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The Foreign Exchange and Over-the-counter Interest Rate Derivatives Market in Ireland – Results of the BIS Triennial Survey 2019

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Abstract

The Central Bank of Ireland participated in the most recent survey of global turnover in foreign exchange (FX) and over-the-counter (OTC) single-currency interest rate derivatives that the Bank of International Settlements (BIS) coordinates every three years. The survey is a key source of information on the size and structure of global FX and OTC interest rate derivatives markets. Ireland has participated since 1995, collecting comprehensive information on the activities of credit institutions' derivatives sales desks that are resident in Ireland. Given the international character of derivatives markets, such information is of interest from a supervisory perspective and can provide additional information about external financial stability risks facing the Irish economy through the lens of financial market activity.

The 2019 survey results for Ireland show a substantial increase in FX and OTC interest rate derivatives trading during the last three years. The Irish trading volumes recovered from the downward trend recorded in the previous two surveys, and the growth rate of Irish derivatives turnover between 2016 and 2019 outpaced the global growth rate. As this article will show, the main factor behind the strong Irish growth was that large global derivatives dealers opened or reactivated derivatives sales desks in Ireland as part of their overall business strategy and in preparation for Brexit. Other driving factors also contributed to the strong growth between 2016 and 2019. For example, the rise in electronic and automated trading facilitated the growth of trading both in foreign exchange and in over-the-counter interest rate derivatives markets, and increased the participation of non-bank dealers in both markets. The growth in the FX

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market was mainly driven by an increase in FX swaps, used for hedging foreign exchange risks and managing funding liquidity, in an environment of increasing economic uncertainties and excess liquidity in the euro area. The growth in US dollar and euro trading outpaced the growth in pound sterling. OTC interest rate derivatives markets additionally benefited from structural developments like clearing and compression, and from changing expectations about US short-term interest rates that incentivised hedging and speculation activities.

1. Introduction

This article outlines the results of the 2019 BIS Triennial Survey of FX and OTC interest rate derivatives markets for Ireland, and compares these with previous surveys and with the global results, published by the BIS. The BIS triennial survey is a key source of information on the structure and size of global FX and OTC interest rate derivatives, which should help Central Banks, Regulatory Authorities and other market participants asses risks and inform policy discussions. Following the Global Financial Crisis, for which OTC derivatives have been recognised as one of the amplifiers, bridging data gaps is a priority particularity in the area of systemic risk assessment.

In 2019, the global survey covered 53 jurisdictions and close to 1,300 reporting agents. As previous surveys, it was organised in two parts: the collection of turnover data in April and of data on notional amounts and gross market values outstanding at end-June.[2] This article focuses on the turnover, given the comprehensive coverage of credit institutions' sales desks that are resident in Ireland. Detailed analyses on the global results are published by the BIS (BIS 2019b and c), while this article aims to provide users with a guide to understanding the Irish results.

The 2019 survey results for Ireland show an increase in the growth rate in derivatives turnover above the global average growth rate. After the Irish results recorded declines in the 2013 and 2016 surveys, there was a remarkable increase in the average daily turnover of FX derivatives in April 2019, and an even stronger growth in OTC interest rate derivatives turnover. Despite this significant growth, the Irish share in both the global FX and OTC interest rate derivatives market remained small, with each at 0.1 per cent in April 2019. At the same time, the entities operating in the Irish derivatives market are highly integrated in the global derivatives markets, which are concentrated and interconnected, with a small number of big players. As this article will show, the majority of trades are with cross-border counterparties in the financial sector. Thus, the survey results provide insights into activities of resident credit institutions in the global derivatives market. Such information is of interest from a supervisory perspective and can provide additional information about external financial

[2] The BIS uses the triennial data on amounts outstanding only to supplement the OTC derivatives statistics, in which the largest banks and other derivatives dealers report data every six months on a consolidated basis. Institutions headquartered in Ireland are not included in the semi-annual OTC derivatives statistics. End-June 2019, the 71 large dealers accounted for the majority of outstanding positions, with 92 per cent of notional amounts and 87 per cent of gross market value (BIS 2019d).

stability risks facing the domestic economy through the lens of financial market activity.

In 2019, the Central Bank of Ireland surveyed 14 credit institutions operating FX and OTC interest rate derivative sales desks in Ireland. The survey participants provided details of their gross turnover for the 21 business days in April 2019, broken down by instrument type, counterparty, maturity and currency. [3] Turnover is defined as the gross value of all new deals during a given period, and is measured in terms of the nominal or notional amount of the contracts. The data cover both the proprietary and commissioned business[4] of the reporting institutions. There is no distinction between sales and purchases. Therefore, the survey data cannot be used to gauge the expectations of investors regarding the future evolution of exchange rates or interest rates (Boneva et al., 2019). All transactions were reported in US dollar equivalents. The turnover survey is conducted on a sales desk location basis, and on an unconsolidated basis. Thus, all transactions concluded by offices or sales contracts located in Ireland are covered, including trades between the reporting institutions and their related parties that are part of the same group. To offset the risk that the survey results may not be representative of broader trends, given the low frequency of the survey of every three years, the reporting institutions are required to provide information on market conditions during the survey month, and how these conditions compared with the preceding six months. The majority of the Irish respondents considered the market conditions in April 2019 and in comparison to the preceding six months as normal.

The activities of new survey participants are the main drivers behind the Irish growth between 2016 and 2019, in particular because most of them are subsidiaries of large globally active derivatives dealers. Therefore, the multiple drivers behind the global increase in FX and OTC interest rate derivatives volumes also help explain the Irish trends. The article will discuss the results for FX turnover and OTC interest rate derivatives turnover separately.

