



# Investment bank reputation and issuance fees: evidence from asset-backed securities

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Accepted: 4 September 2024 / Published online: 18 September 2024  
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## Abstract

We examine the relationship between investment bank (IB) reputation and fees paid in ABS issuance. We compile an extensive instrument level dataset of over 35,000 ABS issued between 1997 and 2018 in the US and the European market. We find that reputation of IBs is influential in determining the compensation they are paid for their services in ABS issuance. On average, reputable IBs receive 3.74% higher fees in comparison to others. Moreover, our results show IBs' ability to obtain lower initial yield spreads in ABS issuance. Overall, our findings provide evidence to the arguments that reputable IBs with high market presence offer high-quality services and assurance to the market participants (i.e., certification effect) leading to better deals. In return, they are able to charge higher fees.

**Keywords** Securitisation · Investment banks · Reputation · ABS pricing

**JEL classification** G21 · G28

## 1 Introduction

Financial intermediaries (FIs) play a significant role in the capital markets by linking borrowers with investors. Theories of financial intermediation argue that services provided by FIs are valuable in lowering transaction costs (Benston and Smith 1976), reducing

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information asymmetries (Leland and Pyle 1977) and producing information (Campbell and Kracaw 1980)<sup>1</sup>. Investment banks (IBs) are particularly important as they specialise in managing large and complex financial transactions for corporations when issuing equity and bonds. IBs receive fees as compensation, often as a percentage of issuance amount, for their services. These fees vary between 0.5 and 7% of the transaction, depending on the type and the quality of issuance (Lee et al. 1996).<sup>2</sup> In 2023, \$106 billion in fees were generated by IBs globally of which \$36 billion accounts for debt underwriting (the largest component), down from almost \$46 billion in 2021 (LSEG Deals Intelligence 2024).

The value of IBs' services has been widely studied by previous research.<sup>3</sup> For example, the existing literature has examined the factors that may influence the pricing of IB services. Size, maturity and credit rating of an issue are found to be the main determinants of fees paid to IBs (Hansen and Torregrosa 1992; Gande et al. 1999; Fang 2005). Another factor identified is an IB's reputation in the financial markets. Here the literature argues that reputable IBs charge lower fees compared to less prestigious IBs, as they can take advantage of economies of scale (James 1992; Livingston and Miller 2000; Iannotta and Navone 2008). Others disagree with the 'reputation discount' and assert that IBs with a superior quality service will charge higher fees (Puri 1999; Fang 2005; Kollo and Sharpe 2006; Esho et al. 2006; Golubov et al. 2012). The latter view is also in line with theoretical models of Klein and Leffler (1981) and Chemmanur and Fulghieri (1994).

In this paper, extending this strand of the literature on IB reputation, we examine the determinants of the fees paid for IB services when issuing more complex structured instruments, such as asset-backed securities (ABS).<sup>4</sup> Information asymmetries are substantially higher in ABS in comparison to more conventional 'vanilla' bonds (Coval et al. 2009; Ashcraft and Schuermann 2009). Such high complexity necessitates IBs to bridge the information gap between the originator banks and investors for the benefit of both sides.<sup>5</sup>

For investors there are various layers of information asymmetries prevalent in the securitisation process which complicate risk assessment. First, as pools of multiple loans, ABS may hold substantial adverse selection problems arising from the bank-borrower relationships. For example, it is documented that mortgage borrowers made false declarations to banks in the pre-Global Financial Crisis period (Jiang et al. 2013; Griffin and Maturana

<sup>1</sup> Berger and Boot (2024) for a recent review of financial intermediation services.

<sup>2</sup> The fees IBs received on IPOs in the US concentrated around 7% of the issue amount (Chen and Ritter 2000). Whereas, in bonds market they can be below 1% (Lee et al. 1996; Fang 2005). In recent years, the fees intermediary banks received for underwriting corporate bonds in the United States averaged around 0.7% for investment-grade issues while for high-yielding issues or 'junk' bonds the average was at 1.2% (Dalal 2018).

<sup>3</sup> These include the pricing of issuance (Chen and Ritter 2000; Hansen 2001; Yeoman 2001; Roten and Mulineaux 2002; Butler 2008), the value of IB reputation in ensuring the quality of services (Chemmanur and Fulghieri 1994; Puri 1999; Livingston and Miller 2000; Fang 2005; Golubov et al. 2012) and the benefits of previous partnership and loyalty between corporations and IBs (James 1992; Yasuda 2005; Burch et al. 2005; Wang and Whyte 2010). And more generally on the importance of expertise and prior relationships in M&A deals quality (Huang et al. 2024; Nguyen and Tsai 2024).

<sup>4</sup> Securitisation, commonly used by banks, is a process of transforming a portfolio of financial assets (such as mortgages, auto loans, corporate loans etc.) into marketable securities (i.e. ABS bonds) that have differing risk profiles from the original underlying assets (Deku and Kara 2017). This process converts an illiquid pool of assets into tradable financial products.

<sup>5</sup> A number of studies have also investigated reputation of different counterparties in securitization, such as originator bank (Deku et al. 2021b) and trustee reputation (Deku et al. 2019a).

2016).<sup>6</sup> These loans were subsequently securitised and sold to unaware investors. Second, securitisation may negatively impact bank lending behaviour. Empirical evidence shows that banks relaxed their lending standards of the underlying loans of ABS (Keys et al. 2010; Dell’Ariccia et al. 2012; Nadauld and Sherlund 2013)<sup>7</sup> and did not monitor loans adequately afterwards (Petersen and Rajan 2002; Kara et al. 2018). Some banks also misreported the quality of assets in the securitisation pools (Piskorski et al. 2015; Griffin and Maturana 2016). Third, the degree of complexity is more severe in ABS as they have multi-tranche<sup>8</sup> structures, where a pool of assets supports the cash flow of all tranches.

For the originator banks, IBs<sup>9</sup> help to carry out the structuring of the ABS and find investors to purchase the securities. Originator banks benefit from this service as IBs are well equipped with niche expertise in arranging complex securitisation deals, which allows the originator bank to reduce transaction costs. For example, IBs undertake a range of credit enhancement methods (such as tranching) in ABS structures. They also have the expertise in dealing with rating agencies to obtain and improve credit ratings (Fabozzi and Vink 2012b; Karimov et al. 2024). Secondly, IBs deal with the sale and marketing of the ABS as they often have a wide-ranging global customer base. During this phase of the process, IBs ensure that the information gap between the originator banks and investors is minimised, securing the sale of the ABS.

