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INVESTMENT BANKING IN EUROPE: WHERE WE ARE AND WHERE WE ARE GOING. IMPLICATIONS FOR FIRMS, FINANCIAL INSTITUTIONS AND REGULATORS

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PREFACE

by EQUITA SIM

It is a great pleasure for Equita to celebrate the seventh year of our partnership with Bocconi University, aimed at analysing and promoting the capital markets.

During the last 6 years, we focussed mostly on the Italian capital markets, analysing their key features, players and performances, and we made a number of policy recommendations that over time contributed to regulatory improvements and initiatives. The key point has always been that we, as a country, desperately need strong capital markets for our companies to grow and to diversify their sources of funding. This has always been true, but it has become even more necessary after the financial crisis.

On the other hand, we gradually realised that inefficient capital markets and a sub-scale investment banking industry have now become European issues. The wealth of the European economy is built on a diverse set of companies that need an efficient ecosystem to fund their growth. For Europe to flourish, it is absolutely key that we have well-functioning equity and debt capital markets, and this is even more relevant today given that the majority of European companies have less access to traditional bank credit than a decade ago. And yet, despite all the evidence, no one is taking action to address the weakness of European investment banking and the disappearing capital markets infrastructure needed to finance Europe's small and midsize companies.

This year's research focuses precisely on these topics and gives very clear evidence that the European investment banking industry is in trouble - and that something should be done about it.

The key facts can be summarised as follows:

- European investment banks have been losing market share to US banks for more than a decade. US investment banks have strong competitive advantages compared to their European peers. They enjoy a high level of concentration, consistent pricing discipline, a very large and profitable domestic market, the quality of their services tends to be very good and they benefit from their regulators taking a consistently pragmatic approach. As a result, their market share in European investment banking has increased, at the expense of local competitors, and the trend is unlikely to be reversed.

- Technology, competition of US players, passive investing, low interest rates, decreasing trading volumes, regulation (including Mifid 2) and growth of private capital at the expense of liquid markets have deeply affected the European capital markets and the profitability of most European players. Revenues in sales and trading have decreased dramatically and even large European banks have been dismantling part of their capital markets activities.

- In the absence of a renewed effort for a real European banking union, it is unlikely that European players will join forces in cross-border mergers to create European Investment Banking champions: the economic rationale is simply not there. Moreover, capital markets for smaller companies tend to be local, even more so during the last few years due to the decreasing liquidity for smaller caps. Therefore, local brokers, investors and markets must be protected and promoted for European companies to prosper.

- And finally, for the last decade European regulators have been mostly focused on increasing transparency, protecting investors, improving disclosure and promoting growth markets. But nothing has been done to make sure that investment banks and investors (particularly the ones focusing on smaller caps) can prosper and guarantee efficient capital markets for European companies. Quite the opposite, with initiatives such as the Mifid 2 directive, which demands the completely unnecessary unbundling of the cost of research from trading fees. These rules are destroying the research industry, increasing concentration, cutting the research coverage of European companies and making it impossible for weaker research institutes to survive.

Why does it matter? Because this is threatening the ecosystem which is essential for European companies to thrive.

- Large US global players are not interested in managing transactions for smaller companies, which are the backbone of the European economy. With no dedicated players (investment banks and investors), smaller companies will find it more and more difficult to access the capital markets (debt and equity).

- The existing strong pro-private capital bias creates inequality in terms of access to investment opportunities and poses risks in terms of liquidity for a number of investors, including pension funds. The bias will not be reversed unless regulators take action. Despite 2019 being a very positive year for the equity markets in general, liquidity in the European equity markets has shrunk, particularly in the small cap sector. The large decrease in the number of European IPOs during the year is further evidence of that.

- The systemic risks posed by the enormous growth of passive investing are unknown. It is difficult to imagine what could happen in the context of a major financial crisis, with particular regard to the real underlying liquidity of ETFs. Some of the risks related to illiquid investments have become clear during 2019 in the well-known Woodford and H2O cases.

The wider consequences of all of the above are by now abundantly clear to everybody: less coverage of smaller caps, fewer brokers focused on anything other than the very large listed companies and consequently weaker interest from institutional investors in the companies that represent the backbone of the European economy. This will not stop. Trading, research and investing in small-caps have become uneconomical and as a result, only large corporate equity and debt issuers will be of interest to global banks and investors. The current environment is stifling competition and is unduly favouring global banks, investors and companies.

The situation is complex, the markets forces are strong, and it is necessary for Europe to have a well-planned strategy, particularly after Brexit. Potential solutions could include: simplifying the regulatory framework, incentivising initiatives to promote the markets and revisiting state-aid rules where necessary. More specifically:

- Revisit and simplify rapidly Mifid 2. It is clearly too complex and has created regulatory burdens and costs that make it impossible for most smaller players (brokers and investors) to be profitable. The unbundling of research must be tempered or completely reversed, although this per se will not solve the problem as most investors have already drastically cut the revenues that they pay to the sales & trading industry.

- Adjust and interpret state aid rules to make it possible for individual countries to promote and incentivise local players and markets. There is clear market failure when it comes to developing efficient markets for smaller companies, and it is mostly local investors who invest in small-caps. Therefore, regulators should encourage the establishment of dedicated investors and change state-aid rules to allow local governments to incentivise them.

- Incentivise public markets vs private markets. Initiatives could include preferential tax treatment for companies going public or financing themselves through bond issues. Changes in European rules could also be considered to avoid tax arbitrage for managers of private capital funds versus entrepreneurs or managers of public funds. The current interest rate level, which makes it relatively easy for private equity players to create value by simply de-leveraging the companies that they invest in, creates a disproportionate advantage compared to active investors in public securities.

- Consider ways to favour active investors. The large concentration of power and assets in the hands of a few large US passive asset managers is not desirable and not in the interest of the healthy development of the European markets. Active investors are essential to contribute to pricing and underwriting publicly-issued securities in a way that will never be matched by the passive investors.

- Consider ways to favour European investment banks and local players. Initiatives could include: (i) establishing proportionality in compliance with regulations, making it easier for smaller brokers, investors and issuers to operate in the market; (ii)promoting tax breaks on research published regarding smaller companies; (iii) simplifying companies' access to markets by removing any regulatory arbitrage among countries (for example harmonising and simplifying filing rules and making reviewing times and practices consistent throughout Europe).

In summary, the European investment banking sector is a key component of our economy and it requires specific attention by regulators and a wide-ranging strategy. For too long nothing has been done: action must be taken now before it's too late.

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SUMMARY

1 INTRODUCTION

Investment banking is a key financial infrastructure for the EU economy. By giving companies access to capital markets and financial advisory, investment banks support their growth and the economic development of the area as a whole. Moreover, at a time in which a strong financial backbone is essential for effectively competing in an increasingly aggressive geopolitical arena, a well-functioning investment banking system in the EU clearly represents a high political priority for European financial regulators and policymakers. Nonetheless, this apparently obvious consideration seems to clash with the evidence that emerges from a comparison between the most recent trends in investment banking in the EU and the US.

Supported by a healthier domestic market and their larger scale, US investment banks have been gaining market share in Europe over the last decade, filling the gap left by European banks, which instead have been downsizing their operations in response to more rigid regulations, slow growth and negative interest rates undermining their core profitability. In particular, as US banks have multiplied their share of investment banking fees, European banks have lost theirs. According to the data provider Dealogic, from a peak of 64% in 2010, European banks now account for just under 55% of the investment banking market in the region, while US banks take in 39% of the fees, up from 28% in 2010. The ascent of US banks is such that so far this year the top five banks in Europe by investment banking revenue are all American, and only one European bank made it into the top five between 2014 and 2018. As of early July 2019, seventeen US banks advised on the ten largest announced deals involving a European company, compared with only nine European banks.

In light of these trends, the goal of this paper is to provide a better understanding of the recent evolution of the investment banking market in Europe, to identify key trends in the industry, and to discuss the implications for the economy, the companies and the regulators and policymakers of Europe. Our motivation stems from the central role investment banks play to support the economy by creating the conditions for the efficient flow and allocation of capital. We are also well-aware that the wealth of the European economy is built on a diverse set of companies, largely small and midsized ones, which need an efficient capital market infrastructure to fund their growth. The question of whether investment banking in Europe is functional to the European business landscape is a timely one. Indeed, the risk of an impoverishment of investment banking in Europe is that it would leave a large portion of companies underbanked and their growth potential constrained.

As a result of our analysis, we set up a map of which type of banks support which type of deals. Regulators and policymakers can use this map to monitor the evolution of the industry over time and possibly identify critical parts of the market that require targeted intervention.

The rest of this paper is organized as follows. In Section 2 we introduce our analysis in the context of recent developments in the investment banking industry in Europe and in the world. In particular, we provide a detailed picture of the status quo of the European investment banking industry, analyzing its structure and its recent evolution in a comparison with the US. In Section 3, we present our empirical analysis of deal making activity in which we monitor the evolution of investment banking over time, disentangling the relative contributions of different types of banks. In Section 4, we discuss policy implications and we offer our concluding remarks.

2 INVESTMENT BANKING AS A KEY INFRASTRUCTURE THAT CONNECTS INVESTORS TO COMPANIES

Before we can address the question of whether the size and the structure of the investment banking industry in the EU is functional to the characteristics of European investors and companies, we need to introduce our analysis in the context of the broader economic trends which in recent years have put investment banking business models under pressure worldwide. To this end, in this section, we provide an overview of recent developments in the investment banking industry, first from a global perspective and then focusing more specifically on the EU.

In particular, we touch upon four different headwinds that can potentially undermine the ability of investment banks to connect companies with investors, trends that investment banks worldwide currently need to face with when advising companies on their external growth (i.e M&A), or raising capital in primary debt (i.e. DCM) and equity capital markets (i.e. ECM), or when brokering and trading securities in secondary markets. In this section, we frame our analysis in the context of recent developments in the investment banking industry in Europe and globally.

Liquidity in primary and secondary markets is drying up.

In the last ten years after the Global Financial Crisis (GFC), different factors affected the overall market liquidity level for both equity and bond markets and consequently the level of liquidity-shock risk.

- The regulatory framework resulting from the GFC made intermediaries like the IBs more risk-averse, hampering their ability to provide liquidity to traders and investors.

- The huge amount of cash injected in the financial system with QE programs boosted the size of the markets while reducing their volatility. This new condition acted as a disincentive for intermediaries to provide market-making services, also given the increased capital absorption derived from Basel III, thus shrinking the capital market activities of IBs.

Especially for those investors searching for yields in a low-interest-rate context, there is a growing incentive to operate in riskier markets like corporate bonds instead of government bonds. According to the IMF (Oct. 2019), the result of these trends is higher systemic risk, given that bond funds, now worth $1.7 trillion, can have a hard time redeeming investors. Indeed, the majority of mutual funds in Europe give their clients the chance to promptly liquidate their investments. The market may become more and more illiquid (also considering the shift to a passive management strategy that concentrates capital on indexes' constituents, as described later in this work). If this happens, liquidity shortfalls are likely. In the global scenario, one-sixth of the fixed income funds will face this issue in case of a severe outflow (IMF, Oct. 2019). Looking at funds that operate in the illiquid niches of the *leveraged loans* or with the *high yield bonds*, which are also exposed to a higher default risk, this difference in the timing of client redemption and liquidation of the underlying assets could affect the stability of global financial markets (Bank of England, Feb. 2019).

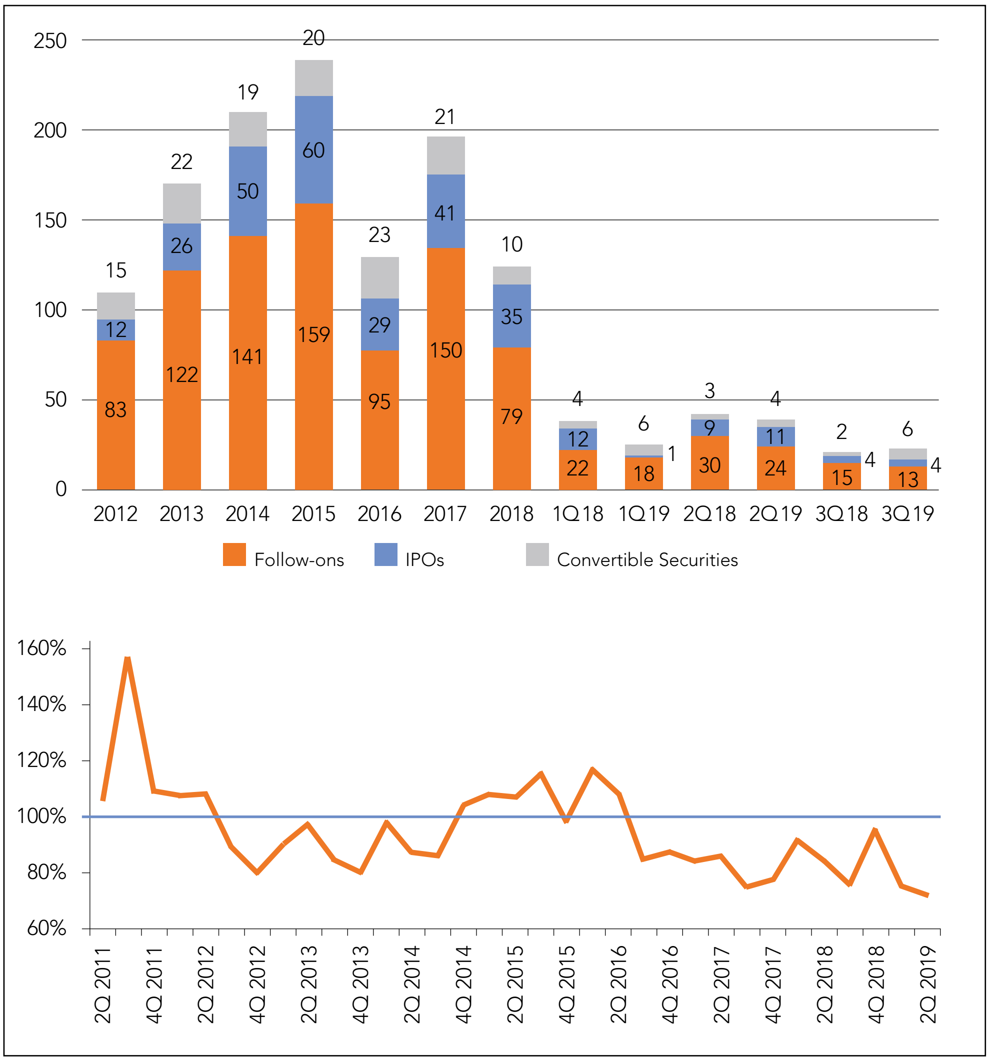


FIGURE 1
Equity issuance on European exchanges (EUR bn) Euro Area data 2012 – 3Q2019

Turnover ratio (annual turnover value/ market cap) Euro Area data 2011-2Q2019

Source: Afme, Dealogic

As shown on the left side of *Figure 1*, the Euro Area is experiencing a decrease in the issuance of new equity instruments on primary markets. In 2018 there was a steep decline compared to 2017, and in 2019 the trend continued until the 2Q. (In *Figure 1* the first three quarters of 2019 are compared with the first three of 2018.) This downturn is reflected in the lower capital market revenues of IBs in European markets. As shown on the right side of *Figure 1*, there is also an ongoing decline in the trading volumes relative to the market cap in the equity secondary market, showing a decreasing liquidity level.

Crowding out of public market funding by private equity and private debt capital.

In the past two decades, private markets experienced steady growth. In *Figure 2*, we can see that private fundraising was positive for different asset classes. Since the beginning of the 2000s, there has been a four-fold rise for PE-backed companies, which now number 8,000 in the US, in contrast to listed companies that dropped to 4,000. Globally, asset owners are expected to place 20% of their assets in private markets within ten years - from the current proportion near 14% (Willis Towers Watson, Sep. 2019).

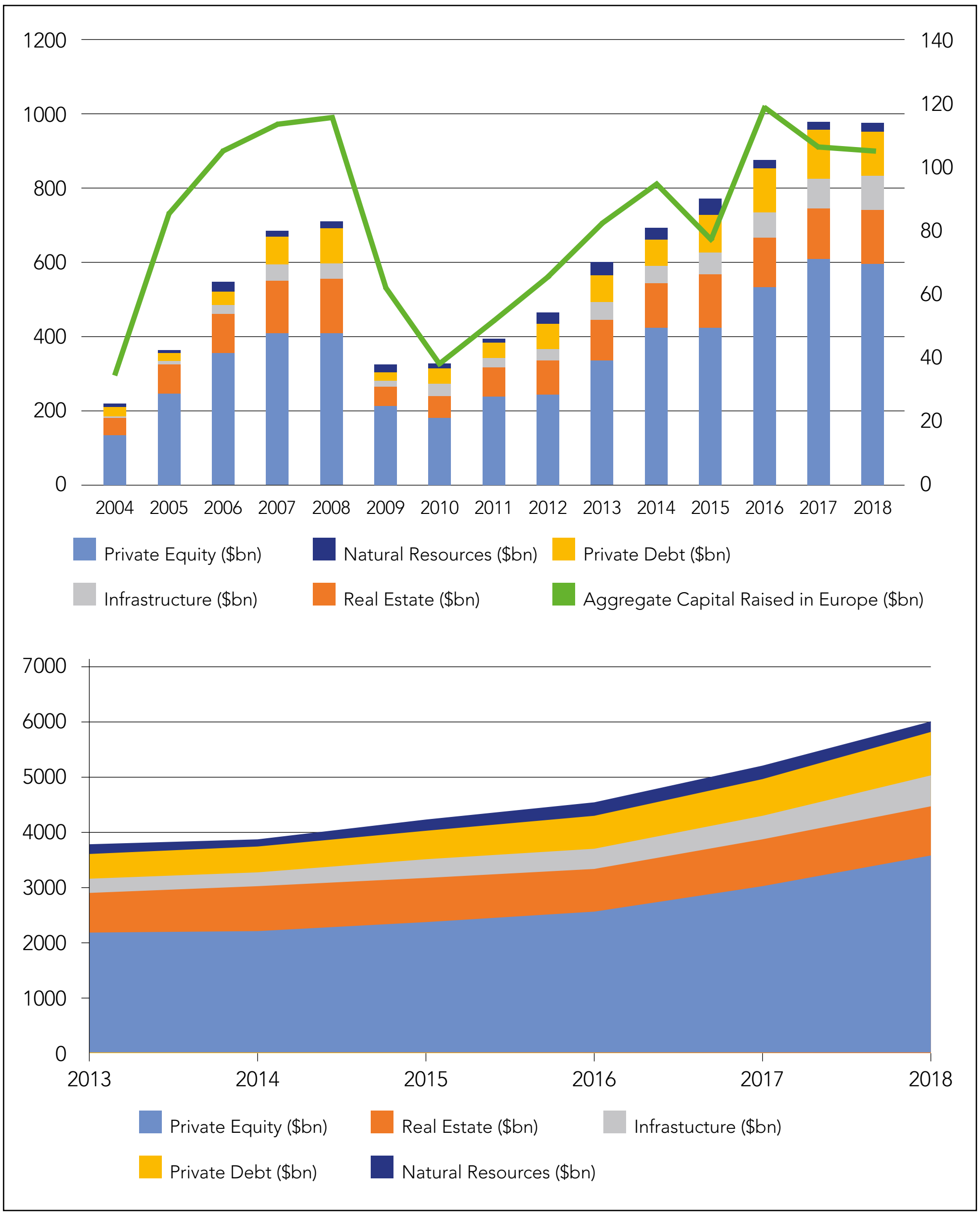


FIGURE 2
Global breakdown for private capital fundraising (bar chart, LHS axis) and private capital raised in Europe (line chart, RHS axis). Global/Euro Area data 2004 – 2018

Source: Afme, Dealogic

The total AUM for private markets worldwide reached $6 trillion in 2018 with fundraising at $976 billion in the same year, slowing slightly from the previous year (Preqin data).

The global private equity market assets grew by 17% in 2018 (Preqin data) and more than seven times since 2000, while the deal value in the same year reached the level of $1.4 trillion, surpassing the previous record set in 2007 (McKinsey Private Markets Review 2019). At the end of 2018, the total assets under management for the PE market were around $3.56 trillion, representing half of the total private market (Preqin data).

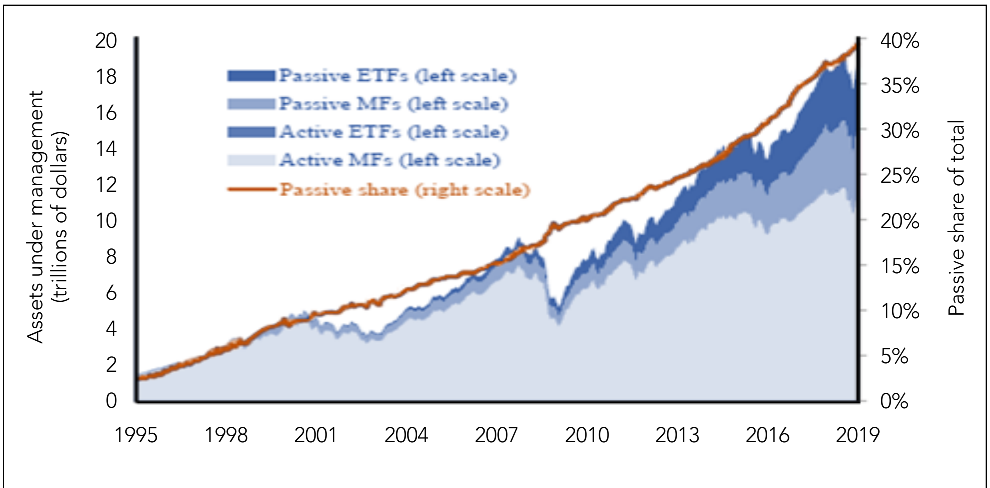
The global private debt market experienced an inflow of around $110 billion in 2018 and, even if the fundraising was down by 10% YoY, it reached $755 billion of AUM (Preqin data).

Thanks in part to an abundance of cash being offered by venture capitalists and sovereign wealth funds, many startups are opting to stay private longer, raising large equity rounds and delaying public offerings. Late-stage funding is squeezing investment banking margins. Then when they decide to go public, some, like the powerful tech companies, exert their influence, using their size and name recognition to extract lower fees from the investment banks. Facebook (1.1%), Twitter (3.25%) and Google (2.8%) all paid significantly lower fees than the standard US IPO fee of 7%. More recently then, other tech giants have explored alternatives to the IPO, like direct public offerings (DPO) in the case of Spotify and Slack, or alternative exchanges, which don't charge market data and exchange access fees like major exchanges do. Another option is the initial coin offering (ICO).

Growing allocation of capital to passive investment styles.

In the last few decades, investor preference for the fund's management style has undergone a clear shift from an active to a passive approach. This resulted in a global trend across asset classes, reaching 47% and 27% of AUM, respectively in equity and bond funds in 2018 (Anadu et al., 2019). The passive share of the AUM will overcome the active share by 2021, according to Moody's estimates.

FIGURE 3
Total assets in active and passive MFs and ETFs and passive share of the total (US data 1995 –2019)



Source: Morningstar

Among the possible causes of this trend are the consistently lower long-term performances and higher fees of active managers, as shown in *Table 1*,compared to their passive peers:

- In Europe, 35% of the total number of actively managed equity funds outperformed the market benchmark in 2011-2012, but only 8% of them outperformed the same benchmark in the longer period 2011-2016 (Sushko and Turner, 2018).

- In the US, 37% of active US stock funds outperformed their market benchmark in 2018, while just 23% of the total (equity and bond) active funds outperformed theirs in the last decade (Morningstar – Active/Passive Barometer, Aug 2019).

- The shift toward lower-cost passive funds was also supported by some new developments in the industry, such as robo-advisors and new regulations that enhanced transparency on fees (MiFID II). Starting from 2010, the three biggest passive funds received 70% of capital inflows, evidence of the increasing importance of economies of scale in reducing fees (Sushko and Turner, 2018).

TABLE 1
The average expense ratio for different types of investment managers

Type of manager	Average expense ratio in 2018	Change since 2008
Active equity funds	0.76%	-18%
Active bond funds	0.55%	-10%
Index equity ETFs	0.20%	-9%
Index bond ETFs	0.16%	-3%
Index equity funds	0.08%	-10%
Index bond funds	0.07%	-9%

Source: Bloomberg

In any case, this trend is not affecting the overall stability of the financial system, but it has some impact on the composition of the stability risk (Anadu et al., 2019). Therefore, we can list increased and mitigated risks:

- *Diminishing liquidity and redemption risks* since most passive funds do not redeem in-cash but in-kind. Around 92% of ETFs redeem investors with baskets of securities, thus reducing the risk of liquidity shortfall (Anadu et al., 2019).

- *Increasing market volatility* of underlying assets, given the indexed investments (Ben-David, Franzoni and Moussawi, 2016). The proliferation of ETFs concentrates capital on the constituent of indexes. This augments the risk of high volatility in case of a change in market sentiment, which in turn erodes the stability of investments in passively managed funds, since investor flows respond procyclically to the fund's performances.

- *Increasing industry concentration* since passive funds tend to concentrate. This can be explained by the necessity to reduce costs thanks to economies of scale and scope. Indeed, the top five players in this market gained 45% of the global market share in 2018, up from 25% in 1999.

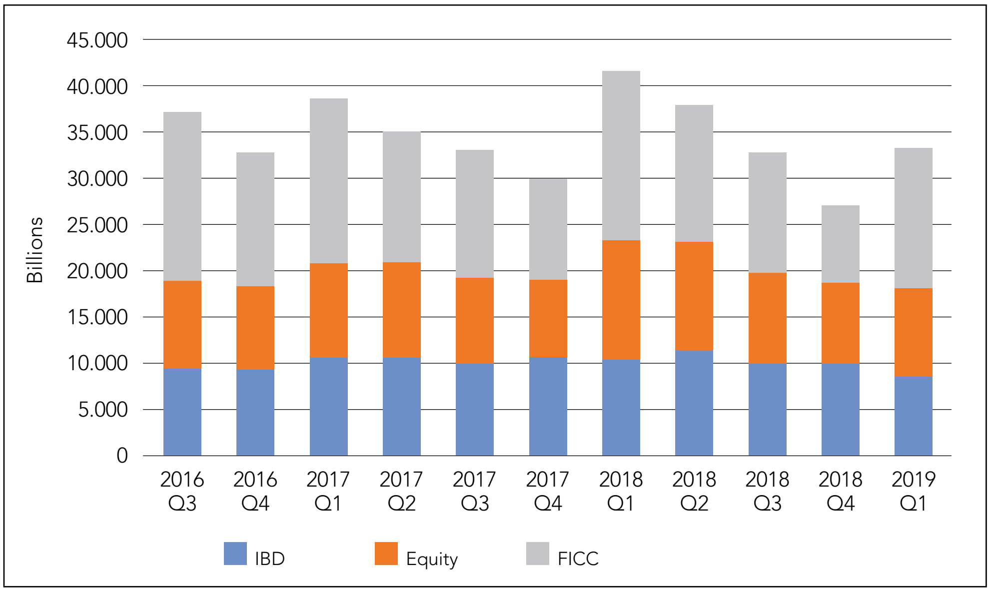
Revenues and stock performances.

Given the current trends that are affecting the investment banking industry, together with the performances of a panel of major IBs, in this section we offer some reflections on the possible effects of these trends on the future of the industry.

Investment banking revenues are under attack on different fronts. Technological advances have disrupted old business models, especially in the realm of securities trading where many of the players are finding their traditional trading models to be increasingly unprofitable. Eager to maintain their margins and protect their competitive advantage, banks have begun working to automate and commoditize their processes. However, financial upstarts have built technologies that could eventually cut into the relationship-driven work that investment banks are accustomed to. For example, algorithmic-based approaches are used to matching bidders and targets in M&As.

Consistently, as shown in *Figure 4*, revenues (defined as a sum of IBD, Equity Trading, and FICC Trading) are currently down with respect to the previous year by around 10%. Most importantly, the RoE at industry level is expected to fall to an average of 6.7% in 2019 from above 9% in 2016, with average operating margin at a 4-year low (Coalition data).

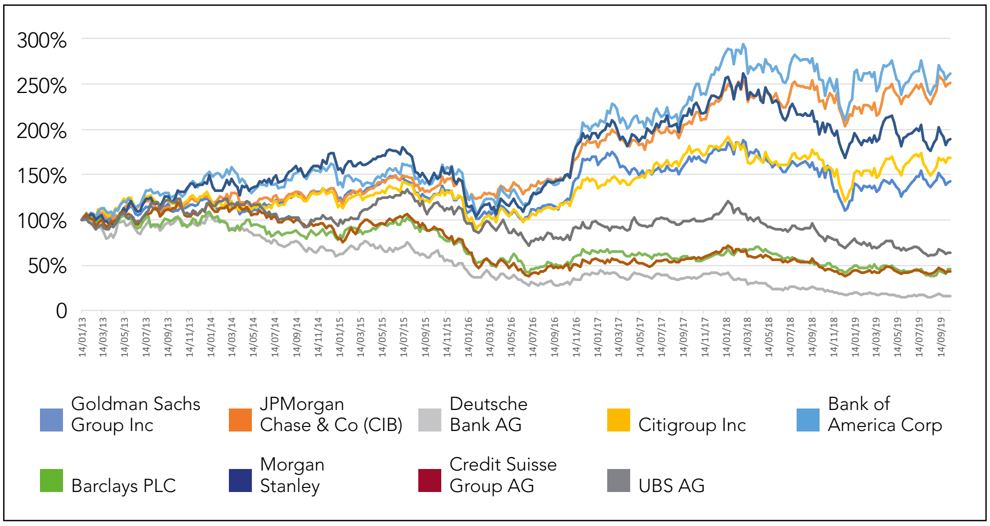
FIGURE 4
Aggregated revenues of the IB divisions of 9 banks comparing the IBD, FICC Trading and Equity Trading lines (Goldman Sachs Group Inc, JPMorgan Chase & Co (CIB), Deutsche Bank AG, Citigroup Inc, Bank of America Corp, Barclays PLC, Morgan Stanley, Credit Suisse Group AG, UBS AG)



Source: Bloomberg

According to Dealogic, in 1H2019 the IB industry's revenues in Europe were \$7.5 billion, down by -32% YoY, and \$36.5 billion, down by -16% YoY, globally. The P/E ratios of global investment banks are currently in the middle of the historical range since 2010. The minimum came in 2011-2012 during the sovereign debt crisis in Europe, while the maximum peaked in 2016 thanks to the anticipation of tax cuts in the US. Since P/E ratios are at mid-level, we can expect a correction of stock prices, also given the fact that global investment banks' EPS are near the top of their range. Added to this is strong uncertainty about the future performance of the global economy.

FIGURE 5
Stock price performance of major listed investment banks stacked to 2013



Source: Bloomberg

As clearly visible in *Figure 5*, the US and European banks are performing at two very different speeds. On one hand, we can note that the major US banks achieved a positive performance between 2013 and 2019. On the other, their European counterparts experienced a negative trend, also reflected in their market share in the global IB market. In 2007, US banks had a 46% market share compared with 39% of European banks. In 2018, the former reached 52% of total revenues, and the latter plummeted to 26%. In the same year, comparing the top five US banks and the top five institutions in Europe, we see $98 billion versus $19 billion of profits, with the IB revenues of the European banks sliding further.

With regard to investment banking, especially in Europe, there are negative expectations for the foreseeable future. In particular for sales & trading activities, declining proceeds and a harsher business environment are the consequences of the trends described above. These trends include the lower issuance of equity instruments, the lower liquidity of equity and debt markets and the shifting of AUM to passive asset management strategies or the world of private capital.

Nowadays, European economies appear in need of a strong financial backbone, given the slower growth that they are experiencing compared to the major economic powers of the world (China/US). Since 56% of the industrial base in Europe is made up of SMEs (with less than 250 employees) employing in total two-thirds of the workforce and requiring ad hoc financial resources/advisory, IBs play a crucial role in this scenario. In fact, IBs must take the lead in supporting a healthy financial system, especially for SMEs that will pursue M&A activities or raise capitals in the markets to reach a large enough critical mass to compete with foreign players, which are always stronger and bigger.

2.1 Investment banking in Europe

After discussing the main developments in the investment banking industry from a global perspective, in this section we provide a detailed picture of the status quo of the European investment banking industry, analyzing its structure and its recent evolution. To do so, we take a closer look at the league tables for the following IBD businesses:

- M&A (Mergers and Acquisitions): where investment banks offer financial and advisory services dedicated to supporting firms on strategic issues, corporate governance or optimization of the financial structure. In general, M&A activity is a cyclical business (i.e. subject to fluctuations), strongly influenced by the competitive dynamics of the single sectors and by the macroeconomic trends of the market; moreover, it is defined by the type of operations, inter alia: mergers, acquisitions, carve-outs, joint ventures, break-ups and spin-offs.

- ECM (Equity Capital Market): which includes all the activities concerning the financing of a company that involve capital markets, e.g. derivatives, issuing or selling shares, as well a as accelerated book offers and block trades. Among the main activities of ECM, the most important are:

  - IPO – In an IPO, a private company is listed on the stock exchange for the first time. Shares can be offered to institutional and private investors. In this case, the investment bank can play different roles (one not necessarily excluding others): the underwriter, the book-builder, the sponsor, the selling bank, etc.

- Follow-on or SEO – Shares of an already-listed company are sold on the market. Shares can be offered to institutional and private investors in a public offering or a rights issue directed to existing shareholders with a preemption right.

- Accelerated Bookbuilding – A larger stake of a listed company is sold on the market in a short time period (usually within one day). Due to the short execution period, buyers are usually exclusively qualified institutional investors. Banks might guarantee a certain minimum share price in return for additional fees or upside participation.

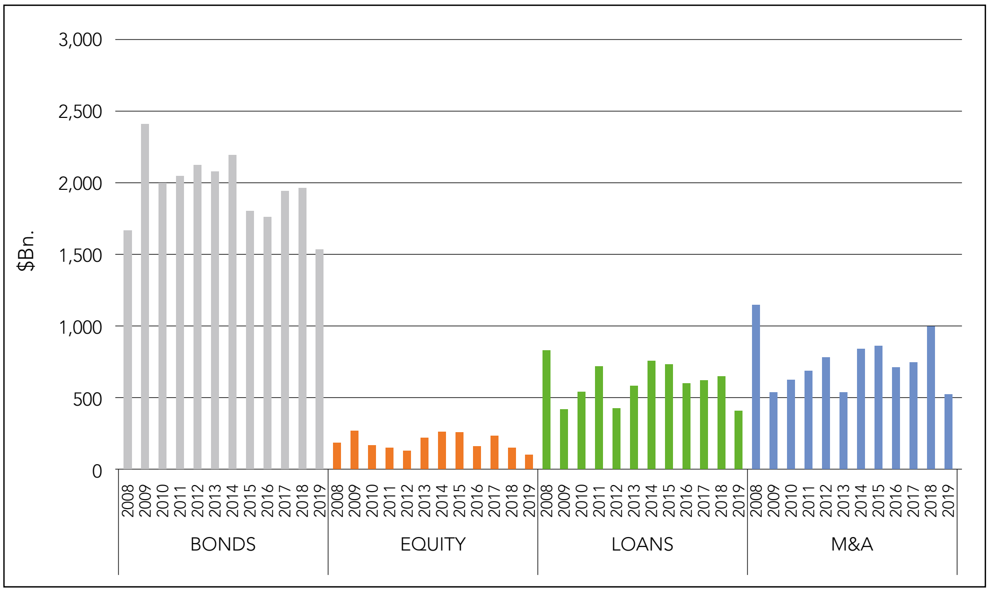
- DCM (Debt Capital Market): where investment banks offer financial and advisory services as to the best way to raise debt capital in many different situations (dividend recap, refinancing of upcoming maturities, liability management, LBOs, M&A, distress, etc.). DCM can be divided into two main segments: Loan and Bonds, which can then be subdivided into: Investment Grade and High Yield (Leveraged) depending on the credit quality.