Section 2 presents the details on Irish FX turnover and the drivers behind the large growth. First, the largest increase was attributable to FX swaps, mainly in the USD/EUR cross. The need for hedging of currencies and incentives for speculations incentivised the use of these instruments. Another important driver for the increase in FX derivatives turnover was the rise in electronic and automated trading systems, which also enabled more non-dealers to participate in the Irish market. This so-called

[3] For details on survey structure, definitions and breakdowns see BIS, 2019a.
[4] Commissioned business refers to reporting institutions‘ deals as agent or trustee in their own name, but on behalf of third parties.

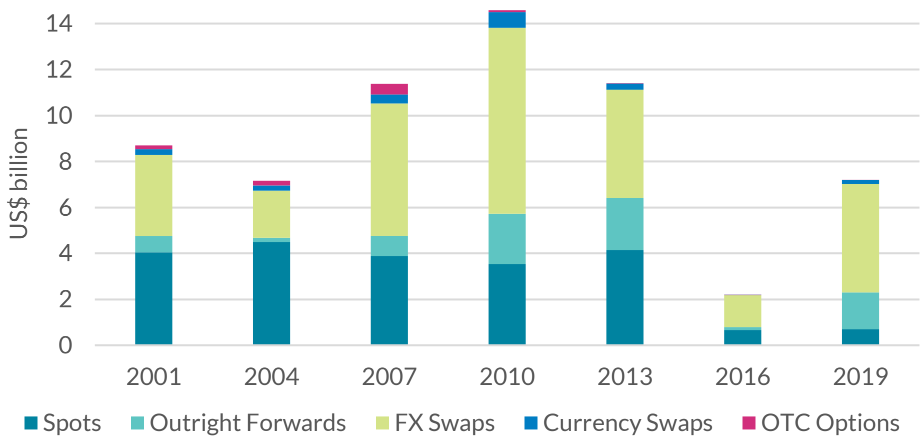
electronification also boosted the increase in OTC interest rates derivatives trading. Section 3 will present the details on this market segment in Ireland. Section 4 concludes.

2. Foreign Exchange Derivatives Turnover

2.1 Overview

The results of the 2019 survey of foreign-exchange derivative turnover show a major increase in activity by reporting institutions resident in Ireland, when average daily turnover increased by 228 per cent between the two surveys, returning from the low level of US$2.2 billion in 2016 (Chart 1).[5] The continued decline in FX turnover among Irish reporting entities in 2016 had two driving factors. Firstly, the landscape of the Irish banking sector has changed dramatically, with banks exiting the Irish market through liquidation or wind down. There has also been significant restructuring of the Irish banking system, with deleveraging of overseas assets. As these banks downsized their ownership of foreign banks, and reduced their foreign lending, the size of foreign claims on their consolidated balance sheet declined, resulting in a reduced need for foreign-exchange derivatives for hedging currency risk.

Chart 1: Average daily turnover in foreign exchange derivatives in Ireland, 2001 - 2019



Source: Central Bank of Ireland

[5] All figures and percentages in this article are unadjusted for exchange rate adjustments. As BIS calculations show, exchange rate movements had only minor impacts on the aggregate turnover figures between 2016 and 2019 (see BIS, 2019b and c). Furthermore, all figures and percentages are adjusted for inter-dealer double counting unless otherwise stated. Double counting arises because both reporting dealers record the transactions between them, i.e. twice. Therefore, the survey asks reporters to distinguish deals with other dealers. These data on other reporters are divided by two, and subtracted from total data.

In April 2019, the average trading volume in FX derivatives per day was 3.3 times higher than it was in the same month in 2016, reaching US$7.2 billion. The global results recorded an increase of 30 per cent, from US$5.1 trillion per day in April 2016 to US$6.6 trillion per day in April 2019, following a dip in 2016. With US$ 534 billion in 2016 and US$ 540 billion in 2019, euro area turnover remained more or less constant.

The key driving factor behind the strong growth in Ireland was a significant change in the reporting population. While six institutions ceased trading derivatives between April 2016 and April 2019 without exiting the Irish market completely, five institutions have opened or reactivated derivatives sales desks in Ireland. In April 2016, these five newly reporting banks were already active in Ireland, but did not operate derivatives sales desks. Four of the five new reporters are subsidiaries of large globally active derivative dealers, including G16 dealers[6], and therefore part of their overall business strategies. Some of the new survey participants confirmed that derivative trades with EU clients were migrated to Ireland in the months before April, on the assumption of a hard Brexit at the end of March 2019. In contrast, some banks that have already participated in the 2016 survey reported transfers of sales activities to their parent institutions, which also explains why the nine institutions that have already participated in the 2016 survey (constant reporting population) lost importance in the Irish FX and OTC interest rate derivatives markets. The average daily turnover in FX derivatives of the constant reporting population declined by 13 per cent (Table 1). In April 2019, the new survey participants accounted for a market share of 76 per cent in the Irish FX market, and therefore for the majority of the trends in the breakdowns by instruments (section 2.2), currency (section 2.3) and counterparty (section 2.4) that are described below. Section 2.5 analyses the impact of advances in technology on the increase in Irish FX derivatives turnover.