In this paper, we examine the relationship between IB reputation and fees paid in ABS issuance. Given that information asymmetries are more complex in ABS structuring and issuance, it is important to understand whether originator banks value IB reputation. We also investigate whether the initial launch yield (i.e., interest rate) matters in determining the fee. Achieving a low yield is important for the originator bank as it is directly related to the cost of funding. Hence, issuing banks may be willing to pay more in fees to IBs in order to achieve a lower yield.

To explore these relationships, we utilise a large instrument level dataset of over 35,000 ABS issued between 1997 and 2018 in the US and the European market. We model the initial pricing of ABS to gauge the value of IB reputation and estimate a cross-sectional model controlling for a wide set of deal and originator characteristics. We find that the reputation of IBs is influential in determining the compensation they receive for their services in ABS issuance. On average, they receive 3.74% higher fees in comparison to other IBs. Our results also show IBs’ ability to obtain lower initial yield spreads for their originator customers. Overall, our findings provide evidence that the higher-quality services and assurances to the market provided by more reputable IBs are valued by originators, which is reflected in the higher fees paid.

Our contribution to the literature is threefold. Firstly, we provide the first evidence in the literature on the link between IB reputation and service fees in the securitisation market,

<sup>6</sup>Deku et al. (2019b) provides a detailed literature review on the negative effects of securitization on bank behaviour.

<sup>7</sup>On the contrary, Kara et al. (2016) does not find this effect in the European securitization market.

<sup>8</sup>Tranching involves splitting up the pooled collection of assets by risk and other characteristics. Each tranche carries different maturities, yields, and degrees of risk and is subordinated to other tranches in case of default. Senior tranches are credit enhanced by subordinated ones as the latter would be the first in absorbing any losses while the former offers its potential buyers a priority in payments. The goal of tranching is to redistribute losses of the reference pool to match the desired risk profile of the prospective investors (Deku and Kara 2017).

<sup>9</sup>They are appointed as issuers, but can also be known as arranger, underwriter or manager.

examining whether reputation has any value in structured finance. This is important as, unlike corporate bonds, ABS are complex and difficult to value instruments for investors. Hence, it is imperative to assess whether reputable IBs' services are valued more by originator banks in order to be able to sell the ABS to investors. In addition, we contribute to the literature by looking at other characteristics that may have an impact on the fees. This is also important since ABS are substantially different from conventional bonds and our study is unique in providing evidence on the other deal characteristics that might have a potential impact on the fees charged by IBs.

Secondly, our findings on the impact of intermediary (i.e., IB) reputation on fees can be a useful addition to the ambiguous literature on the topic. Although the theoretical literature posits that reputable IBs provide better quality service (Klein and Leffler 1981; Chemmanur and Fulghieri 1994), empirical studies report mixed results on the relation between IB reputation and fees paid to them. From this perspective, our work sheds light on what incentivises IBs in providing their services. Furthermore, our extensive dataset of over 35,000 ABS issuances allows us to provide more authoritative results.

Thirdly, we contribute to the literature by providing evidence from the global securitisation market. The aforementioned literature often concentrates on the US capital markets. However, there is a dearth of literature regarding European markets and our study makes a significant contribution on that front. The two markets<sup>10</sup> are by far the dominant in securitisation in terms of both global annual issuances, about 95% until recently<sup>11</sup>, and global volume outstanding (around 90%) (SIFMA<sup>12</sup> 2023; S&P Global 2024).<sup>13</sup> Additionally, we examine the subsamples of ABS and mortgage-backed-securities (MBS) as the underlying assets and the related risks of the two are different.

The remainder of the paper is organised as follows. The following section reviews the literature on the role of IB in structured finance, outlines the determinants of IB services pricing, and develops a testable hypothesis. In Sect. 3 we provide details of the sample and estimation methodologies we employ. Results are presented in Sect. 4, and Sect. 5 concludes.

## 2 Relevant literature and hypothesis development

### 2.1 IB reputation and fees

Typically, IBs receive fees<sup>14</sup> as a percentage of the size of an issue and fees are often deducted from the gross proceeds of the sale. The size of fees IBs receive for bridging the gap between borrowers and lenders (or so called the *certification effect*) depends on several

<sup>10</sup> Market for securitised bonds appeared initially in the US over the 1970s and its expansion continues to this day although they had suffered colossal losses over the Global Financial Crisis period. In Europe ABS were introduced during the late 90s and the market for such instruments grew substantially.

<sup>11</sup> In China, since 2014, the securitisation market has been expanding strikingly in terms of annual issuance, accounting for around 30% of annual total issuance globally (S&P Global 2020).

<sup>12</sup> Securities Industry and Financial Markets Association in the US.

<sup>13</sup> Global structured finance issuances over the past years have been more than \$1 trillion annually (S&P Global 2024).

<sup>14</sup> Fees are also referred to as spread (see for instance Livingston and Miller 2000; Esho et al. 2006).

factors, including the reputation<sup>15</sup> of the IBs (Chemmanur and Fulghieri 1994; Puri 1999).<sup>16</sup> It is argued that reputable banks with high market presence should be able to offer high-quality services, and, therefore, they can charge higher prices (Golubov 2012). Empirical evidence supporting this argument shows that IBs with large market presence (used as a proxy for reputation) receive larger fees (Fang 2005; Kollo and Sharpe 2006; Esho et al. 2006; Golubov 2012). For instance, Fang (2005) finds that in the US, top-tier IBs receive premium fees for underwriting convertible-bonds in comparison to lower-tier IBs. Esho et al. (2006), studying the Eurobonds issued by US corporations, find that reputable IBs are paid higher fees. A similar study focusing on a multi-national sample also find the same relationship (Kollo and Sharpe 2006). Examining M&A Golubov et al. (2012) shows that the reputation of IBs is positively related to the fees they receive.

Kollo and Sharpe (2006) and Golubov et al. (2012) argue that the superior quality service provided by reputable IBs (i.e. ‘premium fee - superior quality’) leads to these results. Modelling this relationship theoretically, Chemmanur and Fulghieri (1994) posit that, in equilibrium, reputation delivers higher compensation to IBs as they underwrite less risky issues and, therefore, obtain better prices for borrowers. IBs try to protect their established reputation by maintaining high quality services and forgoing short-term profits. They charge higher prices as they incur greater costs in providing superior services (Puri 1999).