In detail, for each transaction type we first give an overview of the evolution over time of deal making activity in Europe; then we highlight the role played by European vs. US banks.

2.2.1 Deal making activity in Europe

Deal making activity in Europe is declining across all markets. *Figure 6* captures the aggregate proceeds from debt and equity instruments issued by European firms, as well as the value of their M&A transactions, between 2008 and 2019 (updated to Q3). For all deal types, deal making activity is significantly below the peak levels registered since the financial crisis and will hardly match the 2018 high-water mark.

FIGURE 6
European aggregate deal volumes (2008- 2019 updated to Q3)



Source: Thomson Reuters Datastream

Depressed deal making activity also impacts investment banking revenues, both directly and through more intense competition over fewer deals, which puts downward pressure on fees. Consistently, the total capital market fee revenues pool is shrinking, especially in Europe.

At the macro level, *Figure 7* shows the evolution of global investment banking revenues over time. A full recovery to pre-crisis record levels has not yet been achieved. On the contrary, recovery seems to have lost momentum in the last few years. After falling more than 30% in 2008 to approximately $60 billion, global investment banking revenues made a significant comeback to reach a peak of $84 billion between 2010 and 2014 (still about 10% short of pre-crisis levels). Since then, these revenues gradually stagnated until they started on a downward path, shrinking by 3% in 2018 and by 5% in the first three quarters of 2019. From a high-water mark in 2011, when global investment banking fees were roughly split between US and European banks, the US market has grown to account for approximately half of global investment banking revenues, whereas Europe has seen its relative contribution contract to just about one-fourth of the revenue pool. Consistently, a larger portion of the most recent drop in investment banking revenues is attributable to the European market, down by 17% in the first three quarters of 2019, compared to the same period of 2018. In the US, instead, revenues are just 3% below the corresponding figure for the previous year.

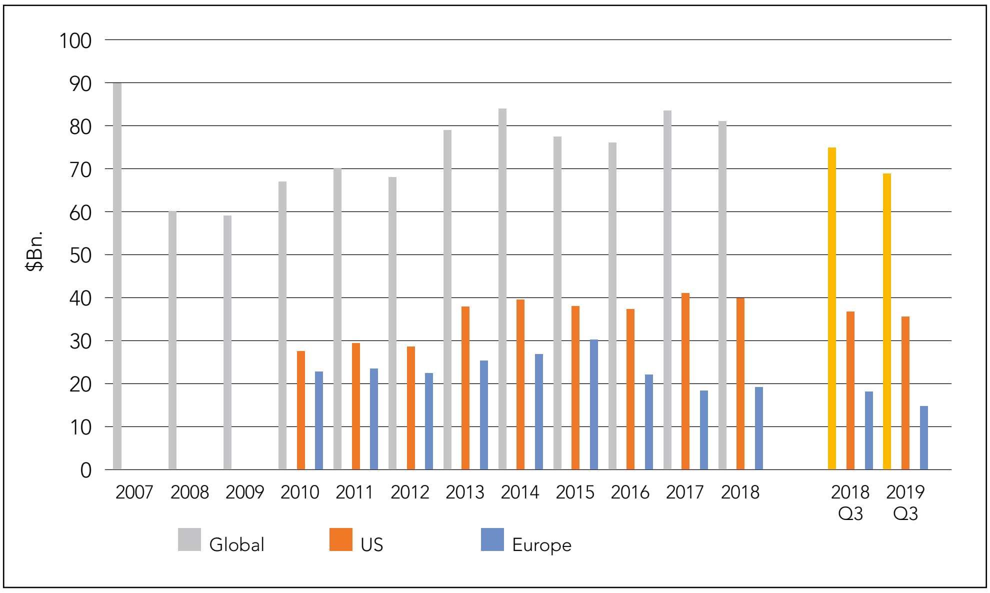


FIGURE 7
Global investment banking revenues (2007-2019 updated to Q3)

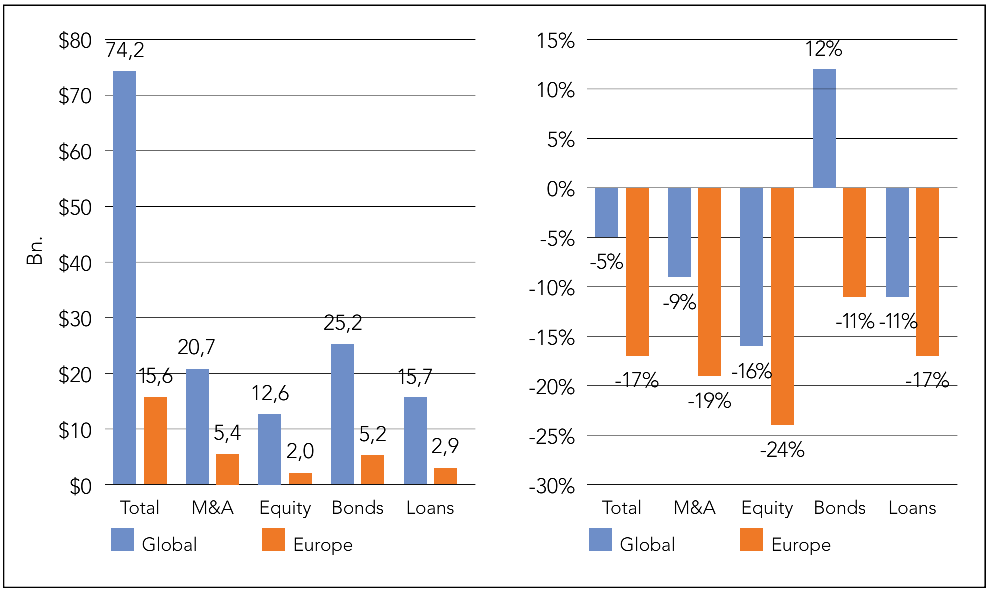
Source: Dealogic

Taking a closer look at different types of deals in the most recent period, *Figure 8* reports total global and European investment banking fee revenues for the first three quarters of 2019, and compares them with the same period in 2018.

Less than one-fifth (17%) of global investment banking revenues are attributable to ECM deals and more than one-fourth (28%) to M&A. DCM accounts for the remaining 55% with bonds (34%) and loans (21%). While for loans the majority of the fees come from leveraged loans (84.4%), investment grade issues make up a larger share (51.5%) of the bond fees compared to high yield instruments (24.1%). IPOs and SEOs account for 48.6% and 38.7% of ECM revenues, respectively.

Europe takes in approximately 21% of global investment banking fees, varying from only 16% of ECM fees to 26% of M&A fees. The drop in investment banking fee revenues is three times more pronounced in Europe than elsewhere. Fee revenues are down by 5% on a global level compared to 2018, but in Europe they have dropped by 17% overall: -19% for M&A, -24% for ECM, -11% for bonds and -17% for loans.

FIGURE 8
Investment banking fees in Europe (2019 updated to Q3)



Source: Financial Times, Refinitiv

2.2.2 European investment banks losing market share to their US peers

Not only has the European investment banking market been shrinking, but European investment banks have been losing market share to their US peers for many years now. Every year since 2014, JPM has generated more investment banking revenues across Europe than anyone else, according to data compiled by Dealogic.

While deleveraging has been a common goal among both European and US banks, it was achieved by opposite means. On one side of the Atlantic, European banks have been scaling down their operations in order to become smaller, but more profitable. On the other side, their US peers have instead grown in size, mainly thanks to new capital injections. As a result, these banks were able to gain market share and leadership positions across all deal types. Consistently, according to data on fees compiled by Dealogic across all rank-eligible deals in its database, US banks' share of the European investment banking revenue pool has also multiplied over time (*Figure 9*). Moreover, the gap between European and US banks has narrowed in the last decade, almost by half. US banks, which shared less than one-third of investment banking revenues in Europe in 2010 account now for almost 40%. Most important, all their gains have come almost exclusively at the expense of European banks.

To better understand where these gains come from and to identify areas where the advances of US banks have been more noticeable, we take a closer look at the evolution of the market shares of European and US banks and their relative positioning in the league tables for different types of deals.

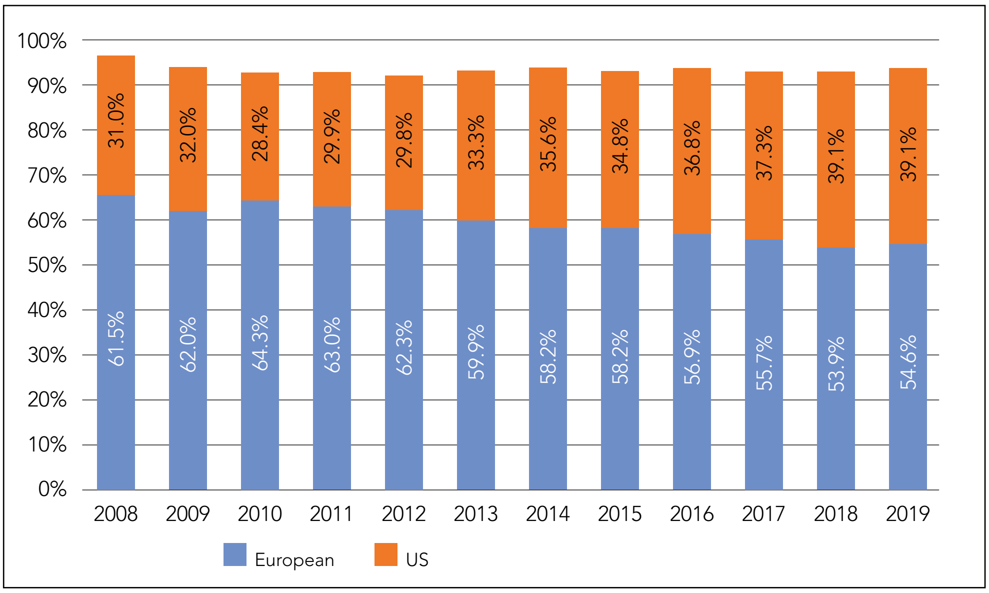


FIGURE 9
Investment banking revenues in Europe, European vs US banks (2008 - 2019 updated to Q3)

Source: Dealogic

Figure 10 and *Figure 11* compare the aggregate market share and relative rankings of European and US banks as regards DCM deals, as well as their evolution over time. For both deals related to bond and loan markets, we observe a slow but continual decline in the share of proceeds corresponding to European banks, mostly in favor of US banks. The market share of European banks dropped from 67.5% in 2008 to 54.1% for bonds and from 77.2% in 2009 to 62.8% for loans. Consistently, we see an expanding presence over time of US banks at the top of the corresponding league tables, especially among the highest-ranked banks.

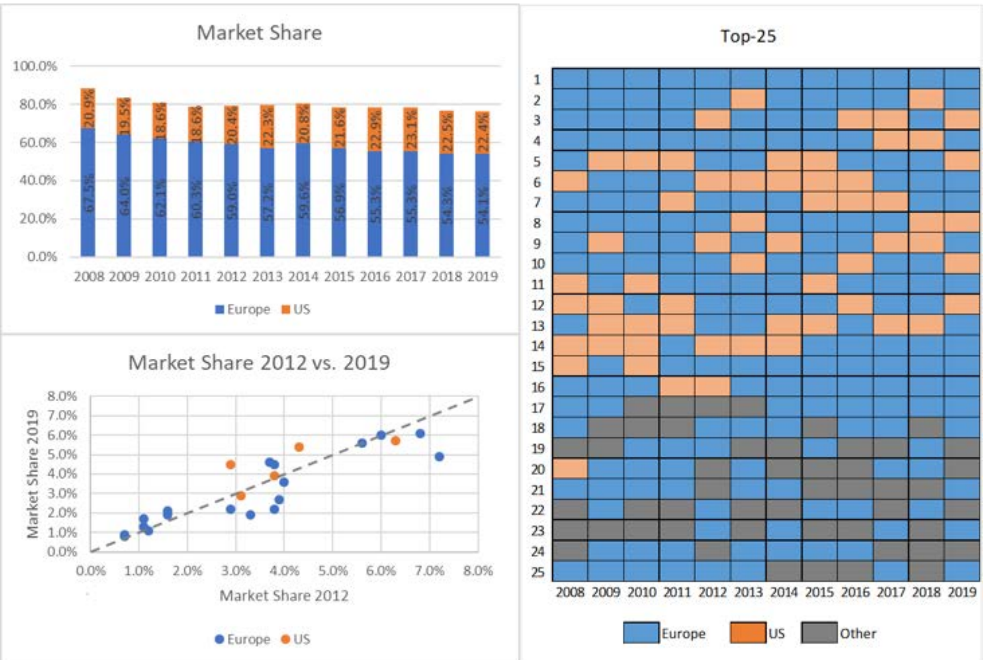
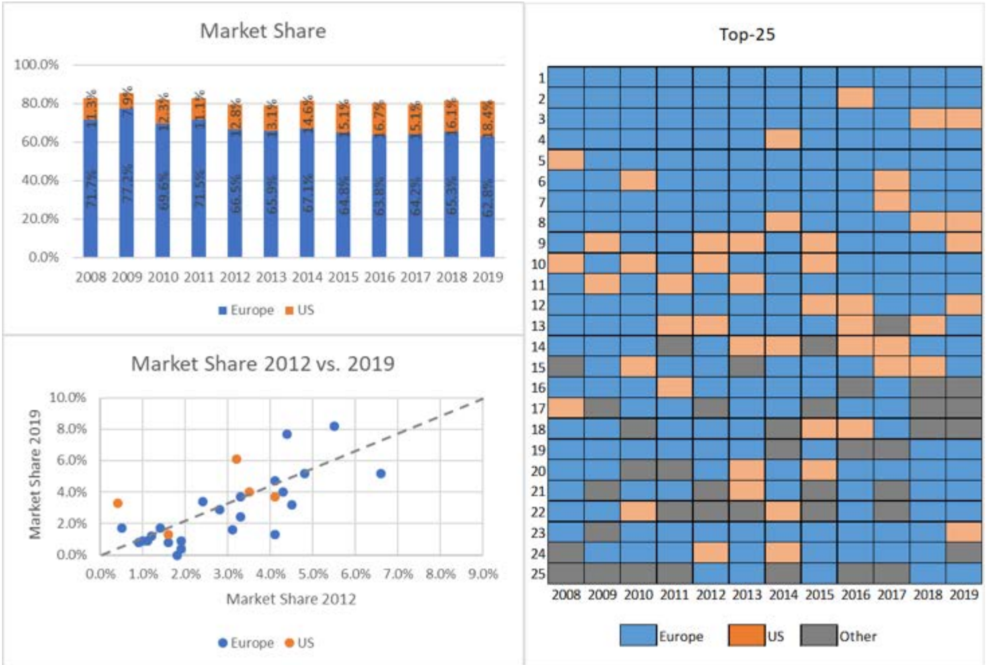


FIGURE 10
Market share and rank of European banks: Top-25, Europe, DCM - Bonds (2008 – 2019 updated to Q3)

Source: Thomson Reuters Datastream

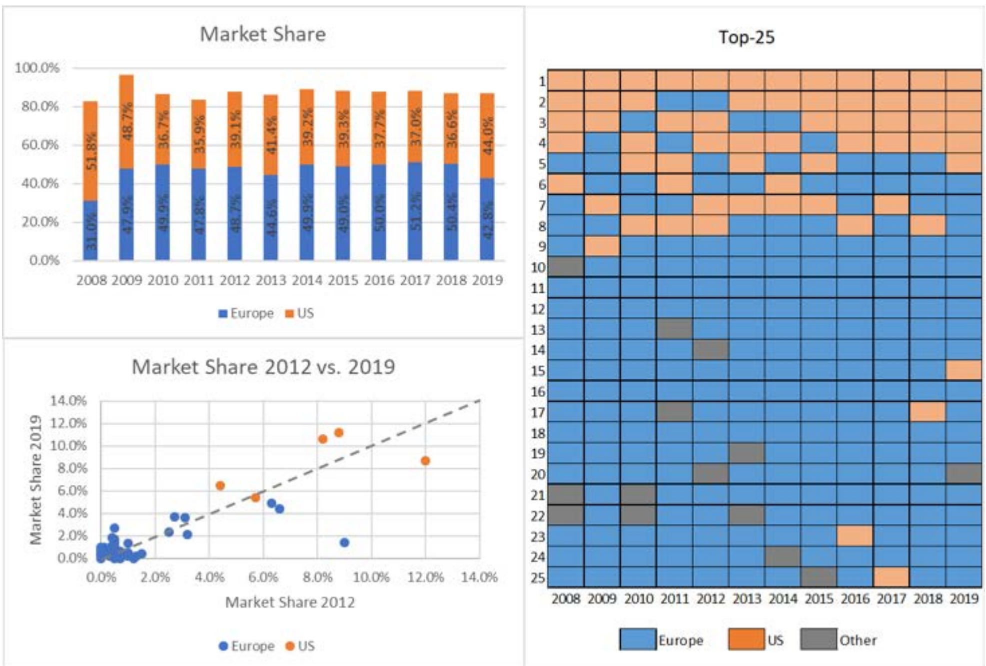
FIGURE 11
Market share and rank of European banks: Top-25, Europe, DCM – Loans (2008 – 2019 updated to Q3)



Source: Thomson Reuters Datastream

The weakness of European investment banks relative to their US peers clearly emerges for ECM deals. *Figure 12* compares the aggregate market share and relative rankings of European and US institutions and shows that while European and US banks share the proceeds of ECM deals almost evenly, US banks consistently outrank European banks at the top of the corresponding league tables. No European bank has made it to the top three positions of the league table since 2014, and none has even broken into the top five in 2019. This suggests that a few US banks are able to seize the larger and more remunerative ECM deals for themselves.

FIGURE 12
Market share and rank of European banks: Top 25, Europe, ECM (2008 -2019 updated to Q3)



Source: Thomson Reuters Datastream

The same holds for M&A deals. *Figure 13* compares deal rank values per advisor between European banks and their US peers.[2] The aggregate rank value shares corresponding to European and US banks are roughly comparable, with US banks taking the lead only in recent years. Still, US banks consistently outrank European banks at the top of the corresponding league tables. No European bank has made it to the top three positions of the league table since 2012 and the top four positions have been consistently occupied by US banks since 2014. Again, this suggests that a few US banks are able to seize a conspicuous part of the M&A market share for themselves, possibly by partaking in all high-profile deals in Europe.

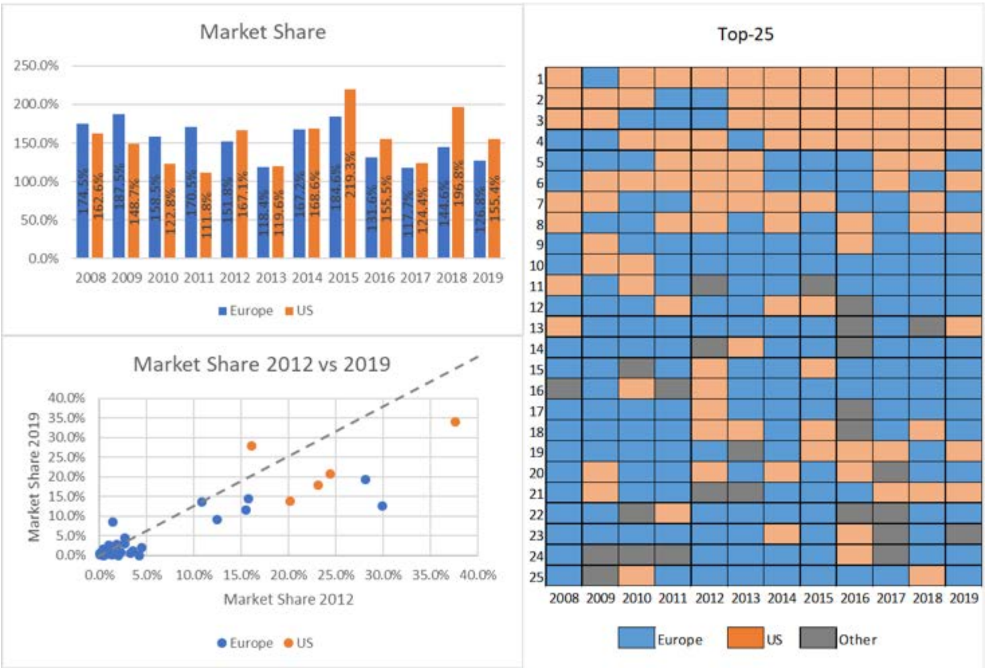


FIGURE 13
Market share and rank of European banks: Top 25, Europe, M&A (2008-2019 updated to Q3)

Source: Thomson Reuters Datastream

Overall this evidence suggests a polarization of European investment banking across all markets. On one hand, a few large US banks compete aggressively and play a prominent role in the market for large and more remunerative deals, especially in ECMs and M&As, at the expense of their subscale European peers. On the other hand, European banks are left to compete among themselves for smaller, less remunerative deals.

2.2.3 How have US investment banks come to dominate European investment banking?

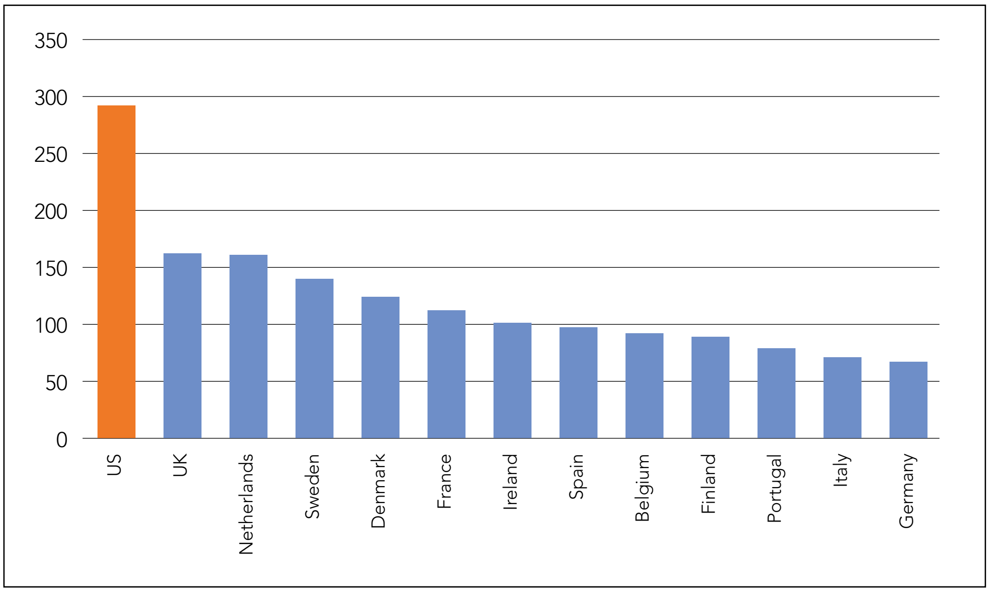
Before we move on to further explore the implications of the advance of US banks in Europe by studying the structure of the market at the deal level, we first discuss the conditions which can explain the fallback of European banks.

US investment banks are strong globally and have major competitive advantages compared with their European peers. This gap stems from three different factors: the diverse size and characteristics of their domestic markets, their exposure to dissimilar macroeconomic conditions and the different regulatory requirements they need to comply with.

[2] Rank value per advisor is subject to double counting. This is why market shares do not total 100%.

Above all, US investment banks enjoy a high level of concentration and a very large domestic market. Financial markets are notably less deep in the eurozone than in the US or the UK in a number of regards. *Figure 14* compares the depth of capital markets across countries.[3] We see that the US market is almost twice as deep as the UK, which is the deepest in Europe. The depth of capital markets in continental Europe is about one-third or less of the depth of the US market. Lack of harmonization in regulations across Europe limits capital flow, investment and extension of credit, all of which ultimately curbs the potential for greater, broader and more stable GDP growth across the whole eurozone.

FIGURE 14
Depth of capital markets in the US and Europe 2016



Source: New Financial

In addition, US and European banks are exposed to different domestic macroeconomic conditions. In particular, the longest period of economic growth in history in the US and rising short-term rates in that country have boosted the profitability of banks in the US over the last decade. As a result, US banks have grown in size, while European banks have slimmed down as weak economic growth, ultra-low interest rates and strict capital requirements have further reduced the resources at their disposal. Unlike in the US, where coming out of the crisis, banks quickly raised capital and shed risk, the 2012 sovereign debt crisis has put new pressure on the European banks. Borrowing has slowed down and with it also the economy, which led central banks to cut interest below zero, leaving banks struggling to squeeze out profit on loans. As a result,

[3] New Financial computes an index of capital market depth based on 25 sectors of activity grouped in eight broad categories: pools of capital (i.e. funded pensions assets, insurance assets, household financial assets); equity markets (i.e. stock market value, value of initial public offerings, secondary equity issues, convertibles); bond markets (i.e. bond market value, corporate bond market value, value of high- yield bonds, investment grade bonds, corporate bonds relative to bank lending); leveraged loans and securitization (i.e. leveraged loans, value of outstanding securitization, securitization issuance); assets under management; corporate activity (i.e. M&A by target nationality, domestic M&A, M&A by acquirer nationality); private equity and venture capital (i.e. private equity deals, private equity fundraising, venture capital deals); and trading (i.e. equities trading, FX trading, OTC derivatives trading). For each metric the corresponding value of the activity is measured as a percentage of GDP and rebased to the EU average. To reduce the impact of outliers the values of individual sectors for each economy are capped at two standard deviations from the average score. The overall ranking is the average of these scores across the 25 sectors of activity, subsequently adjusted for the global average.

European banks have not been able to rely as much on retail businesses to prop up the investment banking side due to negative eurozone interest rates and intense competition for customers in a less concentrated banking sector. In response to all this, banks are cutting back on jobs and large parts of their trading operations.

In addition, European banks' capital allocation has proved poor compared to their US peers. A recent study by Societe Generale shows that while US banks do not have operating divisions generating ROE lower than 10%, European banks keep a consistent proportion of capital allocated to businesses with disappointing returns. (For instance, Equity and FICC trading consume a substantial amount of capital and make low-to-mid single-digit ROEs compared to IBD businesses, such as M&A, ECM and DCM, making decent double-digit ROEs.)[4] One explanation could be that managing the volatility of investment banking revenues is tougher for European banks given their cost inflexibility. In fact, the same study by Societe Generale suggests that the cost/income ratio of European banks is generally more volatile than their US peers. As a result, European banks rely more than their US peers on flow trading businesses, which are difficult to maintain for banks lacking sufficient scale.

While investment banking is seeing its historical profit centers eroded by regulations, US and European institutions are held to different requirements in several respects. We identify three areas where inconsistent regulation has allegedly led to a competitive advantage for US banks: capital buffers, remuneration policies and MiFID II.

First, in the US, large banks have a high minimum supplementary leverage ratio requirement of 5%. As a result, European banks generally have weaker capital ratios than their US peers. More capital allows banks to take advantage of growth opportunities and build economies of scale. This limits European banks' ability to take on risk where appropriate and to absorb shocks when they arise. Consistent with this argument, stronger capital positions for the US banks may have helped them win market share at the expense of European banks.

Second, according to CRD IV regulations in force in Europe since 2014, European banks have to defer a minimum of 40% of variable compensation of material risk takers over at least three to five years, while there is no such restriction for US banks. Moreover, CRD IV regulations impose a bonus cap at no more than 100% of base salary. While the purpose of these provisions is to disincentivize inappropriate short-term risk-taking, the downside is that they drive European banks to augment fixed base salaries as a proportion of total compensation. As a result, banks' ability to cut costs at times when revenues are under pressure is reduced and so is their flexibility in managing their cost/income ratios. Moreover, banks in Europe are relatively more vulnerable to large severance costs due to onerous redundancy regulations. More flexibility allows US banks to better manage their employees, resulting in a stronger talent pool and greater ability to manage capital market businesses at times of extreme volatility.

[4] Societe Generale, Global Investment Banks: Can European investment banks be saved?, Cross Asset Research, 10 September 2019.

After the collapse of Lehman Brothers and Bear Stearns and the global financial crisis, the business models of the world's biggest investment banks needed to change. In the US, legislation emerged to forbid investment banks from proprietary trading and forcing them to keep more capital on hand. These regulations shrunk trading profits and created a need to cut costs, spurring investment banks to spin off unprofitable divisions or eliminate them entirely. While more recently the rules against proprietary trading have been loosened, the restriction has still changed how investment banks operate.

In Europe a package of financial industry reform legislation (MiFID II) came into effect in January 2018. MiFID II was instituted to regulate financial markets, with the goal of making European financial markets more transparent and strengthening investor protection. Among its broad and far reaching consequences, we highlight its direct impact on the primary and secondary market activities of investment banks. In terms of primary markets, MiFID II dents the investment banking business by imposing on banks additional technological and regulatory costs. In particular, certain provisions (regarding order record keeping, allocation justification and transaction reporting) expose banks' capital market operations to higher costs and technological challenges. In an increasingly competitive market, with declining fees, these additional costs test the ability of European banks to compete effectively with their US rivals.

Yet, MiFID II's more disruptive impact is on secondary markets, where it bans investment banks from bundling research with trade execution, compelling them to price and sell their research as a separate product. This has driven asset managers (i.e. the buy-side) to seek out the cheapest trades with the best execution, often in block sizes. As a result, brokers (sell-side) revenues and research spending is squeezed, especially for smaller houses focusing on the midsized capitalization market. As trading, research and investing in small-caps have become uneconomical, the market for research has started to concentrate and shrink. The headcount for equity research at twelve major investment banks is down by 16% between 2013 and 2019 (dropping 5% since 2018 alone). Accordingly, on the Stoxx Europe 600 Index and the Stoxx European Small-Cap Index, the number of ratings of companies has dropped 9% and 12% respectively, according to data compiled by Bloomberg.

3 IS INVESTMENT BANKING IN EUROPE FUNCTIONAL TO THE EUROPEAN BUSINESS LANDSCAPE?

Under the premise that the investment banking industry is a critical infrastructure supporting the growth of small and midsized companies, the trends we discussed in Section 2 can potentially pose significant threats to the EU economy if businesses ended up underbanked and constrained in their ability to grow.

In this section, we present the results of our empirical analysis. Our goal is to provide an exhaustive characterization of investment banking in the EU to assess its adequacy in terms of size and structure from the point of view of EU investors and companies. Consistent with this goal, our focus is on the role investment banks play to support the economy by creating the conditions for the efficient flow and allocation of capital. Therefore, we concentrate on primary market activities and, in particular, the support and advisory services dedicated to M&As and to the placement of newly-issued financial instruments in both public and private markets. More specifically, we conduct our analysis at the deal level, focusing on:

- M&A
- ECM
- DCM – loans
- DCM – bonds

Data Collection and Sample Summary Statistics

To construct the empirical sample, we took the following three steps:

1. We retrieved all M&A, ECM and DCM operations advised between 01/01/2010 and 30/09/2019, including:

- M&A transactions involving European companies;
- Equity Capital Market securities issued by European companies;
- Debt Capital Market – Loans issued to European companies;
- Debt Capital Market – Bonds issued by European companies.

2. We listed the banks appearing at least once in the top 50 positions of the aggregate deals per asset class.

3. We looked at the aggregate league table for M&A deals, taking the first ten Bulge Bracket banks, ten Middle Market banks, and ten Specialists banks to create a balanced sample.

By compiling our panel in this way, we guarantee variety and at the same time ensure a balanced representation across the following aspects:

- Bank Focus – Based on the size of the bank itself, we identified three clusters:

    - Bulge Bracket
    - Middle Market
    - Specialist

- Affiliation – Investment banks that are a division of a conglomerate cannot be defined as independent, whilst banks that do not have a corporate banking division that they leverage to develop new business can be identified as independent. In this sense, only specialists and middle market banks can be considered independent. The resulting classification is as follows:
  - Independent
  - Non-Independent
  - Bulge Bracket
- Nationality – Depending on where the bank headquarters are located, there are three geographical areas:
  - Europe
  - USA
  - Other

Table 2 lists the banks in the sample, along with the classification of their focus and level of affiliation.

TABLE 2
List of Investment Banks analyzed in the study

IB Name	Origin	Bank Focus	Independence
Bank of America Merrill Lynch	US	Bulge Bracket	n.a.
Barclays	European	Bulge Bracket	n.a.
Citi	US	Bulge Bracket	n.a.
Credit Suisse	European	Bulge Bracket	n.a.
Deutsche Bank	European	Bulge Bracket	n.a.
Goldman Sachs & Co	US	Bulge Bracket	n.a.
JP Morgan	US	Bulge Bracket	n.a.
Lazard	European	Bulge Bracket	n.a.
Morgan Stanley	US	Bulge Bracket	n.a.
Rothschild & Co	US	Bulge Bracket	n.a.
Banca IMI (Intesa Sanpaolo)	European	Middle market	No
Macquarie Group	US	Middle market	Yes
Mediobanca	European	Middle market	No
Natixis	European	Middle market	Yes
Nordea	European	Middle market	No
PJT Partners Inc	US	Middle market	Yes
RBC Capital Markets	US	Middle market	Yes
Santander Corp & Invest Bkg	European	Middle market	No
SEB	European	Middle market	Yes
UniCredit	European	Middle market	No
Alantra Partners SA	European	Specialist	Yes
Centerview Partners LLC	US	Specialist	Yes
Evercore Partners	US	Specialist	Yes
Greenhill & Co, LLC	European	Specialist	Yes
Houlihan Lokey	US	Specialist	Yes
Jefferies LLC	European	Specialist	Yes
Moelis & Co	US	Specialist	Yes
Perella Weinberg Partners LP	US	Specialist	Yes
Robey Warshaw LLP	European	Specialist	Yes
Zaoui & Co	European	Specialist	Yes

BOX 1

HOW BANK SELECTION CAN AFFECT THE ANALYSES –A DEEP DIVE

Table 2 presents the list of the banks from which we originated the sample of deals used for the analyses. As described in the text, we referred to the same panel of banks across different categories of deals (i.e., M&A, ECM, Bonds and Loans) to explore how banks with different focus (i.e., bulge bracket, middle market, and specialists) and independence level are represented in each of them and how their relative contributions changed over time. In order to have a more balanced sample, we selected banks on the basis of M&A league tables, where specialists and independents have relatively larger market shares and the barriers to entry are lower. In addition, by starting from the M&A sample, the resulting panel of banks is more varied from a geographical point of view.

For the sake of completeness, in this box, we provide an illustrative example of the list of banks that would have made up our sample had we started from ECM league tables instead.

List of banks under alternative inclusion criteria

IB Name	Origin	Bank Focus	Independence
Bank of America Merrill Lynch	US	Bulge Bracket	n.a.
Barclays	European	Bulge Bracket	n.a.
Citi	US	Bulge Bracket	n.a.
Credit Suisse	European	Bulge Bracket	n.a.
Goldman Sachs & Co	US	Bulge Bracket	n.a.
JP Morgan	US	Bulge Bracket	n.a.
Morgan Stanley	US	Bulge Bracket	n.a.
UBS	European	Bulge Bracket	n.a.
BNP Paribas SA	European	Bulge Bracket	n.a.
HSBC Holdings PLC	European	Bulge Bracket	n.a.
Natixis	European	Middle market	Yes
Nordea	European	Middle market	No
RBC Capital Markets	US	Middle market	Yes
SEB	European	Middle market	Yes
UniCredit	European	Middle market	No
ABN AMRO Bank	European	Middle market	No
Liberum Capital	European	Middle market	Yes
ING	European	Middle market	No
DNB ASA	European	Middle market	No
ABG Sundal Collier	European	Middle market	Yes
Jefferies LLC	European	Specialist	Yes
Numis	European	Specialist	Yes
Berenberg	European	Specialist	No
Stifel/KBW	US	Specialist	Yes
Carnegie	European	Specialist	No
PeelHunt LLP	European	Specialist	Yes
ZuercherKantonalbank	European	Specialist	Yes
Pareto AS	European	Specialist	Yes
Societe Federale de Participat	European	Specialist	Yes
VTB Capital	US	Specialist	No

Comparing this list with the one originated from the M&A-generated sample with reference to independent status, overall the percentage of independent banks involved in the analysis does not change.

