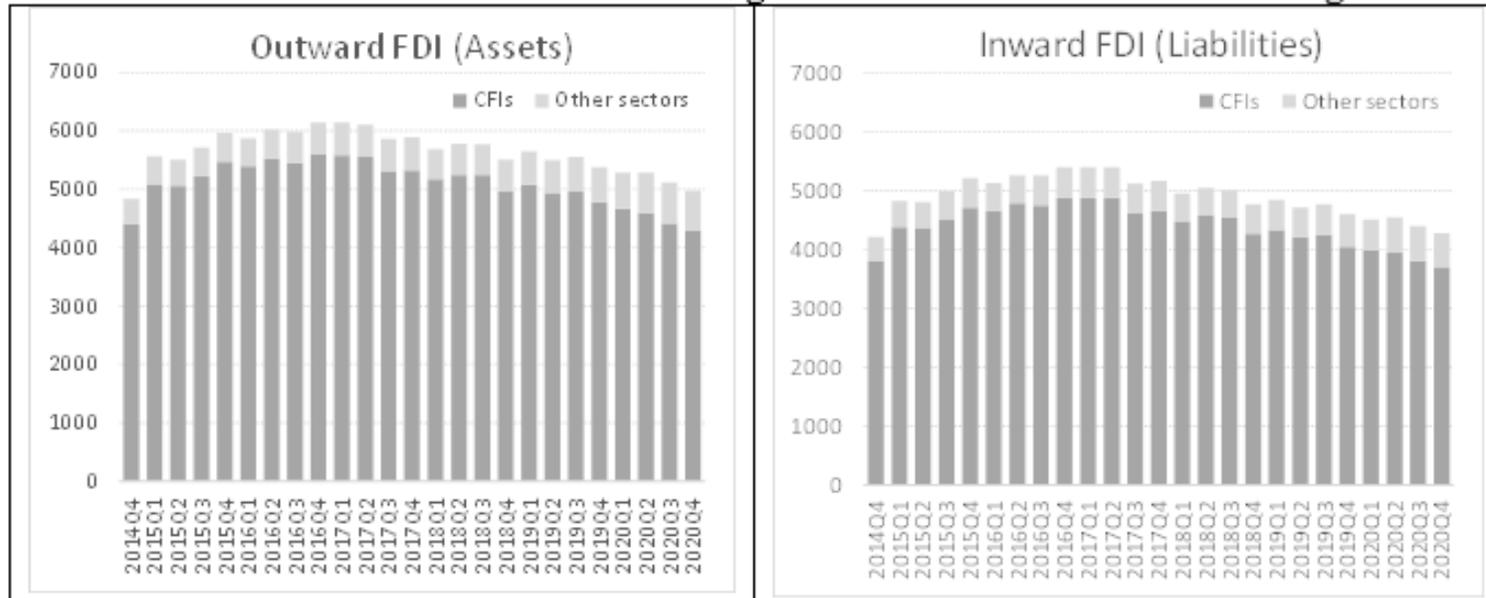
Source: BCL. Unit: EUR billion. Foreign Direct Investment (FDI) stocks measure the total level of direct investment at the end of a quarter. The outward FDI stock is the value of the resident investors' equity in and net loans to enterprises in foreign economies (hence residents' assets). The inward FDI stock is the value of non-resident investors' equity in and net loans to enterprises resident in the reporting economy (hence residents' liabilities).

- CFIs are the major holder of inward and outward stocks of FDI in the international investment position of Luxembourg, compared to the other sectors
- Their share represent 90% of the assets (outward FDI) and 88% of the liabilities (inward FDI) over the period Q4 2014 - Q4 2020

3. Typology of CFIs: Literature Review

Di Filippo and Pierret (2020) "Typology of Captive Financial Institutions and Money Lenders (sector S127) in Luxembourg"
- **Previous work:** Prototype balance sheets of CFIs by IMF (2018)
- **Contribution:** fine-tuned definitions of the potential types of CFIs
- **Data:** BCL reporting collects balance sheet data for resident CFIs with total assets ≥ EUR 500 million

Coverage rate of the population of CFIs in Di Filippo and Pierret (2020)
- **BCL reporting** covers a **sub-sample of the whole population** of CFIs
- Coverage rate in terms of **total assets**: **90%** of the total assets held by the whole population of CFIs
- Coverage rate in terms of **number**: **5%** of the whole population of CFIs

Main challenge
- How to improve the **coverage rate of CFIs** in Luxembourg?