2.2 Instruments and maturities

With a share of 65 per cent, FX swaps were the most important instrument in the Irish FX derivatives market in 2019 (Table 1). The turnover in these instruments increased by US$.3.3 billion or 240 per cent over the last three years, and accounted for 66 per cent of the increase in total FX turnover between 2016 and 2019. Foreign exchange swaps are used by credit institutions to hedge against currency risk and to manage funding costs across different currencies (Schrimpf and Shushko, 2019a).[7] In terms of the

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[6] The parent institutions of these four Irish reporters are regular reporting dealers in the semi-annual OTC derivatives statistics that the BIS collects from the largest banks and dealers in 12 advanced economies. The G16 industry group comprises the 16 dealers that dominate global derivatives trading.
[7] With a foreign-exchange swap, the foreign-exchange risk is removed from the balance sheet during the short leg of the swap, whereas with currency swaps, some

macroeconomic and monetary environment, the need for hedging of currencies or interest rates and incentives for speculation increased during the last three years. April 2019 can be characterised by economic policy uncertainty because of trade tensions between the US and its trading partners, combined with the ongoing uncertainty about Brexit, and slowing growth prospects for the European and global economy amid market expectations of divergent monetary policies (ECB, 2019a).

Irish turnover in outright forwards increased remarkably by US$1.5 billion or 1,115 per cent, and became the second most important FX instrument in 2019, with a share of 22 per cent. This increase was fuelled by the greater demand from non-bank financial institutions (Schrimpf and Shushko, 2019a). Turnover in spots increased by 5 per cent to an average daily turnover of US$0.7 billion. With a share of 10 per cent in 2019, these instruments have lost their relative importance in favour of outright forwards. Currency swaps and OTC Options remained relatively insignificant in Irish FX trading. Also globally, trading in FX swaps and outright forwards gained in market share, while the share of spots declined. The global share of spot trades was 30 per cent in 2019 (down from 33 per cent), while FX swaps accounted for 49 per cent (up from 47% in 2016) of the total global FX market turnover in April 2019.

Table 1: Average daily turnover of FX derivatives in Ireland, by instrument

	amounts in US$ million (share in % in brackets)				% change, 2016-2019	
	2016		2019		total	constant reporting pop.
Total instruments	**2,197**	100%	**7,204**	100%	**227%**	-13%
Spots	666	30%	702	10%	5%	-27%
Outright forwards	131	6%	1,598	22%	1115%	53%
of which: maturity up to 7 days	32	1%	987	14%	2974%	211%
FX Swaps	1,386	63%	4,709	65%	240%	-9%
of which: maturity up to 7 days	870	40%	2,743	38%	215%	-15%
Currency Swaps	4	0%	190	3%	4545%	-7%
OTC Options	10	0%	4	0%	-53%	-71%

risk is retained as a currency swap is an agreement to exchange streams of interest payments.

In terms of the maturity profile of FX derivatives, data are collected for outright forwards and FX swaps.[8] When trading of short-term instruments grows faster than that of long-term instruments, turnover mechanically increases because such contracts need to be replaced more often (Wooldridge, 2019). Both the global and the Irish results show that short-term instruments grew faster than instruments with longer maturities, and that the majority of turnover in outright forwards and FX swaps in April 2019 was in short-maturity instruments. For Ireland, the largest product contributor behind the increase in total reported FX turnover was the increase in FX swaps with the short-term maturity of up to 7 days.

2.3 Currencies and currency pairs

The US dollar remained the dominant currency in Irish FX derivatives markets. It was on one side of 84 per cent[9] of all trades in April 2019, up from 67 per cent in 2016 (Chart 2a). Turnover in euro, the second most traded currency in Ireland, increased from 65 per cent of all trades in 2016 to 73 per cent in 2019. In contrast, pound sterling lost relative importance in terms of one side of a currency pair between the two surveys, when its share in total trading fell from 36 per cent to 19 per cent over the three years to 2019. Despite this decline, pound sterling remained the third most traded currency in Irish FX markets. This is unsurprising given both the strong links between Ireland and the UK. In absolute numbers and unadjusted for exchange rate movements, turnover in pound sterling increased, from US$789 million per trading day in April 2016 to US$1.3 billion in April 2019, but trading of the USD/EUR cross increased at a much faster pace than the USD/GBP and EUR/GBP crosses. With a market share of 58 per cent in 2019, the USD/EUR cross was the most traded currency pair in Ireland, up from 34 per cent in 2016 (Chart 2b). This evolution was mainly driven by the divergent monetary policies in the US and euro area (ECB, 2019b). The strong liquidity in the euro area incentivised banks to swap their excess euro liquidity into US dollars (Schrimpf and Shushko, 2019, and ECB 2019b).

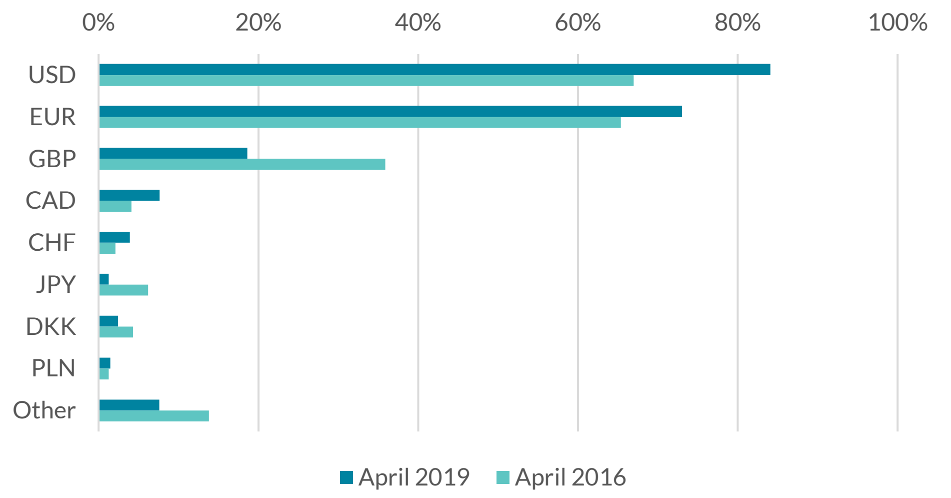
The next most traded currencies in Ireland in 2019 were Canadian dollar and Swiss franc. The market shares of both currencies have approximately doubled since the 2016 survey to 8 per cent and 4 per cent respectively. The Japanese yen's market share dropped from 6 per cent in 2016 to just over 1 per cent in April 2019. With each accounting for 2 per cent of total

[8] In comparison to the 2016 survey, the maturity breakdown for outright forwards and FX swaps has been expanded, affecting the categories for medium and longer tenors.