In addition, in terms of bank focus, we can see that within the bulge bracket cluster, the sample remains mostly unchanged, with the exception of UBS, BNP Paribas SA, and HSBC which would have been included only in the ECM-generated sample. On the contrary, in the M&A-generated sample, Rothschild & Co, Deutsche Bank, and Lazard appear instead. Still, at a general level, it is worth noting that the banks that differ across the two samples do share certain similarities, as regards for example their non-US origins.

We find a different situation among middle market banks, as all five banks that would have been listed in the ECM-generated panel are European, while two of the banks from the M&A-generated panel are from the US. Last, the bank cluster that is most affected by the alternative bank selection criteria is the specialists. In the ECM-generated panel, eight of ten banks are from Europe; while in the M&A-generated panel European banks count for half.

In light of all this, we aver that there are no material differences in the analysis of the sample derived from a panel of banks selected from the ECM rather than from M&A league tables, as long as the characteristics of the deals realized by the newly-included banks do not differ significantly from those of the banks they replace. Within each category of deals, while the total number can change across alternative selection methods, this would not significantly alter the relative frequency of deals with different characteristics. On the contrary, for the sake of conservatism and to allow direct comparisons across different categories of transactions, we believe it is preferable to study a single pool of banks with a fixed set of characteristics.

3.1 Mapping investment banking deal making activity in Europe

The investment banking map follows two directions.

For each category of deal, a trend analysis shows the evolution of deal making activity carried out by the sample banks at an aggregate level. In particular, the corresponding deal flow is based on bank characteristics, allowing us to show the evolution over time of the relative contributions of different types of banks:

- European vs. US banks;
- Bulge Bracket vs. Middle Market vs. Specialist;
- Independent vs. Conglomerates.

Then, within each category, we look at deals of different size, assigning each of them to one of four clusters as follows:

- Cluster 1 – from the minimum value to the 25th percentile;
- Cluster 2 – from the 25th percentile to the median value;
- Cluster 3 – from the median value to the 75th percentile;
- Cluster 4 – from the 75th percentile to the maximum value.

Plus, per each asset class, we were able to draw some specific analysis:

- Domestic vs. Crossborder M&A;
- Related vs. Non-related M&A;
- Foreignness of the listing exchange for ECM operations with respect to the country where the headquarters of the issuer are located;
- Investment Grade vs. High Yield loans;
- Use of proceeds of loans.

The result of these analyses is a map showing the deal type that each bank supports according to its specific features (nationality, focus, etc.).

3.1.1 Results: M&A

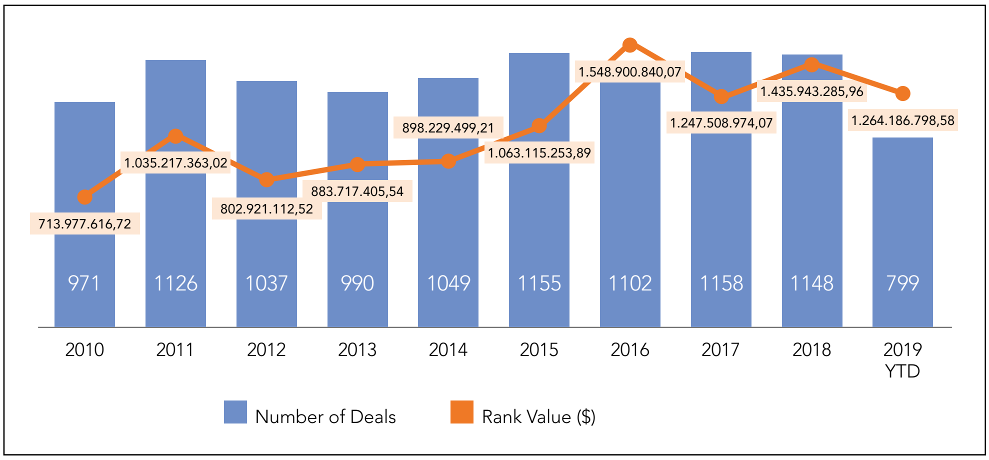
Trend Analysis

The analysis involves M&A operations completed between 01/01/2010 and 30/09/2019 and data was retrieved from Thomson Reuters Datastream.

Figure 15 illustrates the number and the average rank value[5] of the M&As undertaken by European companies in the period of analysis, a proxy for the Enterprise Value of the target.

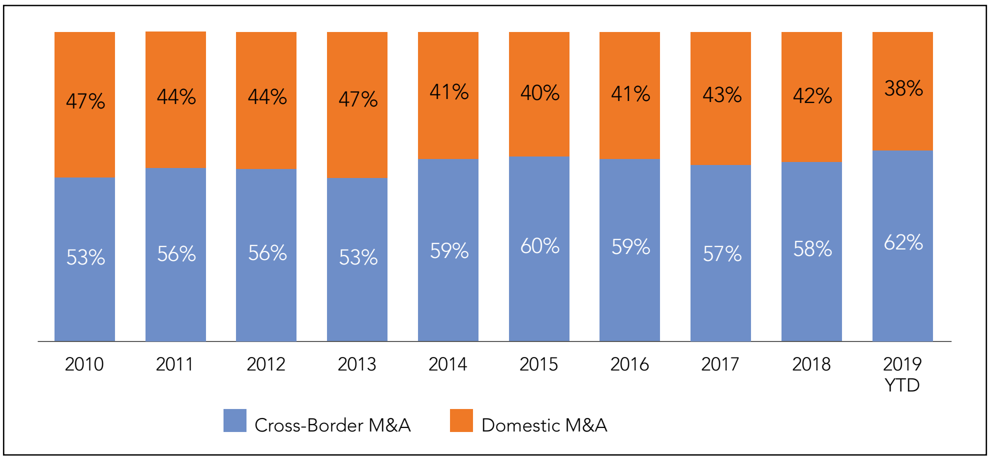
[5] The rank value corresponds to the Enterprise Value of the target company net of the liabilities assumed for the transaction itself, adding the most up-to-date net debt of the target.

FIGURE 15
Average Rank Value - trend analysis (2010 – 2019 updated to Q3)



Generally speaking, an increase in the rank value can be observed from 2010 through 2019, with a peak in 2016 of $1.5 billion as an average. With respect to the number of M&As over the period 2010-2019, data show upward movement overall, with a peak in 2017 (1,158).

FIGURE 16
Cross-Border vs. Domestic M&As - trend analysis (2010 – 2019 updated to Q3)



As for the type of M&A, *Figure 16* shows the distinction between Domestic and Cross-Border transactions, where Cross-Border M&As clearly increase in number. Evidence from the United Nations Conference on Trade Development (UNCTAD) shows that in 2018, the global flows coming from foreign direct investment (FDI, tallying Cross-Border M&As as well) fell by 13% to $1.3 trillion. Despite that, in 2018, global Cross-border M&A worldwide rose by 18% (from $694 billion in 2017 to $816 billion in 2018). Our sample included operations that involved a European company either on the sell-side, the buy-side or both. We can see in each of the years in question, companies of different nationalities were party to more than 50% of the deals, and overall this trend is climbing upward (reaching a peak of 62% in 2019).

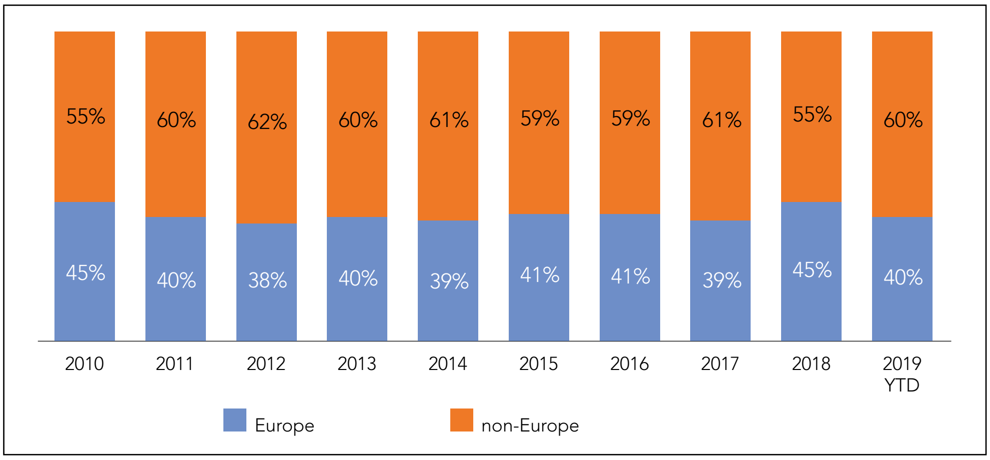


FIGURE 17
Focus on Cross-Border M&A - trend analysis (2010 – 2019 updated to Q3)

Breaking down the Cross-Border M&A category, *Figure 17* shows that in the majority of these deals, at least one of the two parties is non-European, and generally speaking this trend is on the rise.

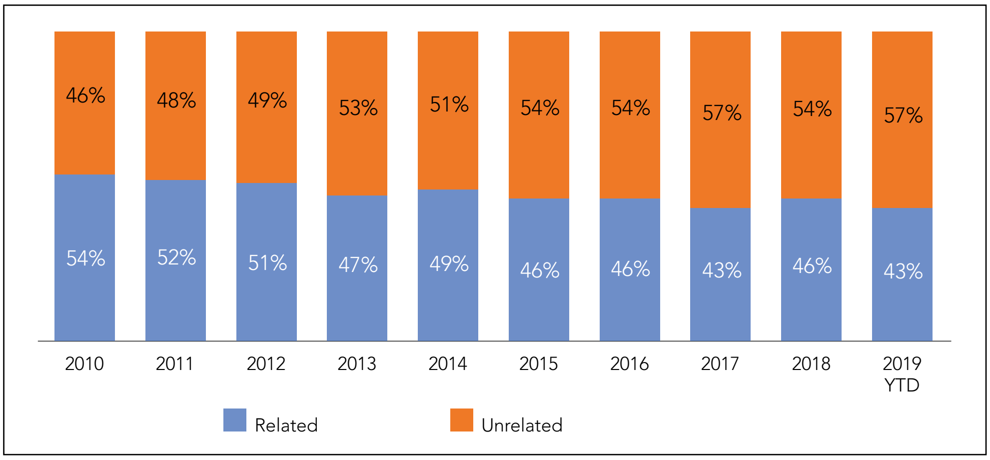


FIGURE 18
Focus Relatedness - trend analysis (2010 – 2019 updated to Q3)

Finally, *Figure 18* shows the degree of diversification of the operations included in the sample we analyzed. Most deals involve companies that do not operate in the same industry. Moreover, the trend from 2010 through 2019 follows a clear upward path, where in 2019 the most unrelated transactions occur.

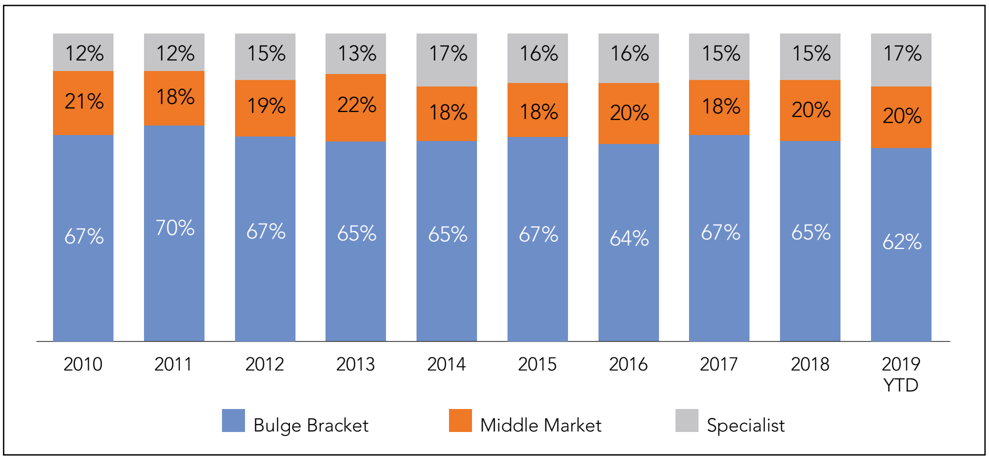
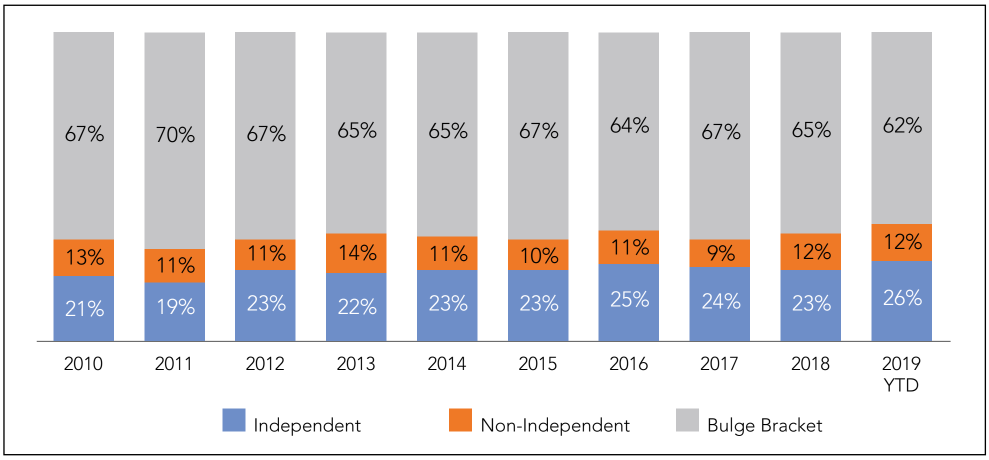


FIGURE 19
Bank Focus - trend analysis (2010 – 2019 updated to Q3)

Throughout the entire period, and on an aggregate level, the presence of banks positioned as bulge bracket is remarkable (See *Figure 19*), Advising on more than half of the deals. Their market share peaked in 2011 when they advised 70% of all deals. Specialists and middle market banks split the remainder of the market. With reference to the latter, their market share peaked in 2013 (22%), while for specialist banks, *Figure 19* shows an overall increase of their engagement in M&A deals. In 2010 and 2011, 12% of the deals involved specialists, while in 2019, this figure rose to 17%.

FIGURE 20
Bank Affiliation - trend analysis (2010 – 2019 updated to Q3)



As for the independence level, the market share of independent banks is increasing overall, starting from 21% in 2010 and landing at 26% in 2019, as shown in *Figure 20*.

FIGURE 21
Bank Affiliation - trend analysis (2010 – 2019 updated to Q3)

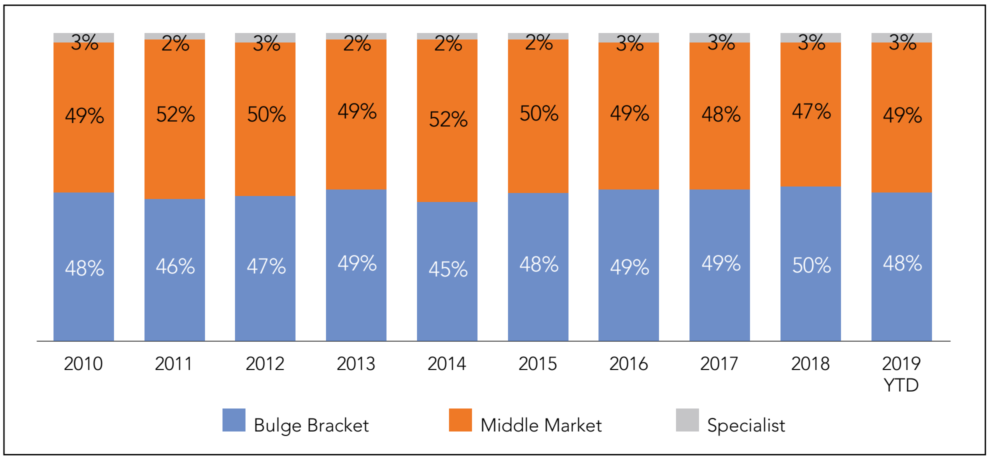


Figure 21 illustrates advisor nationality. Consistently with the data in *Figure 13*, US banks seem to have a major role in M&A deals. This presence is even stronger if contextualized in our research sample, where all M&A deals have at least one European counterpart. *Figure 13* shows a general ranking of banks involved in M&A deals, *Figure 21* concentrates solely on the restricted sample we selected, as described at the beginning of Section 3. The bank nationality, independence level, and focus are illustrated in *Figure 22*, *Figure 23*, and analyzing at the same time the internationality of the deal in question.

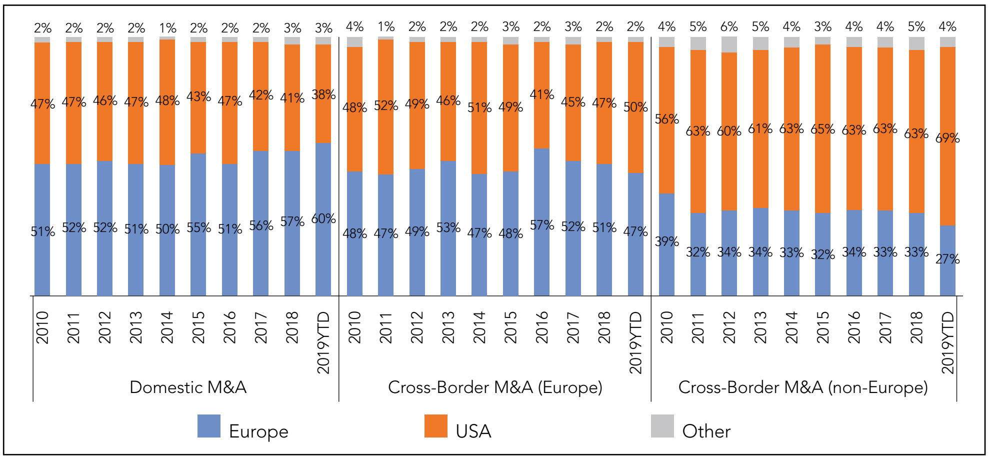


FIGURE 22
Investment banking nationalities by type of deal (Domestic or Cross-Border, 2010 – 2019 updated to Q3)

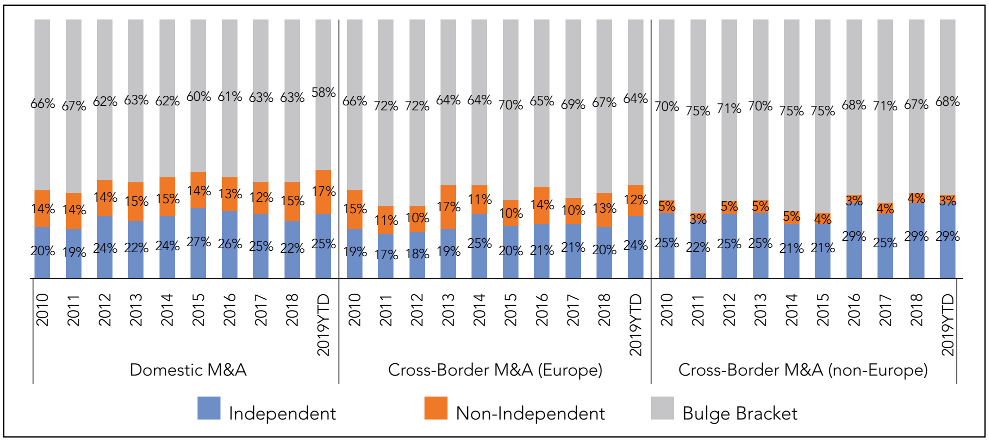


FIGURE 23
Investment banking affiliation by type of deal (Domestic or Cross-Border, 2010 – 2019 updated to Q3)

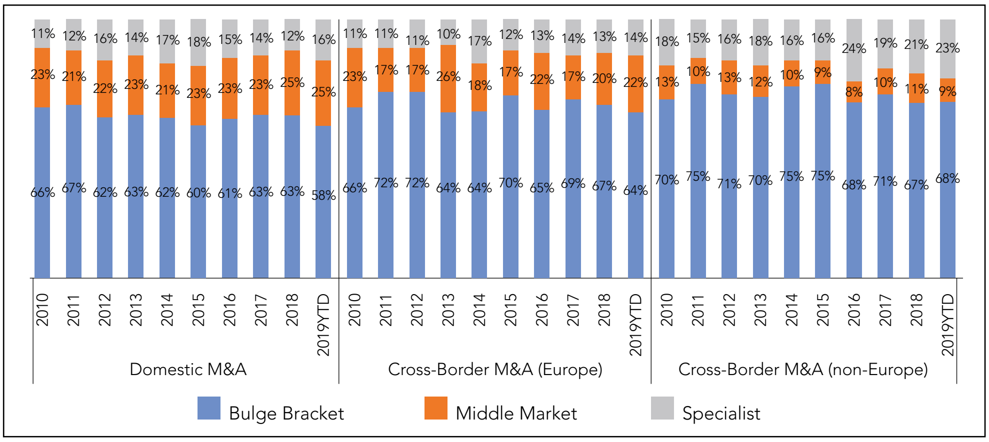


FIGURE 24
Investment banking Focus by type of deals (Domestic or Cross-Border, 2010 – 2019 updated to Q3)

Figure 22 shows that US banks play an important role in the market in domestic deals as well; the minimum level for US bank involvement came in 2019 when they advised 38% of the deals. *Figure 22* also shows the nationality of the banks in Cross-Border M&A deals involving two European companies. In this context, even though no US company participates, still the presence of American banks grows, as if an overseas bank were a requisite in undertaking an internationalization strategy. The largest market share of US banks in Intra-European Cross-Border deals is 52%, recorded in 2011. Over the whole period, two cycles can be observed: after less engagement of US banks in 2012 and 2013, their market share rose again, coming to a halt in 2016 (41%). Then in recent years, the trend turned positive again from 2017 through 2019.

Figure 23 relates the type of M&A with the affiliation of the advisor. We can see that regardless of the M&A type, the market share of independent banks is around 20%. However, these institutions play a larger part in Cross-Border M&As with a non-European counterpart, where their presence accounts for 29% in 2016, 2018, and 2019, showing an overall positive trend.

Figure 24 clusters advisors by their focus. Bulge bracket banks are by far the most often represented in every kind of M&A in every year of the observation period. Regardless, the role of bulge bracket banks is less prominent in domestic M&A deals, in favor of specialists and middle market banks, where the latter held a market share of 25% in the most recent years, 2018 and 2019.

As per international M&A deals, the presence of the bulge bracket grows in transactions involving European counterparts and expands further in global deals, where in three years of the observation period this figure reached 75% (2011, 2014, and 2015).

Segmentation Analysis

In order to take a snapshot of the role played by various banks in the different M&A deals in our study, as mentioned at the beginning of this section, the asset class was divided in four clusters. For M&A deals, the clusterization was based on the rank value, a proxy of Enterprise Value, where:

- Cluster 1 includes all M&A deals with the rank value positioning between the minimum value and the 25th percentile;
- Cluster 2 includes all M&A deals with the rank value positioning between the 25th percentile and the median value;
- Cluster 3 includes all M&A deals with the rank value positioning between the median value and the 75th percentile;
- Cluster 4 includes all M&A deals with the rank value positioning between the 75th percentile and the maximum value.

The tables in the section "Advisor Ranking" show the investment banks involved in each cluster from the most to least active by number of total deals in the overall period. When going through the segment analysis clustered by rank value size, it is important to understand that more than one advisor can take part in the same deal.

This sub-section continues as follows: after presenting the general ranking by advisor, we adopt different standpoints, analyzing the four clusters by the advisor bank's focus (bulge bracket, middle market, or specialist), by its affiliation, and by its nationality.

Advisors' Ranking

Out of the 10,535 deals available, due to some missing data only 6,119 were clustered according to their rank value. As the asset class is divided into four clusters, each cluster consists of 1,530 deals. The tables below show how the number of advisors changes according to the size of the deal. Specifically:

- 3,056 banks were involved in Cluster 1 (2.00 banks per deal);
- 3,431 banks were involved in Cluster 2 (2.24 banks per deal);
- 4,042 banks were involved in Cluster 3 (2.64 banks per deal);
- 6,590 banks were involved in Cluster 4 (4.31 banks per deal).

TABLE 3
Investment Banks involved in Cluster 1 M&A Deals, ranked by number

CLUSTER 1	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Rothschild & Co	50	59	43	61	36	71	72	87	86	59	**624**
Lazard	49	20	26	27	24	23	22	25	38	20	**274**
UniCredit	29	20	14	25	20	11	16	17	8	9	**169**
Houlihan Lokey	22	14	18	16	26	22	14	11	14	8	**165**
Alantra Partners SA	8	4	17	18	10	15	20	33	8	22	**155**
Mediobanca	30	18	11	14	11	12	6	4	27	20	**153**
SEB	15	21	29	20	14	14	4	12	10	4	**143**
Natixis	3	17	18	22	10	22	12	28	4	6	**142**
Banca IMI (Intesa Sanpaolo)	17	15	10	19	18	14	6	10	12	8	**129**
Jefferies LLC	22	11	4	10	3	18	28	4	5	3	**108**
Morgan Stanley	39	14	8	13	6	4	5	8	6	4	**107**
JP Morgan	15	7	12	6	11	12	4	14	8	10	**99**
Goldman Sachs & Co	5	5	20	22	12	8	4	8	3	2	**89**
Credit Suisse	15	15	13	8	10	7	1	10	4	5	**88**
Deutsche Bank	19	13	18	9	10	6		5	2	4	**86**
Citi	10	8	15	13	9	12	4	5	5	1	**82**
Bank of America Merrill Lynch	11	15	6	12	8	9	4	2	4	1	**72**
Barclays	3	6	7	2	6	6	13	1	13	6	**63**
Evercore Partners	7		11	7	10	11	2	1	4	5	**58**
Santander Corp & Invest Bkg	10	4	4	2	3	2		2	10	14	**51**
Macquarie Group	6	5	12	9	5	2	3	2	3	1	**48**
Nordea	3	8	10	2	8	2	4	2	3	4	**46**
RBC Capital Markets	9	3	1	9	2	1	6	3	3	1	**38**
Moelis & Co		2	2	4	4	1	2	1	5	2	**23**
Greenhill & Co, LLC		2		2	3	5	2	2	3		**19**
Perella Weinberg Partners LP		2	1	3	1				2	2	**11**
PJT Partners Inc			3	2	3		2				**10**
Centerview Partners LLC			1		2			1			**4**

TABLE 4
Investment Banks involved in Cluster 2 M&A Deals ranked by number

CLUSTER 2	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Rothschild & Co	49	42	40	39	43	52	59	65	71	40	**500**
Lazard	34	35	28	42	38	32	34	32	30	25	**330**
JP Morgan	23	24	24	19	29	21	30	31	16	18	**235**
Goldman Sachs & Co	17	18	35	34	28	16	23	10	13	14	**208**
Morgan Stanley	46	23	31	17	12	30	18	8	10	3	**198**
Citi	16	21	14	15	26	27	17	20	3	22	**181**
Deutsche Bank	27	33	16	14	12	20	7	12	8	7	**156**
Houlihan Lokey	13	15	21	16	23	8	20	13	14	7	**150**
Bank of America Merrill Lynch	8	22	14	14	14	11	15	16	6	8	**128**
Barclays	7	13	23	21	10	15	11	4	11	10	**125**
Credit Suisse	22	21	23	8	14	3	8	4	9	11	**123**
Mediobanca	13	14	15	9	10	11	9	14	16	11	**122**
Jefferies LLC	11	15	14	14	11	15	11	7	6	16	**120**
SEB	16	8	12	10	13	6	16	5	9	7	**102**
Banca IMI (Intesa Sanpaolo)	11	9	10	25	16	6	10	4	2	6	**99**
UniCredit	13	16	10	16	8	4	11	9	2	6	**95**
Evercore Partners	6	5	1	11	13	6	8	9	17	7	**83**
Macquarie Group	7	6	9	10	5	3	1	11	6	5	**63**
Alantra Partners SA	2	6		4	6	10	12	6	7	9	**62**
Nordea	4	8	8	4	6	5	14	2		8	**59**
Santander Corp & Invest Bkg	1	9	8	19	3	8	5		2		**55**
Moelis & Co	1	1	10	3	9	8	2	4	11	3	**52**
RBC Capital Markets	3	8	5	7	6	5	10	1	3	2	**50**
Natixis		6			8	4	4	4	12	6	**44**
Greenhill & Co, LLC	5	6	4	1	2	6	4	1	7	3	**39**
PJT Partners Inc	4			4	5	6		2	4	3	**28**
Perella Weinberg Partners LP	1	5	3	2	2	2	1		1	1	**18**
Centerview Partners LLC		2			1		1			2	**6**

TABLE 5
Investment Banks involved in Cluster 3 M&A Deals, ranked by number

CLUSTER 3	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Rothschild & Co	30	56	46	32	56	46	51	70	53	36	**476**
Goldman Sachs & Co	32	58	36	35	39	41	33	32	40	30	**376**
Morgan Stanley	37	57	40	32	45	35	29	40	29	17	**361**
JP Morgan	36	39	34	27	40	39	26	47	26	28	**342**
Lazard	38	25	23	36	38	32	37	41	37	21	**328**
Deutsche Bank	39	39	40	22	41	20	20	17	15	16	**269**
Credit Suisse	26	50	22	34	18	18	21	17	14	15	**235**
Citi	10	24	21	30	16	23	27	31	18	17	**217**
Barclays	12	18	25	26	33	30	21	20	20	7	**212**
Bank of America Merrill Lynch	7	44	19	15	24	18	16	23	9	13	**188**
Jefferies LLC	4	13	11	12	7	9	13	9	11	15	**104**
Mediobanca	5	13	19	3	8	8	9	12	8	11	**96**
Houlihan Lokey	4	15	8	10	13	12	10	13	4	5	**94**
UniCredit	11	8	9	5	19	15	15	4	7		**93**
Evercore Partners	7	6	4	8	11	8	16	10	9	10	**89**
Banca IMI (Intesa Sanpaolo)	9	8	10	6	10	13	16	5	2		**79**
SEB	9	14	3	4	7		6	10	12	10	**75**
Macquarie Group	2	2	4	9	11	3	9	8	8	8	**64**
RBC Capital Markets	4	7	8	6	1	10	7	6	4	7	**60**
Natixis	1	4	6	2	6	4	4	9	9	2	**47**
Santander Corp & Invest Bkg	1	3	11	10	5	2	2	6	3	4	**47**
Moelis & Co	2	2	8	4	4	3	7	5	6	5	**46**
Nordea	2	2	1	8	3	6	4	6	2	4	**38**
Greenhill & Co, LLC	3		4			1	7	5	4	2	**26**
PJT Partners Inc	4	2		5		3	4	3	1		**22**
Centerview Partners LLC	2	3		2	1	2	1	2	1	4	**18**
Alantra Partners SA	2	2			2	3	2		4	2	**17**
Perella Weinberg Partners LP		2	2	1	5	2		2		2	**16**
Zaoui & Co					3		2				**5**
Robey Warshaw LLP						2					**2**

TABLE 6
Investment Banks involved in Cluster 4 M&A Deals, ranked by number

CLUSTER 4	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Goldman Sachs & Co	36	109	73	79	81	102	67	81	96	62	**786**
Morgan Stanley	47	118	58	66	63	75	75	71	80	43	**696**
JP Morgan	54	84	55	58	71	88	56	68	90	43	**667**
Deutsche Bank	48	84	78	69	78	61	52	37	44	25	**576**
Rothschild & Co	39	74	64	43	43	58	57	62	75	31	**546**
Bank of America Merrill Lynch	19	54	41	46	54	67	59	55	52	36	**483**
Lazard	32	60	37	36	41	56	51	48	59	17	**437**
Citi	40	52	40	49	34	49	35	45	61	26	**431**
Credit Suisse	41	72	50	36	31	37	34	26	48	8	**383**
Barclays	21	56	33	52	53	47	31	25	31	24	**373**
Mediobanca	16	10	10	13	12	17	8	9	28	6	**129**
Houlihan Lokey	9	20	20	15	5	12	6	5	17		**109**
Evercore Partners	6	8	8	7	2	13	16	11	12	7	**90**
Banca IMI (Intesa Sanpaolo)	5	15	8	13	6	10	4	3	10		**74**
UniCredit	4	19	2	13	8	9	4	7	5		**71**
SEB		4	10	5	16	7	3	9	8	8	**70**
Jefferies LLC	6	1	8	3	4	8	7	5	14	13	**69**
RBC Capital Markets	10	5	7		8	7	4	8	14	4	**67**
Santander Corp & Invest Bkg	7	10	4	8	7	7	6	1	12	2	**64**
Moelis & Co	6	3	8	8	4	5	4	13	5	3	**59**
Natixis	3	9	1	4	5	8	9	9	6	4	**58**
Centerview Partners LLC	2	3	3		10	10	8	5	6	8	**55**
Nordea		7	4	2	7	2		9	11	7	**49**
Perella Weinberg Partners LP	6	3	3	6	9	6	5	6	3	2	**49**
Macquarie Group	2	4	6		4	7	5	8	9	3	**48**
PJT Partners Inc	5	4	4	1	5	4	4	2	16	1	**46**
Greenhill & Co, LLC	5	6	7	3	4	2	7	2	6	2	**44**
Alantra Partners SA					3	7	3	4	4	2	**23**
Robey Warshaw LLP					3	2	6	2	3	4	**20**
Zaoui & Co					2	9	3	2	2		**18**

The only bank that ranks among the first five in all four clusters is Rothschild & Co.

Comparing these findings with the ones presented in *Figure 13* above, we can calculate that US banks outnumber European banks by four to one in the top five positions in Cluster 2 and 3. However, this is not the case for Cluster 1 and 4.

In Cluster 1, all three of the top three banks are from Europe (60%). In Cluster 4, despite not counting for 80% of the top five, US banks still play the bigger role, occupying 60% of the top five.

Interesting to note is how the number of deals advised by the top five are very close in Clusters 2 through 4, while a very wide gap separates Rothschild & Co from the second best in Cluster 1 (Lazard). In fact, the top bank advised around three times the number of the deals advised by number two in the ranking.

Investment bank focus

Figures below show that each cluster is advised by a different investment bank typology.

The first thing we notice is how the presence of bulge bracket banks gets stronger as the deal size grows.

In Cluster 1 (*Figure 25*) notable is the fact that the market share of middle market banks rose from 2010 through 2013, only to diminish in subsequent years, with a minimum market share for the period of 23%.