In contrast, the earlier literature finds an inverse relationship between IB reputation and fees (James 1992; Livingston and Miller 2000; Iannotta and Navone 2008). Livingston and Miller (2000), examining nonconvertible debt issues in the US, find that reputable banks have a certification value attached to them by investors. However, they report that fees received by top-tier IBs are lower than the less reputable ones. They justify their findings by economies of scale, arguing that the top-tier IBs offer low service fees in order to increase their market share. For European bond issuance, Iannotta and Navone (2008) also conclude that reputable IBs charge lower fees as an attempt to increase their market presence. Similar results are reported for IPOs (James 1992). Evidence also shows that firms that worked with the same IB in making subsequent equity issues paid lower fees than the ones that did not. Yasuda (2005) reports that previous cooperation between borrowers and IBs also leads to discounted fees. However, the certification effect vary across regions, Anagnostopoulos et al. (2024) conclude that its relevance is diminished in European M&As compared to the US context.

Overall, the arguments in the literature and empirical evidence provided show that IB reputation is important in signalling the quality of the issuance. However, the evidence is inconclusive on whether it influences the IB fees positively or negatively. Furthermore, the evidence on the link between IB reputation and fees in the securitisation market is scarce. One significant difference of ABS bonds from conventional ones is that they are complex instruments with various layers of information asymmetries prevalent. So, on the one hand, given the complexity, reputable IBs may be charging higher fees to issue ABS for a better service. On the other hand, reputable IBs may be specialising on issuing large volume of

<sup>15</sup> Carè et al. (2024) reviews bank reputation literature in detail.

<sup>16</sup> A strand of the literature examines the possible determinants of fees charged by IBs for their role as FIs in bond markets (Rogowski and Sorensen 1985; Hansen and Torregrosa 1992; Livingston and Miller 2000; Butler 2008; Abakah 2024), IPOs (James 1992; Chemmanur and Fulghieri 1994; Chen and Ritter 2000; Hansen 2001; Koda and Yamada 2018; Espenlaub et al. 2024) and M&As (Rau 2000; Golubov et al. 2012).

ABS and, therefore, benefit from economies of scale and demand lower fees. Therefore, we test both hypotheses as follows:

*H<sub>1A</sub>- IB reputation has a positive effect on the fees.*

*H<sub>1B</sub>- IB reputation has a negative effect on the fees.*

## 2.2 Simultaneous determination of initial yield spreads and fees

One key factor that needs to be considered is the potential impact of IB reputation on the initial yield spread of ABS bonds. This is because the initial yield spread of an issue and its fee could be determined simultaneously, and IB reputation can be a determinant for both. This is relevant as it is also important for IBs to achieve a lower yield for their clients as this reduces the funding costs of originator banks. Therefore, originator banks may be willing to pay higher fees to IBs in order to achieve a lower initial yield spread. In such a setting, it is plausible to expect a significant relationship between IB reputation and initial yield spreads as well as between the initial yield spreads and fees.

Prior studies have examined the link between IB reputation and initial yield spreads. For example, Fang (2005) finds that reputable IBs obtain lower initial yields spreads for corporate bonds in comparison to their less reputable competitors. They argue that the lower initial yield spread outweighs the fees paid to the IB. Similarly, Livingston and Miller (2000) find reputable IBs achieve lower initial yield spreads for their customers in the nonconvertible debt issues in the US. In a more recent study, Carbo-Valverde et al. (2021) estimate the initial yield spread gains from a reputable IBs to be around EUR 10 million per deal in the European bank bond issuance. Similar relationships are also observed in the IPO market.<sup>17</sup> Related to securitisation, Deku et al. (2021a) find that MBS issuers with a large market presence, proxied for reputation, obtain lower yields for the bonds they sell as investors appreciate the certification offered by reputable issuers. However, there is also an opposite argument. For example, Andres et al. (2014), focusing on the high-yield bond market, find that bonds underwritten by the most reputable IBs have higher initial yield spreads. They argue that this finding is consistent with the market-power hypothesis, and contradict the traditional certification hypothesis.

There is a dearth of literature examining whether the initial yield spread is a determinant of fees. However, this is relevant as the initial yield spread of ABS bonds and the quality of such instruments are negatively related. Investors demand higher yield spread for buying lower quality (i.e., riskier) bonds. Meanwhile, an improvement in the quality of ABS issues can lead to lower initial yield spreads being paid to investors. IBs are key parties in enhancing the quality of ABS. For example, IBs can help to increase quality by performing credit enhancement methods (Fabozzi and Vink 2012a, b), as explained earlier. Performing such techniques demands more effort as well as costs from IBs. Therefore, the level of compensation IBs charge for the services they provide in structuring and selling the bonds can be influenced by the initial yield spread.

<sup>17</sup> A strand of the literature also focuses on the IPO market (see for example, Chen and Ritter 2000; Fernando et al. 2005, and Abrahamson et al. 2011). Often, prestigious IBs are found to be associated with lower risk offerings (Carter and Manaster 1990) and less underpricing (Carter et al. 1998).

Overall, and due to the potential simultaneous determination of initial yield spread and fees and the impact of IB reputation on both, it is necessary to employ the appropriate econometric methods to obtain unbiased results. These are explained in the following section.

### 3 Data and methodology

#### 3.1 Sample and descriptive statistics

We obtain our data from Bloomberg. The sample includes 34,499 ABS bonds (i.e., tranches) issued between 1997 and 2018 in the US and Europe<sup>18,19</sup>, the two largest securitisation markets in the world. The data is compiled at instrument level and each observation reports the main features of an ABS tranche such as the credit ratings, size, initial yield spread, service fee, and maturity as well as deal level characteristics such as size, issuer bank, issuer nation, collateral type and issuance year, among others.

In Table 1 we report summary statistics of the main variables for the full sample. The average fee is 0.57% of issue size. Given that the average tranche size is \$182 million (mln), the average fee paid to issuers is around \$1 mln. The average initial market spread is 132 basis points and the mean maturity is 24 years. Regarding the given credit ratings for each tranche, they average between AA- and A+<sup>20</sup>. Average tranche and deal sizes are \$182 and \$930 mln, respectively. On average each ABS tranche has two ratings (i.e., assessed by two different rating agencies). Table 2 reports the summary statistics of the top 20 global investment banks out of 126 in our study sample. Nine top-tier banks are ordered according to the number of issues they have advised. It is evident that reputable investment banks have been involved with the majority of global ABS bond issuance. The top five investment banks are

**Table 1** Summary statistics of selected variables

| Variable                          | Freq.  | Mean   | Median | Std. Dev |
|-----------------------------------|--------|--------|--------|----------|
| Service Fee (%)                   | 34,999 | 0.57   | 0.23   | 1.12     |
| IB Reputation                     | 34,999 | 0.68   | 1      | 0.47     |
| Spread (basis points)             | 32,763 | 132.44 | 80.00  | 167.08   |
| Tranche value (million USD & EUR) | 34,999 | 182.33 | 53.45  | 438.43   |
| Deal value (million USD & EUR)    | 34,999 | 929.72 | 571.70 | 1,890.64 |
| MBS (issue type)                  | 34,999 | 0.32   | 0      | 0.47     |
| Weighted Average Life (Years)     | 34,999 | 23.59  | 17.36  | 19.71    |
| Government Agency                 | 21,680 | 0.01   | 0      | 0.1      |
| Government Agency                 | 34,999 | 0.04   | 0      | 0.19     |
| Credit Rating                     | 34,999 | 4.29   | 3      | 3.85     |
| CRA                               | 34,999 | 2      | 2      | 0.68     |

<sup>18</sup> The European data covers major issuer countries which accounts for over 80% of the total issuance in the region (Bloomberg 2018). These countries are the UK, France, Germany, Italy, Ireland, Netherlands and Spain.

