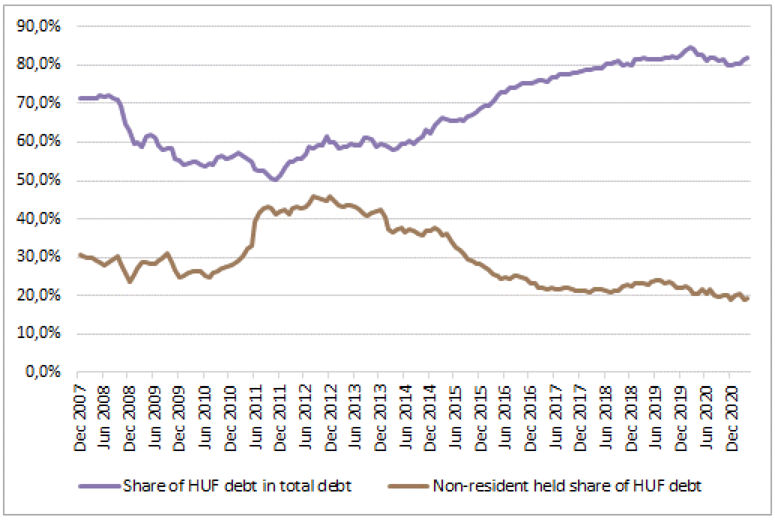
Secondary Market Turnover of the Primary Dealers of Hungary with Foreign Counterparties (2018-2021)

Introduction

In most countries, foreign investors play a role in financing public debt. Foreign exchange (FX) debt buyers are predominantly non-resident, but foreign investors also participate in the domestic government bond market (unless there are FX or capital restrictions). Foreign investors help to diversify the investor base, increase the average maturity, allow temporarily higher funding needs to be covered, and contribute to better liquidity in the sovereign debt market. Too high share of foreign investors is, however, risky. This risk materialised during the 2008 global financial crisis, with foreign investors sharply reducing their holdings of HUF government bond investments in a short period of time, putting strong selling pressure on the secondary market. After the stabilisation of the HUF market, foreign holdings increased significantly again in the early 2010s. After 2012, based on the experience of the previous period, reducing the share of foreign currency debt and the foreign financing ratio became a key strategic objective for Hungary's public debt management. By the end of the decade, the Hungarian government achieved significant success in this respect, with the share of foreign currency debt within the total central government debt falling below 20% by 2019 and the share of foreign financing falling from two-thirds to one-third of total central government debt.

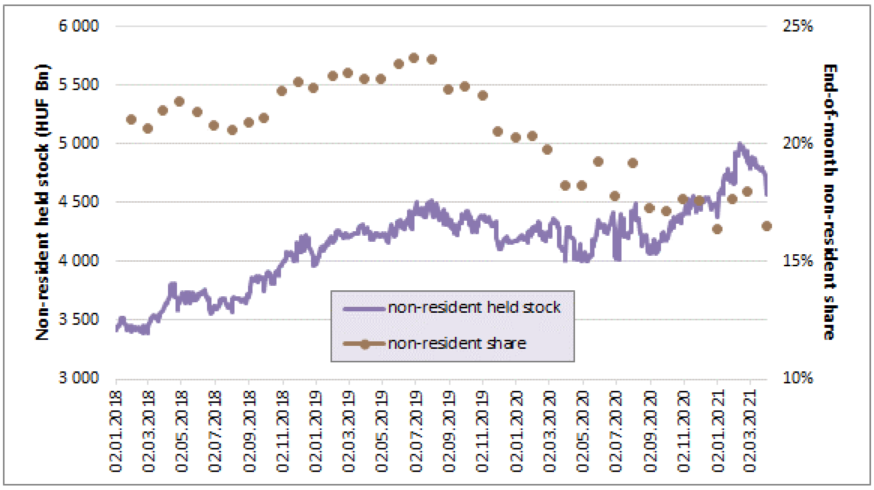


Graph 1: The ratio of HUF debt and non-resident-held HUF debt within the total central government debt (source: ÁKK, National Bank of Hungary)

However, the debt manager's task is made more difficult by the fact that, on the one hand, it has much less influence on the factors shaping foreign demand in the domestic market and, on the other hand, much less information is available about non-residents' activities compared to domestic investors. As the participation of foreigners can vary significantly from time to time, both in nominal terms and in relative terms, it is worthwhile to monitor this process on an ongoing basis. This is facilitated by secondary market turnover data from Primary Dealers. In the following, we aim to provide information on this data set and the results we can gain from it.