[9] The volume is broken down on a single-currency basis, i.e. the turnover of each contract is reported twice, according to the currencies making up the two legs of the contract. Thus, the currencies' market shares will sum to 200 per cent of the total turnover.

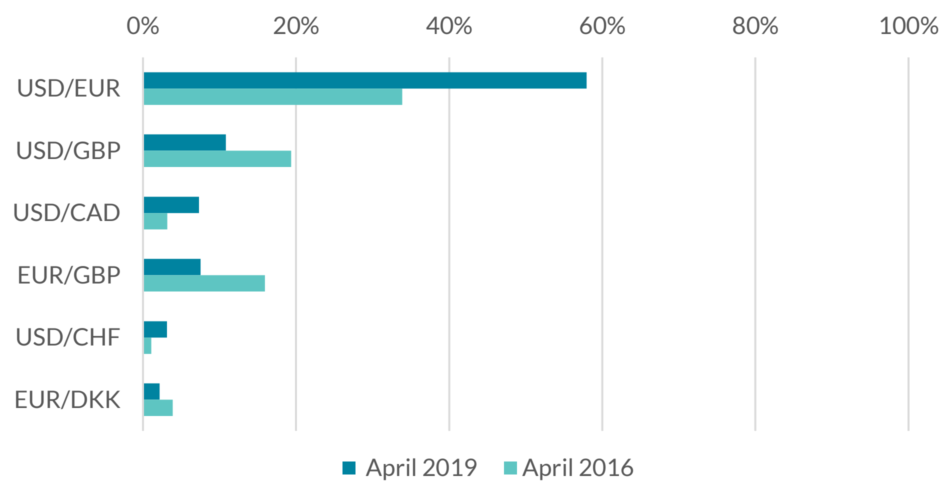
turnover, Danish krone and Polish zloty were more traded than Japanese yen. Trading with other currencies remained insignificant in Irish FX derivatives markets. The combined market share of all remaining currencies declined between the two surveys, from 14 per cent in 2016 to 8 per cent in 2019.[10]

Chart 2a: FX market turnover in Ireland by currency, Market shares of selected currencies



Source: Central Bank of Ireland

Chart 2b: FX market turnover in Ireland by currency, Market shares of selected currency pairs



Source: Central Bank of Ireland

2.4 Counterparties

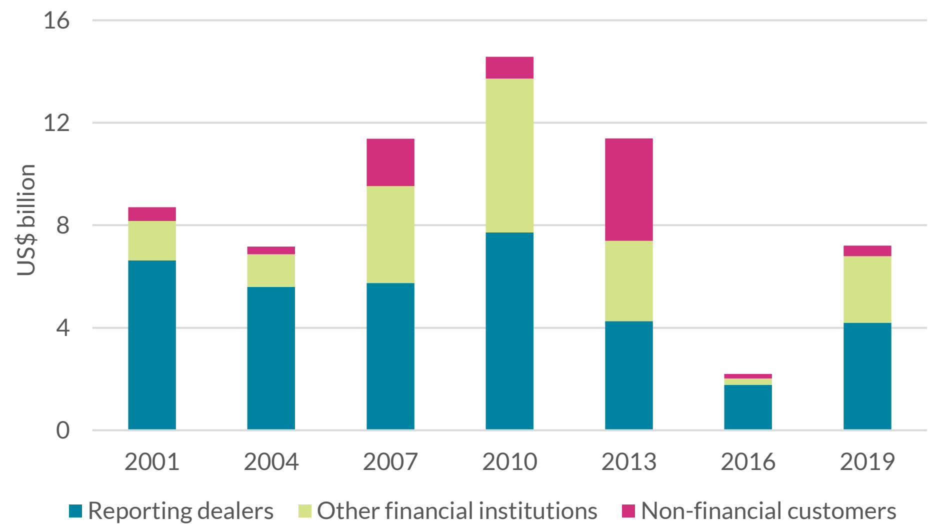
In the 2019 survey, trades with reporting dealers accounted for US$4.2 billion, or 58 per cent of FX derivatives turnover in Ireland, down from 81

[10] See Footnote 9.

per cent of turnover in the previous survey. 38 per cent of total FX turnover in April 2019 was with related parties.[11] Trades with other financial institutions[12] gained in relative importance, reaching US$2.6 billion or 36 per cent of Irish total FX turnover in April 2019. This reverses the development that was observed in the 2016 survey, when trading with other financial institutions had reduced to 11 per cent (Chart 3).

The relative importance of trade with non-financial customers, including non-financial corporations that are most closely linked to global trade in this segment, fell from 8 per cent in 2016 to 6 per cent in 2019. This small share indicates that financial motives caused the trends in FX trading rather than needs arising from global trade and developments in the real economy (Schrimpf and Shushko, 2019a).

Chart 3: FX turnover in Ireland, by counterparty, 2001-2016



Source: Central Bank of Ireland

Most transactions were cross-border. Transactions taking place via cross-border counterparties had reached 92 per cent in 2019, up from 85 per cent in 2016. Nearly all reporting dealer trading in April 2019 was cross-border, while 15 per cent of all FX trades with other financial institutions, and 40 per cent of trades with non-financial customers were local. The survey provides no information on countries or regions.