<sup>19</sup> The original global sample obtained from Bloomberg constituted 44,219 observations. However, we drop observations where the service fee and other key variables (such as initial yield spread, credit rating, size etc.) are not reported.

<sup>20</sup> Each tranche is rated by at least one of the Big Three credit rating agencies: S&P, Moody's and Fitch.

**Table 2** List of top-tier and the top 20 global IBs

| Rank                             | Issuer Entities                 | Number of issues | Market Share (% of number of issues) | Average fee (% of issuance value) |
|----------------------------------|---------------------------------|------------------|--------------------------------------|-----------------------------------|
| <b>Top-Tier Investment Banks</b> |                                 |                  |                                      |                                   |
| 1                                | Merrill Lynch / Bank of America | 4,755            | 14.70                                | 0.55                              |
| 2                                | Chase / JP Morgan               | 3,593            | 11.11                                | 0.66                              |
| 3                                | Salomon Bros. / City            | 3,493            | 10.80                                | 0.61                              |
| 4                                | Lehman Bros. / Barclays         | 3,453            | 10.68                                | 0.59                              |
| 5                                | DLJ / Credit Suisse             | 2,843            | 8.79                                 | 0.48                              |
| 6                                | Morgan Stanley                  | 2,603            | 8.05                                 | 0.53                              |
| 7                                | Deutsche Bank                   | 1,790            | 5.54                                 | 0.55                              |
| 8                                | Goldman Sachs                   | 1,649            | 4.96                                 | 0.59                              |
| 9                                | Bear Stearns                    | 1,052            | 3.25                                 | 0.45                              |
|                                  | Total                           | 25,231           | 77.88                                | 0.56                              |
| <b>Other Investment Banks</b>    |                                 |                  |                                      |                                   |
| 10                               | Wells Fargo                     | 752              | 2.33                                 | 0.48                              |
| 11                               | RBS                             | 646              | 2.01                                 | 0.39                              |
| 12                               | BNP Paribas                     | 566              | 1.75                                 | 0.51                              |
| 13                               | ABN-Amro                        | 367              | 1.13                                 | 1.07                              |
| 14                               | Prudential Financial            | 340              | 1.05                                 | 0.22                              |
| 15                               | Wachovia Bank                   | 271              | 0.84                                 | 0.43                              |
| 16                               | Credit Agricole                 | 249              | 0.77                                 | 0.57                              |
| 17                               | UBS                             | 233              | 0.72                                 | 0.49                              |
| 18                               | Cantor Fitzgerald               | 173              | 0.53                                 | 0.35                              |
| 19                               | HSBC                            | 150              | 0.46                                 | 0.76                              |
| 20                               | Commerzbank AG                  | 122              | 0.38                                 | 0.4                               |
|                                  | Total                           | 3,869            | 11.97                                | 0.52                              |

responsible for roughly 60% of the total global issues. This indicates high concentration in securitisation markets in comparison to other debt underwriting markets (Fang 2005).

### 3.2 Empirical model

Following the literature on the factors considered to have an impact on the pricing of financial services (Livingston and Miller 2000; Fang 2005; Esho et al. 2006; Iannotta and Navone 2008), we specify the baseline model for a given ABS tranche  $i$  as follows:

$$Fee_i = \beta_0 + \beta_1 IB\ Reputation_i + \gamma' X_i + \epsilon_i \quad (1)$$

where,  $Fee$  is the compensation paid to an IB. We measure  $Fee$  as a percentage of the size of an ABS tranche. Typically, IBs deduct their service fee from the gross proceeds of the sale. In our sample, the average service fee charged by IBs is 0.56% for the whole sample, and 0.51% and 0.67% for the US and European transactions, respectively.

$IB\ Reputation$  is our key variable of interest. We measure IB reputation following previous literature analysing its effect on service fees (Livingston and Miller 2000; Fang 2005; Golubov et al. 2012). First, we use the total market share of IBs over the whole sample

period. Second, we use Bloomberg's annual global IB league tables for the study period and chose those banks with the most frequent appearances in the league tables. There are 126 IBs in our sample. Table 2 contains the summary statistics for the top 20 global IBs based on their market volume for the US (Panel A) and European (Panel B) samples over the period between 1997 and 2018. We classified IBs with a global market volume of over 3% as reputable IBs. Hence, *IB reputation* is a binary variable taking the value of 1 if an IB is one of these institutions, and 0 otherwise. Fang (2005) posits that a binary reputation variable yields better inference on the qualitative differences between reputable and non-reputable banks. Comparing our classification to previous studies, the IBs we identify as reputable are very similar to Livingston and Miller (2000), Rau (2000), Fang (2005) and Golubov et al. (2012). Golubov et al. (2012) argue that similarities in the identification of IBs indicate the stability of reputational attributes across services offered by IBs. Due to mergers or acquisitions (M&A), there are two IB names for each of the top five IBs. Any transaction made by a bank prior to its M&A is classified under that IB's individual reputation.<sup>21</sup> Moreover, if an ABS deal involves more than one IB, and at least one of them are categorised as a reputable IB, then we classify that transaction as undertaken by a reputable IB (Rau 2000; Golubov et al. 2012).

Following the literature, we use a set of variables ( $X_i$ ) to control for various deal, tranche, originator bank and macroeconomic characteristics. Studies examining the determinants of service fees in the bond market find that issue attributes that carry potential risks are reflected on the fees, as they have an impact on banks' intermediary functions and costs (Livingston and Miller 2000; Fang 2005; Esho et al. 2006; Iannotta and Navone 2008). We include *Size*, the natural logarithm of bond issue size, to control for the effects of economies of scale on the fees charged by IBs (Altinkilic and Hansen 2000; Kara et al. 2020). We utilise *Weighted Average Life*, the natural logarithm of the years to maturity, to capture the maturity. This is because bonds with longer term maturities have higher default risk (Flannery 1986; Karimov et al. 2021), can carry higher cash flow risks and placing such bonds can be costly, leading to higher fees charged by IBs (Esho et al. 2006; Iannotta and Navone 2008).