To monitor the secondary market turnover of Primary Dealers, ÁKK introduced the Harmonised Reporting Format (hereinafter "HRF") in 2016, a standard reporting format jointly developed by the EU Economic and Financial Committee's Sub-Committee on EU Sovereign Debt Markets (ESDM), Eurozone debt managers and the European Primary Dealers Association. The specific feature of this reporting format is that PDs also identify the type, the country and the investor sector of their counterparty/customer for each transaction. (See below in more detail in the sections on 'Counterparty categories' and 'Geographical groups'.) This is particularly important because traditionally a significant part of the secondary market turnover of Hungarian government securities is with foreign counterparties, and in previous data collections there was no further breakdown by country or investor type for foreign counterparties.

Looking back over the past more than three years, the stock of non-resident held HUF government securities registered by KELER Central Depository Ltd. rose steadily in 2018, reaching HUF 4,000 billion (ca. EUR 12 billion then) in November 2018, and then fluctuated in the HUF 4,000-4,500 billion range for a long time. In 2021, it rose again more significantly, and stood between HUF 4,500 and 5,000 billion (ca. EUR 14 billion then) until the end of the first quarter[1].



Graph 2: HUF government securities held by non-residents and their end-of-month ratio to total outstanding stock of wholesale government securities (source: ÁKK, KELER Central Depository Ltd.)

The share of this non-resident stock within the total outstanding amount of Hungarian Government Bonds plus Discount Treasury Bills increased roughly in line with the total market stock until July 2019, but has since been declining due to stronger growth in the total market stock. This is in line with the intention of ÁKK, as described above, to keep the stock of foreign held government securities within limits. These wholesale government securities are quite liquid in the secondary market, and sudden portfolio reallocations and sales by large foreign investors may even reinforce negative trends through excessive selling (not only in a crisis situation).

In this analysis, we look at the role of foreign players and foreign investors in the HUF government bond market, and who they were over the past three years. Among the available data sources, we mainly use data sent directly to ÁKK by Primary Dealers. This is the most direct data available to

[1] The Hungarian original of this analysis was made in the second quarter of 2021, and was published in July 2021, with the latest full dataset available until Q1 2021.

study foreign purchases of Hungarian government securities, as most of the ownership (stock) data are masked by the clearing house omnibus accounts.

Primary Dealers

Since 3 January 1996, the Primary Dealer system for government securities has been operating in Hungary. Its basic purpose had been to facilitate the delivery of securities issued by the Hungarian State to investors, to put the financing of the budget on a secure footing and to increase the transparency and liquidity of the secondary market. Primary Dealers (PDs) are banks and investment firms that are accepted by ÁKK after the application process and whose main functions in the primary dealer system are:

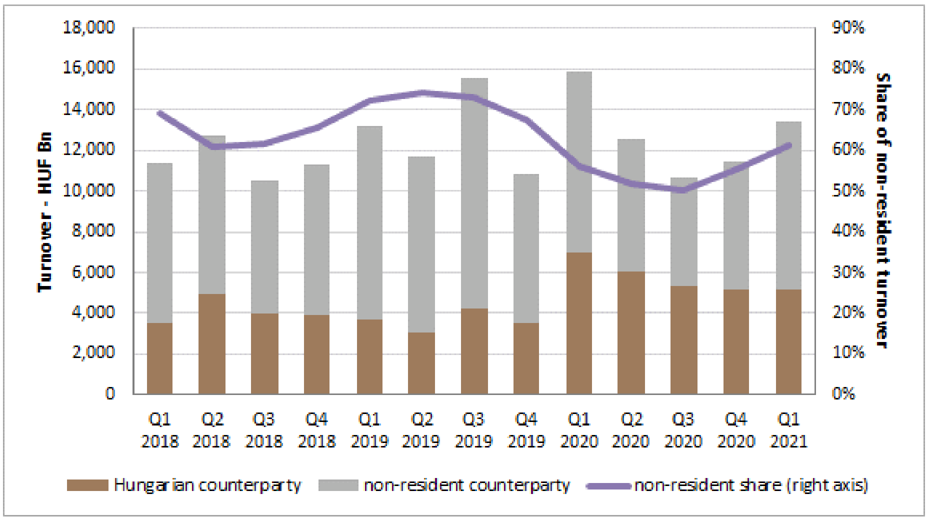
1. Participation (with exclusive rights) in the placing and distribution of Hungarian Government Bonds and Discount Treasury Bills denominated in HUF by regular auction bidding in classical and exchange auctions and in non-competitive tenders.