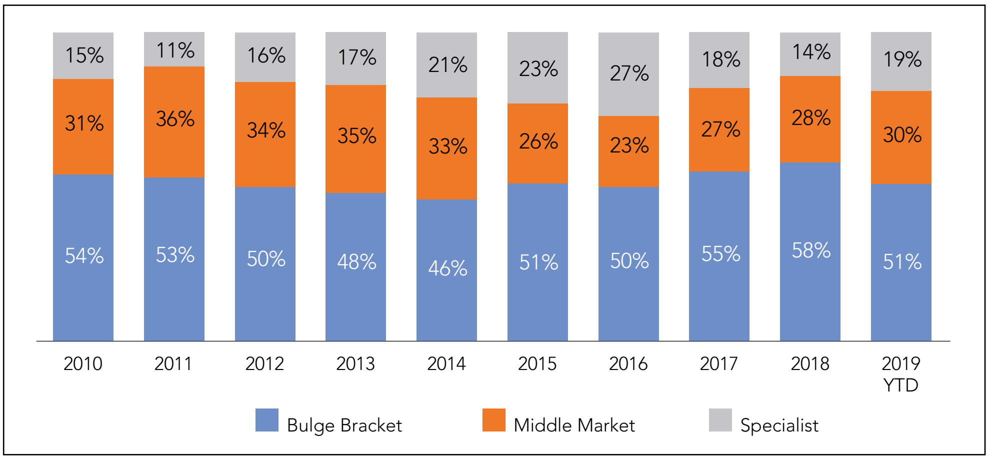


FIGURE 25
Investment banks advising companies in Cluster 1 M&A Deals by size cluster (2010 – 2019 updated to Q3)

As per Cluster 2, it is interesting to see how specialist banks grew their market share in the overall period. As per middle market banks, there seems to be a pattern: every two or three years, the market share shrinks, only to increase again in the following two-year period.

FIGURE 26
Investment banks advising companies in Cluster 2 M&A Deals by size (2010 – 2019 updated to Q3)

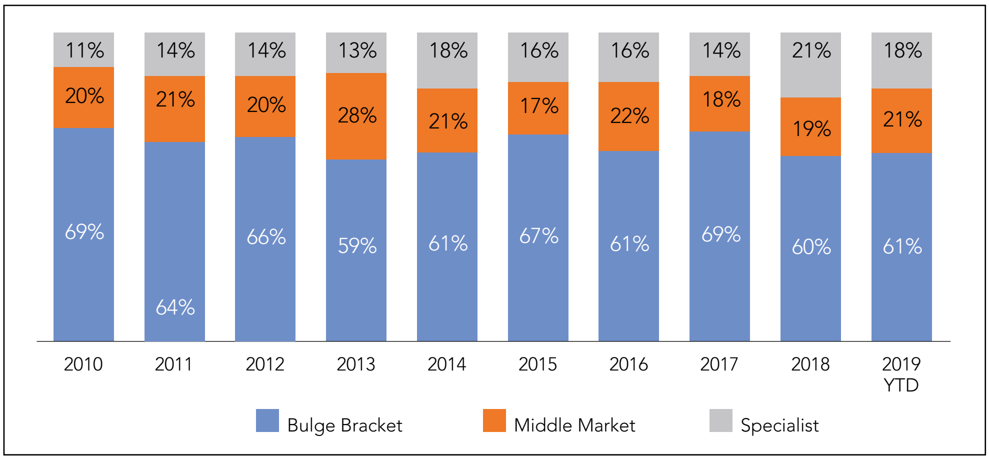
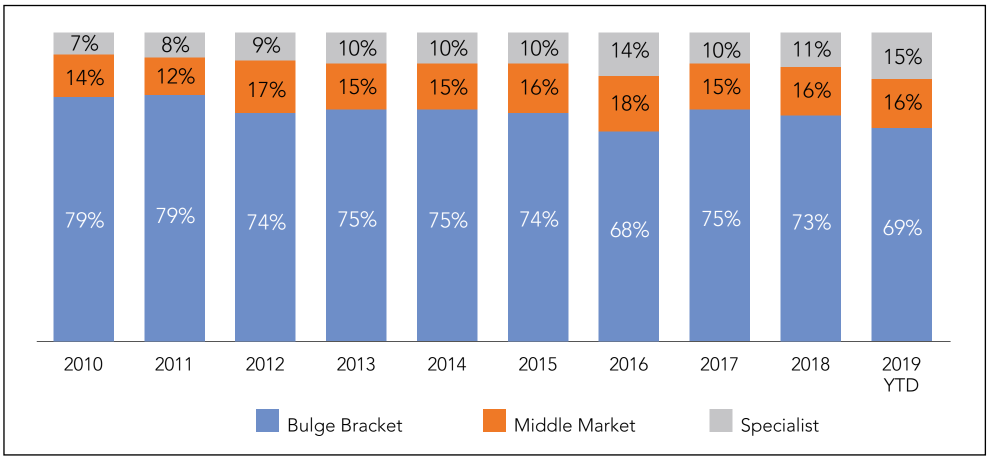
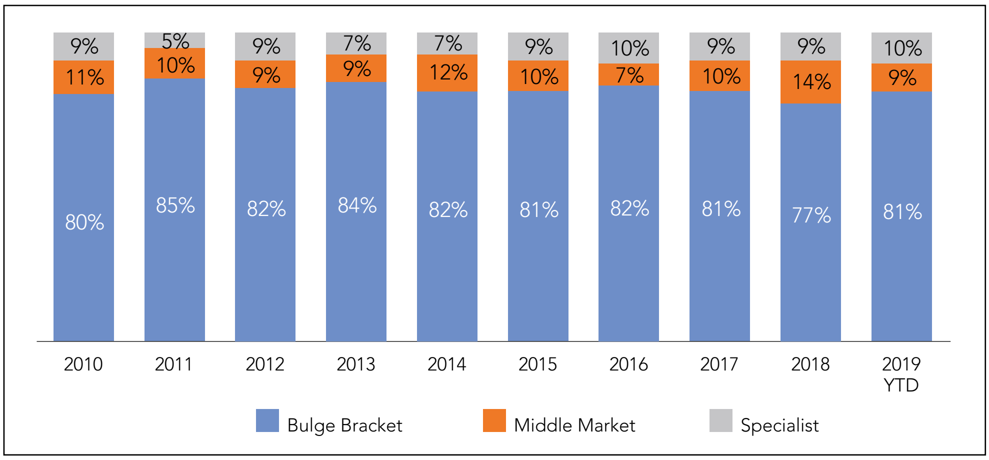


FIGURE 27
Investment banks advising companies in Cluster 3 M&A Deals by size (2010 – 2019 updated to Q3)



In Cluster 3 and 4, the presence of the bulge bracket is constantly growing, especially in Cluster 4 deals, where their market share exceeds 80% (with the exception of 2018).

FIGURE 28
Investment banks advising companies in Cluster 4 M&A Deals by size (2010 – 2019 updated to Q3))



Investment bank affiliation

The figures below show the involvement of independent banks in M&A deals. We can note that the larger the size of the M&A, the smaller the presence of independent banks. In Cluster 1 and Cluster 2 we observe a similar pattern: in both clusters, independent banks are least active in 2010 and 2011, after which we see an overall expansion in their presence.

As per Cluster 1, the year with the largest market share is 2015 (36%), while in Cluster 2, this peak comes in 2018 (33%).

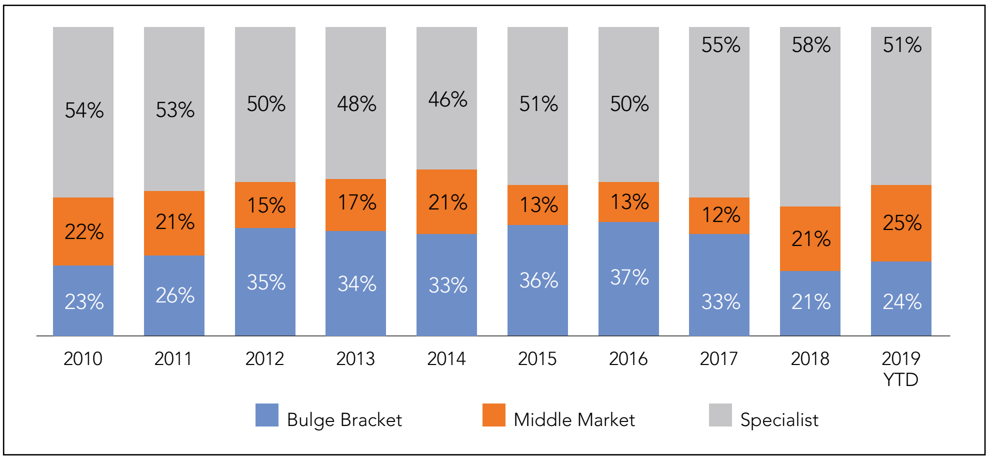


FIGURE 29
Investment banks advising companies in Cluster 1 M&A Deals by affiliation (2010 – 2019 updated to Q3)

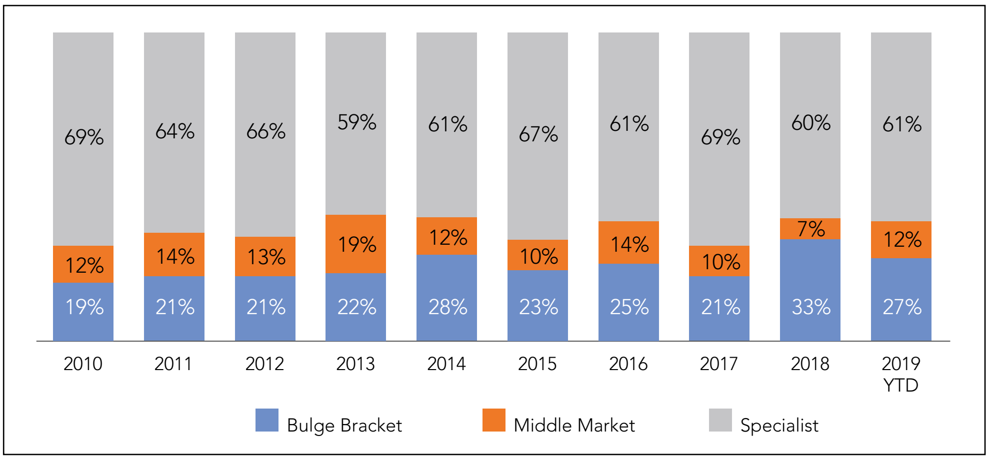
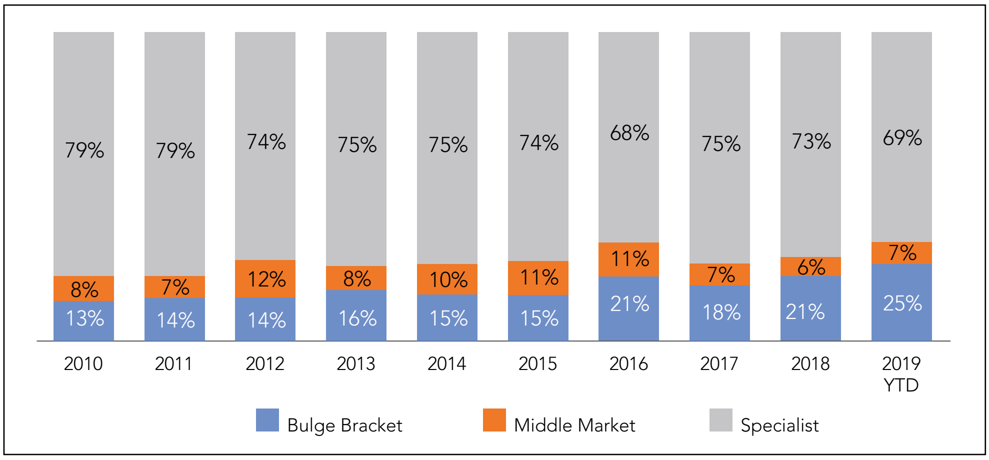


FIGURE 30
Investment banks advising companies in Cluster 2 M&A Deals by affiliation (2010 – 2019 updated to Q3)

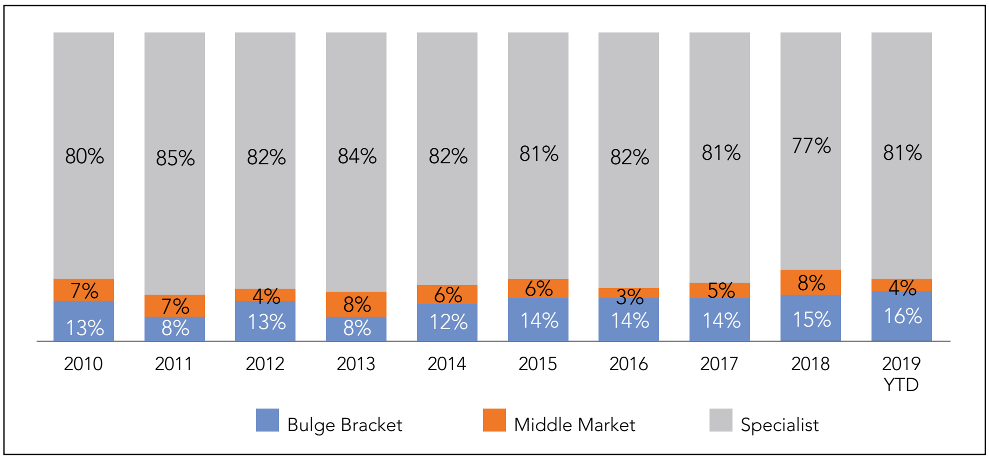
In Cluster 3, the presence of independent investment banks trends upward until 2019 where their market share is 25% with respect to the beginning of the period, when it stood at 13%.

FIGURE 31
Investment banks advising companies in Cluster 3 M&A Deals by affiliation (2010 – 2019 updated to Q3)



In the largest deals (Cluster 4, depicted in *Figure 32*), despite the fact that market share is less than 20% throughout the entire period, it seems to be trending upward.

FIGURE 32
Investment banks advising companies in Cluster 4 M&A Deals by affiliation (2010 – 2019 updated to Q3)



Investment bank nationality

Finally, the four clusters were analyzed by nationality of the investment bank headquarters. The figures below clearly show that US banks once again play a major role. Looking at the overall picture provided by the four graphs, it is evident that the bigger the size, the greater the tendency to be advised by a US bank. In Cluster 1, we see that European banks advise the majority of M&A deals, a trend which appears to be on the rise overall.

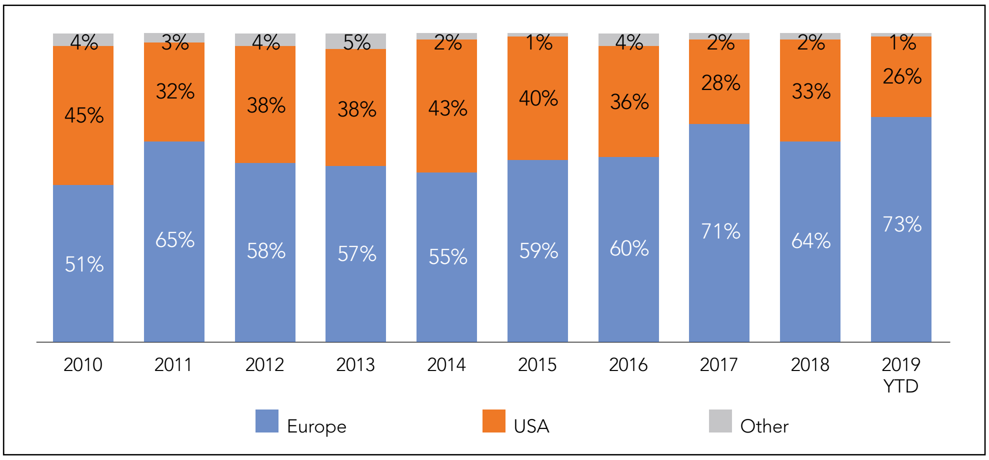


FIGURE 33
Investment banks advising companies in Cluster 1 M&A Deals by nationality (2010 – 2019 updated to Q3)

In Cluster 2, the market seems to be equally balanced between European and US banks.

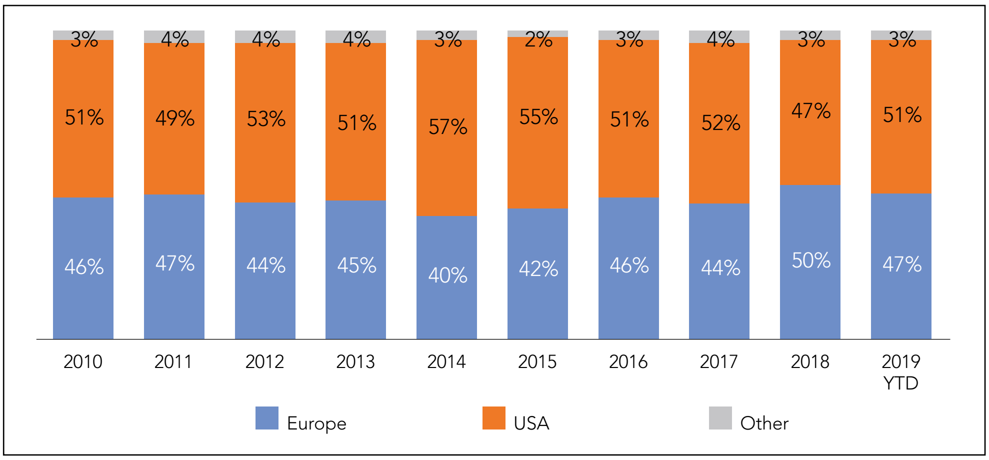


FIGURE 34
Investment banks advising companies in Cluster 2 M&A Deals by nationality (2010 – 2019 updated to Q3)

In Cluster 3 and 4, US banks outnumber European banks. Indeed, the presence of the former reaches the maximum level in 2019 with a 67% market share in Cluster 4 (*Figure 36*), corresponding to an increase of 9% over the 2010 market share.

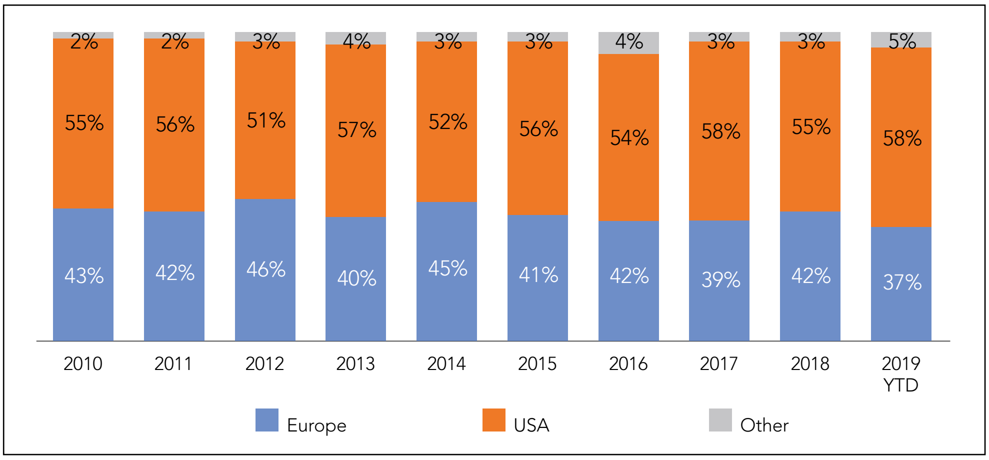
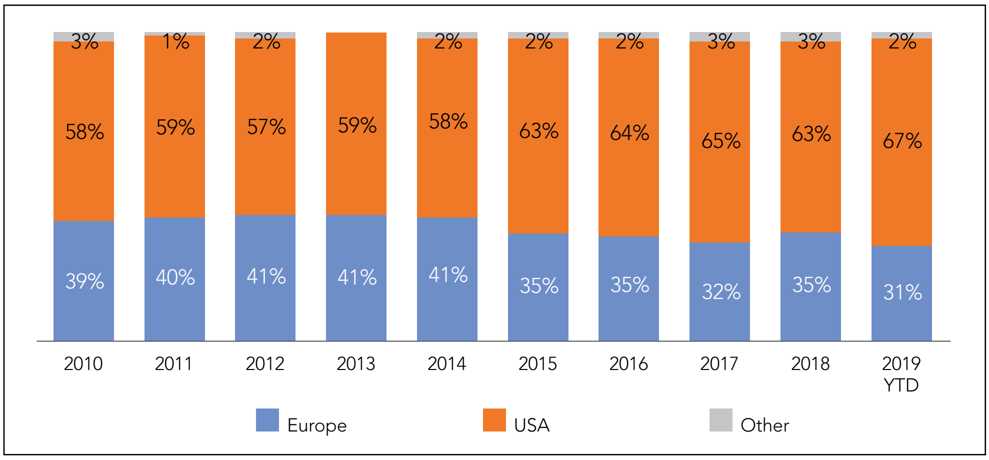


FIGURE 35
Investment banks advising companies in Cluster 3 M&A Deals by nationality (2010 – 2019 updated to Q3)

FIGURE 36
Investment banks advising companies in Cluster 4 M&A Deals by nationality (2010 – 2019 updated to Q3)



3.1.2 Results: ECM

Trend analysis

The analysis involves ECM deals completed between 01/01/2010 and 30/09/2019; data was retrieved from Thomson Reuters Datastream.

Figure 37 shows the trend in the number of ECM deals advised by the largest banks in the world that are the object of this study, as well as the average gross proceeds[6] collected through the deals in question.

FIGURE 37
Average proceeds and number of deals - trend analysis (2010 – 2019 updated to Q3)

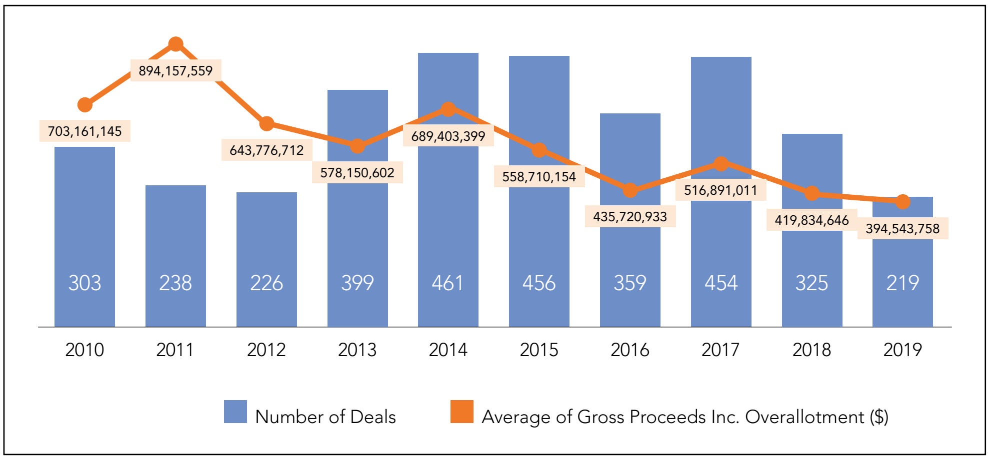


Figure 37 shows an overall decline in the number of deals in the period in question, despite a rising wave between 2013 and 2017.

In detail, growth in the number of ECM deals can be seen in the period 2013-2017, peaking in 2014 with 461 transactions. Despite this upward trend, the number abruptly drops in 2018 to 325 to diminish further in 2019. Considering that 2019 figures do not include the whole year, we can estimate that as of December 31, 2019, deals would proportionally number 292 in total, one of the lowest values of the whole period.

6 Gross proceeds correspond to the total proceeds for the entire transaction plus overallotment amount (or green shoe) sold. This figure represents all tranches of the transaction. The green shoe clause in the underwriting agreement establishes that, in case of excess demand, the issuer can authorize additional shares to be sold through the syndicate.

As for the proceeds collected with the transactions, the overall average is almost halved in 2019 with respect to 2010. A strong peak occurs in 2011, with deals collecting on average around $900 million. This peak is not bookended by a constant trend. In fact, in subsequent years, the average of gross proceeds continues to steadily decline until 2019, showing the lowest value on average.

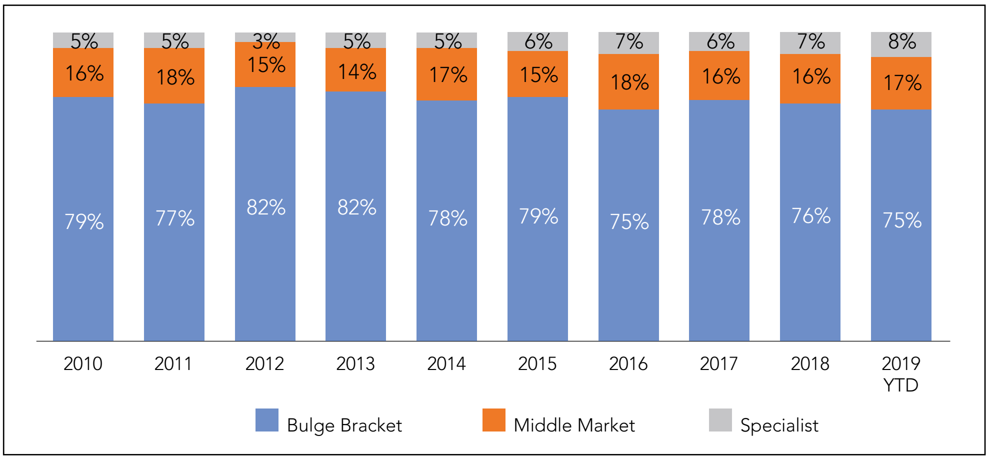


FIGURE 38
Bank Focus - trend analysis (2010 – 2019 updated to Q3)

As the overall trend illustrates, the majority of these deals are advised by bulge bracket banks, as depicted in *Figure 38*.

There are two trends that can be observed. On the one hand, the bulge bracket market share fluctuates slightly throughout the entire period, showing an overall decline. In fact, in 2012 and 2013, the market share of these banks was over 80%, while in 2019 it lands at 75%. On the other hand, there is a constant yet decisive engagement by specialists. In 2012, their market share was 3%, while in the following years, it doubled and indeed almost tripled as both in 2018 and 2019 this figure hit 8%.

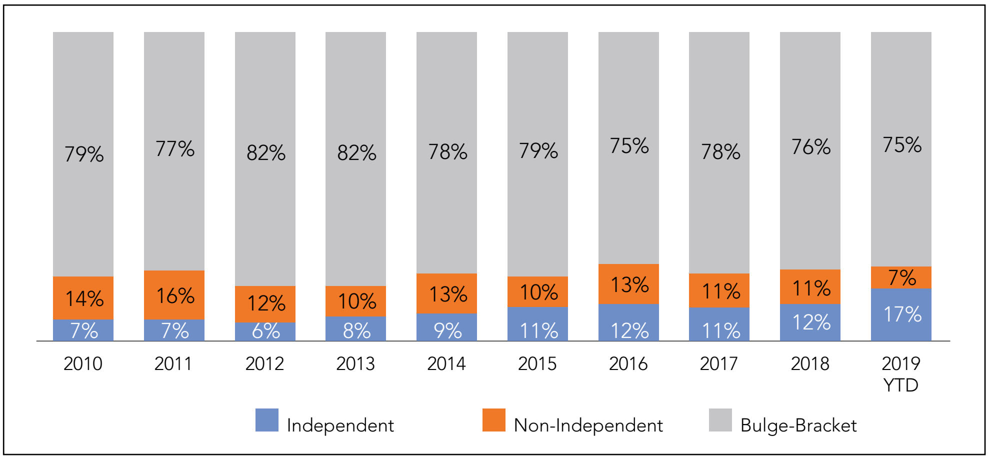


FIGURE 39
Bank Affiliation - trend analysis (2010 – 2019 updated to Q3)

Figure 39 shows the role that independent banks play in advising ECM deals. From the beginning of the period (2010) through the end (2019), their market share more than doubled from 7% to 17%. Despite the positive overall trend, there are some sub-trends in this time series, as the position worsened in 2012 and 2017, losing 1% compared to the respective previous years.

FIGURE 40
Bank Nationality - trend analysis (2010 – 2019 updated to Q3)

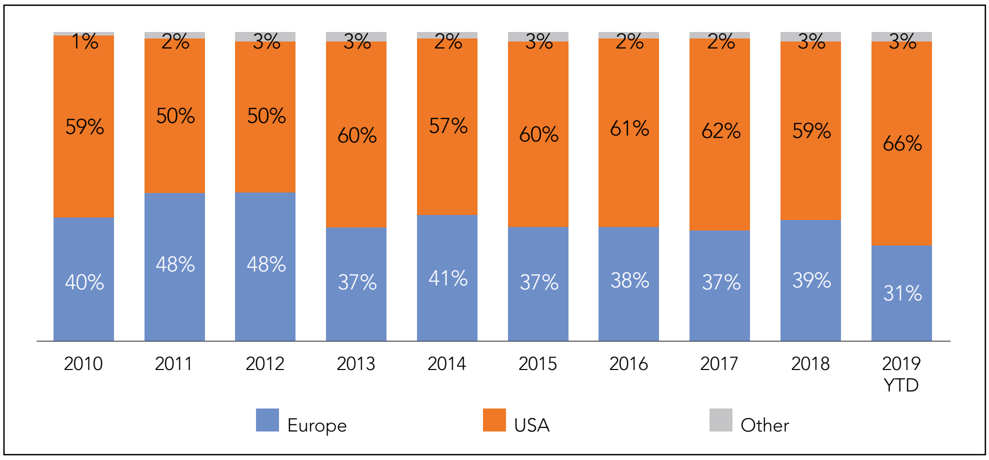


Figure 40 reports how the different nationalities of advisors relate to ECM deals. This evidence should be read along with *Figure 12*, Section 2, which reports the market share of the whole ECM market clustered by nationality, bearing in mind that in this part of the work, only the largest deals are analyzed.

In *Figure 40*, the percentage of European banks is always lower than 50%. On the contrary, in *Figure 12* showing market share in every ECM deal, US banks never hold the majority of the market in the period 2010-2019, leaving European banks with more than the half of the market. This means that US banks are mostly advising large deals, whereas in the overall market, European banks advise a large number of deals that are most likely smaller in size.

Segment analysis

Advisor Ranking

Similarly with the approach followed for the M&A analysis, deals were ordered and clustered according to their size to study common trends. As with M&As, there are four clusters:

- Cluster 1 includes all ECM deals with the gross proceeds positioning between the minimum value and the 25th percentile;
- Cluster 2 includes all ECM deals with the gross proceeds positioning between the 25th percentile and the median value;
- Cluster 3 includes all ECM deals with the gross proceeds positioning between the median value and the 75th percentile;
- Cluster 4 includes all ECM deals with the gross proceeds positioning between the 75th percentile and the maximum value.

Next we were able to identify the advisors that were most involved in equity issuances (*Table 7* through *Table 10*).

A total of 3,440 ECM deals are included in our analysis. As this asset class is divided into four clusters, each cluster consists of 860 deals. Looking at the tables below, keeping in mind that they report the sum of all the deals involving banks, we see that the number of advisors changes according to the size of the deal. The breakdown in the number of banks is as follows:

- 1,049 in Cluster 1 (1.22 banks per deal);
- 1,266 in Cluster 2 (1.47 banks per deal);
- 1,525 in Cluster 3 (1.77 banks per deal);
- 2,383 in Cluster 4 (2.77 banks per deal).

From the tables below, we can note that JP Morgan is the only bank ranking among the first five in all four clusters.

Drawing a comparison between these tables and the evidence garnered from *Figure 12* mentioned above, we can focus on the banks rated in the top five.

Figure 12 shows that in 2019 the first five banks are all from the US. In Cluster 4, the same finding can be confirmed looking at 2019 data. In fact, *Table 10* illustrates that for 2019 the first five banks are from the US, as Citi advised 13 deals. Still, despite the low performance in terms of number of deals, thanks to its past activity Deutsche Bank ranks second in terms of total number of deals.

TABLE 7
Investment Banks involved in Cluster 1 ECM Deals by number

CLUSTER 1	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
JP Morgan	18	8	12	16	19	26	18	10	8	9	**144**
Jefferies LLC	16	7	9	14	19	15	13	20	17	12	**142**
Citi	13	5	1	9	14	12	13	18	3	8	**96**
Credit Suisse	11	2	5	6	12	11	3	13	9	5	**77**
Nordea	7	8	6	4	3	10	12	7	9	4	**70**
Natixis	1	4		2	7	9	12	11	10	4	**60**
RBC Capital Markets	3	4	8	7	4	14	8	3	7	2	**60**
Barclays	5	3	6	1	5	7	10	7	9	3	**56**
Morgan Stanley	3	3	6	6	4	3	5	13	7	6	**56**
Deutsche Bank	4	1	4	9	7	7	5	6	7	3	**53**
Goldman Sachs & Co	10	2	5	4	1	6	3	8	4	6	**49**
UniCredit	12	2		7	4	8	5	5	4	2	**49**
Bank of America Merrill Lynch	6	6	6	6	4	7	6	5		2	**48**
Banca IMI (Intesa Sanpaolo)	4			6	4	6	4	4	4	1	**33**
Mediobanca	2	1		2	1	1	1	5	3	1	**17**
Santander Corp & Invest Bkg	2	2		2	2	3		1	3		**15**
SEB										8	**8**
Evercore Partners				1				2	2		**5**
Alantra Partners SA		1		1						2	**4**
Lazard	2			1							**3**
Moelis & Co							1	1			**2**
Macquarie Group										1	**1**
Rothschild & Co		1									**1**

TABLE 8
Investment Banks involved in Cluster 2 ECM Deals by number

CLUSTER 2	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
JP Morgan	13	13	9	21	33	20	23	26	13	11	**182**
Goldman Sachs & Co	16	6	4	16	7	16	21	16	23	10	**135**
Morgan Stanley	8	8	3	12	13	21	11	23	21	12	**132**
Deutsche Bank	8	5	11	16	14	20	15	14	16	5	**124**
Credit Suisse	13	7	13	10	17	18	16	14	7	8	**123**
Barclays	6	9	6	12	12	11	4	19	17	9	**105**
Citi	9		1	8	13	8	10	16	16	14	**95**
Bank of America Merrill Lynch	6	4	10	11	11	15	9	9	12	3	**90**
Jefferies LLC	4	9	1	6	14	16	6	12	13	5	**86**
Nordea		3		2	4	5	16	10	3	5	**48**
UniCredit	7	8	3	5	4	2	3	5	2	1	**40**
RBC Capital Markets		1	3	6	6	3	3	1	4	5	**32**
Banca IMI (Intesa Sanpaolo)	1	1	1	4	7	3	1	1	2		**21**
Natixis	2			2	2	3	3	2	2	1	**17**
Mediobanca	1	2	2	2	3		2	1	3		**16**
Santander Corp & Invest Bkg	2		1			1	1	1	3	1	**10**
Evercore Partners					2	2	1		1	1	**7**
Macquarie Group										1	**1**
Moelis & Co										1	**1**
SEB										1	**1**

TABLE 9
Investment Banks involved in Cluster 3 ECM Deals by number

CLUSTER 3	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
JP Morgan	21	13	7	24	40	24	34	41	27	22	**253**
Goldman Sachs & Co	11	5	10	28	22	30	26	39	21	12	**204**
Morgan Stanley	9	11	9	21	17	28	20	21	17	9	**162**
Deutsche Bank	7	9	15	26	19	26	19	25	12		**158**
Credit Suisse	9	19	15	21	17	18	10	19	12	6	**146**
Bank of America Merrill Lynch	9	4	10	18	25	22	10	18	14	6	**136**
Citi	4	5	6	9	19	18	12	31	13	9	**126**
Barclays	4	4	6	14	14	11	11	16	12	4	**96**
Jefferies LLC	1	2	2	8	2	8	18	10	8	5	**64**
UniCredit	3	9	4	7	4	4	3	5	2	2	**43**
Nordea	2		3	6	1	3	7	6	1	2	**31**
Mediobanca	5	1	3	3	9	1	1	3	3		**29**
Natixis	1				3	3	4	6	1	3	**21**
RBC Capital Markets		2		3	2	1	1	5	4	1	**19**
Banca IMI (Intesa Sanpaolo)	2	1	1	5	8	1					**18**
Santander Corp & Invest Bkg				1	2	2	3	3	2		**13**
Evercore Partners									1	1	**2**
Lazard				2							**2**
SEB										2	**2**

TABLE 10
Investment Banks involved in Cluster 4 ECM Deals by number

CLUSTER 4	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
JP Morgan	24	17	29	42	67	50	30	42	26	22	**349**
Deutsche Bank	32	38	32	45	58	36	18	26	15	4	**304**
Goldman Sachs & Co	25	33	16	40	52	35	25	35	24	13	**298**
Morgan Stanley	25	26	25	36	46	38	20	37	15	17	**285**
Bank of America Merrill Lynch	17	15	8	31	45	42	29	32	13	12	**244**
Citi	16	14	14	28	41	21	18	35	23	13	**223**
Credit Suisse	17	25	19	15	34	18	11	18	16	7	**180**
Barclays	6	10	15	10	31	17	15	15	13	8	**140**
UniCredit	5	16	8	5	18	7	4	9	7	3	**82**
Mediobanca	5	7	11	4	23	9	7	8	3	2	**79**
Santander Corp & Invest Bkg	4	3	3	3	12	9	2	10	7	1	**54**
Banca IMI (Intesa Sanpaolo)	2	4	2	3	10	5	4	7	3	1	**41**
Jefferies LLC	2			3	8	6	3	6	1	1	**30**
Nordea	3		1	2	7	3	5	3	3	1	**28**
Natixis					7	4	2	9	1	3	**26**
RBC Capital Markets	2			2	4	3		4		2	**17**
SEB										2	**2**
Moelis & Co		1									**1**

Following the same path we adopted for M&A deal analysis, we also examined ECM deals for each of the 4 Clusters by the bank focus of the advisor, by its affiliation, and by its nationality.