We also consider the efforts of IBs interacting with Credit Rating Agencies (CRA) to obtain the best ratings in order to make the issue attractive. The fee is found to be influenced by ratings (Livingston and Miller 2000; Kollo and Sharpe 2006). It is also argued that the higher the number of ratings assigned the lower the risks associated with the bond due to rating shopping (Skreta and Veldkamp 2009; Deku et al. 2019a; Karimov et al. 2024). To do so, we use *CRA Reported*, the total number of credit ratings attained from rating agencies to an ABS tranche.<sup>22</sup> We also control for whether an issue is backed by mortgages (i.e., MBS) only, as such instruments are deemed to carry lower risk (Cuchra 2005; Deku and Kara 2017). We use a dummy variable to control for ABS issued by US government agencies (*Government Agency*)<sup>23</sup>. We also employ three different variables to control for the macroeconomic environment. The *Originator Country* indicates where the originator bank

<sup>21</sup> For instance, Chase had been acquired by JP Morgan in 2000 and all of the deals performed by Chase till that period have been classified as issues of a non-prestigious bank.

<sup>22</sup> All the observations in the sample are assessed at least by S&P, Moody's or Fitch.

<sup>23</sup> Freddie Mac and Fannie Mae are the two government agencies that have been actively involved in the US securitisation.

is located. The *Market Area* defines the region where the ABS issued. Finally, we utilise the issuance *Year* for macro effects (Fabozzi and Vink 2012a).

### 3.3 Robustness checks for simultaneity

As mentioned above, the initial yield spread of an ABS issue and the fee amount may be simultaneously determined. To provide robustness for our results and remedy the issues that may be caused by simultaneity, we employ a two-stage least squares (2SLS) regression in estimating the causal effect of the initial yield spread on the fee. The following first stage estimation involves measuring the endogenous variable (i.e., the initial yield spread) using an instrumental variable:

$$Spread_i = \theta_0 + \varphi' Z_i + \mu_i \quad (2)$$

where, *Spread* is the natural logarithm of the initial yield spread of an ABS at issue. Initial yield spread is defined over a relevant benchmark as a fixed premium in basis points, which is set at issuance (Cuchra 2005; Fabozzi and Vink 2012a; Deku et al. 2019, 2021c). We use a set of variables ( $Z_i$ ) including an instrumental variable (IV) and other factors that are established in the literature to be determinants of ABS initial yield spreads. The IV we utilize is *Tranche Credit Rating*, which is the credit rating assigned to an ABS tranche. Each ABS tranche in our sample is rated by at least one rating agency. This variable is the arithmetic mean of the ratings attached for each bond after converting rating grades of AAA to C into numeric scale of 1 to 21. We use *Tranche Credit Rating* as a suitable IV since it serves as a proxy for the risks associated with the underlying assets of ABS (Fabozzi and Vink 2012a; Karimov et al. 2024). In other words, the quality of the underlying assets is predetermined and not subject to change with IBs or their reputation and, therefore, should not impact the fee paid to IBs. In the second stage, we utilise the predicted values of *Spread* and re-estimate our baseline model (1) as follows:

$$Fee_i = \beta_0 + \beta_1 IB\ Reputation_i + \beta_2 Predicted\ Spread_i + \gamma' X_i + \epsilon_i \quad (3)$$

### 3.4 Robustness checks for predetermined originator bank–IB matching and self-selection

Our results can suffer from issues that may lead to biased results. First, the matching between ABS originator banks and IBs might be endogenous, due to the potential for predetermined originator bank–IB matching. This is because the originator bank choice of reputable or non-reputable IBs may be explained by unobserved private information. Second, self-selection bias could be present in the choices that an IB makes. For instance, top-tier IBs might be more inclined towards securitising less risky and better-quality issues because they may be mindful of their reputation. This potential issue could render OLS estimators unreliable (Heckman 1979). We aim to address these potential concerns by a two-stage Heckman (1979) selection model. In the first stage we estimate the following selection equation by probit model<sup>24</sup>:

<sup>24</sup> See Li and Prabhala (2007) and Wooldridge (2010) for more on the selection models and their properties.

$$IB\ Reputation_i = \gamma W_i + \epsilon_i \quad (4)$$

where  $W_i$  denotes all the available information (i.e., variables) that may have an impact on the choice of reputable and less reputable IBs. Considering that our variable *Issuer Reputation* is binary,

$$IB\ Reputation_i \begin{cases} 1, & \text{iff } \gamma Z_{i+i} > 0 \\ 0, & \text{iff } \gamma Z_{i+i} \leq 0 \end{cases} \quad (5)$$

The second stage corrects the selection problem and involves estimating the linear regression (1) given that we incorporate (4) and its properties (5) and a variable  $\lambda$  (inverse Mills ratio):

$$Fee_i = \delta Variables_i + \pi \lambda (\gamma Z_i) \quad (6)$$

$\lambda$  is the variable for unobserved private information that effects the choice, and its coefficient  $\pi$  can help determine the potential issue of selection bias in the model (Li and Prabhala 2007).

## 4 Results

The estimations and the analysis of regression models with various specifications are performed progressively. We start our analysis by reporting the estimates for OLS regression for the whole sample. Subsequently, we split the global sample into the US and European issues and present our findings for the two different markets. In estimating the effects of yield spread on the IB fee, we include results for the 2SLS models for the full sample. We also compare ABS and MBS subsamples to examine if the possible relationships change for securitised bonds with different risk levels. Finally, as part of our robustness check, we present the results of the Heckman's selection model. This allows to address any potential endogeneity issues.