4. New Database for CFIs in Luxembourg

STEP 1: Data providers gathering entities classified as CFIs
- **EuroGroups Register** (EGR) by Eurostat
- **Statistical Business Register** (SBR) by STATEC

    - **CFIs** with total assets **≥ EUR 500 million** and **≤ EUR 500 million**

STEP 2: Accounting data to build the prototype balance sheet of CFIs
- **Central Balance Sheet Register** (CBSR) by STATEC
  - Balance Sheet
  - Abridged Balance Sheet
  - Standardised Chart of Accounts

    - Resort to **Chart of Accounts** as available for more than 99% of CFIs

STEP 3: Build the prototype Balance Sheet of CFIs by matching the balance sheet items
- Matching btw **Chart of Accounts items** & **Balance Sheet items** in **Central Balance Sheet Register**
- Matching btw **Balance Sheet items** in **Central Balance Sheet Register** & **BCL Balance Sheet items**
- Matching btw **BCL Balance Sheet items** & **Prototype Balance Sheet items (IMF (2018), BCL (2020))**

    - **Improve coverage of CFIs** in LU by more than **900% in terms of number** and by more than **5% in terms of total assets**
    - **Annual data** over **2011-2019**

STEP 4: Apply qualitative method as in Di Filippo and Pierret (2020)
- Screen the balance sheet of each CFI based on qualitative criteria (predominance of balance sheet items)
- Match with the pre-determined prototype balance sheet associated to a given type of CFI
- Advantage: avoid arbitrary quantitative thresholds

5. Typology of CFIs: New Database

Chart 2: Typology of CFIs with the new database

Legend: Holding · Intragroup lending · Mixed structures · Conduit · Loan origination · Predominant NFA · Extra-group loan origination · Wealth-holding entities · Captive financial leasing · Captive factoring

Chart 2.1 Total assets
Chart 2.2 Total number

Source: Authors' calculations. Units: EUR billion

Source: Authors' calculations. Units: Total number

Total assets - Main types of CFIs
- Holding corporations (52%)
- Intragroup lending companies (22%)
- Mixed structures (15%)
- Conduits (9%)
- Loan origination companies (1%)

⇒ These entities represent about 99% of the total assets held by CFIs
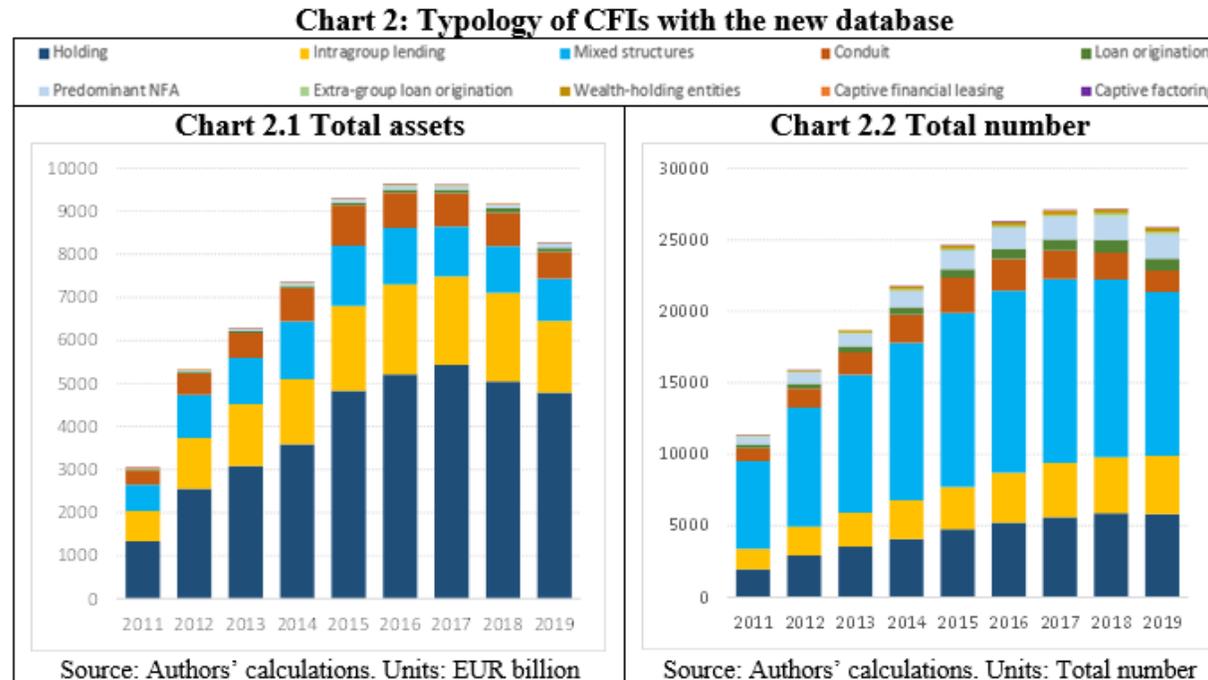
Total number - Main types of CFIs
- Mixed structures (49%)
- Holding corporations (20%)
- Intragroup lending companies (13%)
- Conduits (8%)
- Companies with predominant non-financial assets (5%)