After exploring all three criteria, for ECM deals, we conduct an ad hoc analysis focusing on the country of exchange of the equity issued. At the same time, we consider whether the exchange and the company's headquarters are located in the same country.

Investment bank focus

Looking at *Figure 41* through *Figure 44*, we can deduce that the bigger the size of the cluster, the bigger the role of bulge bracket advisors. For example, in 2019, the bulge bracket accounts for 53% of the market share in Cluster 1 ECM deals, and 86% of the market share in Cluster 4 ECM deals.

Generally speaking, the most remarkable year for bulge bracket was 2013, when they advised 92% of the Cluster 4 deals.

Conversely, specialist banks seem to lose market share in Cluster 2 where their position is shrinking, and gain a larger role in Cluster 1 where in 2018 and in 2019 they held 18% of the market.

FIGURE 41
Investment banks advising companies in Cluster 1 ECM Deals by bank (2010 – 2019 updated to Q3)

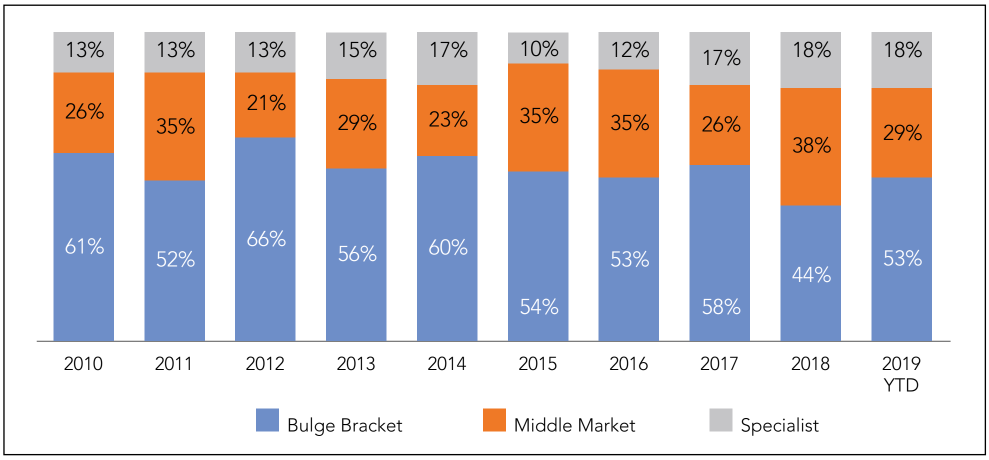


FIGURE 42
Investment banks advising companies in Cluster 2 ECM Deals by bank focus (2010 – 2019 updated to Q3)

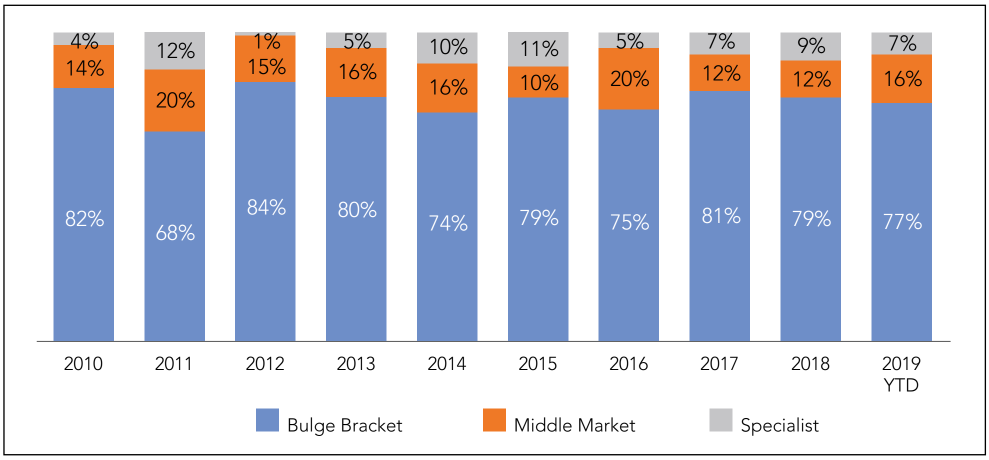
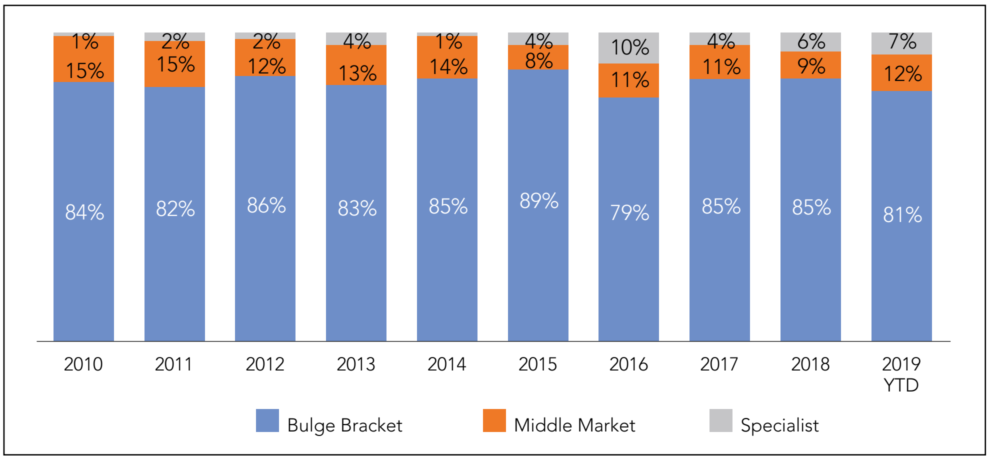


FIGURE 43
Investment banks advising companies in Cluster 3 ECM Deals by bank focus (2010 – 2019 updated to Q3)



As evidenced in *Figure 44*, in 2012, 2013, 2018, and 2019, specialist banks have little or no market share. Instead, middle market banks in Cluster 4 played the most active role in 2014 and in 2017, with a market share of 17%.

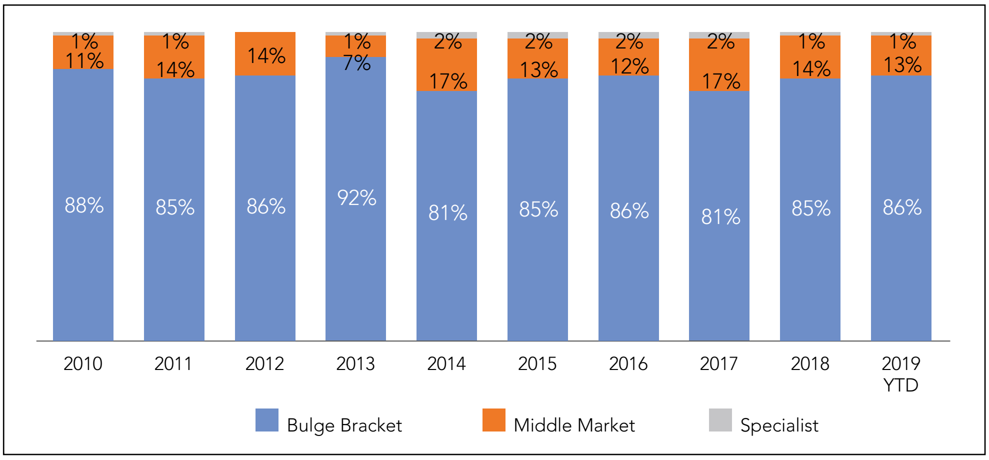


FIGURE 44
Investment banks advising companies in Cluster 4 ECM Deals by bank focus (2010 – 2019 updated to Q3)

Investment bank affiliation

Concerning the bank affiliation, from *Figure 45* through *Figure 48*, we can observe how the market share held by independent banks reduces drastically as the cluster size gets bigger.

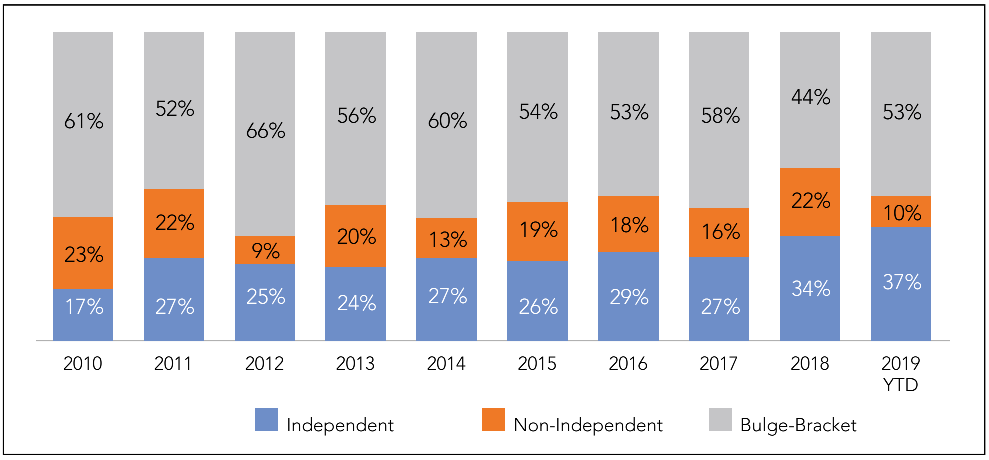


FIGURE 45
Investment banks advising companies in Cluster 1 ECM Deals by affiliation (2010 – 2019 updated to Q3)

In Cluster 1, the role of independent banks follows an overall positive trend from 2010 to 2019, where the market share of independent banks more than doubled. *Figure 45* shows that this figure peaks in 2019 with 37% of deals advised.

The same growth is not found in Clusters 2, 3, and 4 where the market share of independent banks shrinks over the years.

FIGURE 46
Investment banks advising companies in Cluster 2 ECM Deals by affiliation (2010 – 2019 updated to Q3)

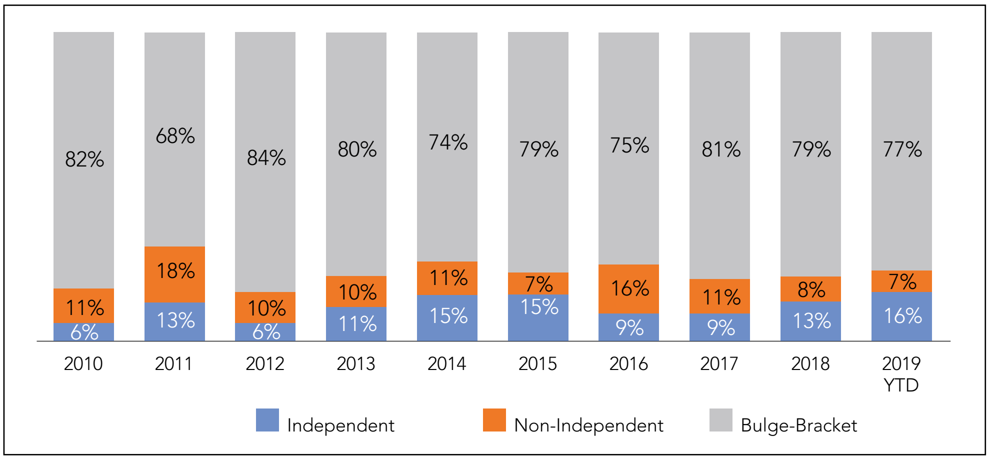
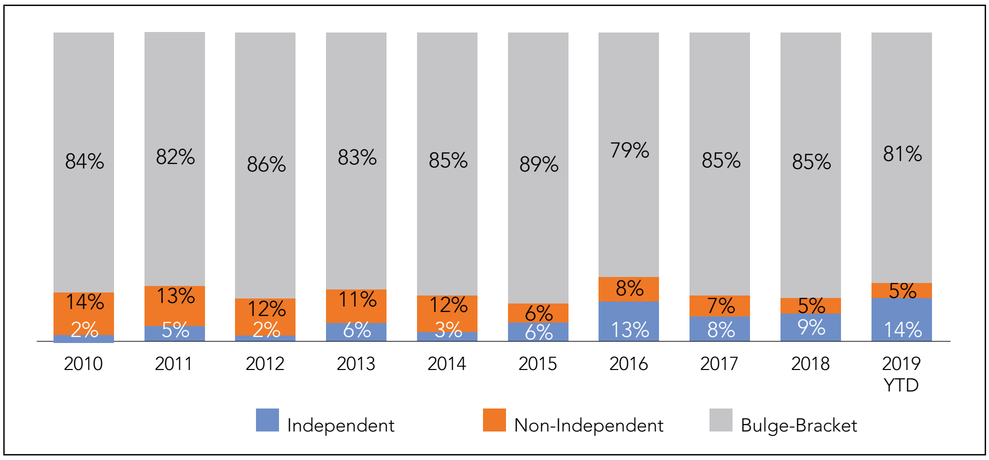
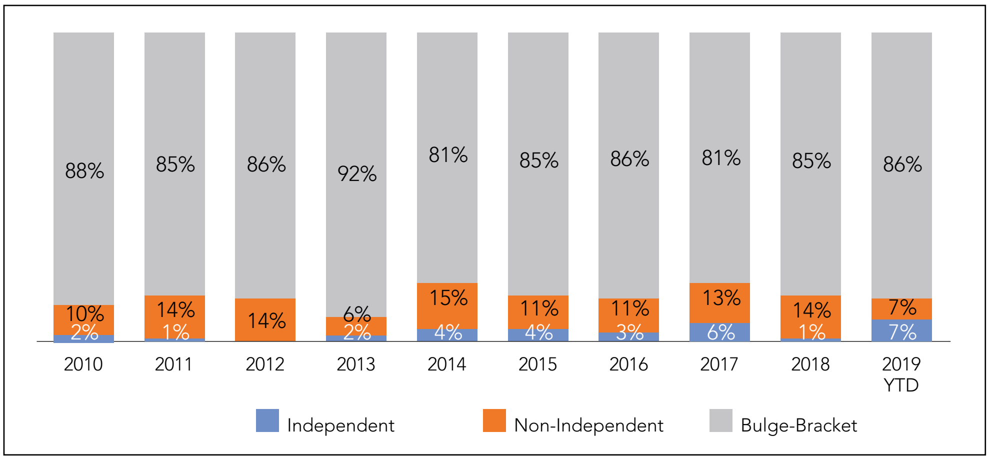


FIGURE 47
Investment banks advising companies in Cluster 3 ECM Deals by affiliation (2010 – 2019 updated to Q3)



As per Cluster 4, no ECM deal was advised by independent banks in 2012, while in 2011 and in 2018, this figure was 1%.

FIGURE 48
Investment banks advising companies in Cluster 4 ECM Deals by affiliation (2010 – 2019 updated to Q3)



Investment bank nationality

From *Figure 49* through *Figure 52* it is possible to observe the role of advisors in the four clusters based on their nationality. Bearing in mind that all ECM operations were undertaken by companies located in Europe, the important role played by US banks is quite relevant. In fact, they recorded their largest market share in 2019 in Cluster 3 jumping to 76% of market share, from 67% in 2018.

In Cluster 4, we see a similar trend: in 2019, 7 deals out of 10 were advised by an American bank, up by 10% with respect to 2018.

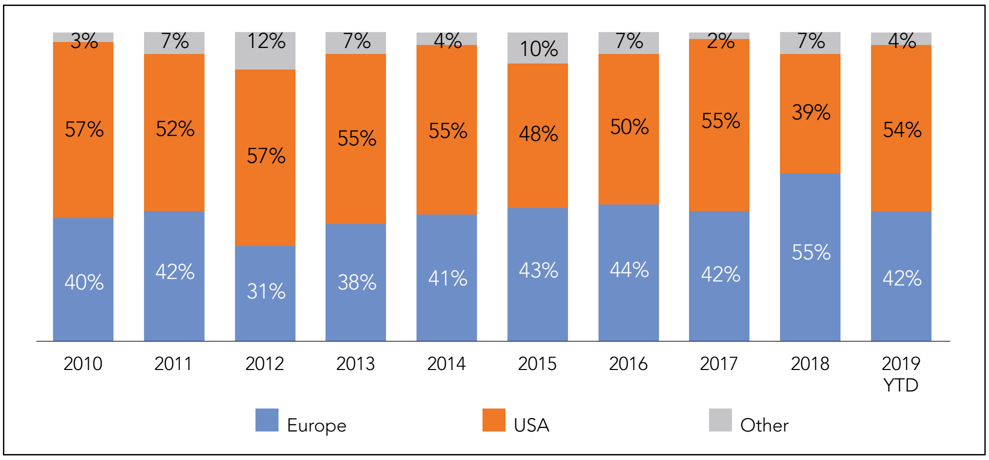


FIGURE 49
Investment banks advising companies in Cluster 1 ECM Deals by nationality. (2010 – 2019 updated to Q3)

In Cluster 2 and Cluster 3 US banks advise more than 50% of ECM deals, with the only exceptions occurring in 2012 for Cluster 2, and in 2011 and 2012 for Cluster 3.

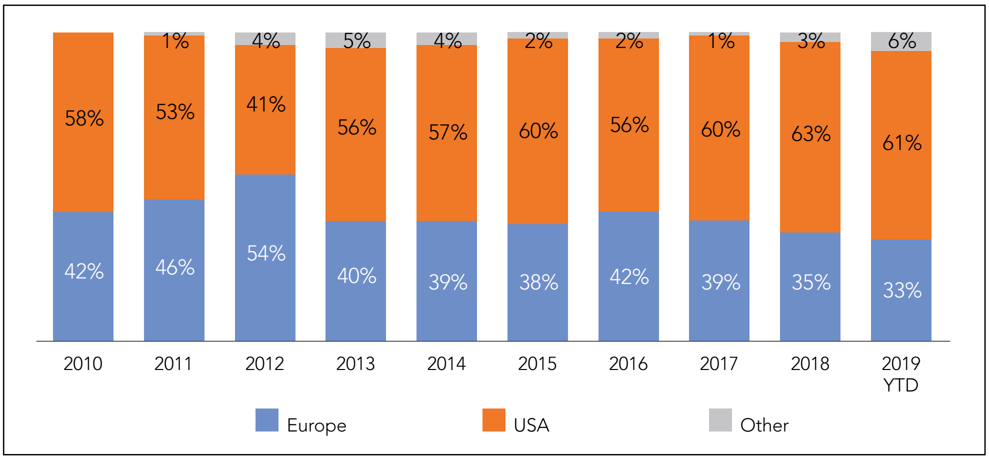
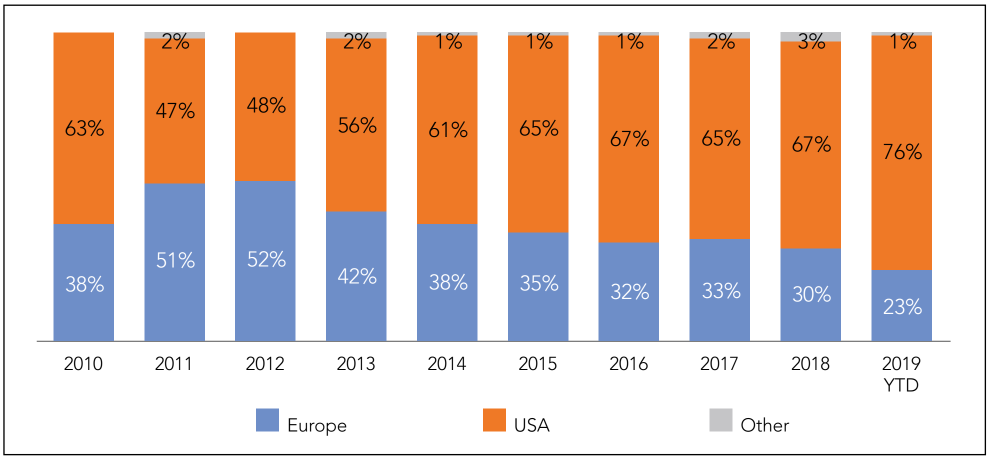


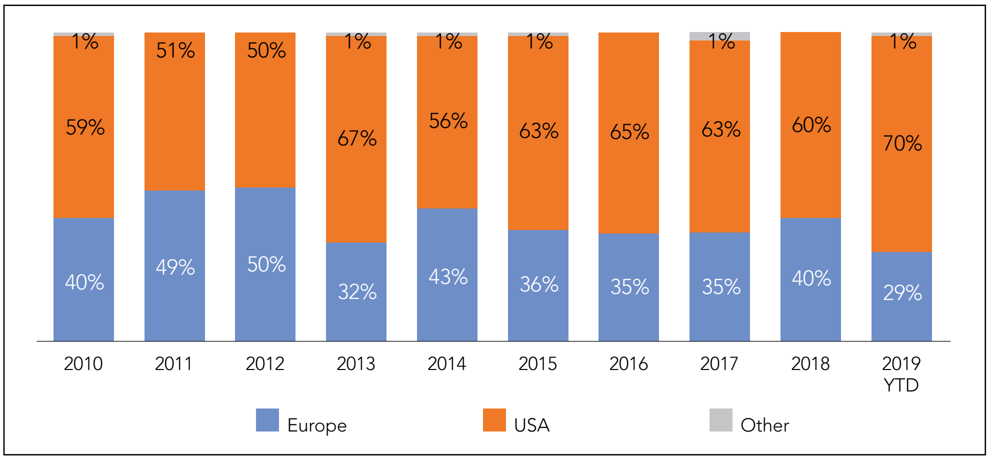
FIGURE 50
Investment banks advising companies in Cluster 2 ECM Deals by nationality (2010 – 2019 updated to Q3)

FIGURE 51
Investment banks advising companies in Cluster 3 ECM Deals by nationality (2010 – 2019 updated to Q3)



Cluster 4 is definitely the sub-sample in which US banks play the biggest role, as reflected in the fact that their smallest market share was 50% in 2011.

FIGURE 52
Investment banks advising companies in Cluster 4 ECM Deals by nationality (2010 – 2019 updated to Q3)



Internationality of securities issued in ECM deals

The last analysis regarding ECM deals explores the nationality of the companies issuing equity instruments and advised by the biggest investment banks.

Table 11 presents exchange nationality by number of deals, while *Table 12* reports the ranking of countries where companies issuing equity instruments are located, ranked by number of deals.

Around one-third of the ECMs targeted a UK exchange, while around 10% of the operations targeted the US for a total of 299 deals. The data breakdown is as follows:

- 73 deals (24%) involve companies located in the United Kingdom;
- 45 deals (15%) involve companies located in Greece;
- 42 deals (14%) involve companies located in the Netherlands;
- 26 deals (9%) involve companies located in Ireland;
- 24 deals (8%) involve companies located in Luxembourg.

TABLE 11
Exchange Location of ECM Deals[7]

COUNTRY OF EXCHANGE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
United Kingdom	86	65	68	113	147	148	99	119	96	59	**1000**
Germany	48	38	40	48	51	56	26	59	39	30	**435**
United States	19	17	17	41	53	33	25	37	38	19	**299**
France	19	13	13	35	35	39	42	56	25	20	**297**
Italy	19	25	16	27	35	27	19	29	21	11	**229**
Spain	13	11	7	12	29	35	14	22	17	10	**170**
Switzerland	16	5	11	12	16	15	11	21	19	10	**136**
Sweden	8	4	4	9	6	20	29	17	11	17	**125**
Netherlands	2	2	6	11	9	18	19	17	15	11	**110**
n.a.	8	3	3	23	19	12	10		3	5	**86**
Poland	18	7	8	12	14	12	5	5	3		**84**
Norway	8	3	8	6	6	8	12	10	6	7	**74**
Denmark	10	6	4	5	11	6	9	9	6	1	**67**
Austria	5	8	3	7	7	2	8	7		2	**49**
Finland	1	6	2	4	2	3	6	7	9	2	**42**
Belgium	1	3	3	4	6	5	5	5	3	4	**39**
Russian Fed	3	5	2	3	2	1	2	11	1	3	**33**
Ireland-Rep	4	1	1	4	2	7	2	1	5	4	**31**
Turkey	5	3	2	4	1		2	7	4		**28**
Greece	3	1		5	5	4	1	2			**21**
Luxembourg	3	4	4	6		1					**18**
Romania				3	3	1	3	2			**12**
Hong Kong	1	5	2	2				1			**11**
Channel Is		1		1		1	2	2			**7**
Czech Republic	1					1	3				**5**
Australia							2	1		1	**4**
Hungary				1				3			**4**
Cyprus		1	1					1			**3**
Canada							1		1		**2**
Iceland									1	1	**2**
Portugal			1		1						**2**
Slovenia									1	1	**2**
Brazil								1			**1**
Bulgaria								1			**1**
Croatia								1			**1**
Estonia									1		**1**
India	1										**1**
Latvia										1	**1**
South Africa	1										**1**

As mentioned above, the total number of ECM deals analyzed is 3,440. Hence the deals involving companies located in the UK represent 26% of the European companies that issued equity securities (*Table 12*).

In the beginning of this section, with the help of *Figure 37* (depicting the overall trend of the number of ECM operations), we projected 2019 as one of the lowest in the overall 10-year period.

7 For 6 deals, information about the exchange location was missing.

Looking at the trend for deals concerning companies located in the UK, we can find further confirmation: in 2019, 56 deals were undertaken. Considering that this number represents 75% of the deals for the year, assuming that the last quarter of the year keeps the same pace as the first three, we can project the data to show 75 ECM deals by December 31, 2019: the worst year since 2012.

The same applies to Germany, the second-ranked country by number of deals. Should data demonstrate that the trend was unvaried, the final 2019 number will be 25: the worst of the decade.

TABLE 12
Location of Headquarters of companies advised on ECM Deals

COUNTRY OF EXCHANGE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
United Kingdom	63	43	53	102	135	131	94	115	102	56	**894**
Germany	46	37	35	34	37	48	18	49	34	19	**357**
France	19	16	13	38	38	47	47	55	27	22	**322**
Italy	20	26	18	39	40	34	20	32	21	14	**264**
Spain	14	11	8	20	30	34	16	21	20	14	**188**
Netherlands	8	5	10	21	19	20	24	30	22	15	**174**
Switzerland	16	7	11	13	19	18	15	24	23	10	**156**
Sweden	10	3	4	7	5	20	30	17	10	20	**126**
Ireland-Rep	6	8	4	9	15	15	10	4	11	6	**88**
Luxembourg	3	10	3	17	16	4	7	13	9	2	**84**
Poland	18	7	8	12	14	11	6	3	3		**82**
Norway	10	2	9	9	7	8	11	8	8	7	**79**
Denmark	10	6	4	6	12	7	9	12	7	4	**77**
Russian Fed	10	15	7	8	3	4	4	19	1	6	**77**
Greece	17	6	7	13	12	8	4	2	1		**70**
Austria	6	9	5	6	7	4	6	9	2	3	**57**
Belgium	1	3	4	7	8	8	9	7	2	6	**55**
Finland	2	7	5	5	5	4	6	7	10	2	**53**
Guernsey	6	3	5	4	9	12		1	1	2	**43**
Jersey	4	2		7	6	7	7	3	1	5	**42**
Portugal	1	3	4	6	10	2	1	2			**29**
Turkey	5	3	2	4	1		3	7	4		**29**
Cyprus	1	2	6	3	2	1	3	4	1	2	**25**
Monaco	2	2	1	1	6	2	1	2	1		**18**
Romania				5	4	1	4	1			**15**
Isle of Man		1		1		2	1		1		**6**
Hungary				2				3			**5**
Czech Republic						1	3				**4**
Gibraltar	1							2			**3**
Iceland									1	2	**3**
United States		1				2					**3**
Faroe Islands	1									1	**2**
Slovenia									1	1	**2**
Ukraine	2										**2**
Bulgaria								1			**1**
Cayman Islands	1										**1**
Croatia								1			**1**
Estonia									1		**1**
Georgia					1						**1**
Malta						1					**1**

The countries that rank among the first five account for around 60% of the deals. For these countries, an ad hoc analysis follows. *Figure 53* through *Figure 57* show the trend of ECM deals by year, and whether or not equity was issued in the domestic financial market.

The UK is the country where most deals were advised, with a peak of 135 in 2014.

In the aftermath of the financial crisis, in 2010 and 2011, only 3% and 2% of deals respectively target a non-UK exchange, while the trend of listing abroad followed an overall positive direction in the period 2012-2019 with a maximum of non-UK exchanges involved in 2019 in 16% of the cases.

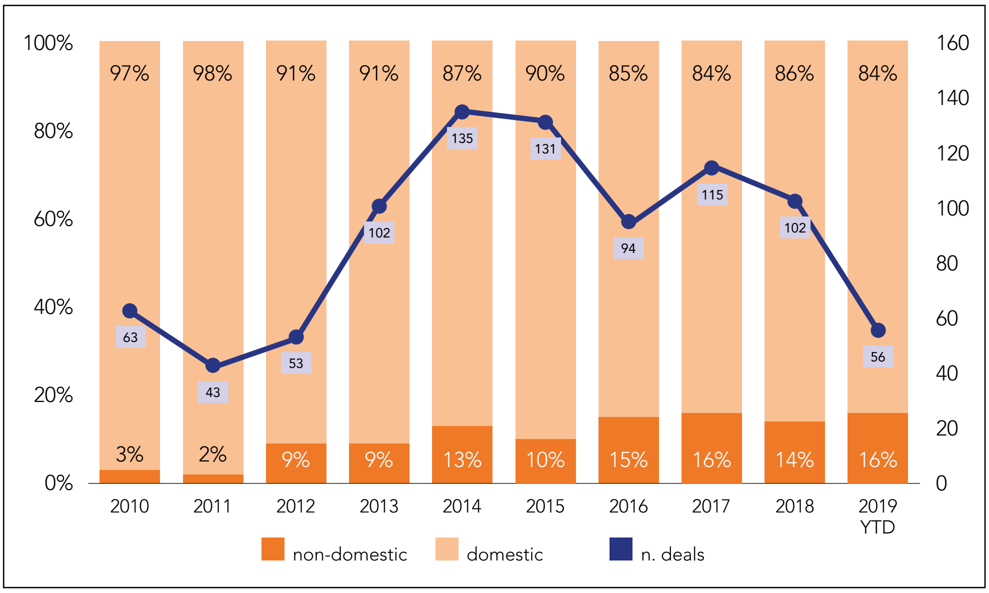


FIGURE 53
Nationality of the exchange in UK ECM Deals (2010 – 2019 updated to Q3)

In Germany, the year with the number of most ECM deals was 2017, with 49 transactions; only 2% were directed to a foreign exchange.

The year 2016 was a peculiar one, seeing the minimum number of deals, and at the same time the largest percentage of deals that involved non-German exchanges (28%).

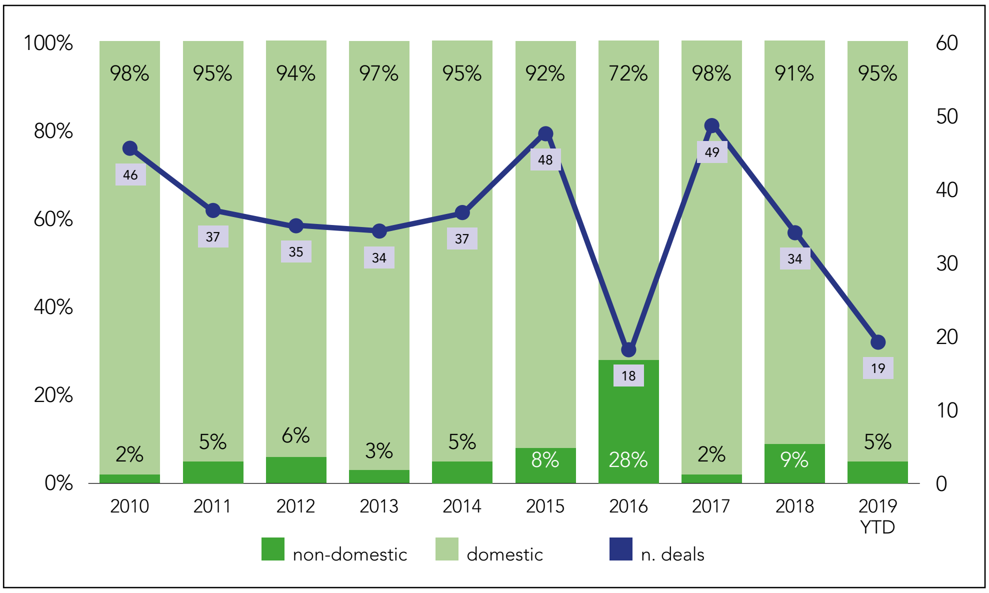
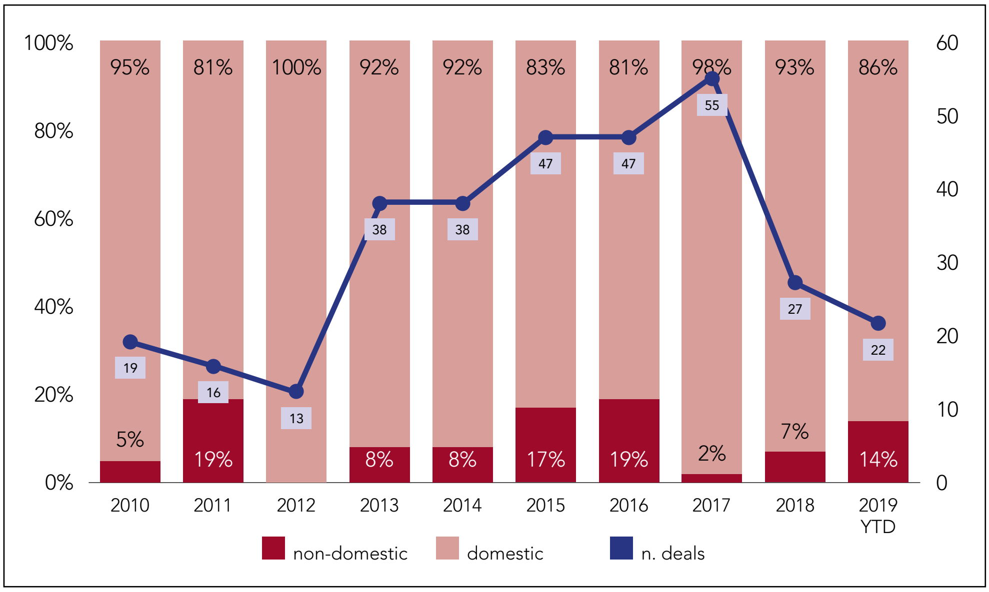


FIGURE 54
Nationality of the exchange in German ECM Deals (2010 – 2019 updated to Q3)

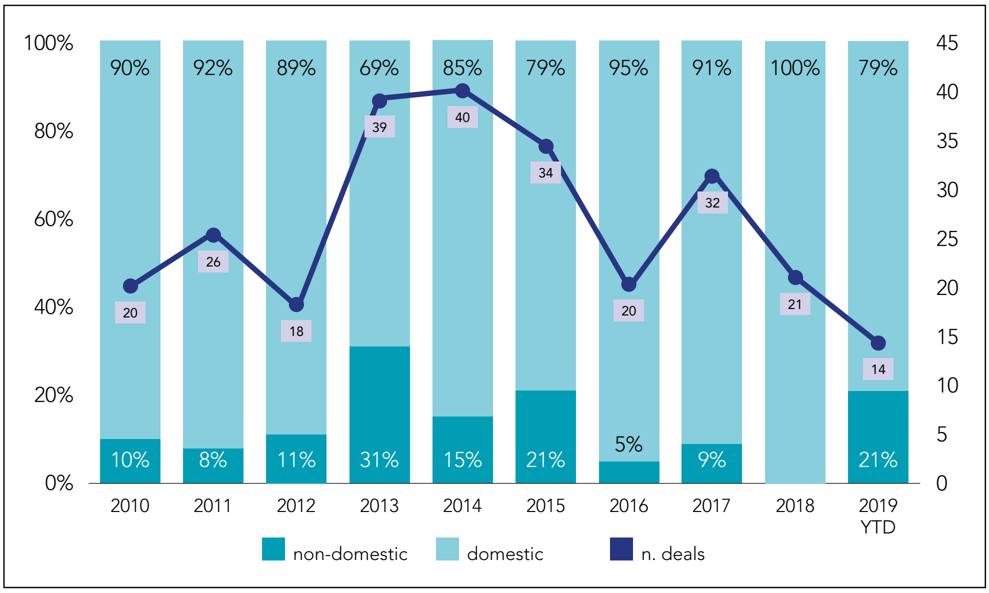
In France, the trend of the number of ECM deals witnesses a sharp increase in the period 2012-2013 (+192%). In 2012, the year with the fewest ECM deals, no deal targeted a foreign exchange. In the period 2013-2017, ECM deals rose overall, to plummet in 2018 (-51%).