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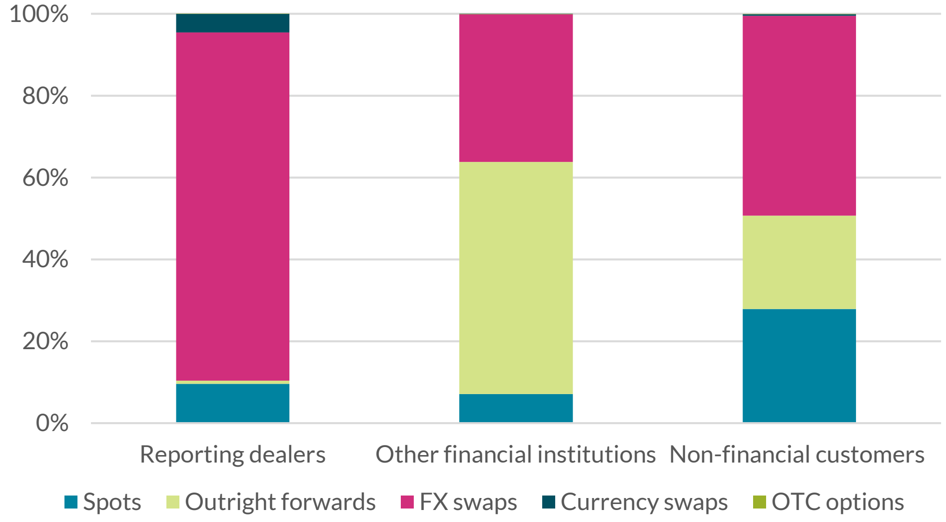
[11] Related party trades are contracts with own branches and subsidiaries and between affiliates, and can fall in the categories reporting dealers and other financial institutions. The survey provides no counterparty breakdown of related party trades.
[12] The counterparty ‘other financial institutions’ includes non-reporting banks. Therefore, this definition is different from other financial intermediaries as defined in international statistical manuals, such as ESA 2010.

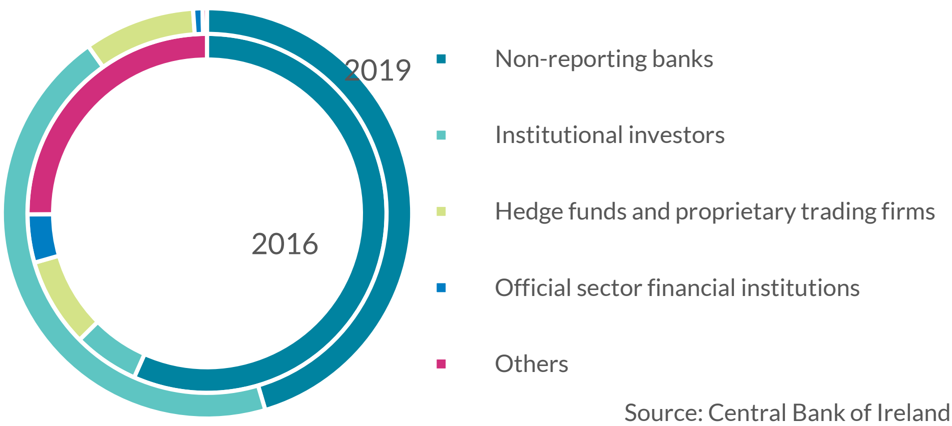
Chart 4: FX turnover in Ireland , by instrument and counterparty, 2019



Source: Central Bank of Ireland

FX swaps dominated inter-dealer trading, while trading with other financial institutions was mainly via outright forwards (Chart 4). Trading with other financial institutions includes non-reporting banks, hedge funds and proprietary trading firms (PTFs), institutional investors as well as official sector financial institutions. The relative importance of trading with institutional investors increased between 2016 and 2019, from 6 per cent to 45 per cent of the total turnover with other financial institutions (Chart 5). Institutional investors, such as insurance companies and pension funds, typically use longer maturity FX derivatives to hedge the currency risks of their foreign bond holdings bonds (ECB, 2019b).

Chart 5: FX market turnover in Ireland, Breakdown of other financial institutions, 2016 and 2019



Source: Central Bank of Ireland

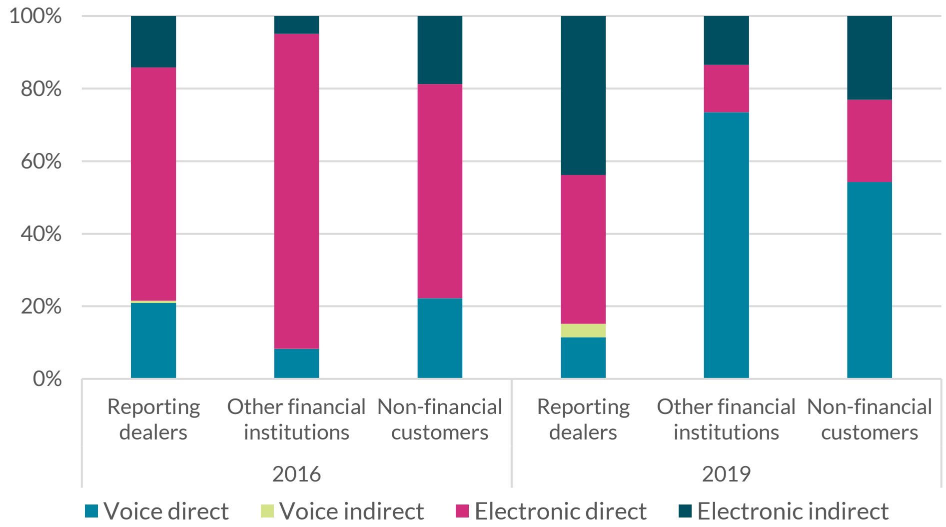
In the global results, trading with institutional investors has contracted as a flattening yield curve since late 2016 made US Treasuries less attractive

(Schrimpf and Shushko, 2019a). Globally, the relative importance of non-reporting banks, hedge funds and PTFs increased notably over the last three years, accounting for 24 per cent of total FX market turnover and 9 per cent, respectively. In Ireland, hedge funds and PTFs also accounted for 9 per cent of the 2019 FX turnover, up from 8 per cent in 2016. The relative importance of non-reporting banks, typically smaller banks which do not engage in market making and serve as clients of large derivatives dealers, fell from 57 per cent in 2016 to 45 per cent in 2019.