2. In order to ensure liquidity on the secondary market and to reach investors, price quotation of two-way prices to investors on the secondary market through various trading systems, including, on a mandatory basis, an electronic platform[2] as defined in the PD agreement.

3. Participation in various market maintenance and risk management activities of ÁKK, e.g. benchmark yield fixings, government bond indices, repo transactions, buy-back auctions.

Foreign share

In recent years, according to the HRF reports **the majority of the secondary market turnover of Primary Dealers has been with non-Hungarian counterparties**. The share of transactions with foreign counterparties was between 60 and 70% in 2018, rising to over 70% in 2019 and then falling back to between 50 and 60% in 2020. In Q1 2021, the share of foreign partners was 61%.



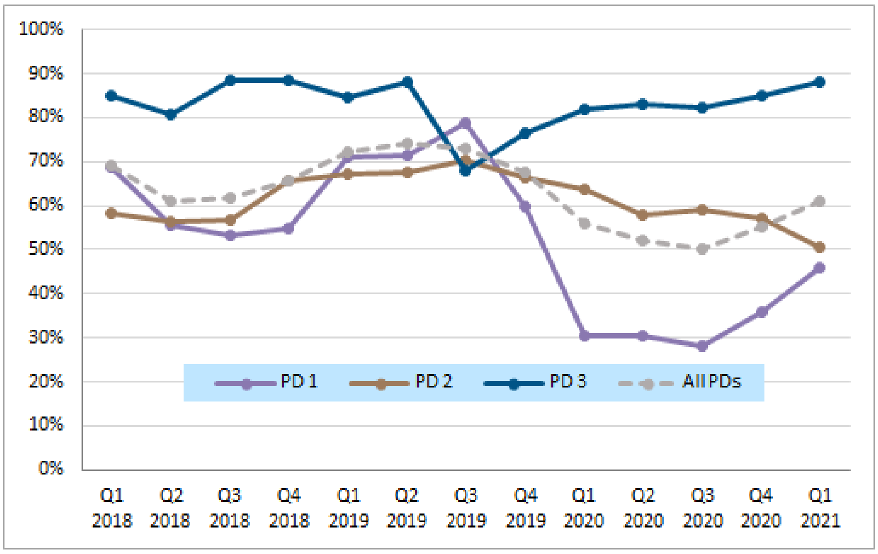
Graph 3: Quarterly breakdown of secondary market turnover of Primary Dealers (Government Bonds, Discount Treasury Bills) by location of counterparty [3]

[2] It is currently the MTS Hungary multilateral trading facility operated by MTS S.p.A. within the so-called MTS Cash Domestic Market MTF.

[3] The source of graphs and tables are the Primary Dealers' HRF reports (if not stated otherwise)

For deeper analysis, we divide the Primary Dealers in the following groups:

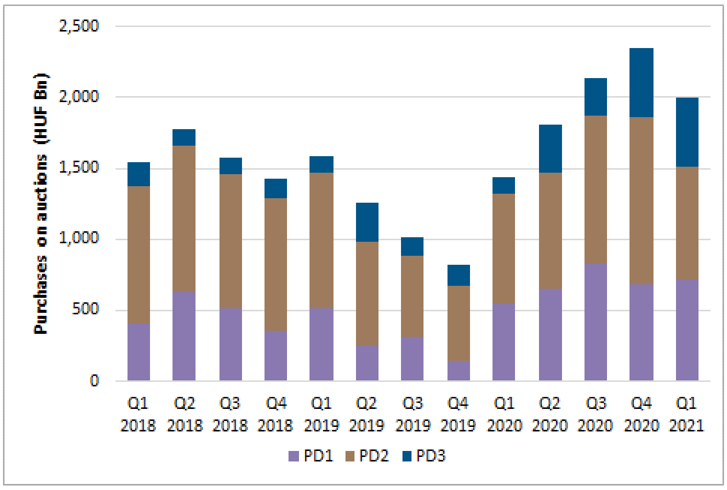
PD 1: Those who conduct their PD activity in Hungary (5 firms: CIB Bank, MKB Bank, MTB Magyar Takarékszövetkezeti Bank, OTP Bank, UniCredit Bank).
PD 2: Those who conduct their PD activity partly in Hungary, partly in their group's non-resident centres, institutions (5 firms: Citibank, Erste Befektetési Zrt., ING Bank, K&H Bank, Raiffeisen Bank).
PD 3: Those who conduct their PD activity outside Hungary (in 2018 5, in 2019-2021 4 firms: BNP Paribas, Deutsche Bank, Goldman Sachs, JP Morgan and in 2018 Merrill Lynch).