### 4.1 Baseline estimations

The results for the baseline model for the whole sample are presented in Table 3, Column 1. We find that *IB Reputation* is positive and statistically significant, supporting our hypothesis  $H_{IA}$  that IB reputation has a positive impact on the fees IBs receive for their services. The coefficient indicates that reputable IBs receive, on average, 3.74% higher fees in comparison to other IBs. This result is in line with the literature providing supporting empirical evidence on the existence of a positive association between reputation and fee (Fang 2006; Kollo and Sharpe 2006; Esho et al. 2006; Golubov et al. 2012). The relationship can be explained by the quality of services offered by top tier IBs allowing them to obtain better deals for the originators and, thus, better compensation. These findings also conform to the theoretical predictions of Chemmanur and Fulghieri (1994) and Klein and Leffler (1981) that IB reputation matters for signalling the quality of an issuance. Our results show that this signalling is also observed in the issuance of complex securities, such as the ABS (in

**Table 3** OLS regressions

|                         | Global     |          | US         |          | EU         |          |
|-------------------------|------------|----------|------------|----------|------------|----------|
| IB Reputation           | 0.0374**   | (0.0182) | 0.0856***  | (0.0156) | -0.0017    | (0.0339) |
| Size                    | 0.2818***  | (0.0154) | 0.1990***  | (0.0119) | 0.4123***  | (0.0361) |
| MBS                     | -0.3354*** | (0.0188) | -0.2670*** | (0.0178) | -0.3999*** | (0.0434) |
| Government Agency       | 0.5406***  | (0.0913) | 0.6102***  | (0.0920) |            |          |
| Weighted Average Life   | -0.0162*   | (0.0093) | -0.0447*** | (0.0103) | 0.0038     | (0.0194) |
| Originator Nation       |            |          |            |          |            |          |
| France                  | 0.0357     | (0.0655) |            |          | -0.0018    | (0.0671) |
| Germany                 | 0.0379     | (0.0621) |            |          | 0.0318     | (0.0619) |
| Italy                   | 0.1809***  | (0.0626) |            |          | 0.2057***  | (0.0630) |
| Netherlands             | 0.2329***  | (0.0579) |            |          | 0.2254***  | (0.0615) |
| Republic of Ireland     | 0.0814**   | (0.0413) |            |          | 0.1508***  | (0.0438) |
| Spain                   | 0.1968***  | (0.0634) |            |          | 0.1175*    | (0.0672) |
| US                      | -0.1208*** | (0.0281) |            |          |            |          |
| <i>Controlled for</i>   |            |          |            |          |            |          |
| CRA Reported            | Yes        |          | Yes        |          | Yes        |          |
| Market Area             | Yes        |          | Yes        |          | Yes        |          |
| Year                    | Yes        |          | Yes        |          | Yes        |          |
| Obs.                    | 34,999     |          | 21,680     |          | 13,319     |          |
| Adjusted R <sup>2</sup> | 0.1518     |          | 0.1742     |          | 0.1640     |          |

This table presents OLS regressions of investment bank (IB) fees paid for ABS issuance. *IB Reputation* equals to 1 if an IB belongs to one of the top-tier banks, otherwise 0. *Size* is the face value of a securitised bond and it is in the logarithmic form. *MBS* equals to 1 if the issue is backed by mortgages. *Weighted Average Life* is the natural logarithm of the total maturity of a bond. *Government Agency* equals to 1 if the ABS issued by one of the US government agencies (i.e., Freddie Mac and Fannie Mae). *CRA Reported* is the number of ratings obtained for a given structured bond at launch. *Market Area* is the country where the securitised bonds are sold for/at. *Originator Nation* is the country where the securitisation program takes place. *Year* is the year when the ABS is issued

\*\*\*, \*\* and \* indicate statistical significance at 1%, 5% and 10%, respectively

comparison to MBS). The results of the regressions for the US and European samples are presented in Column 2 and Column 3, respectively. We find that for the US sample the coefficient for *IB Reputation* is positive and significant at 1% level. This result suggests that in US securitisation market, reputable IBs charge higher service fees than other IBs. For the European sample we do not find a significant coefficient for *IB Reputation*.

To comment on the control variables briefly, we find that larger issuances, captured by *Size*, have higher IB fees. Maturity (i.e. *Weighted Average Life*) is negatively related to fees. We also find that originator banks pay lower fees for *MBS* issuances, perhaps they are considered to be less risky than other ABS (Deku and Kara 2017). In the US, *Government Agencies* pay higher fees in comparison to private originators and, in general, IB fees are lower in the US in comparison to Europe.

## 4.2 Robustness checks

We report the second-stage results of the 2SLS estimations in Table 4 (Eq. 2). In Column 1 we present the results for the whole sample and find that the coefficient for the *IB Reputation* is positive and statistically significant. This is similar to the results obtained for the baseline regressions, supporting  $H_{1A}$ . Even after controlling for potential endogeneity between initial

**Table 4** 2SLS regressions

|                         | Global           |          | US               |          | EU               |          |
|-------------------------|------------------|----------|------------------|----------|------------------|----------|
| IB Reputation           | 0.0530***        | (0.0186) | 0.0716***        | (0.0158) | 0.0592*          | (0.0344) |
| Spread (predicted)      | -0.3220***       | (0.0095) | -0.2724***       | (0.0105) | -0.4526***       | (0.0208) |
| Size                    | 0.2027***        | (0.0152) | 0.1450***        | (0.0124) | 0.3197***        | (0.0347) |
| MBS                     | -0.3861***       | (0.0196) | -0.2897***       | (0.0178) | -0.4660***       | (0.0448) |
| Government Agency       | 0.4792***        | (0.0888) | 0.5261***        | (0.0893) |                  |          |
| Weighted Average Life   | 0.0676***        | (0.0096) | 0.0462***        | (0.0102) | 0.0335*          | (0.0194) |
| Originator Nation       |                  |          |                  |          |                  |          |
| France                  | -0.1376***       | (0.0667) |                  |          | -0.2322***       | (0.0668) |
| Germany                 | 0.0318           | (0.0736) |                  |          | 0.0030           | (0.0752) |
| Italy                   | 0.0063           | (0.0654) |                  |          | 0.0161           | (0.0695) |
| Netherlands             | 0.2304***        | (0.0590) |                  |          | 0.2871***        | (0.0698) |
| Republic of Ireland     | 0.0740***        | (0.0429) |                  |          | 0.1890***        | (0.0510) |
| Spain                   | -0.0782          | (0.0684) |                  |          | -0.1763**        | (0.0767) |
| US                      | -0.1191***       | (0.0285) |                  |          |                  |          |
| Controlled for          |                  |          |                  |          |                  |          |
| CRA Reported            | Yes              |          | Yes              |          | Yes              |          |
| Market Area             | Yes              |          | Yes              |          | Yes              |          |
| Year                    | Yes              |          | Yes              |          | Yes              |          |
| Obs.                    | 32,345           |          | 21,128           |          | 11,217           |          |
| Adjusted R <sup>2</sup> | 0.107            |          | 0.136            |          | 0.104            |          |
| Hausman F-test          | 242.45           |          | 115.78           |          | 130.35           |          |
|                         | (p-value<0.0001) |          | (p-value<0.0001) |          | (p-value<0.0001) |          |