FIGURE 55
Nationality of the exchange in French ECM Deals (2010 – 2019 updated to Q3)



As for Italian deals, the year with the highest number was 2014 with 40 deals; companies targeted non-Italian market the most in 2013 (31%). In 2018, none of the deals target non-Italian exchanges.

FIGURE 56
Nationality of the exchange in Italian ECM Deals (2010 – 2019 updated to Q3)



In Spain, the situation is unique as there are two years where a large number of deals were directed onto a non-Spanish exchange, 2013 and 2019. In 2013, four deals out of ten were addressed to a foreign exchange, while in 2019 this figure was 43%. However, there is one year when deals are only directed to the local exchange: 2011.

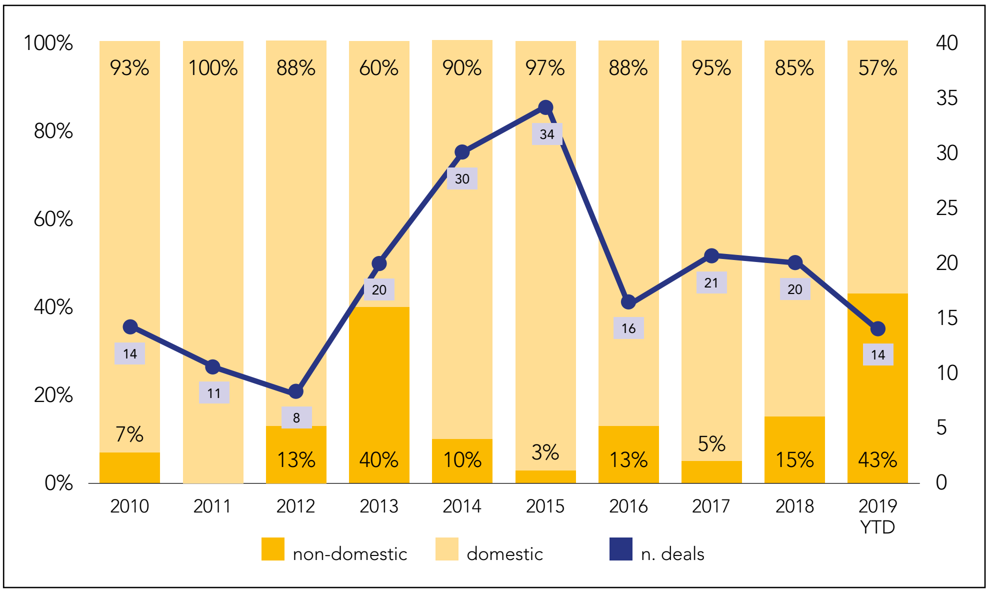


FIGURE 57
Nationality of the exchange in Spanish ECM Deals. (2010 – 2019 updated to Q3)

3.1.3 Results: DCM – loans

Trend analysis

The analysis involves loan deals completed between 01/01/2010 and 30/09/2019; data were retrieved from Thomson Reuters Datastream.

Figure 58 illustrates the number and the average loan value[8] that European companies undertook in the period of analysis.

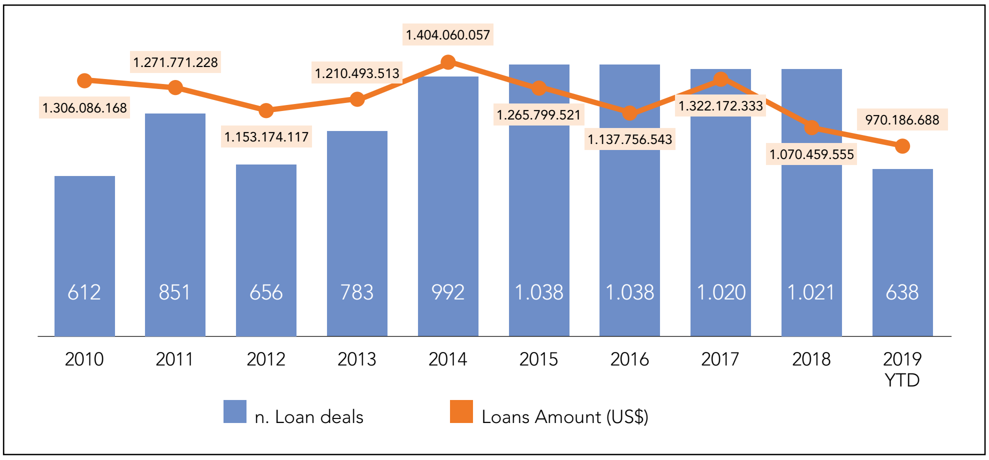
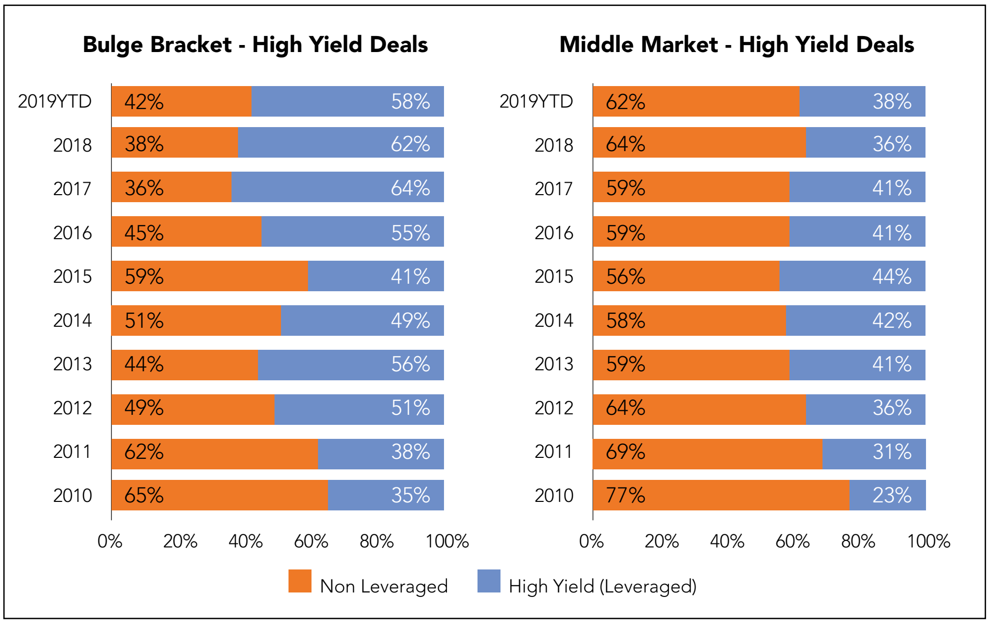


FIGURE 58
Loan amounts and number of deals - trend analysis (2010 – 2019 updated to Q3)

[8] The loan amount is the full loan package amount in US dollars for all tranches.

FIGURE 59
High Yield Deals – bulge bracket and middle market banks (2010 – 2019 updated to Q3)



As for bulge bracket banks (graph on the left-hand side), the tendency over the period in question is to advise an increasing number of High Yield Deals. On the contrary, Middle Market banks (graph on the right-hand side) concentrate more on Non-Leveraged Deals.

Figure 60 through *Figure 62* show the engagement of the advisors, classifying them according to the bank focus, affiliation, and nationality.

FIGURE 60
Bank focus-trend analysis (2010 – 2019 updated to Q3)

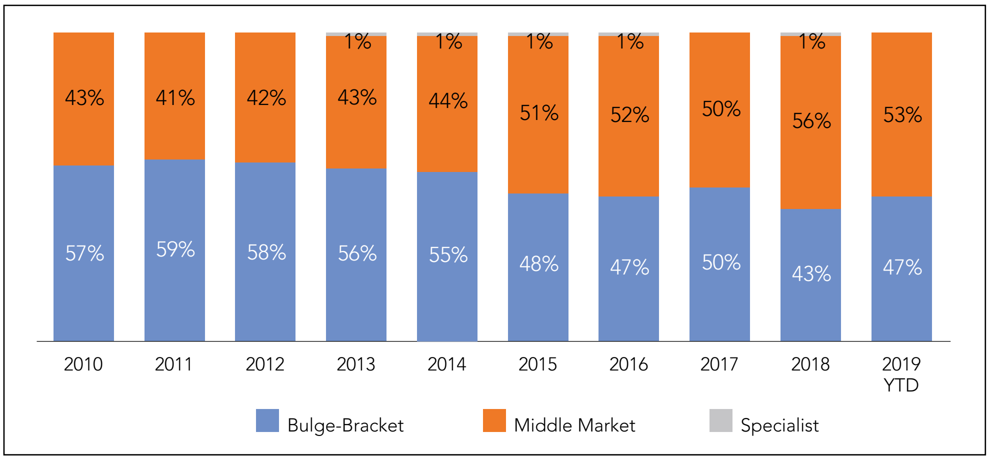


Figure 60 shows that the banks most involved in loan deals are bulge bracket and middle market, sharing 50% each of the total market on average. In fact, the market is perfectly split in two in 2017, where each holds 50%. In 2015, 2016, 2018, and 2019 Middle Market banks held more than 50%. This may look like a trend, as these percentages are larger than at the beginning of the period.

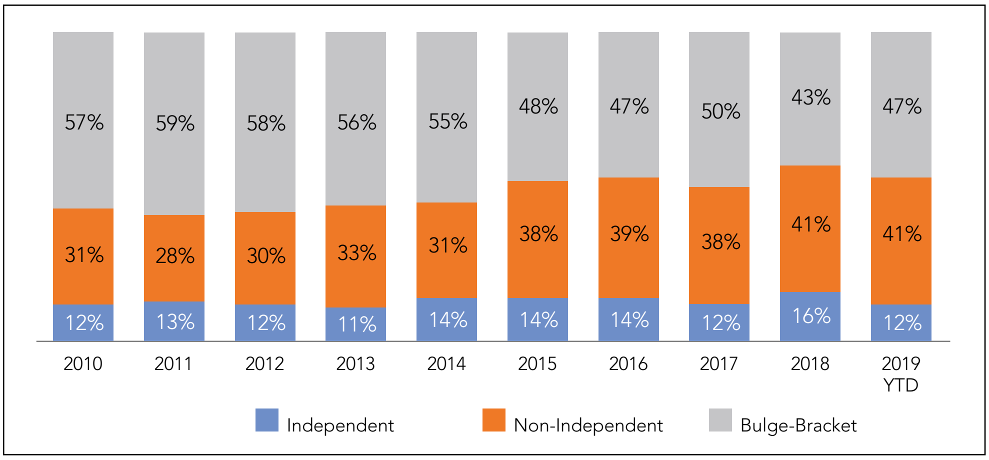


FIGURE 61
Bank Affiliation - trend analysis

Independent banks (*Figure 61*) appear to be limitedly, yet constantly engaged in loans deals. Their presence reaches a peak of 16% of the market in 2018. Despite this constant presence, there is not a clear trend as their market share is quite steady over the whole period.

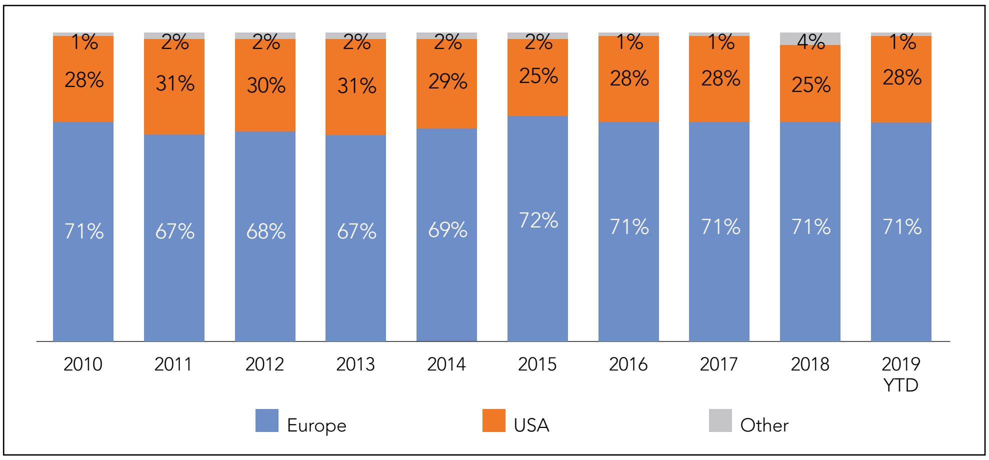


FIGURE 62
Bank nationality - trend analysis (2010 – 2019 updated to Q3)

Numbers illustrated in *Figure 62* should be benchmarked with the ones reported in *Figure 11*. *Figure 62* explores the market share of investment banks by nationality, taking into consideration the largest deals. On the other hand, *Figure 11* presented in Section 2 reports all loan deals. From this comparison, we can infer that for small loans, no banks headquartered in the US or in Europe were involved.

Segment analysis

Advisor Ranking

As with the previous asset classes, deals were clustered according to their size to study similar dynamics. Here too, there are four clusters:

- Cluster 1 includes all loan deals with the positioning of loan amounts between the minimum value and the 25th percentile;
- Cluster 2 includes all loan deals with the positioning of loan amounts between the 25th percentile and the median value;
- Cluster 3 includes all loan deals with the positioning of loan amounts between the median value and the 75th percentile;
- Cluster 4 includes all loan deals with the positioning of loan amounts between the 75th percentile and the maximum value.

Our analysis counts 8,649 loan deals. As this asset class is divided into four clusters, each cluster consists of 2,162 deals. Looking at the tables below, keeping in mind that they sum up all the deals involving banks, it is clear that the number of advisors changes according to the size of the deal. Specifically:

- 2,488 banks were involved in Cluster 1 (1.15 banks per deal);
- 2,877 banks were involved in Cluster 2 (1.33 banks per deal);
- 4,151 banks were involved in Cluster 3 (1.92 banks per deal);
- 6,878 banks were involved in Cluster 4 (3.18 banks per deal);

We can then identify the advisors that were most involved in loan issuances (*Table 13* through *Table 16*). Also in this case, when going through the segment analysis, it is important to remember that more than one advisor can take part in the same deal.

As illustrated in the tables below, UniCredit and Deutsche Bank are the only banks ranked among the first five in all clusters.

Taking into account the first five banks in each table, we can compare the results with Figure 11, which shows the nationality of the top banks advising on loans.

As *Figure 11* highlights, in 2012 all top five banks were European, while in the other period, this market share is 80%.

From the Tables below, we can see that in Cluster 1 and 2 (*Table 13* and *Table 14*) all the top five are from Europe, while in Cluster 3 and 4 they share the five-tier podium with other US banks.

TABLE 13
Investment Banks involved in Cluster 1 Loans by number of deals

CLUSTER 1	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
UniCredit	23	21	34	52	68	134	110	95	82	65	**684**
Santander Corp & Invest Bkg	18	15	25	17	28	59	52	67	138	100	**519**
Natixis	26	24	31	18	37	62	55	42	28	19	**342**
Deutsche Bank	31	40	34	23	34	60	36	36	26	13	**333**
Banca IMI (Intesa Sanpaolo)	10	2	8	24	35	43	40	30	18	15	**225**
Nordea	3	3	1	12	8	15	21	12	20	9	**104**
Citi	4	9	9	7	13	7	7	2	4	2	**64**
Barclays	16	6		11	4	7	4	4	1	7	**60**
JP Morgan	2		2	6	9	3	6	6	4	10	**48**
Goldman Sachs & Co			1	6	7	9	5	1	1	6	**36**
Credit Suisse	5	1	1	4	1	2	1	2	1	5	**23**
Bank of America Merrill Lynch	1	2	1	4	4	1	1	3		1	**18**
Morgan Stanley	1			2	2	3	3	1		1	**13**
Mediobanca			2				5	1			**8**
RBC Capital Markets	3					4				1	**8**
Jefferies LLC					2		1				**3**

TABLE 14
Investment Banks involved in Cluster 2 Loans by number of deals

CLUSTER 2	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
UniCredit	36	40	62	69	66	74	81	89	68	33	**618**
Natixis	40	35	42	38	64	76	64	64	74	32	**529**
Deutsche Bank	26	25	44	39	30	27	16	29	10	9	**255**
Barclays	29	42	37	14	18	31	22	15	17	20	**245**
Santander Corp & Invest Bkg	18	7	21	13	12	32	37	35	43	20	**238**
Nordea	6	30	13	26	18	15	43	6	22	15	**194**
Citi	20	24	20	8	13	21	25	10	9	9	**159**
Banca IMI (Intesa Sanpaolo)	16	9	7	11	28	10	18	23	14	12	**148**
JP Morgan	3	8	15	10	12	11	16	15	12	8	**110**
Credit Suisse	2	10	10	12	6	13	17	16	3	6	**95**
Bank of America Merrill Lynch	3	7	17	12	4	10	12	13	9	7	**94**
Goldman Sachs & Co	2	4	3	10	8	5	10	8	7	15	**72**
RBC Capital Markets	2	5			10	12	6	1	8		**44**
Mediobanca		1			4	3	7	9		3	**27**
Morgan Stanley		1	4	1	2	3	10	4		1	**26**
Jefferies LLC			4	7		5	3		2		**21**
Macquarie Group	1									1	**2**

TABLE 15
Investment Banks involved in Cluster 3 Loans by number of deals

CLUSTER 3	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Deutsche Bank	48	72	46	60	78	74	65	71	53	34	**601**
UniCredit	34	65	47	57	49	59	66	86	72	48	**583**
Natixis	29	42	23	33	58	32	43	47	43	31	**381**
JP Morgan	18	53	41	52	30	45	28	51	25	27	**370**
Barclays	34	56	36	32	46	56	26	25	24	12	**347**
Citi	31	44	29	18	23	22	31	28	33	29	**288**
Goldman Sachs & Co	17	47	8	31	36	32	34	24	31	12	**272**
Bank of America Merrill Lynch	19	36	13	23	20	35	27	40	23	17	**253**
Santander Corp & Invest Bkg	10	30	23	16	19	22	20	42	25	19	**226**
Nordea	14	26	16	12	31	31	27	10	19	13	**199**
Credit Suisse	10	26	15	11	18	18	29	36	21	13	**197**
Banca IMI (Intesa Sanpaolo)	15	17		7	13	25	16	9	21	19	**142**
Morgan Stanley	10	25	12	8	12	14	11	14	9	3	**118**
RBC Capital Markets	3	12	11	9	12	9	3	14	13	1	**87**
Mediobanca	5	6	2	3	12	14	6	4	9	1	**62**
Jefferies LLC				5	2	1	7		6		**21**
Macquarie Group		4									**4**

TABLE 16
Investment Banks involved in Cluster 4 Loans by number of deals

CLUSTER 4	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Deutsche Bank	78	86	59	101	119	68	69	79	90	57	**806**
UniCredit	55	81	55	84	94	69	83	84	93	40	**738**
Citi	58	94	53	76	105	73	61	57	84	48	**709**
JP Morgan	63	76	60	71	103	59	76	82	67	40	**697**
Barclays	68	87	39	66	111	72	42	56	54	34	**629**
Bank of America Merrill Lynch	47	55	36	63	77	65	69	95	55	53	**615**
Natixis	34	89	20	39	69	50	56	45	58	50	**510**
Santander Corp & Invest Bkg	61	55	26	47	56	64	40	50	54	33	**486**
Credit Suisse	25	28	34	26	51	27	47	47	43	24	**352**
Goldman Sachs & Co	25	22	11	28	41	36	47	47	44	27	**328**
Banca IMI (Intesa Sanpaolo)	45	34	9	24	24	31	23	35	25	24	**274**
Morgan Stanley	26	33	27	23	34	28	19	17	24	16	**247**
RBC Capital Markets	8	16	14	27	10	21	15	8	42	7	**168**
Nordea	10	22	16	20	25	18	16	7	17	11	**162**
Mediobanca	18	24	8	8	12	11	13	19	7	8	**128**
Jefferies LLC					6		5	7	5		**23**
Macquarie Group								3	3		**6**

Investment bank focus

Looking at *Figure 63* through *Figure 66*, we can see that specialists play a very small role in all clusters, even if they are more frequently involved as advisors in Cluster 2 and Cluster 3.

Out of all the clusters, the year in which Middle Market banks advise the most deals is 2018 for Cluster 1, where they were involved in 89% of loans.

As for bulge bracket banks, they hit their peak at 68% in Cluster 4 in 2012.

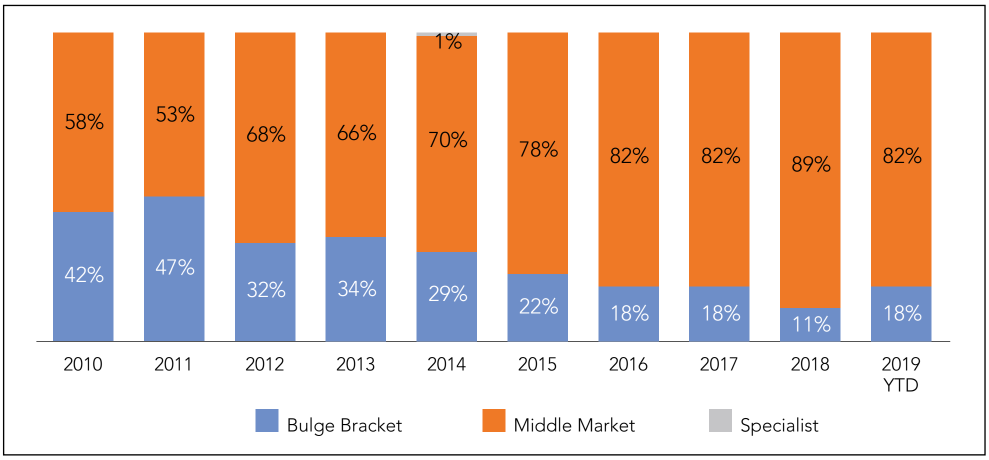


FIGURE 63
Investment banks advising companies in Cluster 1 Loans by size cluster (2010 – 2019 updated to Q3)

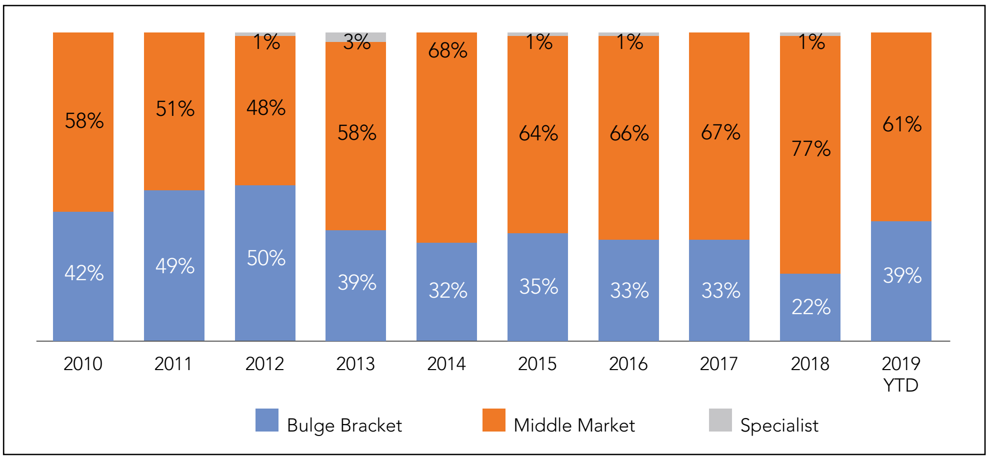


FIGURE 64
Investment banks advising companies in Cluster 2 Loans by size cluster (2010 – 2019 updated to Q3)

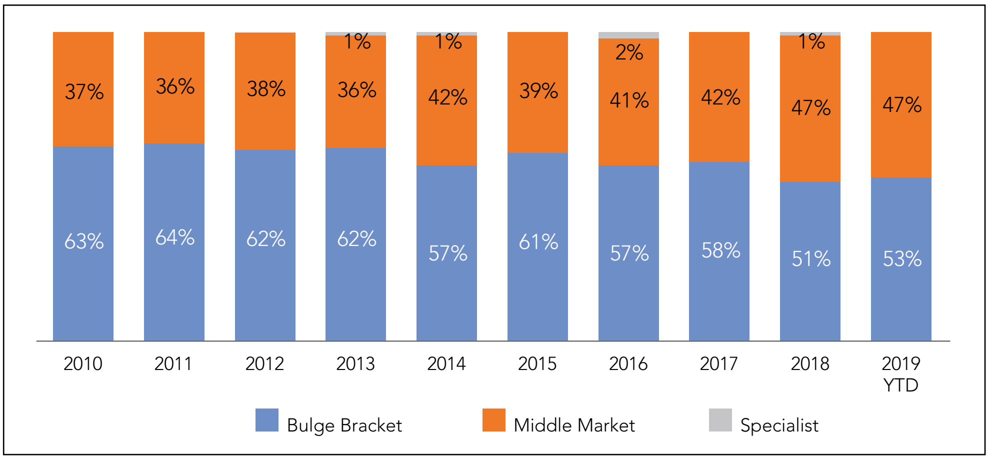
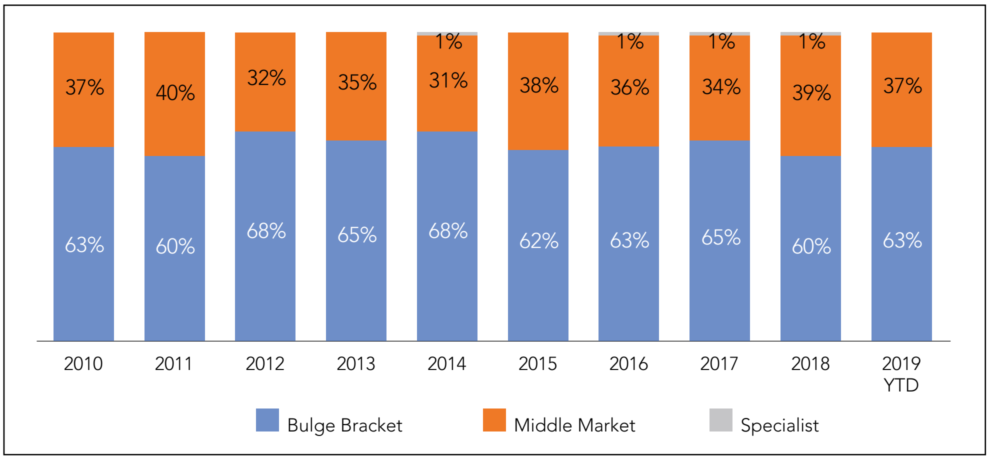


FIGURE 65
Investment banks advising companies in Cluster 3 Loans by size cluster (2010 – 2019 updated to Q3)

FIGURE 66
Investment banks advising companies in Cluster 4 Loans by size cluster (2010 – 2019 updated to Q3)



Investment bank affiliation

We see the most activity by independent banks in Cluster 2, where in 2018 they advised 28% of companies issuing loans. On the contrary, their involvement decreased for loans in Cluster 1 over the period 2010-2019. Finally, for Cluster 4, the market share overall grew in the period 2010-2019.

FIGURE 67
Investment banks advising companies in Cluster 1 Loans by affiliation (2010 – 2019 updated to Q3)

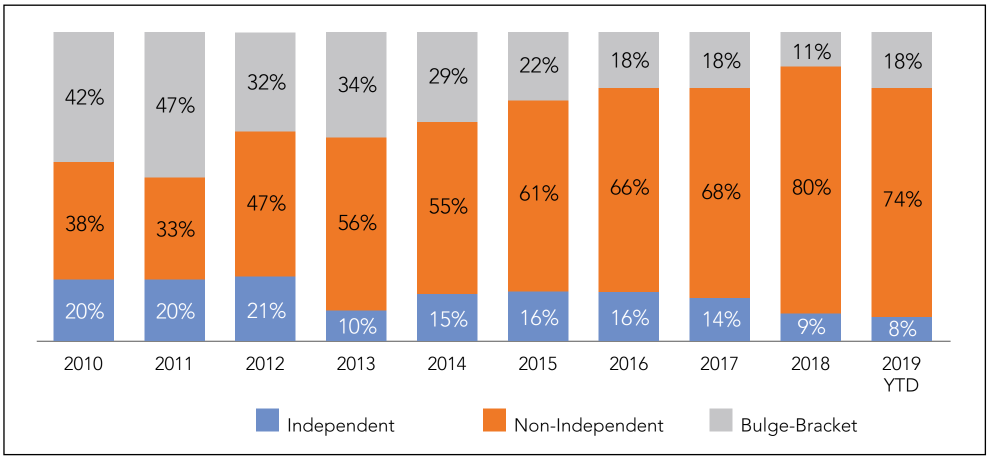
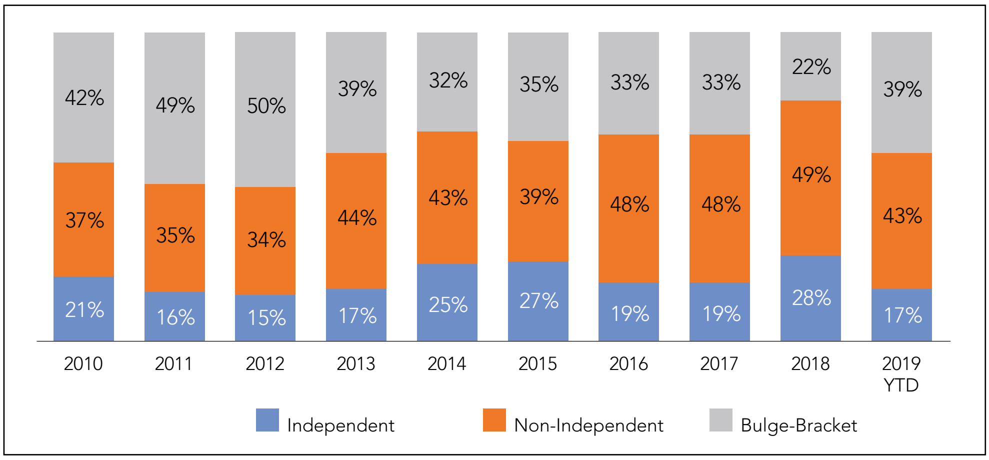


FIGURE 68
Investment banks advising companies in Cluster 2 Loans by affiliation (2010 – 2019 updated to Q3)



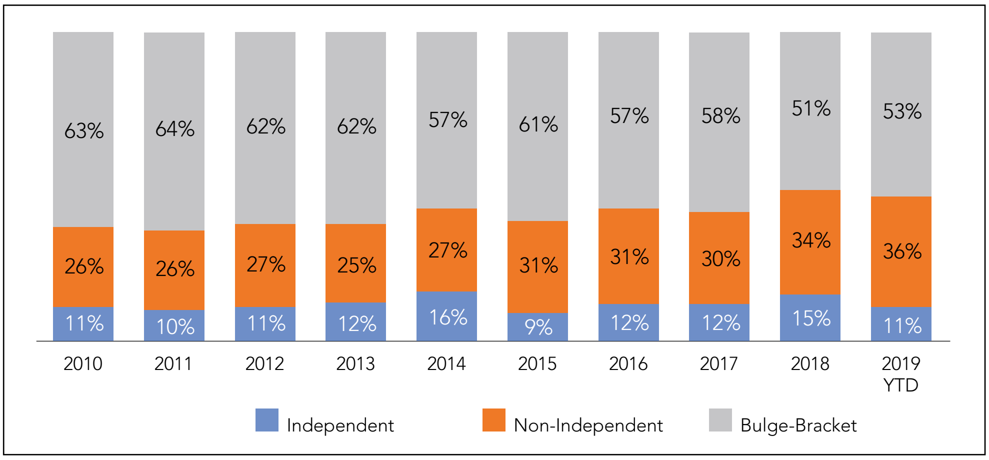


FIGURE 69
Investment banks advising companies in Cluster 3 Loans by affiliation (2010 – 2019 updated to Q3)

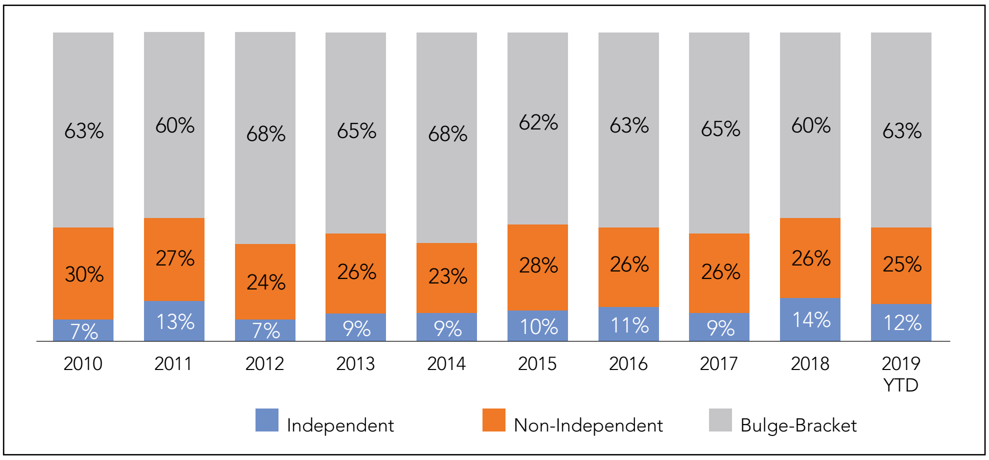


FIGURE 70
Investment banks advising companies in Cluster 4 Loans by affiliation (2010 – 2019 updated to Q3)

Investment bank nationality

Unlike with previous asset classes, the presence of US banks in Cluster 1 Loans is less strong. In fact, in2018, almost all deals were advised by European banks (97%).