Graph 4: Quarterly share of foreign partners in the secondary market turnover of PDs in the different PD groups

The share of foreign customers among the transactions of fully Hungarian-based distributors (PD 1) was very high in 2019, rising to over 70%, then fell sharply to around 30% in 2020, before rising again in 2021. With the exception of one quarter, the foreign share was always the highest for foreign-based banks (PD 3). Those who share their activity between Hungary and their international centres (PD 2) have the most balanced foreign share and a very similar pattern than that of the total of the PDs.

This second group bought more than half of the volume sold by ÁKK in the Government Bond and Discount Treasury Bill auctions:



Graph 5: Purchases of Government Bonds and Discount Treasury Bills in auctions by the 3 Primary Dealer groups (including switch auctions and non-competitive tenders)

Counterparty categories

HRF methodology differentiates the following groups:

Inter-dealer broker: non-bank financial intermediaries, brokers
Primary Dealer: PDs of Hungary
Bank Inter-dealer: PD in at least 3 Eurozone countries, but not in Hungary
Connected entity: company belonging to the given PD's group of firms
Customer bank: bank that is not Inter-dealer, not connected entity and not PD in Hungary
Public entity: central banks, sovereign wealth funds, local governments
Pension fund: private or government pension funds
Insurance company: insurance companies
Fund manager: fund managers, investment funds, mutual funds
Hedge fund: hedge funds
Corporate: commercial, industrial, other non-financial companies

In the three and a quarter years under review, this was the breakdown of gross turnover with foreign partners by investor group (in HUF billion):

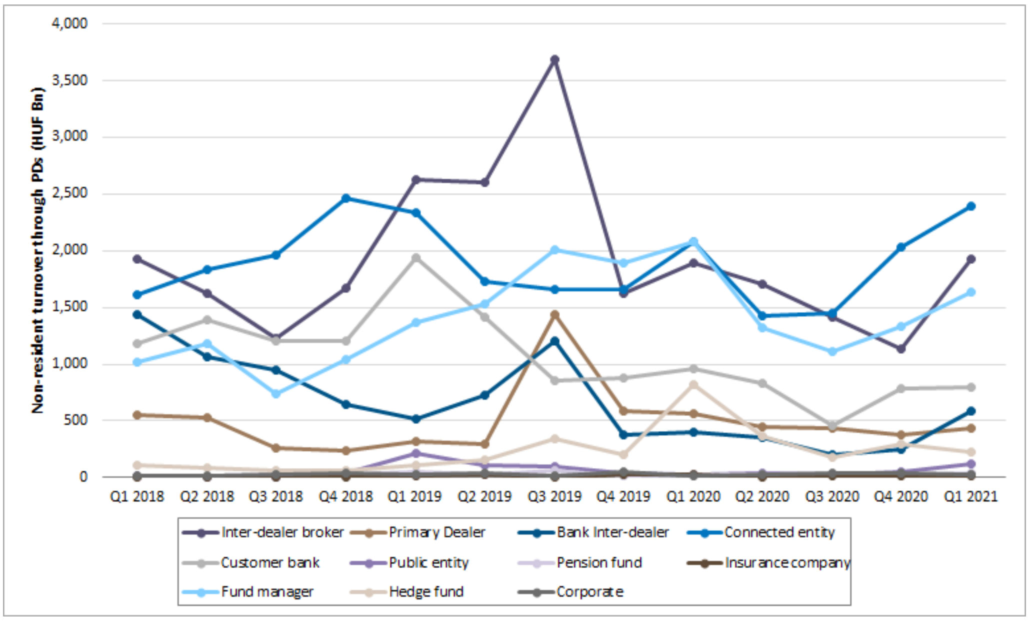
Inter-dealer broker	Primary Dealer	Bank Inter-dealer	Connected entity	Customer bank	Public entity	Pension fund	Insurance company	Fund manager	Hedge fund	Corporate	**Sum**
25,040.7	6,463.6	8,689.8	24,634.5	13,883.3	780.2	365.8	171.7	18,244.3	2,997.7	370.9	**101,642.6**
24.6%	**6.4%**	**8.5%**	**24.2%**	**13.7%**	**0.8%**	**0.4%**	**0.2%**	**17.9%**	**2.9%**	**0.4%**	**100.0%**

The Primary Dealers had the largest total volume of transactions with inter-dealer brokers, followed by connected entities and then fund managers. These three groups accounted for 67% of the total turnover and they are three very different categories of institutions, as well.