This table presents 2SLS regressions of investment bank (IB) fees paid for ABS issuance. *IB Reputation* equals to 1 if an IB belongs to one of the top-tier banks, otherwise 0. *Spread (predicted)* is the predicted value of *Spread* and is obtained in the first stage of the estimation (it is the natural logarithm of the yield spread of a securitised bond at issuance). *Size* is the face value of a securitised bond and it is in the logarithmic form. *MBS* equals to 1 if the issue is backed by mortgages. *Weighted Average Life* is the natural logarithm of the total maturity of a bond. *Government Agency* equals to 1 if the ABS issued by one of the US government agencies (i.e., Freddie Mac and Fannie Mae). *CRA Reported* is the number of ratings obtained for a given structured bond at launch. *Market Area* is the country where the securitised bonds are sold for/at. *Originator Nation* is the country where the securitisation program takes place. *Year* is the year when the ABS is issued. \*\*\*, \*\* and \* indicate statistical significance at 1%, 5% and 10%, respectively

yield spread and *IB reputation*, we still find a significant relationship between *IB reputation* and fees. Hence, our findings are robust. The results for the US sample are presented in Column 2, and we observe the same significant relationship between *IB reputation* and fees for this sample. In Column 3, we present results for the European sample and find that the coefficient of *IB reputation* is positive and significant. Overall, our results are robust in providing evidence that originators view IB reputation as an important factor in determining the quality of the service they receive and compensate IBs accordingly. Our other variable of interest in Table 4 is *Spread (predicted)*. We find that the coefficient of *Spread (predicted)* is negative and statistically significant for the whole sample as well as for the sub-samples of US and Europe. This result indicates that in the securitisation market, all else equal, IBs receive higher fees if the initial yield spread of the issuance is low. In other words, IBs are compensated by higher fees for achieving lower costs of issuance for the originator in the securitisation market. Our study provides the first evidence for such a relationship in this strand of the literature.

We report the first-stage results of the 2SLS estimation in Table 5. We find that the relationship between *IB reputation* and initial yield spread is negative for the whole sample (Col-

umn 1), and it is negative and significant for the US (Column 2). This result provides further evidence that reputable IBs, in comparison to other IBs, obtain lower yields for their customers when issuing ABS. This finding is in line with the results reported by earlier studies for the securitisation market (Deku et al. 2021a) as well as for bond issuance (Livingston and Miller 2000; Carbo-Valverde et al. 2021). However, the coefficient of *IB reputation* is positive for the European sample (Column 3). Hence, our results seem to be driven by the US sample.

### 4.3 Riskier versus less risky securities

The underlying assets are less complex in MBS and therefore considered to carry lower risks in comparison to other types of ABS (Deku and Kara 2017). Therefore, we split the data into ABS and MBS subsamples to examine whether the relationship between IB fee and reputation changes when the risks of securitised bonds increase due to higher complexity. In Panel A of Table 6 we present the results for the ABS sample. In Column 1 we find that the coefficient for *IB Reputation* is significant for the whole sample. Also, for both the US (Column 2) and the European (Column 3) samples, the coefficients of this variable are positive and significant. These results reinforce our earlier findings that reputable IBs

**Table 5** IV regressions - first stage

|                         | Global     |          | US         |          | EU         |          |
|-------------------------|------------|----------|------------|----------|------------|----------|
| IB Reputation           | -0.0072    | (0.0171) | -0.0959*** | (0.0230) | 0.0726***  | (0.0217) |
| Size                    | -0.1630*** | (0.0110) | -0.0853*** | (0.0132) | -0.2177*** | (0.0148) |
| Credit Rating           | 0.1718***  | (0.0021) | 0.1664***  | (0.0033) | 0.1831***  | (0.0021) |
| MBS                     | -0.1699*** | (0.0203) | -0.1210*** | (0.0313) | -0.1628*** | (0.0215) |
| Government Agency       | -0.1834**  | (0.0755) | -0.2511*** | (0.0780) |            |          |
| Weighted Average Life   | 0.2142***  | (0.0100) | 0.3188***  | (0.0143) | 0.0431***  | (0.0134) |
| Originator Nation       |            |          |            |          |            |          |
| France                  | -0.3060*** | (0.0680) |            |          | -0.3208*** | (0.0588) |
| Germany                 | -0.0532    | (0.0388) |            |          | -0.1245*** | (0.0386) |
| Italy                   | -0.3304*** | (0.0385) |            |          | -0.2879*** | (0.0345) |
| Netherlands             | 0.0094     | (0.0410) |            |          | 0.0161     | (0.0395) |
| Republic of Ireland     | 0.0614     | (0.0415) |            |          | 0.0156     | (0.0370) |
| Spain                   | -0.7986*** | (0.0366) |            |          | -0.6498*** | (0.0356) |
| US                      | 0.1182***  | (0.0262) |            |          |            |          |
| Controlled for          |            |          |            |          |            |          |
| CRA Reported            | Yes        |          | Yes        |          | Yes        |          |
| Market Area             | Yes        |          | Yes        |          | Yes        |          |
| Year                    | Yes        |          | Yes        |          | Yes        |          |
| Obs.                    | 33,988     |          | 21,516     |          | 12,472     |          |
| Adjusted R <sup>2</sup> | 0.590      |          | 0.558      |          | 0.706      |          |

This table presents the analysis of first stage 2SLS regressions of investment bank (IB) fees paid for ABS issuance. *IB Reputation* equals to 1 if an IB belongs to one of the top-tier banks, otherwise 0. *Size* is the face value of a securitised bond and it is in the logarithmic form. *Credit Rating* is the rating assigned for a securitised issue at launch by one of the three big rating agencies. *MBS* equals to 1 if the issue is backed by mortgages. *Weighted Average Life* is the natural logarithm of the total maturity of a bond. *Government Agency* equals to 1 if the ABS issued by one of the US government agencies (i.e., Freddie Mac and Fannie Mae). *CRA Reported* is the number of ratings obtained for a given structured bond at launch. *Market Area* is the country where the securitised bonds are sold for/at. *Originator Nation* is the country where the securitisation program takes place. *Year* is the year when the ABS is issued

\*\*\*, \*\* and \* indicate statistical significance at 1%, 5% and 10%, respectively

receive higher compensation for their service. In addition, we now observe that the *IB Reputation* for the European ABS sample is also statistically significant, at the 5% level. These results provide some evidence that originators are likely to trust reputable IBs more when it comes to securitising riskier assets; therefore, ready to pay higher fees. *Spread (predicted)* is negative and statistically significant across all samples. These results show that obtaining better yield spreads are associated with higher IB fees, even when we examine only ABS with higher risk. Panel B of Table 6 reports the results from the MBS sample. Similar to previous results the coefficients for *IB Reputation* are positive and significant. Regarding *Spread (predicted)*, we obtain significant and negative results in all estimations. The results suggest that for both ABS and MBS higher spreads lead to lower fees.