2.5 Execution method

Electronic and automated trading systems boost turnover by reducing trading costs and other barriers to entry, enhancing pricing transparency and liquidity provision (Wooldridge, 2019). The reduction in transaction costs particularly enabled non-dealer banks to participate in the FX markets (Schrimpf and Shushko, 2019b). Traditionally, most business was conducted via direct trading, i.e. verbal contract. In 2013, nearly half of all trades in Ireland were conducted via voice methods, either direct or indirect. In the 2019 survey, this had fallen to 19 per cent (Chart 6), with indirect voice trading accounting for just 0.4 per cent of total turnover. Electronic direct trading had a share of 69 per cent, up from 36 per cent in 2016. The share of electronic indirect trading – execution intermediated by a third party electronic platform, e.g. Reuters Matching/EBS – declined from 39 per cent to 13 per cent over the last three years.

Chart 6: Irish FX turnover, by execution method and counterparty, 2016 and 2019



Source: Central Bank of Ireland

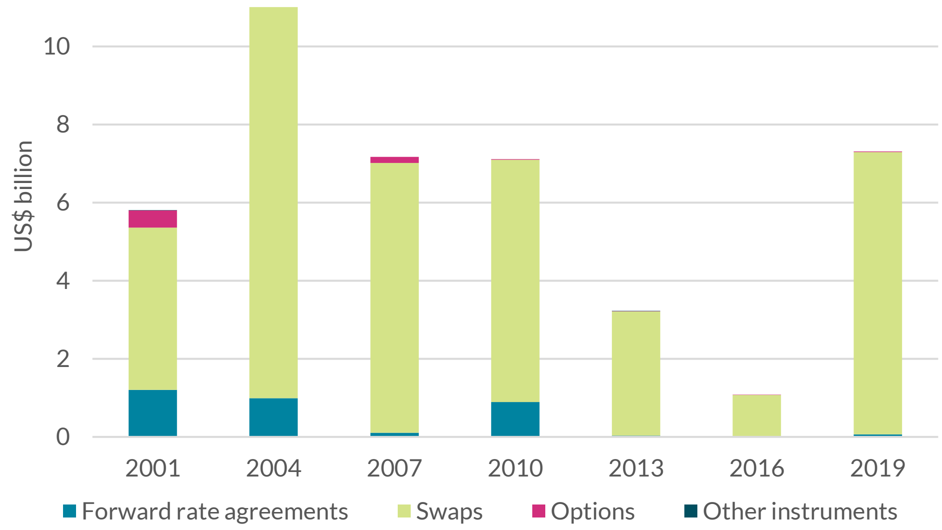
In April 2019, 45 per cent of spot volumes were executed via electronic indirect trading, while for all other instruments electronic direct trading was the dominating execution method. Particularly for other financial institutions, the main execution method changed from voice direct in 2016 to electronic direct trading in 2019. For these counterparties, turnover via electronic direct methods increased from 13 per cent in 2016 to 87 per cent in 2019. For non-financial customers, electronic direct methods accounted for 59 per cent of turnover in April 2019, compared to 23 per cent three years earlier. The rise in electronic and automated trading was one important driver behind the increase in Irish FX turnover, and helped increase OTC interest rate derivatives volumes.

3. OTC Interest Rate Derivatives

3.1 Overview

The BIS triennial also collects data on OTC single-currency interest rate derivatives. These instruments are contracts whose value depends on the value of an underlying interest rate or of another interest rate contract. The 2019 survey results for Ireland show an increase of average daily turnover by 577 per cent between the last three years (Chart 7). This is the first time since 2004 that turnover in OTC interest rate derivatives exceeds the turnover in FX derivatives. Between April 2010 and April 2016, the Irish average daily turnover tended downwards, reaching US$1.1 billion in 2016. As in FX markets, the sharp fall in OTC interest rate derivatives turnover between 2013 and 2016 was driven by banks exiting the Irish market and by the decline in cross-border exposure. Mainly driven by the changes in the survey population, in April 2019, average daily turnover in OTC interest rate derivatives jumped to US$7.3 billion. Globally, with an increase of 143 per cent between 2016 and 2019, OTC trading experienced the highest growth rate since the introduction of the Triennial Survey, and outpaced the growth of trading of interest rate derivatives on exchanges. In contrast, the total euro area turnover grew by 8.7 per cent between the last three years, reaching US$256 billion, or 3.5 per cent of the global turnover in 2019.

Chart 7: Average daily turnover in OTC interest-rate derivatives in Ireland, 2001-2019



Source: Central Bank of Ireland

The five new survey participants accounted for 88 per cent of the Irish OTC interest rate derivatives turnover in April 2019. The turnover of the nine banks that have already participated in the 2016 survey increased by only 1.3 per cent. The booking of contracts with EU customers in assumption of a hard Brexit end of March 2019 was one of the main reasons given by the new survey participants for the opening or reactivation of sales desks for interest rate derivatives in Ireland.