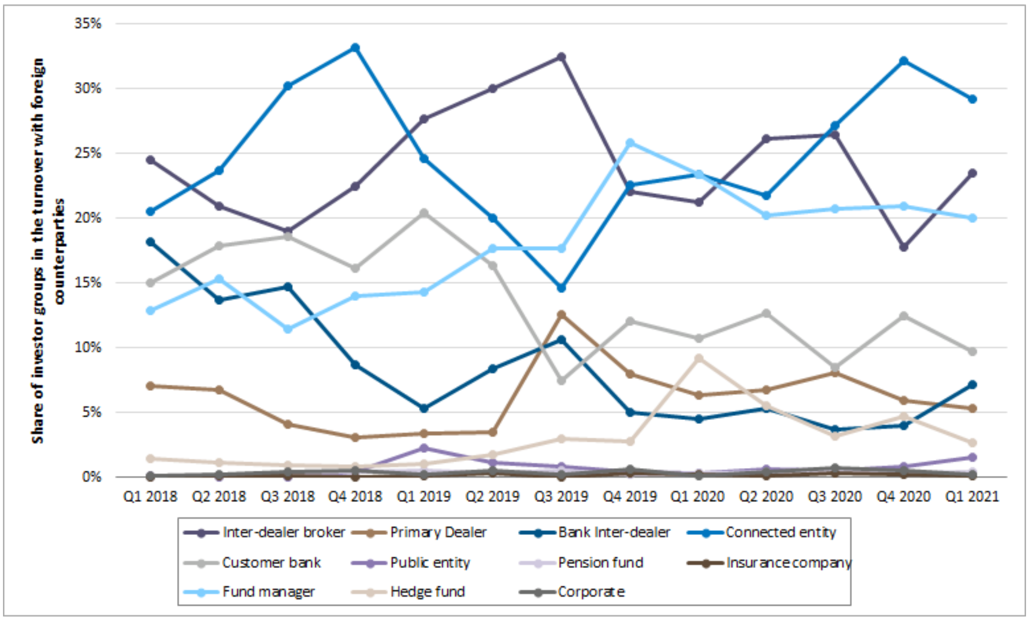
Inter-dealer brokers are international intermediaries that link banks and market participants in the OTC market, and channel the transactions. They act as important intermediaries but do not take positions. Among the PD groups introduced above, banks with a partly or fully foreign distributive activity (groups 2 and 3) have the highest share of inter-dealer transactions (28% and 29% respectively). 69% of inter-dealer transactions were with UK firms and 29% with Swiss firms.

Connected entities are individual institutions belonging to the PD's international group of companies, and may be either certain types of end-investors or additional intermediaries. The diversity of the primary distributors of Hungarian government securities and their wide geographical spread is illustrated by the fact that 15 different countries appeared in the category of related companies in the more than three years under review. These countries are, in alphabetical order: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Germany, Japan, the Netherlands, Poland, Romania, Slovakia, Switzerland, the United Kingdom, and the United States. In this counterparty group, PD group 2 had the highest share of over 50%.

Unlike the previous two groups, *fund managers* are fundamentally end-investors. A total of 33 countries were included in this category, with 57% of fund manager turnover concluded with UK firms, 20% with Eurozone firms and 14% with US firms. PD group 3, which has its total PD activity abroad, had the largest share of fund managers in its turnover (30%).



Graph 6: Quarterly secondary market turnover of Primary Dealers with foreign counterparties by investor groups



Graph 7: Quarterly share of investor groups in the secondary market turnover of Primary Dealers with foreign counterparties

In terms of both volume and proportion, turnover with each group of foreign counterparties was quite varied and volatile in these 13 quarters. There has been a broadly upward trend in turnover with fund managers, and even in the turnover with other Primary Dealers and hedge funds.

Geographical groups

The HRF reporting framework provides nearly 250 country codes that allow PDs to identify counterparties by their location. During the period under review, 43 different geographical locations (typically countries) were reported. Below, the following countries are listed separately in terms of investor activity and market importance: Austria, UK, Belgium, Switzerland and the USA. The others are grouped by continent, and the European countries are further divided into three separate sections: Eurozone (except Austria and Belgium); non-Eurozone EU (except Switzerland and UK); other Europe.