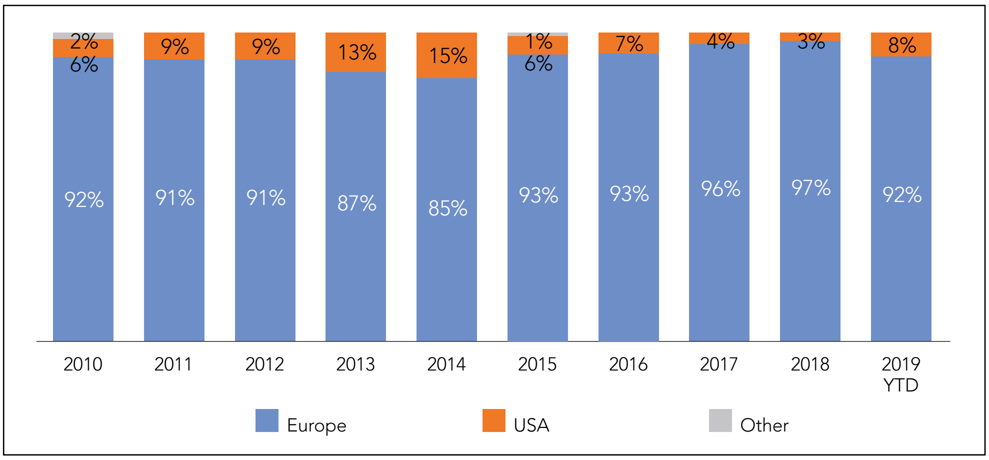


FIGURE 71
Investment banks advising companies in Cluster 1 Loans by nationality (2010 – 2019 updated to Q3)

FIGURE 72
Investment banks advising companies in Cluster 2 Loans by nationality (2010 – 2019 updated to Q3)

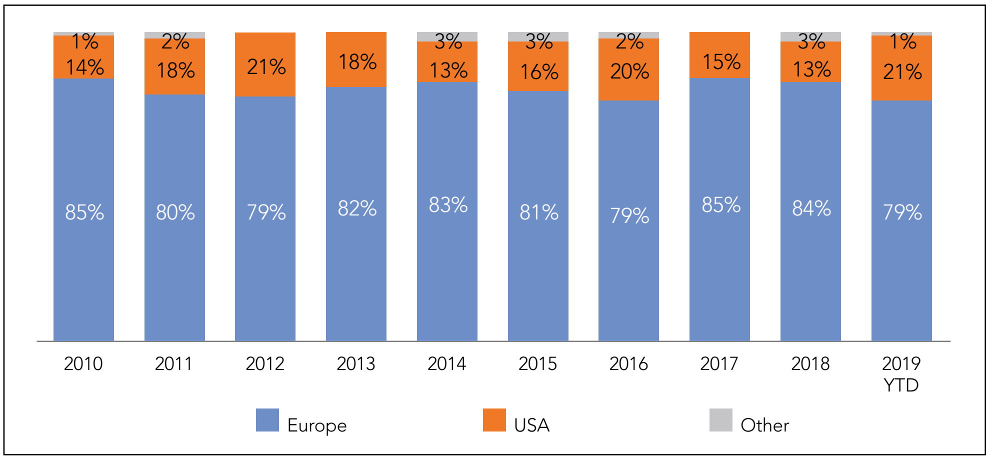


FIGURE 73
Investment banks advising companies in Cluster 3 Loans by nationality (2010 – 2019 updated to Q3)

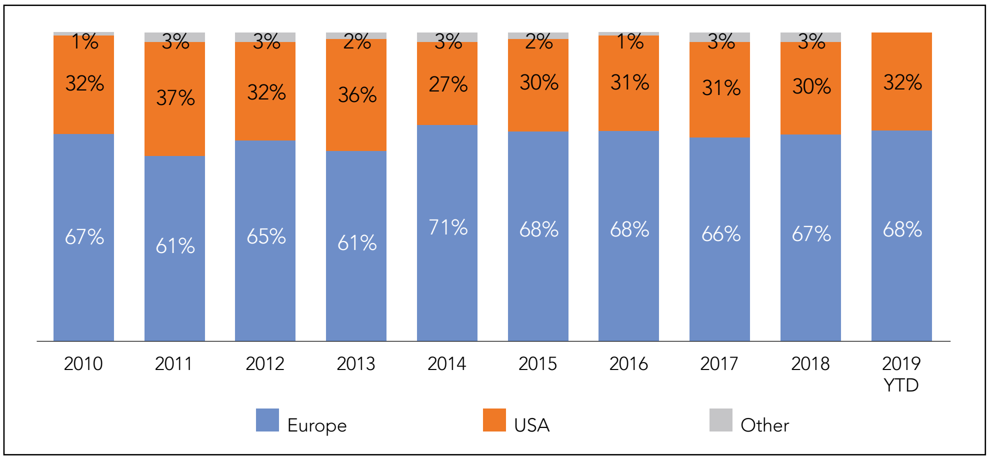
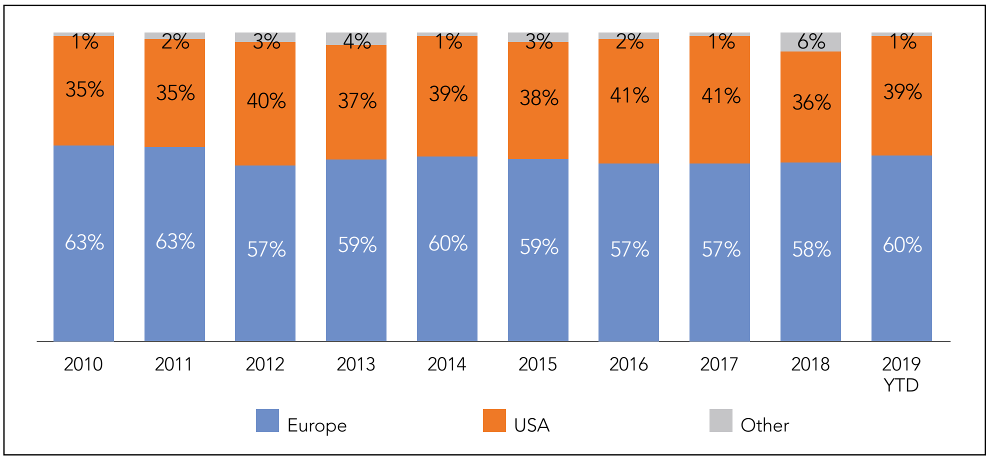


FIGURE 74
Investment banks advising companies in Cluster 4 Loans by nationality (2010 – 2019 updated to Q3)



Use of Proceeds in DCM Deals

Thanks to the information provided by Thomson Reuters, we can understand the purpose of the loans that were granted.

The motivations leading a company to increase its financing are many. Here only the most popular choices are analyzed: LBO[9], Refinancing[10], Acquisition Financing[11], and Internal Growth[12].

As for LBOs, we can interpret the data as reflecting an even split between bulge bracket and middle market banks, as in some years the former advise the majority of the deals, while in other years the opposite is true.

In Refinancing deals, the majority of the market is usually held by bulge bracket banks, with the only exception for 2015, where they advised only 29% of the deals.

In Acquisition Financing deals as well as in internal growth deals, the situation mirrors LBOs, with bulge bracket and middle market playing alongside each other over the period analyzed.

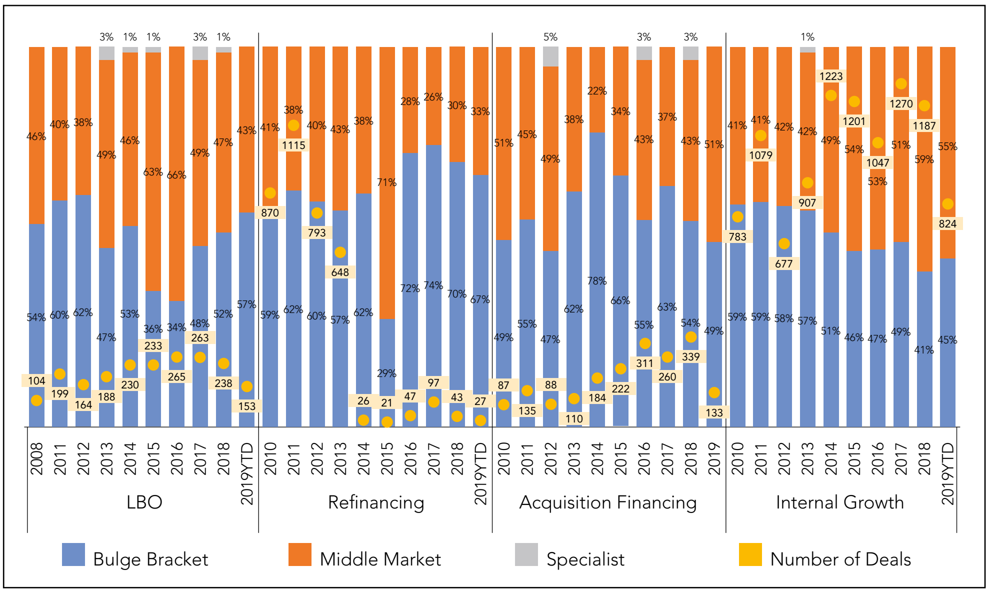


FIGURE 75
Use of Loans and Bank Focus (2010 – 2019 updated to Q3)

[9] This includes the categories "LBO" as well as "Sponsored LBO"

[10] This includes the categories "Refinancing" as well as "Refin./Retail Banking"

[11] This includes the categories "Acquisition Financing" as well as "Future Acquisition Financing"

[12] This includes the categories "General Corporation Purposes, Working Capital, and CAPEX"

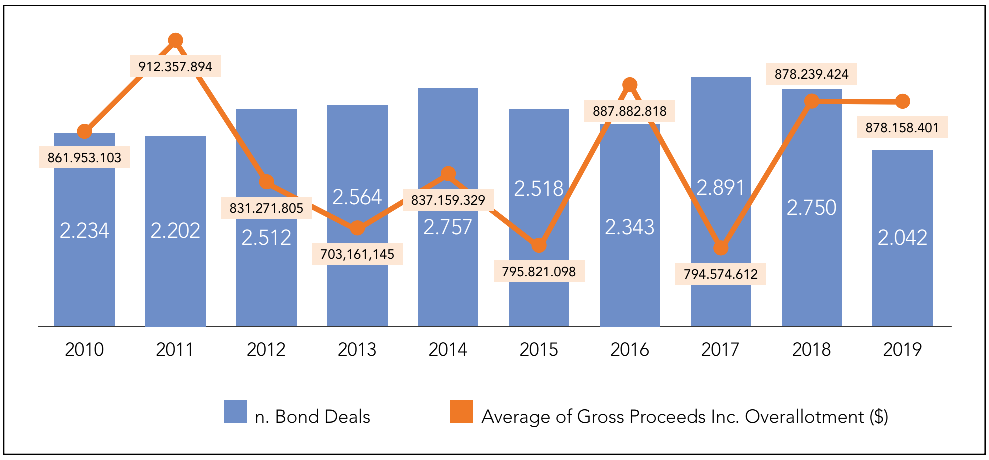
3.1.4 Results: DCM – Bonds

Trend analysis

The analysis centers on bonds completed between 01/01/2010 and 30/09/2019; data were retrieved from Thomson Reuters Datastream.

Figure 76 illustrates the number and average proceeds received through European companies in the period of analysis.

FIGURE 76
Bonds: gross proceeds and number of deals - trend analysis (2010 – 2019 updated to Q3)

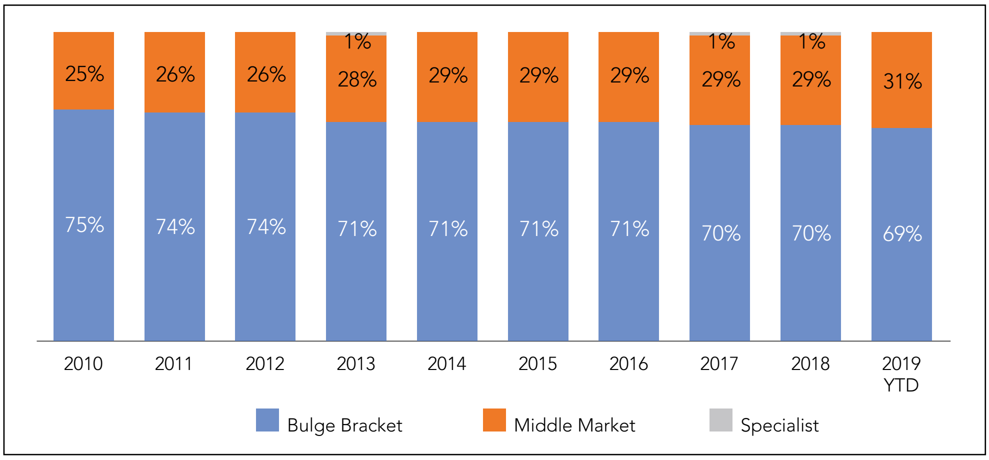


Two trends can be observed in *Figure 76*. On the one hand, the number of the operations does not fluctuate over the period in question. The minimum number of bond issues is recorded in 2011 (2,202 deals), and the maximum in 2017 (2,891 deals). Should data show the trend of the first three quarters for 2019 continuing in the last quarter, 2019 could close with a total of 2,722 deals, becoming the second best year in terms of number of bonds over the ten-year period.

The second trend concerns the size of the bond, *Figure 76* that this changed considerably in the period we analyzed. Despite being the year when most bonds were issued, 2017 is also the year when the average proceeds were lower ($794.6 million). Conversely, the 2,202 deals of 2012 actually generated the largest proceeds, peaking with a maximum average value of $912.4 million.

Looking at the overall trend, we divided yearly deals by bank focus, affiliation, and nationality (*Figure 77*, *Figure 78*, *Figure 79*).

FIGURE 77
Bank Focus - trend analysis (2010 – 2019 updated to Q3)



As for bank focus, we can see that the largest part of the market is held by the bulge bracket, despite the fact that their market share is declining overall: in 2010, their market share was 75%, but in 2019 it was down to 69%. This negative trend for the bulge bracket leaves room for growth in the market share for the middle market, which in 2019 recorded performance with a 31% presence in bond deals.

FIGURE 78
Bank affiliation - trend analysis (2010 – 2019 updated to Q3)

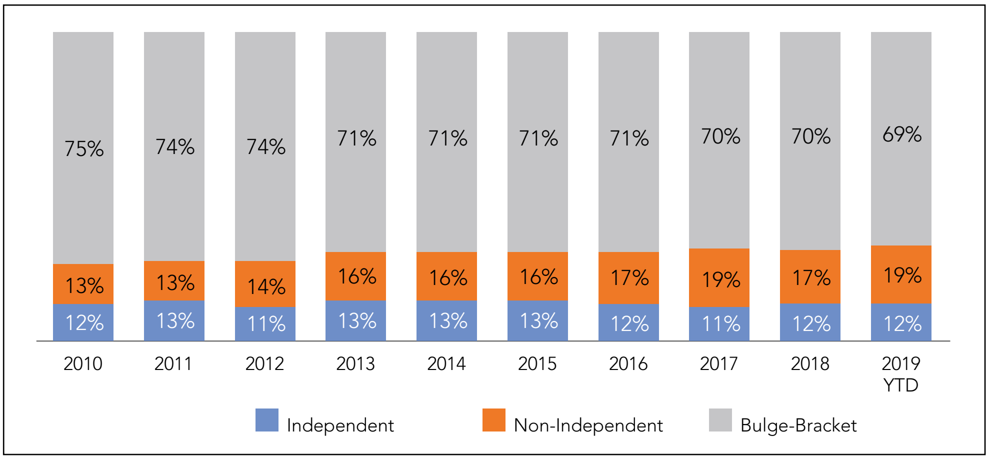


Figure 78 shows that the market share of independent banks is consistently within the range of 11% to 13% over the whole period.

FIGURE 79
Bank nationality - trend analysis (2010 – 2019 updated to Q3)

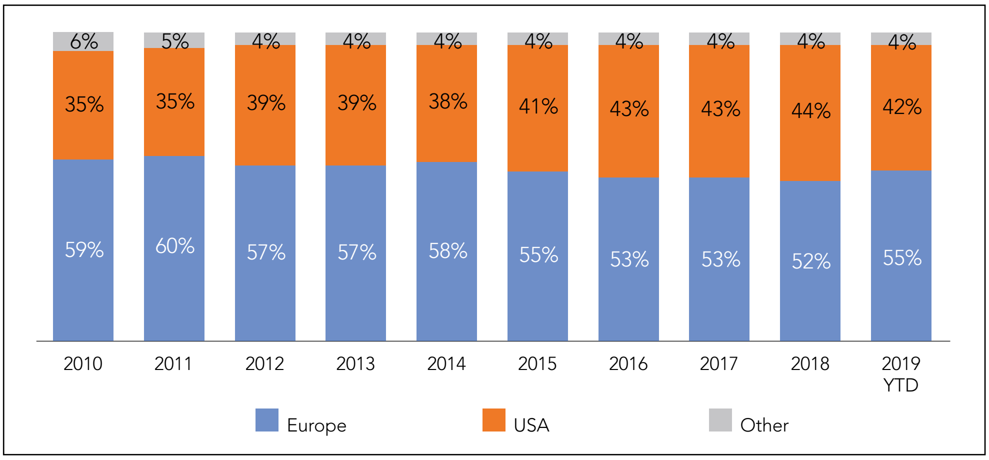


Figure 79 records bank nationality and market share.

This Figure should be read together with *Figure 10*, which explores all bond deals, while *Figure 79* concentrates on the largest transactions.

According to *Figure 10*, more than 20% of bond deals were advised by banks that were neither European nor American. In addition, as *Figure 79* shows, 6% of deals are carried out by such banks, which leads us to assume that they prefer to target small deals, leaving European and US banks with 94% of the market for big deals.

Segment analysis

Like for the asset classes that preceded this analysis, bonds are grouped according to their size to analyze similar features. As above, there are four clusters:

- Cluster 1 includes all bond deals with the gross proceeds positioning between the minimum value and the 25th percentile;
- Cluster 2 includes all bond deals with the gross proceeds positioning between the 25th percentile and the median value;
- Cluster 3 includes all bond deals with the gross proceeds positioning between the median value and the 75th percentile;
- Cluster 4 includes all bond deals with the gross proceeds positioning between the 75th percentile and the maximum value.

Our analysis counts 24,813 bond deals. As this asset class is divided into four clusters, each cluster consists of 6,203 deals. Looking at the tables below, keeping in mind that they sum up all the deals involving banks, we can note that the number of advisors changes according to the size of the deal. Specifically:

- 6,722 banks were involved in Cluster 1 (1.08 banks per deal);
- 8,574 banks were involved in Cluster 2 (1.38 banks per deal);
- 11,968 banks were involved in Cluster 3 (1.93 banks per deal);
- 16,020 banks were involved in Cluster 4 (2.58 banks per deal);

At this point we can identify the advisors that were most often involved in bond issuances (*Table 17* through *Table 20*).

As shown in *Table 17* through *Table 20*, Deutsche Bank and JP Morgan are the only banks ranked among the first five in all four clusters.

In addition, comparing the evidence from the tables below with the findings in *Figure 10*, we can observe that 60% of the European market share is divided up among the top five banks in bond deals. The same occurs at each cluster level, with the only exception of Cluster 1 (*Table 17*), where the fourth position is occupied by RBC Capital Markets (Canada).

TABLE 17
Investment Banks involved in Cluster 1 Bond Deals by number

CLUSTER 1	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Deutsche Bank	180	165	169	113	102	84	51	57	66	54	**1041**
JP Morgan	70	87	99	95	112	83	110	115	74	40	**885**
Nordea	9	23	45	70	82	95	74	119	115	66	**698**
RBC Capital Markets	129	83	79	71	73	58	47	75	46	29	**690**
SEB	15	17	22	45	58	50	70	67	82	80	**506**
Morgan Stanley	45	34	38	52	58	62	42	38	62	19	**450**
Credit Suisse	63	47	33	35	46	40	26	48	61	45	**444**
Barclays	65	56	66	39	61	47	30	23	24	27	**438**
Citi	30	17	12	23	61	52	53	77	67	20	**412**
UniCredit	30	19	34	32	46	47	46	55	40	19	**368**
Natixis	23	24	28	34	37	41	31	19	21	5	**263**
Goldman Sachs & Co	32	9	20	36	18	21	30	32	21	12	**231**
Bank of America Merrill Lynch	35	17	19	6	11	11	18	24	21	8	**170**
Santander Corp & Invest Bkg	1	2	22	13	12	5	10	11	3	1	**80**
Banca IMI (Intesa Sanpaolo)	1		2	1	3	1	5	5		3	**21**
Mediobanca	1	1	2	1	1		2	1	1		**10**
Jefferies LLC					5		1	3			**9**
Macquarie Group			1	2			1		1		**5**
Greenhill & Co, LLC								1			**1**

TABLE 18
Investment Banks involved in Cluster 2 Bond Deals by number

CLUSTER 2	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Deutsche Bank	122	148	130	133	163	141	98	119	91	80	**1225**
Credit Suisse	129	104	110	130	156	118	111	145	104	59	**1166**
Barclays	50	57	99	80	86	100	105	127	96	58	**858**
Citi	27	40	54	51	55	97	89	114	89	98	**714**
JP Morgan	54	36	63	69	75	75	70	90	76	55	**663**
UniCredit	42	22	65	84	75	44	61	85	66	48	**592**
Bank of America Merrill Lynch	20	33	43	55	34	73	55	102	75	58	**548**
Goldman Sachs & Co	27	29	35	66	54	59	56	97	52	30	**505**
Morgan Stanley	23	25	32	65	53	58	47	78	63	44	**488**
Natixis	41	47	47	79	57	55	41	48	52	19	**486**
RBC Capital Markets	44	43	53	37	49	42	44	45	36	20	**413**
Nordea	2	18	33	24	39	35	36	39	29	23	**278**
SEB	6	18	26	38	32	25	14	26	25	18	**228**
Santander Corp & Invest Bkg	5	16	18	13	23	29	18	31	17	25	**195**
Banca IMI (Intesa Sanpaolo)	6	12	2	14	13	13	10	15	8	16	**109**
Macquarie Group		1	3	4	3	10	4	7	6	7	**45**
Mediobanca		5	2	6	4	4	1	6	1	3	**32**
Jefferies LLC			3	7	4	2	2	5	2	4	**29**

TABLE 19
Investment Banks involved in Cluster 3 Bond Deals by number

CLUSTER 3	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Deutsche Bank	93	131	166	177	169	134	131	172	136	117	**1426**
JP Morgan	99	73	144	164	138	144	126	178	144	114	**1324**
Barclays	88	95	143	127	128	142	117	166	148	101	**1255**
Citi	55	65	119	98	129	106	122	187	167	118	**1166**
UniCredit	72	44	84	123	109	113	102	146	115	126	**1034**
Bank of America Merrill Lynch	57	54	76	86	82	129	103	132	130	99	**948**
Credit Suisse	62	90	111	106	87	94	45	90	101	68	**854**
Goldman Sachs & Co	41	57	75	91	80	77	83	117	112	104	**837**
Natixis	49	66	83	78	89	117	78	84	85	83	**812**
Morgan Stanley	40	34	70	69	71	78	49	73	119	62	**665**
Santander Corp & Invest Bkg	28	26	44	49	40	50	57	73	69	66	**502**
RBC Capital Markets	20	30	31	34	29	36	22	38	40	30	**310**
Banca IMI (Intesa Sanpaolo)	19	15	17	40	21	32	33	41	27	34	**279**
Nordea	10	6	19	15	22	22	19	33	21	31	**198**
Mediobanca	8	5	8	14	14	23	20	31	19	20	**162**
SEB	9	10	10	20	15	15	21	21	13	24	**158**
Jefferies LLC			3	4	2	2	2	2	1	3	**19**
Macquarie Group					2	8	1	2		6	**19**

TABLE 20
Investment Banks involved in Cluster 4 Bond Deals by number

CLUSTER 4	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD	TOTAL
Barclays	205	194	211	191	223	200	207	226	225	204	**2086**
Deutsche Bank	199	198	198	223	239	176	180	181	185	160	**1939**
JP Morgan	160	197	219	176	207	169	164	212	216	167	**1887**
Citi	108	131	174	149	181	173	186	189	212	175	**1678**
Bank of America Merrill Lynch	111	109	116	126	135	153	147	148	176	155	**1376**
Goldman Sachs & Co	85	110	130	131	154	127	137	164	165	132	**1335**
UniCredit	89	99	92	100	121	118	89	106	140	104	**1058**
Morgan Stanley	79	77	103	115	111	120	108	109	112	99	**1033**
Credit Suisse	111	79	96	89	125	114	61	70	96	73	**914**
Natixis	69	83	74	67	104	74	75	78	98	74	**796**
Santander Corp & Invest Bkg	60	74	72	52	88	60	78	95	100	91	**770**
RBC Capital Markets	15	23	19	36	44	46	43	35	85	49	**395**
Banca IMI (Intesa Sanpaolo)	27	28	27	30	34	22	32	39	42	37	**318**
Nordea	16	17	14	9	22	13	15	31	22	14	**173**
Mediobanca	3	10	13	10	21	15	17	16	11	13	**129**
SEB	7	8	1	11	13	9	11	27	15	16	**118**
Jefferies LLC			3						6		**9**
Macquarie Group		1	1						2		**4**
Lazard						2					**2**

Investment bank focus

Figure 80 through *Figure 83* illustrate the different market shares in bond issuance, according to the advisors' size positioning.

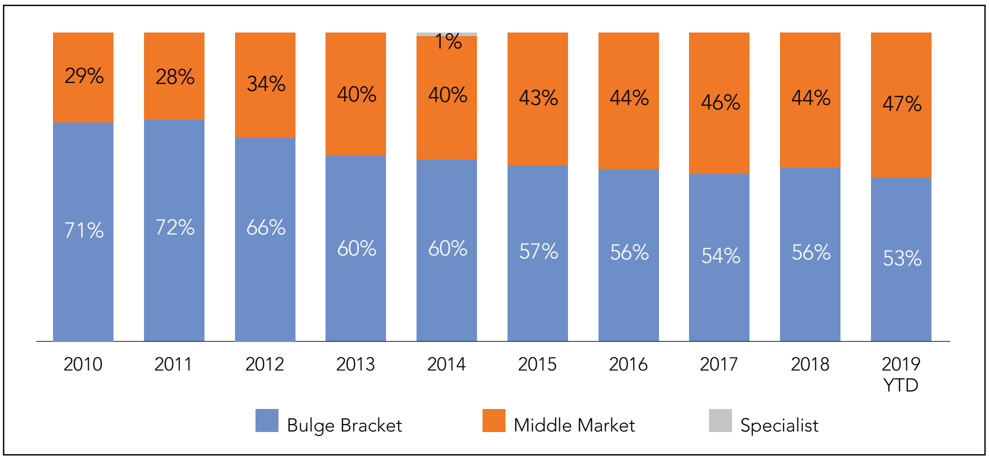


FIGURE 80
Investment banks advising companies in Cluster 1 Bond Deals by bank focus (2010 – 2019 updated to Q3)

As the figures show, over the period in question, bulge bracket banks saw a decline in Cluster 1 in their market share, while it remained more or less constant in Cluster 2. The same can be said for Clusters 3 and 4, even if their market share is much larger overall, with a peak of 80% in 2012 for Cluster 4.

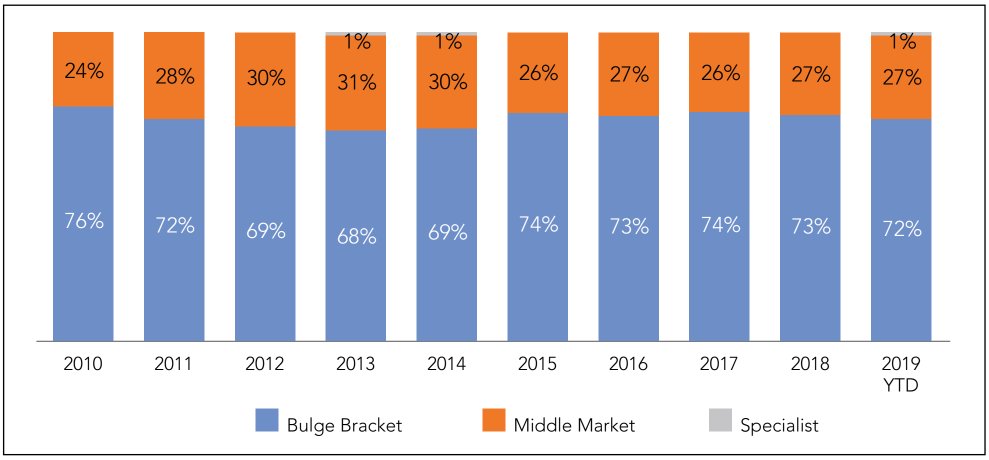


FIGURE 81
Investment banks advising companies in Cluster 2 Bond Deals by bank focus (2010 – 2019 updated to Q3)

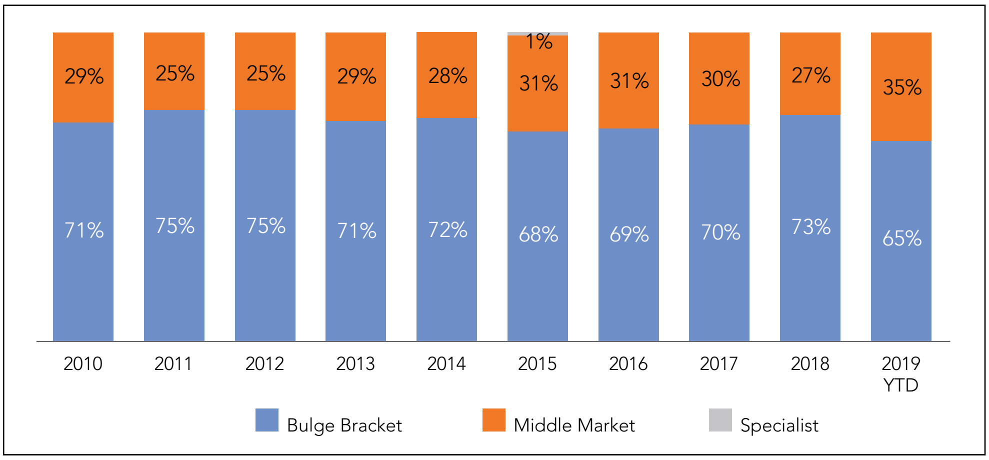
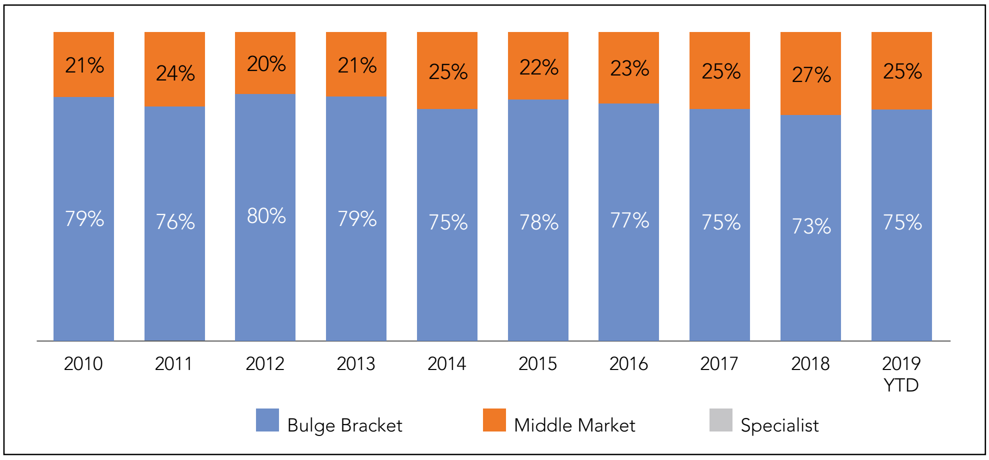


FIGURE 82
Investment banks advising companies in Cluster 3 Bond Deals by bank focus (2010 – 2019 updated to Q3)

In Cluster 4, we can see that no specialists was involved, hence the independent banks present in Cluster 4 in the following section all have a middle market focus.

FIGURE 83
Investment banks advising companies in Cluster 4 Bond Deals by bank focus (2010 – 2019 updated to Q3)



In Cluster 1, independent banks seem to grow their market share at quite a fast pace, while there is an overall decline in Cluster 2. Their market share sees slight upticks both in Clusters 3 and 4, although the maximum level reached for independent advisors is 13% in Cluster 3 and 11% in Cluster 4.