Traditionally the concentration in the OTC interest rate derivatives market is high. Institutions operating derivatives sales desks for FX derivatives do not necessarily trade interest rate derivatives. In April 2016, nine of the fifteen Irish reporting institutions recorded OTC interest rate turnover. This number declined down to six in April 2019, with three institutions accounting for 99 per cent of total turnover and therefore for the trends in the breakdowns by instrument (section 3.2), by currency (section 3.3) and counterparty (section 3.4) described below. Section 3.5 analyses the impact of compression trades and central clearing on the Irish growth in OTC interest rates derivatives between 2016 and 2019.

3.2 Instruments and maturities

As can be seen in Chart 7, interest rate swaps (IRS), including overnight index swaps (OIS), continued to dominate the Irish OTC interest rate derivatives turnover. Turnover of these contracts accounted for 98.9 per cent of the total interest rate turnover in April 2019, slightly down from 99.5 per cent in the previous survey. IRS are used for a wide range of purposes, including the hedging of interest rate risks on banks and other market participants' balance sheets, e.g. risks arising from duration gaps

(Boneva et al., 2019). In addition to hedging, changing expectations about future interest rate movements, in particular about US short-term interest rates, also incentivised speculative activity (Ehlers and Hardy, 2019). In the global survey, the share of IRS decreased from 69 per cent to 64 per cent over the past 3 years.

With an average daily turnover of US$ 63 million in April 2019, forward rate agreements (FRAs) were traded again in Irish OTC interest rate derivatives markets, after they disappeared as an instrument in 2013. The turnover of OTC options in Ireland increased by 210 per cent between the 2016 and 2019 survey, albeit remaining on a low level, with an average daily turnover of US$ 14 million in April 2019.

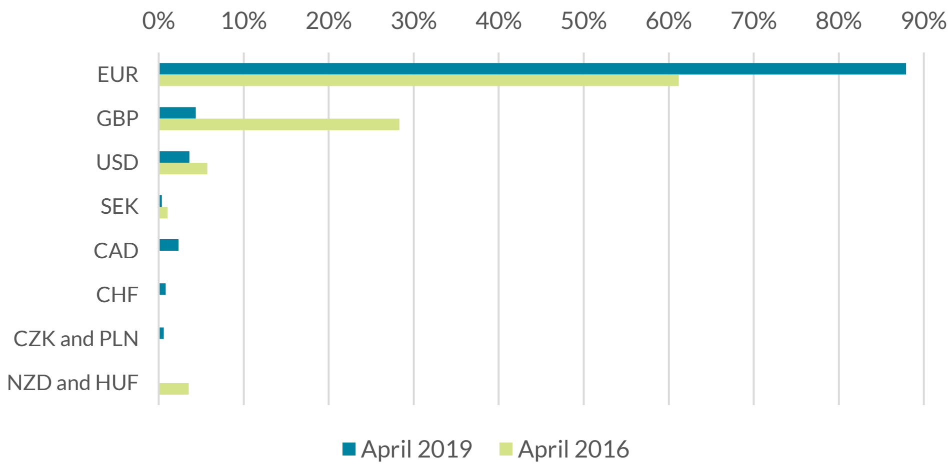
The 2019 survey distinguished for the first time between OIS and other interest rate swaps. Turnover of OIS in Ireland in April 2019 was US$ 0.6 billion. OIS and FRAs are instruments typically of short maturities. With a combined average daily turnover of 8.9 per cent of total turnover in all OTC interest rate derivatives, their contribution to the market growth was moderate. In contrast, these shorter maturity instruments accounted for 60.7 per cent of the total turnover in all interest rate derivatives instruments in the global results. Trading in the euro area increased at a slower pace due to continuously relatively low and stable shorter-term rates in the euro area (Ehlers and Hardy, 2019).

3.3 Currencies

Irish institutions reported the use of just eight currencies in the single-currency interest rate derivatives markets in the 2019 survey, one more currency than in 2016. Irish turnover in euro-denominated contracts came to US$ 6.4 billion per day in April 2019, accounting for 88 per cent of total turnover in all currencies, up from 61per cent in 2016 (Chart 8). The proportion of turnover in interest rate derivatives denominated in pound sterling declined between the two surveys, to 4 per cent in 2019 from 28 per cent in 2016. In contrast, the share of global turnover in pound sterling decreased only slightly, from 9 per cent to 8 per cent over the last three years. Controlling the Irish results for a constant reporting population, the share of OTC interest rate derivatives denominated in pound sterling declined just from 24 per cent to 21 per cent. For the new reporting institutions, only 2 per cent of all trades were denominated in pound sterling, while 92 per cent are denominated in euro.

The share of US dollar declined to 4 per cent in 2019, down from 6 per cent three years earlier. The other currencies traded in April 2019 were Canadian dollar, Swiss franc, Swedish krona, Czech koruna and Polish zloty, while Hungarian Forint and New Zealand dollar were no longer used.

Chart 8: OTC interest rate derivatives market turnover in Ireland, by currencies



Source: Central Bank of Ireland

3.4 Counterparties

In terms of the counterparties, the picture has changed between the two surveys. While in April 2016 trading with other reporting dealers accounted for 92 per cent of total interest rate derivatives turnover, three years later 99 per cent of interest rate derivatives trading was with other financial institutions. In the global survey, the share of trading among reporting dealers was 24 per cent. The survey provides no further information on other financial institutions. Other sources than the survey show that investment funds and other asset managers have become more important players in interest rate derivative markets as these institutions use interest rate derivatives to manage their risks, particularly when they invest in fixed income securities, or to replicate their portfolio (Ehlers and Hardy, 2019). The Irish reporting institutions reported almost all of the transactions in April 2019 as with cross-border counterparties. While the BIS identified an increase in related party trades, particularly back-to-back trades[13], as one of the factors behind the growth in interest derivatives markets, with 2 per cent of total OTC interest rate derivatives turnover in April 2019, the share of related party trades in Ireland was small.