In this three and a quarter year period, the aggregate breakdown of secondary market turnover with foreign partners by country group, was as follows (in HUF billion):

U.K.	Austria	Belgium	Switzerland	Other Eurozone	Non-€ EU	Other Europe	USA	Other Americas	Asia	Australia	Africa	**Sum**
41,408.6	10,460.3	7,777.8	8,100.4	12,085.2	11,939.2	64.8	6,002.2	2,941.8	851.4	8.5	2.3	**101,642.6**
40.7%	**10.3%**	**7.7%**	**8.0%**	**11.9%**	**11.7%**	**0.1%**	**5.9%**	**2.9%**	**0.8%**	**0.0%**	**0.0%**	**100.0%**

In 90% of transactions with non-residents, the Primary Dealers' counterparties were European, and nearly half of those were UK-registered companies.

Of the *UK* partners, 42% were inter-dealer brokers and 25% were fund managers.

Banks in different categories accounted for the big majority of the turnover in *Austria* (95%).

In the case of *Belgium*, the majority of the turnover (79%) was with so-called connected entities, i.e. counterparties belonging to the banking groups of Hungarian Primary Dealers.

In *Switzerland* 91% of the clients were inter-dealer brokers.

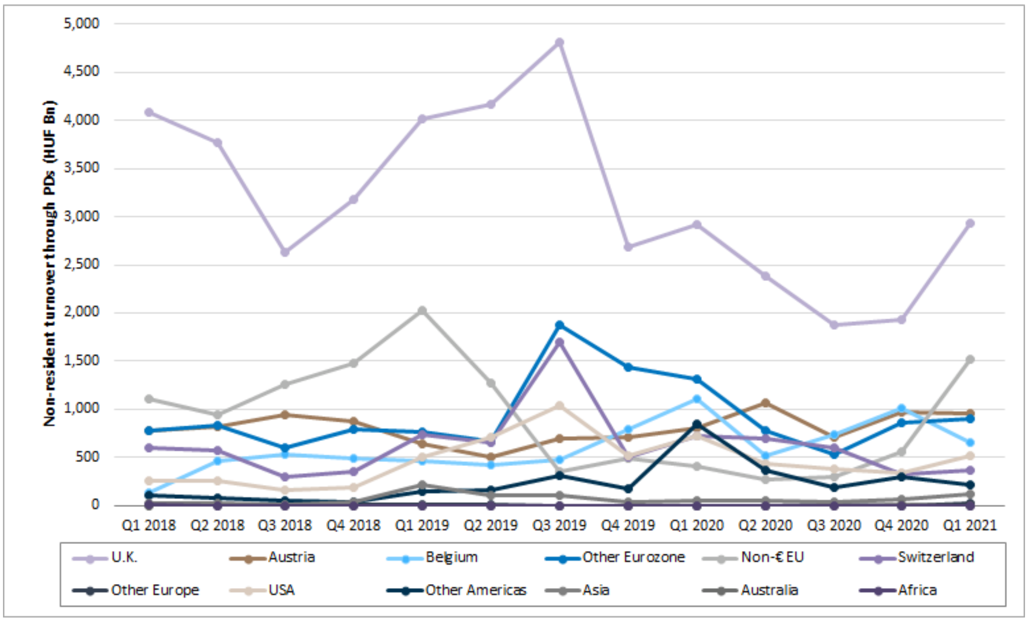
In the *other Eurozone* countries, connected entities also had the highest share of counterparties (43%), followed by fund managers and Primary Dealers (26% and 20% respectively).

In the *EU countries outside the Euro area*, 49% of the counterparties were connected entities and 43% were banks.