⇒ These entities represent about 96% of the total assets held by CFIs

Proportions of the various types of CFIs differ when considering the typology by total assets or by total number
- Holding entities = largest holder of total assets
- Mixed structures = highest number of companies consists of mixed structures
  - **In terms of number**: other mixed structures (49%), companies declaring losses (negative capital) all over their living period (44%), mix of holding and intragroup lending corporations (7%);
  - **In terms of total assets:** mix of holding and intragroup lending corporations (38%), other mixed structures (34%), companies declaring losses (negative capital) all over their living period (28%)

6

Chart 3: Total number of CFIs with total assets larger than EUR 500 million

Chart 3.1: Total number – new database

Chart 3.2: Total number – BCL reporting
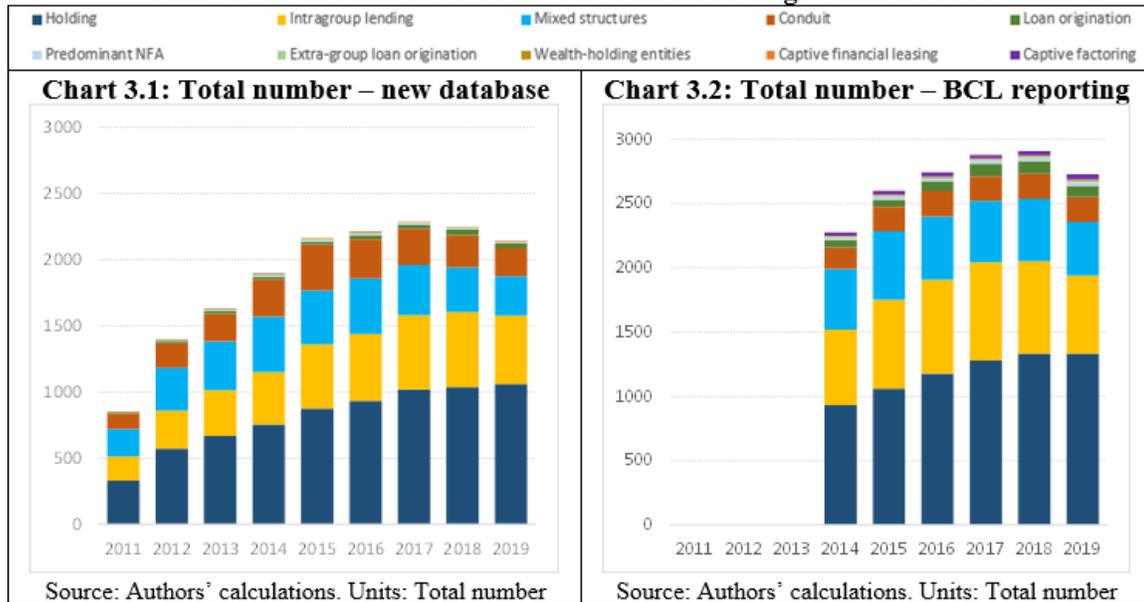
Chart 4: Total assets of CFIs with total assets larger than EUR 500 million
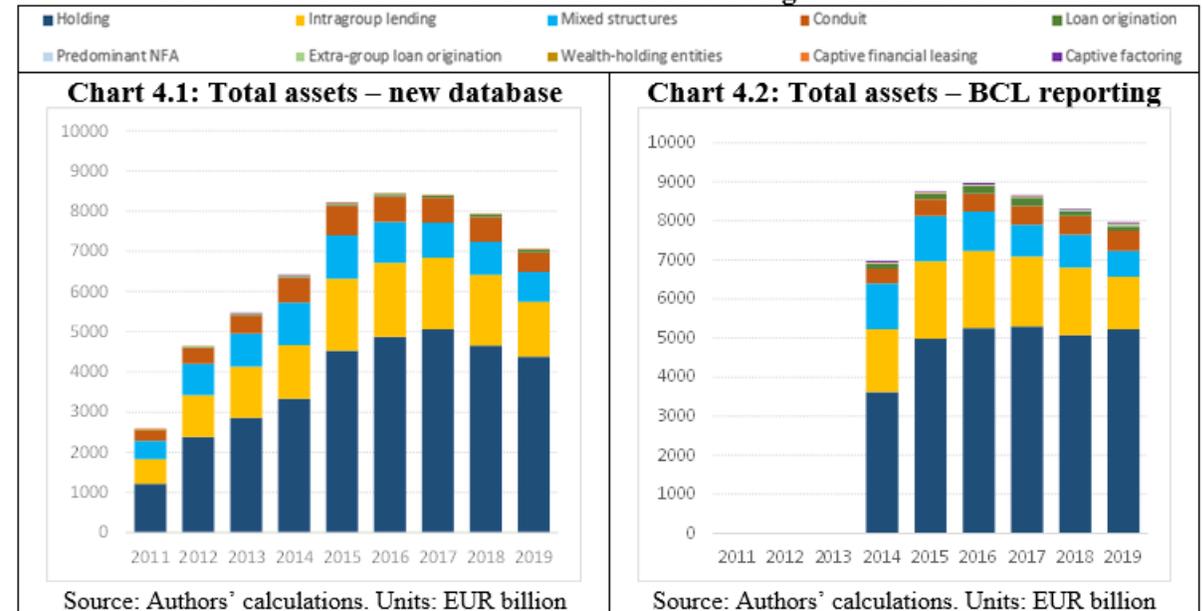
Chart 4.1: Total assets – new database

Chart 4.2: Total assets – BCL reporting

Proportions of the various types of CFIs differ when considering the typology by total assets or by total number

- Typology of CFIs btw new database and BCL reporting shares similar characteristics for CFIs with total assets ≥ EUR 500 million
- Relative importance of holding corporations, intragroup lending companies, mixed structures and conduits
- => In what range of total assets does the proportion of mixed structures increase?
- To address this question, the typology of CFIs must be split across various ranges of balance sheet sizes, spanning [500;+∞[, [400;500[, [300;400[, [200;300[, [100;200[and [0;100[