FIGURE 84
Investment banks advising companies in Cluster 1 Bond Deals by affiliation (2010 – 2019 updated to Q3)

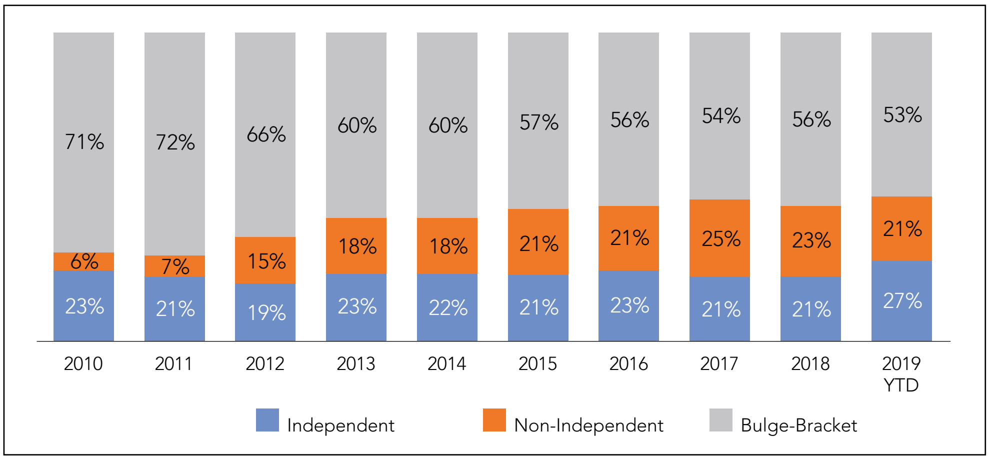
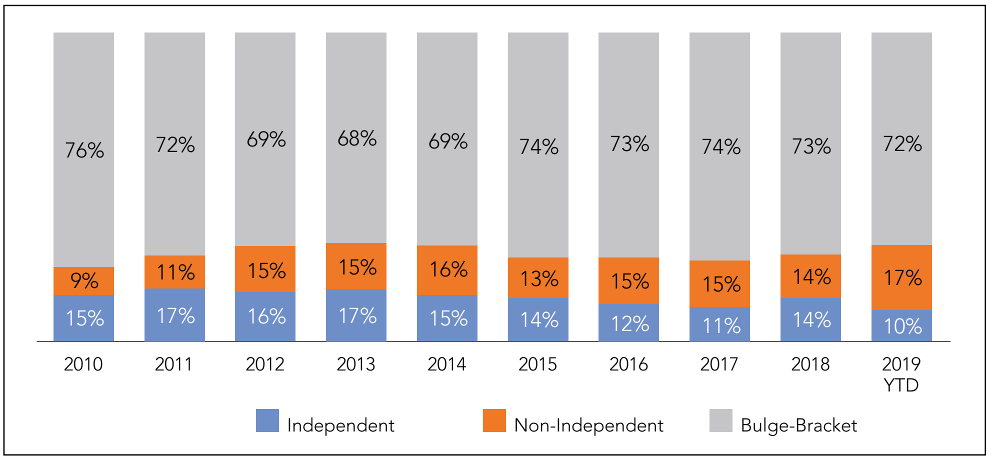


FIGURE 85
Investment banks advising companies in Cluster 2 Bond Deals by affiliation (2010 – 2019 updated to Q3)



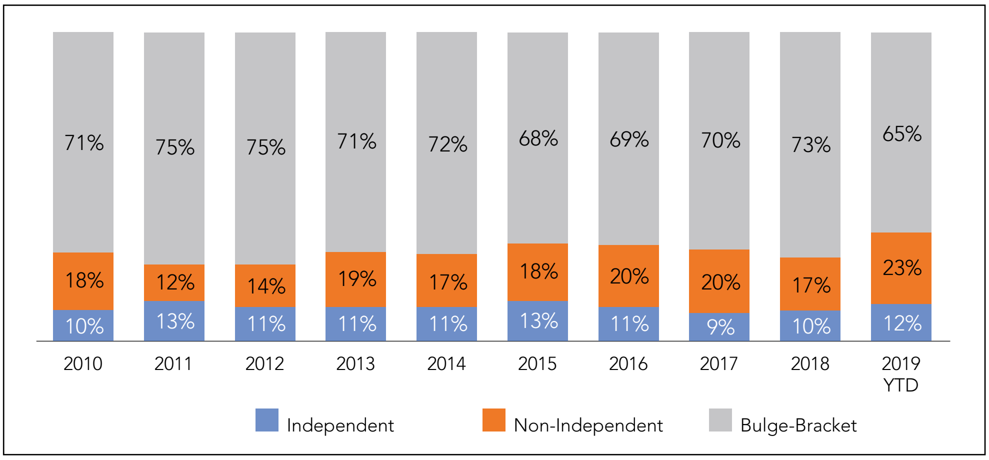


FIGURE 86
Investment banks advising companies in Cluster 3 Bond Deals by affiliation (2010 – 2019 updated to Q3)

Thanks to the evidence of the previous section, we can state that all the independent banks in Cluster 4 belong to middle market. Despite their size, their role in Cluster 4 deals is limited and their peak in 2018 is only 11%.

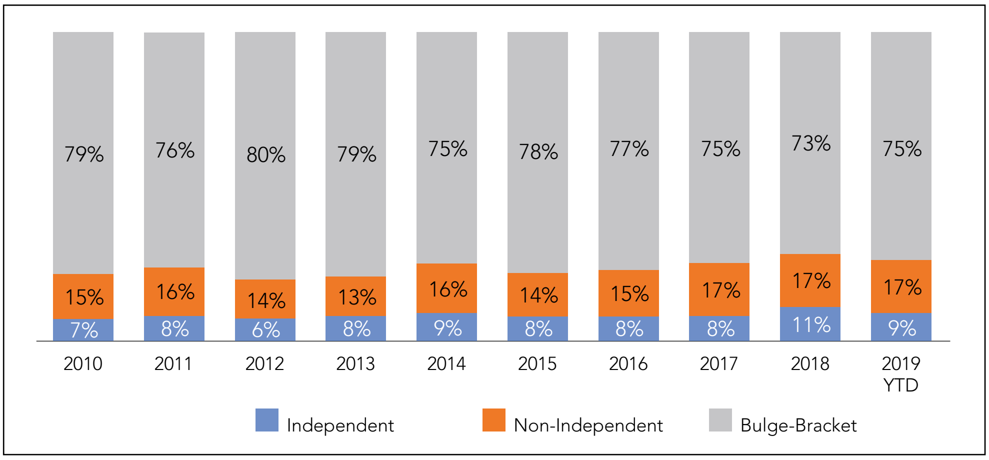


FIGURE 87
Investment banks advising companies in Cluster 4 Bond Deals by affiliation (2010 – 2019 updated to Q3)

Investment bank nationality

Regarding the nationality of the advisor, *Figure 88* through *Figure 91* show a clear path: the bigger the deal size, the more often companies ask for the assistance of US banks.

The market share held by banks of nationalities other than European or American is much larger in Cluster 1 (*Figure 88*), proving what we theorized in the previous section: banks with "Other" nationalities target deals of a much smaller size.

FIGURE 88
Investment banks advising companies in Cluster 1 Bond Deals by bank nationality (2010 – 2019 updated to Q3)

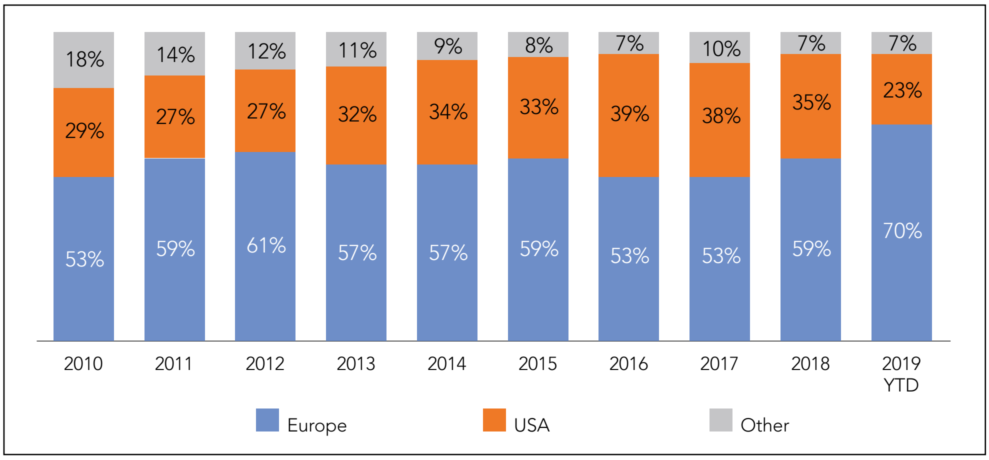


FIGURE 89
Investment banks advising companies in Cluster 2 Bond Deals by bank nationality (2010 – 2019 updated to Q3)

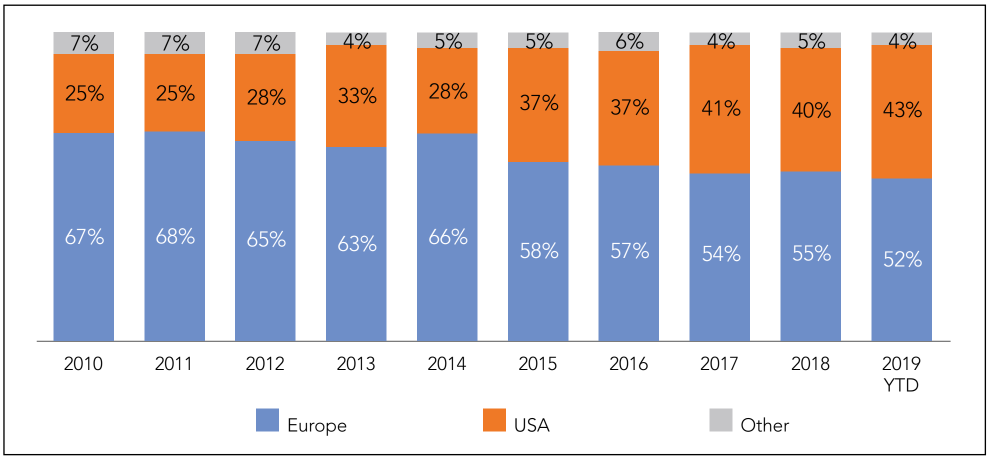
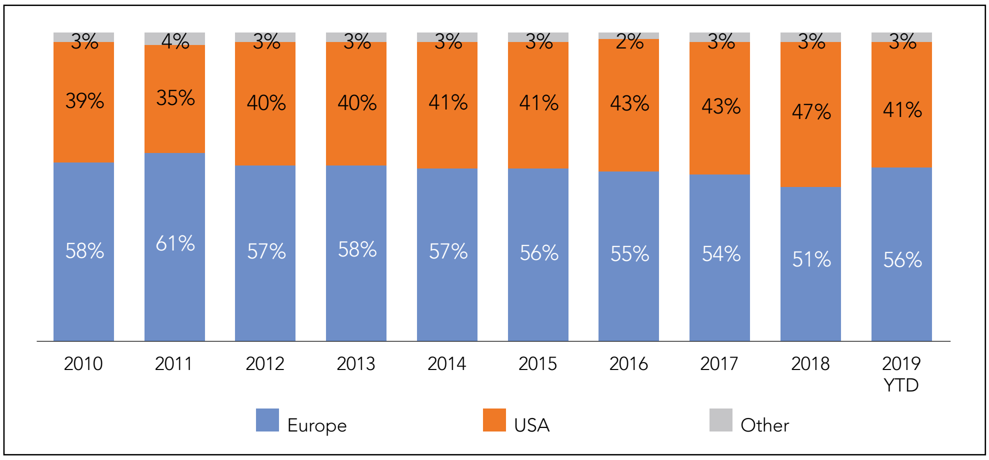


FIGURE 90
Investment banks advising companies in Cluster 3 Bond Deals by bank nationality (2010 – 2019 updated to Q3)



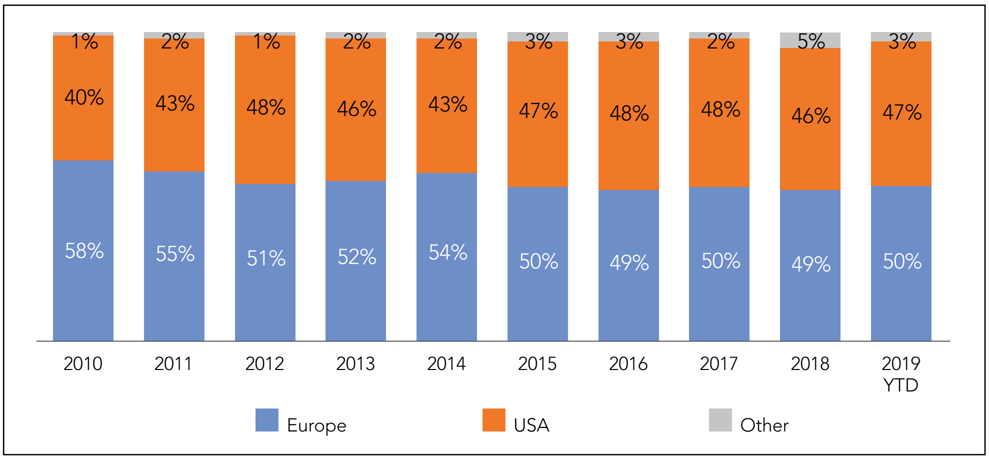


FIGURE 91
Investment banks advising companies in Cluster 4 Bond Deals by bank nationality (2010 – 2019 updated to Q3)

Target Market of Bond Deals

Also for the bond market, we can carry out ad hoc analysis. This last one concerns the Target Market, namely the specific geographic location where the security is being offered:

- Europe;
- EuroMarket;
- Asia;
- USA/North America;
- Whole world, i.e. targeting every country of the world generically, without a specific geographical focus.

Figure 92 through *Figure 96* illustrate the number of bond issues targeting a specific market, breaking down the market share of advisors that managed those deals.

With regard to Europe, the number of bonds targeting this area (*Figure 92*) followed a discontinuous trend, rising slightly from 2010 to 2014 to jump sharply in the period 2015-2018. In the first three quarters of 2019, only 226 bonds were issued toward this target area.

These deals were mainly advised by European banks. However it is worth noting that in the period where the most bonds were issued (that is 2015-2018), the US banks played a crucial role with more than 35% of deals advised.

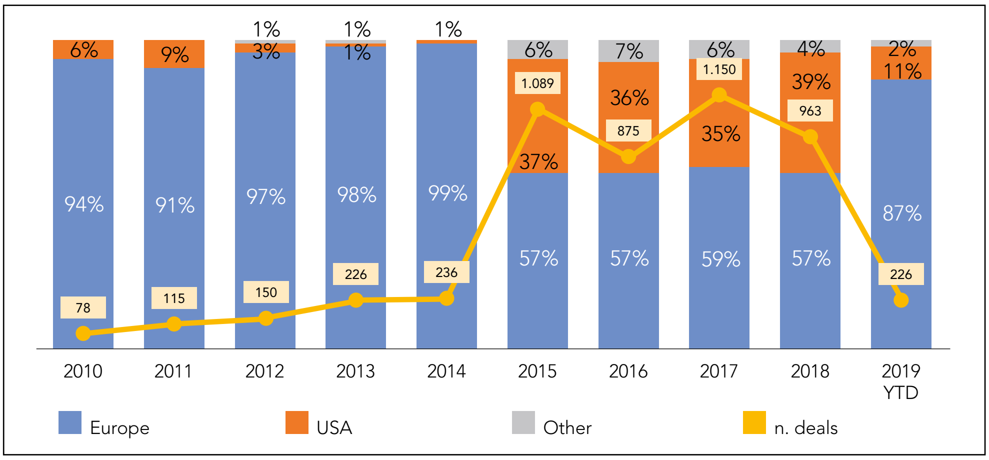


FIGURE 92
Target Market of Bond Deals: trends and advisor areas. Target Market – EUROPE (2010 – 2019 updated to Q3)

As for the deals in the Euro Area (*Figure 93*), these are at least 10 times more than the deals targeting all European countries. In fact, this number peaks in 2017 with a total of 4,570 deals issued, followed by 2018 with 4,122. This trend seems to be confirmed in 2019 where already 3,281 deals were issued updated to Q3. If year-end data corroborates that this pace continued for the remaining months of 2019, the total number of deals would be 4,374 as of December 31.

FIGURE 93
Target Market of Bond Deals: trends and advisor areas. Target Market – EUROMARKET (2010 – 2019 updated to Q3)

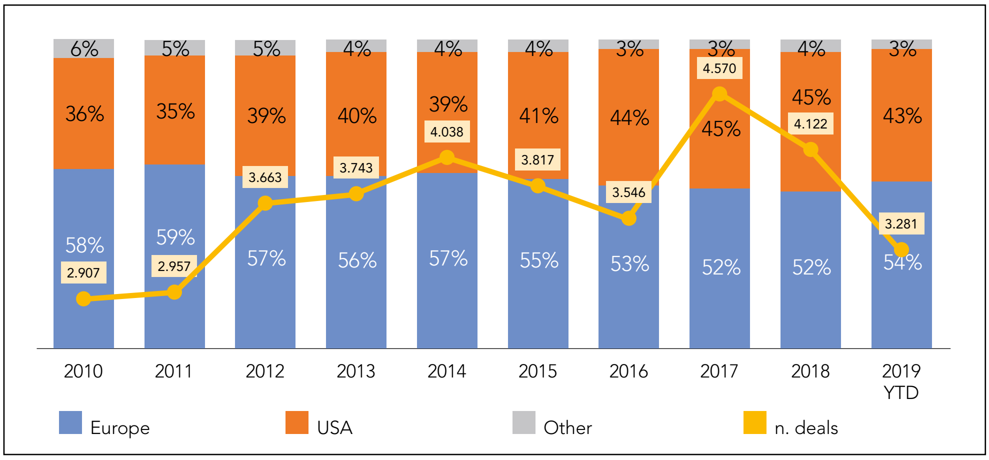
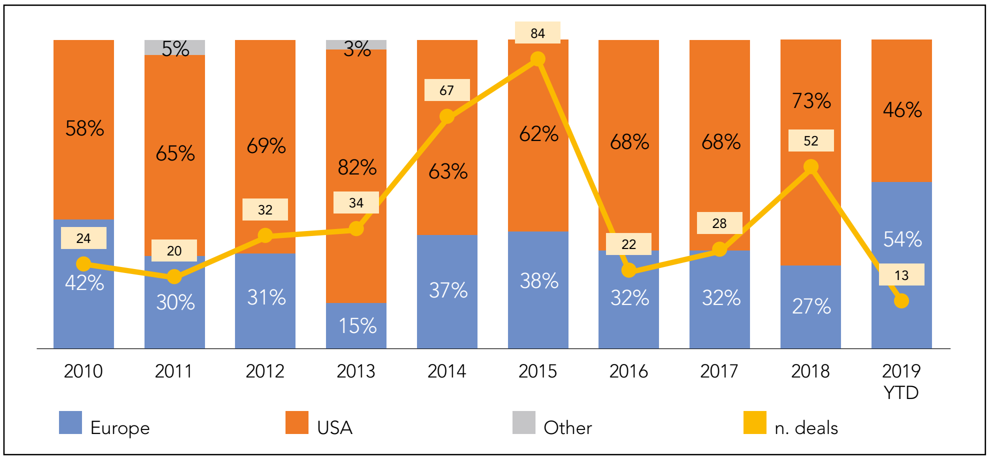


FIGURE 94
Target Market of Bond Deals: trends and advisor areas. Target Market – ASIA (2010 – 2019 updated to Q3)



Bonds targeting Asia witnessed growth in the period 2014 and 2015, with peaks of 67 and 84 deals respectively. US banks mainly advise corporations issuing these bonds.

Finally, the market is evenly split among US and European banks for bonds targeting the US (*Figure 95*) and targeting the whole world, without any particular geographical distinction (*Figure 96*). However, the number of bonds targeting the US is larger, peaking in 2017 when 1,120 bonds were issued.

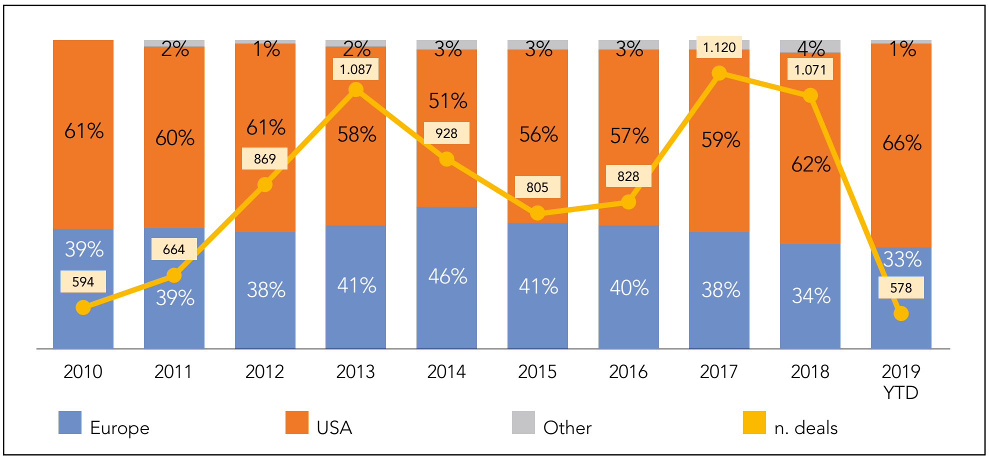


FIGURE 95
Target Market of Bond Deals: trends and advisors area. Target Market - USA/North America (2010 – 2019 updated to Q3)

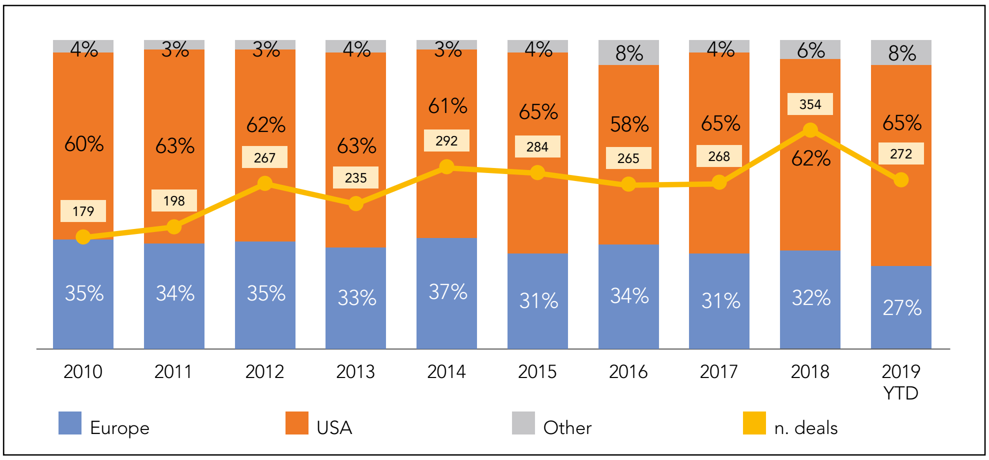


FIGURE 96
Target Market of Bond Deals: trends and advisor areas. Target Market – WORLDWIDE (2010 – 2019 updated to Q3)

4 CONCLUSIONS AND RECOMMENDATIONS

As a result of our analysis, we obtain a map of which type of banks support which type of deals, a map that regulators and policymakers can use to monitor the evolution of the industry over time and possibly identify critical parts of the market that require targeted intervention.

The picture that emerges from our analysis suggests:

- European banks are struggling. They are smaller and less profitable than their US rivals.

- US banks have come to dominate significant parts of the investment banking industry in Europe, with the top five places of the league tables now firmly in their hands. In general, the larger the size of the deal, the larger the market share of the US banks. Still, we observe significant differences across deal types. In particular:

    - M&A. Generally speaking, half of the market is split among US and European banks. Yet breaking down the market share we find that companies seek US banks as advisors more often than European banks when the transaction is cross-border, both within and outside the EU. The market is dominated by bulge bracket banks. Middle market banks are relevant only for domestic transactions, while specialist and independent banks are rapidly gaining market share in all but the largest deals.

    - ECM. As for ECM, US banks have come to dominate European banks across the board since 2013. Before the market was roughly equally split. Most important, US banks have been winning market share in a shrinking market. The advance of US banks has been especially strong for larger deals, while the market share of middle market and affiliated banks is still significant in smaller deals. In all but the largest deals the share of specialist and independent banks in on the rise.

    - DCM – loans. Loan deals represent a special case. European banks have a stable dominant position. Their market share is always over 50% regardless of the deal size, with peaks of 90% for smaller deals. Middle market banks have overtaken bulge bracket banks in the last few years and affiliated banks have seen a significant rise. The presence of US banks is confined to a few large deals.

    - DCM – bonds. As for bond deals, the market is roughly equally split between European and US banks for larger-sized deals, and two considerations are worthwhile marking. On the one hand, there are smaller deals that are advised by European banks in 60% of the cases. On the other hand, in large deals, European are losing ground to the Americans whose share expands over the period. At the same time while the market is dominated by bulge bracket banks, middle market banks and affiliated banks have been earning market share, especially in smaller deals.

Our map of investment banking in Europe is therefore consistent with the four-tier characterization provided by Goodhart and Schoenmaker (2016). At the top we find the five US global bulge bracket giants, who have come to dominate their European peers across all transaction types except for loans, where domestic banks have a stable dominant position. The second tier consists of the European bulge bracket banks, who have maintained strong positions especially as regards to bonds and M&A deals. Middle market banks and investment banking arms of large European lenders populate the third tier. Focused on small and medium size transactions, their role has been expanding for both bond and loan deals at the expense of bulge bracket banks. In the case of loans, these players were able to overtake their bulge bracket rivals. The fourth tier consists of smaller, specialist and independent banks whose market share has been growing at a significant pace in the last few years, especially for smaller domestic M&A deals and equity issues.

Nonetheless, before we can draw any policy implication form the results of our analysis, we need to address a fundamental question: Why should the composition of the investment banking landscape matter at all? Shouldn't the ultimate concern of the regulator be in principle to ensure a level playing field that attracts the best players regardless of their nationality, to achieve a sort of "Wimbledon effect"?

In practice, the retreat from investment banking by European banks and the advance of US banks can have far reaching consequences for the development of European companies and economic growth in the area.

- As European banks weaken and their US rivals get stronger, a large portion of small and midsized companies risks being left underbanked and their growth potential constrained. For example, as a drawback of MiFID II, less coverage of smaller caps, fewer brokers focused on anything other than the very large listed companies have resulted in waning interest from institutional investors in the small and midsized companies that represent the backbone of the European economy.

- Meanwhile, the investment banking needs of larger companies risk becoming too exposed to macroeconomic shocks in the US and even geopolitical concerns.

- Moreover, the ownership structure and governance model of European companies risks negative fallout from a shift from shareholder registers stacked with old-line European families and trusts to American investment giants, where US banks are better connected.

As conduits for capital flow, European investment banks should be a key strategic priority for policymakers. Yet, banking policy in Europe remains fractured, with national and continental regulators pursuing what are often conflicting agendas. As a result, banks suffer pressure on capital market revenues and profitability, while they would greatly benefit from a deeper and more integrated European financial system.

But the debate surrounding the need for a European CIB system is much more relevant and impactful, as it involves the European community and European stakeholders at large. The question is not merely relevant to the financial industry per se and to the Banking Union; it has to embrace the larger political debate about the strategy Europe has to pursue. The risk highlighted in this research paper appears crystal clear: the European financial industry could become a huge lending system whereas the role of banks will be under pressure. On the one hand, more value added CIB services are delivered by US players. On the other, fintech companies generate a great deal of competition with significant disruptive power (at least disruptive on margins). Is this acceptable? And is it profitable? Or shall we suggest more proactive and concrete actions, not *against* someone but in *favor* of a more diversified eco-system where a European voice matters. Is it too late to promote concrete actions to stimulate the rise of a competitive European CIB industry, taking care of both large corporates and mid-cap? It is not, but actions have to be focused, and identified through bottom-up and top-down recommendations and suggestions related to the architecture of the Banking Union.

The Banking Union project, when taken as a whole, has unquestionably and very rapidly led to the creation of teams of resources enabling the ECB to interface with individual national supervisory authorities, actually aligning supervisory rules. These rules constitute the genetic markers of risk management and the concept of levelling the playing field, an aspiration of European regulators since the days of the Banking Directive in the early '90s. Yet the Banking Union has not provided us with European banks in the true sense, seeing that the 118 banks under ECB supervision are European only in-so-far as they are subject to supra-national supervision and resolution mechanisms.

This is what lies at the heart of any reflection on the structure of the banking system, and indeed the very architecture of Europe. Indeed, this represents the testing ground where the political and strategic challenge will play out for the new leadership at the European Commission and the ECB. But central to this challenge is not what kind of Banking Union we want to have from a technical-regulatory standpoint, but rather what mission it should pursue and what role it can play to best serve Europe, including both large corporates and mid-cap or SMEs. Moreover, having a stronger Banking Union doesn't mean forgetting local eco-systems, which are crucial to ensure the right bridge between specialized local players and SMEs.

The CIB industry could have a relevant role in all this. But make no mistake, this choice does not mean neglecting the technical-regulatory components of the three pillars, which have a fundamental function. Instead it means to think about what needs to be done to ensure that banks become truly European, not simply because they are under European supervision and profitable.[13] Re-envisioning the Banking Union would also be vital to assuage the anger and restrain the sloppy populist reasoning that views banks in general as a system to be punished, one that does not serve the needs of people or businesses. In more evocative yet concrete terms, in the face of country systems far larger in size and growth rates, Europe can no longer afford to concentrate all its energy on having a hyper-stable and supra-regulated, but ultimately marginal, banking system.

[13] S. Caselli, A. Sironi, «L'Unione Bancaria: ambizioni, certezze, rischi», Economia & Management, n.3, 2015, pp. 7-12.

Paradoxically, populism on one side and regulatory drift on the other both risk marginalizing the banking system and sanctioning its decline. But the banking system is actually the infrastructure underpinning the entire economic system. The path forward leads out into the open, sending a strong political signal that the banking system, including the CIB industry, is an essential driver for growth. This can be done by setting new positioning goals and benchmarks.

In doing so, the challenges are not only regulatory, but political as well. The European banking system must be steered into a support role as a facilitator of business development and overall economic growth, well aware that while this system has survived the sub-prime bubble, all its energy has been necessarily spent resolving the crises first of the sovereign debt and then Non-Performing Loans (NPLs). In the US, meanwhile, the banking system has had time to recoup, increasing in size and generating innovation, at pace with the capital markets.[14] What is more, Chinese banks are gradually acquiring expertise, gaining agility at an international level, and above all, growing in size like their US counterparts. So the risk is clear: the European economic system could be crushed between the US and China, due in part to the lack of an equally strong banking system.[15]

The challenges that need to be tackled quickly on the European playing field are four:

1 growth and M&As;
2 business model of banks;
3 funding;
4 trust.

The issue of growth and size of European banks must be top priority for a genuine Banking Union, beyond shared supervision and the three pillars in general. The European banking system has experienced consolidation processes within the borders of member nations, first in the '90s and later in the '00s. But progress, which seems to be at a standstill, must begin again with intensity and determination. Only growth can facilitate the rise of more sophisticated business areas, such as capital markets, M&A, corporate finance and private equity.

A comparison with the American market, like the one we have drawn throughout this entire paper, is very constructive, as the two systems are similar in size and underlying GNP. But in some ways the contrast is discouraging. The top three American banks ranked by total assets (Bank of America, JP Morgan and Wells Fargo) represent 30% of the market, while Europe's top three asset holders (HSBC, BNP Paribas and Crédit Agricole) cover little more than 12%. All the data reported in this paper speak volumes: the US banking system is far more concentrated and profitable. US banks have what it takes to be global players, to sit at the table on the biggest deals, to leverage the economies of scale necessary to innovate and meet the needs of their broad customer base, from corporate to retail. But their ever-stronger presence in Europe means all the deals under a certain size-thresholds (i.e., with mid-caps and SMEs) will be not managed by them because they don't meet the expectation of a reasonable profitability. In light of this, an aggregation approach is more crucial than ever before in Europe, and must be reactivated aggressively with domestic M&As and even more importantly cross-border deals. But this calls for four essential ingredients:

[14] T. Beck, B. Casu (eds.), The Palgrave Handbook of European Banking, London, Palgrave Macmillan, 2016.

[15] Assolombarda, Credito e finanza per la crescita delle imprese, Milan, October 2018.

1 Political backing in individual countries and from the European Commission. At a national level, this means abandoning excessive support for localism and small banks, which are often seen as constituencies and sources of consensus. But this also calls for promoting an open mentality that accepts the idea of having national banks buying or being bought by other institutions for the sake of a more competitive European banking platform.

2 The approach of supervisory bodies. They should support and facilitate mergers and acquisitions by giving clear indications on post-merger capital requirements. This does not mean adopting a permissive, lax, or lenient stance, but instead clarifying the steps and amounts within the framework of solid industrial plans to ensure stability and growth. Moreover, innovation within capital requirements mechanisms can be promoted. Today, capital requirements are driven by the composition of the asset side and do not include any factors related to the business mix and diversification overall. It is too simplistic to say a discount factor based on the balance between lending and CIB has to be introduced; however a debate has to be open about what kind of stability we need. A more diversified banking industry contributes to the growth of the economic system and it implies more stability at all.

3 The choices of shareholders and investors. When there is a favourable political and regulatory scenario, they can push deals that aim to reduce forms of localism which are no longer in step with the times. They can also promote the creation of pan-European groups that have the ability to compete not only at an international level but at a global one.

4 The relevance of local eco-systems and specialization. To fight localism it doesn't mean to forget local eco-systems, at least if by local we mean the domestic playground of each member State of the Union. To fight localism means to progressively overcome small entities focused on lending and based on governance systems that are sometimes opaque and sometimes unable to attract the right management. Specialized players able to bridge the requests and the needs of mid-caps and SMEs (especially on capital market), are essential not only to keep a segment of the market alive that could be abandoned by large players, but to promote this segment as well. With the right ambition to enhance home country's growth. The regulatory (and political) debate must be crystal clear on this aspect.

In addition to size, the business model of banks is another penalizing aspect of the European banking system.[16] The most revealing statistic in this regard can be found in the breakdown of funding for American and European institutions. In the US, 70% of funding for companies consists of securities, while in Europe the same percentage is covered by bank loans, whose price is affected more and more by rising capital charges driven by regulation. This substantial difference makes European companies less capitalized and less competitive from the market's perspective. Moreover, from a lender's standpoint, this means that European banks appear to be totally dependent on the lending business and as such exposed to the (mostly external) volatility of interest rates. Vice versa, the dependence of US banks on the securities market protects them from reliance on interest margins. However, the business model question does not imply that a radical transformation of European banks is either obligatory or even desirable. Instead, there needs to be a shared (European!) commitment among banks

[16] S. Caselli, A. Sironi, op. cit.

to progressively transition toward a complete range of investment banking activities, linked both to large banking groups and to specialized players operating into local eco-systems. This should be endorsed, once again, on the political, supervisory and regulatory fronts, while engaging shareholders as well. All this is not only for the good of the profit and loss accounts of banks, but more importantly for the sake of financial growth - and real growth - of businesses.

The issue of funding is far more complicated to resolve, but it constitutes a real obstacle to the realization of a Banking Union that is more than simply rules. Here too the difference compared to the US market is stark and substantial. An American bank that grows its funding in any given State can utilize those resources in another State, this thanks to a single treasury. The same is not possible in Europe. Here funding raised in one country cannot be moved to be utilized somewhere else. This puts European banks at a clear competitive disadvantage, for lack of a perfectly integrated, centralized treasury. More critical still is the fact that these institutions lose out on the flexibility of being able to exploit the most lucrative combinations of borrowing/lending on a case by case basis. The push for legal and fiscal harmonization among European countries is strong but it must be pursued all the more vigorously in this specific instance.

Last of all comes the question of trust. The sovereign debt crisis and the banking emergencies striking in rapid succession have generated a wave marked by varying levels of mistrust, aversion, and discrediting of banks, in particular in Italy. The recurring narrative says that banks have taken up a defensive stance, the clear risk being that their role is being delegitimized, to the detriment of the entire economic system. Accompanied by a rise in populist sentiment, this attitude can only be amplified and distorted. No one can deny that some banks are at fault and have made mistakes (and for this they deserve to be punished according to the law). But the banking system as a whole must be protected and strengthened as a tool that serves the common good. This aspect must be brought to the table in the context of national and European political debate; likewise the regulatory component must, together with the banks, advance formal measures and substantial initiatives to protect retail and business customers. In other words, banking institutions must simplify their offering, with the aim of achieving greater opportunities for understanding and interacting with customers. This is a difficult but unavoidable challenge, in order to rebuild a relationship based on trust, which on occasion may have been lacking in the past.

One thing is certain: shortcuts and compromises will not be options. Either the banking system takes top priority to support growth, making the Banking Union more complete and more inclusive of the local eco-systems to become the driver of that growth, or it will be relegated to merely a topic of technical-regulatory debate. In the latter case, it won’t be the banks or Europe that will lose out, but its citizens and companies.

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Investment banks play a central role to support the economy by creating the conditions for the efficient flow and allocation of capital. The key question of this edition of the paper is whether the size and the structure of the investment banking industry in the EU is functional to the characteristics of European investors and companies. Our goal is to provide a better understanding of the recent evolution of the investment banking market in Europe, to identify key trends in the industry, and to discuss the implications for the economy, the companies and the regulators and policymakers of Europe. As a result of our analysis, we obtain a map of which type of banks support which type of deals, a map that regulators and policymakers can use to monitor the evolution of the industry over time and possibly identify critical parts of the market that require targeted intervention.