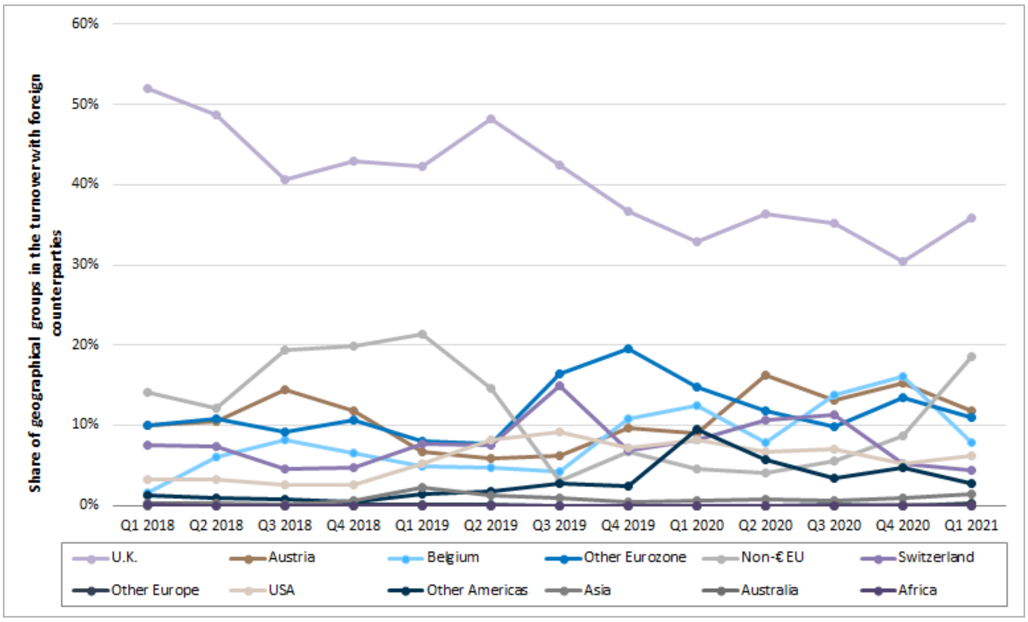
For clients in the *US*, 51% were connected entities and 43% were fund managers.

Other Americas included some Caribbean islands and Canada. Hedge funds accounted for 88% of the turnover there.

In *Asia*, 83%of the turnover was in the public entity category. Public entity in this case mainly meant sovereign wealth funds or central banks.



Graph 8: Quarterly secondary market turnover of Primary Dealers with foreign counterparties by geographical groups

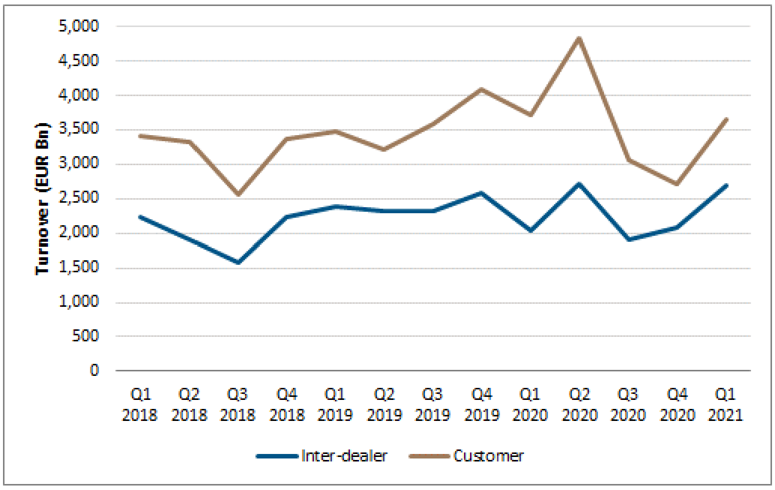


Graph 9: Quarterly share of geographical groups in the secondary market turnover of Primary Dealers with foreign counterparties

In each of the 13 quarters, the UK accounted for the largest share of turnover among the ten geographical groups. However, the trend is downwards, while the volume of transactions with the Euro area in particular (but also with other geographical groups) is on the increase. This may be due to the impact of Brexit, for example the relocation of some partners from London to continental Europe, or the fact that a PD already deals with the EU branch of some of its traditional client, rather than their UK branch. At the end of 2020, two London-based PDs of Hungary were replaced by their EU-based entities.

International comparison

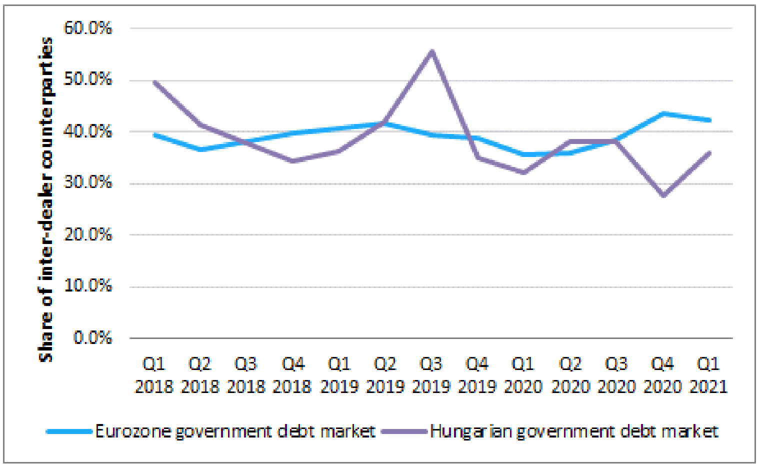
The ESDM publishes quarterly summaries of turnover in Euro area sovereign debt markets.[4]