Chart 5: Total number of CFIs by range of total assets
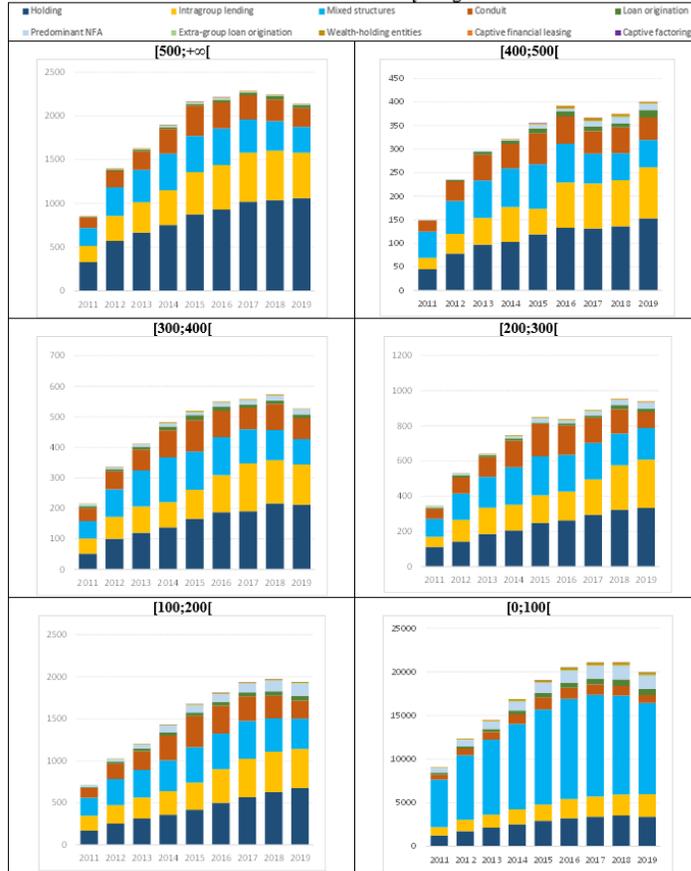
Units: Total number

Chart 6: Total assets of CFIs by range of total assets
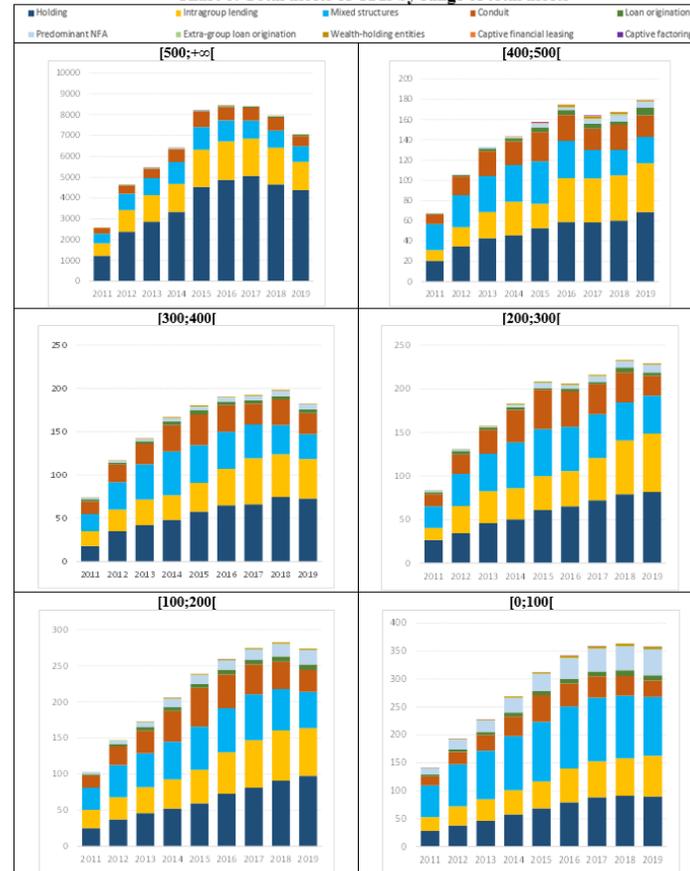
Units: EUR billion

CFIs present different characteristics depending on their balance sheet size

- CFIs with total assets ≥ EUR 100 million: holding companies, intragroup lending corporations, mixed structures and conduits
- CFIs with total assets < EUR 100 million: mixed structures

=> The typology of CFIs differs, depending on the balance sheet size of CFIs

Mixed structures

- mix of holding and intragroup lending corporations, companies declaring losses (negative capital) all over their living period and other mixed structures

Use of mixed structures by MNEs

- Lower costs and higher organisational efficiency
- Mixed structures concentrate on different types of activities within a single structure, instead of resorting to multiple entities that perform a specific activity