3.5 Compression and central clearing

Compression trades[14] are seen as another important contributor to the large increase in OTC interest rate derivatives turnover (Wooldridge,

[13] In back-to-back deals the liabilities, obligations and rights of the second deal are exactly the same as those of the original ones. They are usually conducted within financial groups to facilitate either internal risk management or internal bookkeeping.
[14] In a compression trade one single new contract replaces two or more contracts with offsetting positions, but leaving the economic exposure materially unchanged.

2019). Both the original and the compression trade are reported in the survey, thereby increasing the turnover.

Although the turnover survey provides no hard data, compression trades may account for a good portion of the increase in Irish turnover given the regulatory environment. The European Market Infrastructure Regulation (EMIR) includes requirements for compression and the central clearing of fixed-to-float interest rate swaps, FRAs and OIS in EUR, GBP, JPA and USD. In addition, the Basel III leverage ratio requirements account derivatives on a gross basis, which can be reduced via portfolio compression (Ehlers and Hardy, 2019). For the majority of instruments that are traded in Ireland, EMIR requires central clearing. As the data from the second part of the BIS Triennial Survey show, 65 per cent of all notional amounts of single-currency interest rate derivatives outstanding at the end ofJune 2019 in Ireland were with Central Counterparties (CCPs), compared to only one per cent that was reported end-June 2016[15]. As trade compression limits notional growth (Aramonte and Huang, 2019), the increase of outstanding notional amounts of OTC interest rate derivatives in Ireland between 2016 and 2019 by only 16 per cent (compared to the 577 per cent jump in turnover) can be considered a further indicator for trade compression in Ireland.

4. Conclusion

The 2019 BIS triennial survey results for Ireland show a substantial increase in both foreign exchange and OTC interest rate derivatives since the last survey in 2016, which is consistent with the global trend. There are multiple drivers behind the increase in FX and OTC interest rate derivatives volumes globally, and these have helped increase Irish volumes. The rise in electronic and automated trading was one important driver for the increase in FX and OTC interest rate derivatives trading during the last three years. Hedging and speculation activities, incentivised by growing economic uncertainties, changing expectation about monetary policies, and an excess liquidity in the euro area benefited an increased use of FX and interest rate swaps. In addition, OTC interest rate derivatives markets benefited from structural developments like clearing and compression. By influencing the activities of global market players, these factors influenced the trends in the Irish derivatives markets, in particular because large derivatives dealers opened or reactivated their sales desks in Ireland during the last three years. Mainly the activities of these new participants in the Irish market drove the Irish growth above the global average.

[15] Please note that due to the conceptual differences between the turnover and the outstanding amounts part of the triennial survey, mainly reporting population and reporting basis, the survey results for Ireland are not directly comparable.

References

Aramonte, S. and Huang, W. (2019), 'OTC derivatives: euro exposures rise and central clearing advances', BIS Quarterly Review, December.

BIS (2019a), 'Triennial Central Bank Survey of Foreign Exchange and OTC Derivatives Markets: Reporting guidelines for turnover in April 2019', Monetary and Economic Department, March.

BIS (2019b), 'Foreign exchange turnover in April 2019', Statistical release, Monetary and Economic Department, September.

BIS (2019c), 'OTC interest rate derivatives turnover in April 2019', Statistical release, Monetary and Economic Department, September.

BIS (2019d), 'OTC derivatives statistics at end-June 2019', Statistical release, Monetary and Economic Department, November.

Boneva, L., Böninghausen, B., Rousová, L. and Letizia, L. (2019),'Derivatives transactions data and their use in central bank analysis', Economic bulletin, Issue 6/2019, ECB, September.

ECB (2019a), 'Economic and monetary developments', Economic bulletin, Issue 4/2019', ECB, June.

ECB (2019b), 'Euro money market study 2018', September.

ESMA (2019), 'EU Derivatives Markets 2019', ESMA Annual Statistical Report, December.

Ehlers, T. and Hardy, B. (2019),' The evolution of OTC interest rate derivatives markets', BIS Quarterly Review, December.

Goodacre, H. and Razak, E. (2019), 'The foreign exchange and over-the-counter interest rate derivatives market in the United Kingdom', Bank of England, Quarterly Bulletin, Q4.

King, M. and Mallo, C. (2010), 'A users' guide to the Triennial Central Bank Survey of foreign exchange market activity', BIS Quarterly Review, December.

Kreicher, L. and McCauley, R., (2016), 'Asset managers, eurodollars and unconventional monetary policy', Bank for International Settlement, BIS Working Paper No 578, August.

Menton, A. (2014), 'Irish Results of the BIS Foreign Exchange and Interest Rate Derivatives Survey 2013', Quarterly Bulletin 02, Central Bank of Ireland, April.

Schrimpf, A. and Shushko, V. (2019a), 'Sizing up global foreign exchange markets', BIS Quarterly Review, December.

Schrimpf, A. and Shushko, V. (2019b), 'FX trade execution: complex and highly fragmented', BIS Quarterly Review, December.

Wooldridge, P. (2016), 'Comparison of BIS derivatives statistics'. Paper for the eight IFC on 'Statistical implications of the new financial landscape, September.

Wooldridge, P. (2019), 'FX and OTC derivatives markets through the lens of the Triennial Survey', BIS Quarterly Review, December.

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