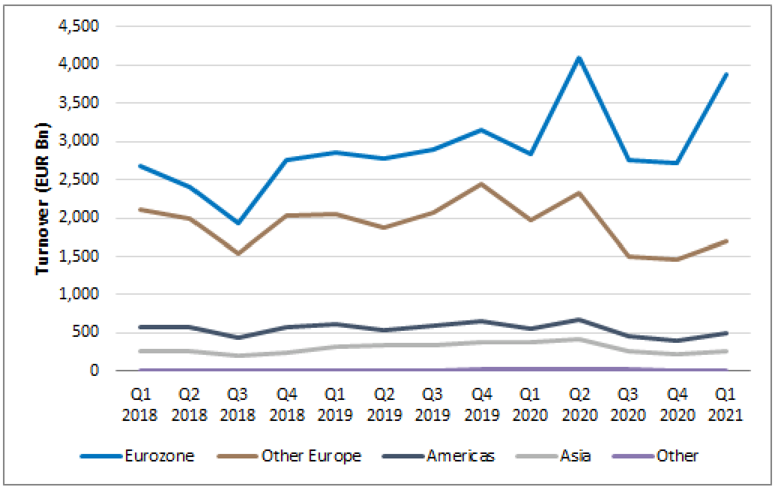
Graph 10: Eurozone government securities market quarterly turnover by counterparty categories (source: ESDM)

[4] Euro Market Activity Report (EMAR): https://europa.eu/efc/efc-sub-committee-eu-sovereign-debt-markets/euro-market-activity-report-emar_en

In these published data, only two groups of counterparties are distinguished. From the more detailed breakdown used in the HRF, the first three categories (inter-dealer brokers, Primary Dealers, bank inter-dealers) are in the "inter-dealer" group, the others are all in the "customer" group. In the euro area markets, the inter-dealer - customer split was 39-61% in this period, while in the foreign markets for Hungarian government securities it was almost the same: on average 40-60%. Graph 11 shows that this breakdown is mostly stable in euro area markets, but more volatile for Hungarian PDs:



Graph 11: Quarterly share of inter-dealer clients (inter-dealer brokers, Primary Dealers, bank inter-dealers) in the Eurozone and in the Hungarian government securities market



Graph 12: Quarterly total secondary market turnover in the Eurozone government securities markets by geographical groups

By comparison, 85% of the turnover in the Eurozone sovereign debt markets was with European counterparties, compared to 90% in the Hungarian market. The share of the Americas was 10% in the Euro area and 9% in Hungary.

Concentration

Foreign participation in the domestic government bond market should be examined not only in aggregate, but also on a series-by-series basis, as excessive concentration can trigger adverse developments in the event of market disruptions. The four Government Bonds with the highest share of foreign counterparties in total turnover all have 5-10 years remaining maturity and a high market capitalisation of over HUF 1,000 billion (ca. EUR 2.8 billion).

Government Bond series	Share of non-resident counterparties in total turnover (2018 - Q1 2021)
2027/A	83.7%
2026/D	82.0%
2030/A	80.5%
2025/B	75.5%
2028/A	75.3%
2024/B	75.2%
2022/A	75.1%
2026/E	74.5%
2020/C	72.5%
2022/B	71.3%

Table 1: The 10 Government Bond series with the highest share of non-resident turnover (2018 – Q1 2021)

Summary

The participation of foreign investors and market participants in the HUF government bond market has increased in nominal terms over the past 3 years, reflecting Hungary's favourable investor perception, but has been declining relative to the size of the overall market. The latter is also a positive phenomenon from ÁKK's point of view, and if we look at the details, we see a rather favourable picture. In the HUF government bond market, foreign participants come from a broad and diversified range, there is no excessive concentration either geographically, or in terms of counterparty sector, and among the individual government bond series, those with large stocks have the biggest non-resident share. This means that, in recent years, the non-resident share of public debt declined to a favourable level, while the share of FX debt also declined, contributing to the stability of Hungary's public debt management. The HRF data regularly received from Primary Dealers provide a good approximation of developments and allow for geographical and sectoral analysis.