#### 4.4 Heckman's selection model estimations

Table 7 presents the estimates for the Heckman's selection model. Column 1 reports the results for the whole sample, while the US and European samples are presented in Column 2

**Table 6** 2SLS regressions for ABS and MBS subsamples

| Panel A: ABS Tranches                                       | Global           |          | US               |          | EU               |          |
|-------------------------------------------------------------|------------------|----------|------------------|----------|------------------|----------|
| IB Reputation                                               | 0.0417*          | (0.0243) | 0.0592***        | (0.0203) | 0.1024**         | (0.0509) |
| Spread (predicted)                                          | -0.3016***       | (0.0096) | -0.2935***       | (0.0111) | -0.3682***       | (0.0248) |
| Weighted Average Life                                       | 0.0559***        | (0.0123) | 0.0528***        | (0.0138) | 0.0002           | (0.0275) |
| Size                                                        | 0.2508***        | (0.0218) | 0.1766***        | (0.0156) | 0.4901***        | (0.0688) |
| Government Agency                                           | 0.1507*          | (0.0856) | 0.1245           | (0.0895) |                  |          |
| Obs.                                                        | 21,810           |          | 16,241           |          | 5,569            |          |
| Hausman F-test                                              | 135.76           |          | 105.37           |          | 30.92            |          |
|                                                             | (p-value<0.0001) |          | (p-value<0.0001) |          | (p-value<0.0001) |          |
| Panel B: MBS Tranches                                       | Global           |          | US               |          | EU               |          |
| IB Reputation                                               | 0.0933***        | (0.0294) | 0.0463**         | (0.0205) | 0.0809*          | (0.0447) |
| Spread (predicted)                                          | -0.4199***       | (0.0209) | -0.2514***       | (0.0246) | -0.5413***       | (0.0294) |
| Weighted Average Life                                       | 0.0404*          | (0.0206) | -0.0171          | (0.0185) | 0.0762**         | (0.0365) |
| Size                                                        | 0.1863***        | (0.0259) | 0.1173***        | (0.0209) | 0.2648***        | (0.0451) |
| Government Agency                                           | 0.3881***        | (0.0930) | 0.5794***        | (0.0900) |                  |          |
| Obs.                                                        | 10,535           |          | 4,887            |          | 5,648            |          |
| Hausman F-test                                              | 107.25           |          | 65.95            |          | 97.45            |          |
|                                                             | (p-value<0.0001) |          | (p-value<0.0001) |          | (p-value<0.0001) |          |
| <i>All regressions in Panels A and B are controlled for</i> |                  |          |                  |          |                  |          |
| CRA Reported                                                | Yes              |          | Yes              |          | Yes              |          |
| Originator Nation                                           | Yes              |          | Yes              |          | Yes              |          |
| Market Area/ Year                                           | Yes/Yes          |          | Yes/Yes          |          | Yes/Yes          |          |

This table presents the 2SLS regressions of investment bank (IB) fees paid for ABS (Panel A) and MBS (Panel B) issuance. *IB Reputation* equals to 1 if an IB belongs to one of the top-tier banks, otherwise 0. *Spread (predicted)* is the predicted value of *Spread* and is obtained in the first stage of the estimation (it is the natural logarithm of the yield spread of a securitised bond at issuance). *Size* is the face value of a securitised bond and it is in the logarithmic form. *MBS* equals to 1 if the issue is backed by mortgages. *Weighted Average Life* is the natural logarithm of the total maturity of a bond. *Government Agency* equals to 1 if the ABS issued by one of the US government agencies (i.e., Freddie Mac and Fannie Mae). *CRA Reported* is the number of ratings obtained for a given structured bond at launch. *Market Area* is the country where the securitised bonds are sold for/at. *Originator Nation* is the country where the securitisation program takes place. *Year* is the year when the ABS is issued

\*\*\*, \*\* and \* indicate statistical significance at 1%, 5% and 10%, respectively

**Table 7** Heckman's selection model regressions table 7 Heckman's selection model regressions

|                                   | Global     |          | US         |          | EU         |          |
|-----------------------------------|------------|----------|------------|----------|------------|----------|
| IB Reputation                     | 0.1766***  | (0.0409) | 0.0750***  | (0.0152) | 0.1779**   | (0.0779) |
| Spread                            | -0.0804*** | (0.0096) | -0.0990*** | (0.0108) | 0.0087     | (0.0212) |
| MBS                               | -0.3419*** | (0.0226) | -0.2831*** | (0.0195) | -0.3673*** | (0.0302) |
| Weighted Average Life             | 0.0118     | (0.0116) | -0.0189**  | (0.0090) | 0.0136     | (0.0166) |
| Size                              | 0.2256***  | (0.0163) | 0.1720***  | (0.0191) | 0.3930***  | (0.0241) |
| Government Agency                 | 0.2790***  | (0.0748) | 0.6179***  | (0.1505) |            |          |
| Inverse Mills ratio ( $\lambda$ ) | 0.9512***  | (0.3407) | -0.6336    | (0.7398) | 0.5330**   | (0.2668) |
| Credit rating                     |            |          |            |          |            |          |
| AA+                               | -0.4740*** | (0.0324) | -0.3550*** | (0.0404) | -0.7110*** | (0.0965) |
| AA                                | -0.6057*** | (0.0189) | -0.4420*** | (0.0169) | -0.9643*** | (0.0429) |
| AA-                               | -0.5863*** | (0.0249) | -0.4395*** | (0.0165) | -0.9500*** | (0.0891) |
| A+                                | -0.6334*** | (0.0416) | -0.4836*** | (0.0502) | -1.0190*** | (0.0768) |
| A                                 | -0.6233*** | (0.0191) | -0.4689*** | (0.0183) | -1.0083*** | (0.0455) |
| A-                                | -0.5143*** | (0.0260) | -0.3681*** | (0.0279) | -0.9671*** | (0.1014) |
| BBB+                              | -0.5217*** | (0.0460) | -0.3709*** | (0.0305) | -1.0296*** | (0.1178) |
| BBB                               | -0.5514*** | (0.0257) | -0.3373*** | (0.0322) | -1.0683*** | (0.0540) |
| BBB-                              | -0.5210*** | (0.0176) | -0.3265*** | (0.0287) | -1.1041*** | (0.0794) |
| BB+                               | -0.4316*** | (0.0398) | -0.2358*** | (0.0473) | -0.9477*** | (0.1435) |
| BB                                | -0.3311*** | (0.0238) | -0.1344*** | (0.0403) | -0.8543*** | (0.0803) |
| BB-                               | -0.2975*** | (0.0324) | -0.1610*** | (0.0385) | -0.7167*** | (0.1119) |
| B+                                | -0.2876*** | (0.0859) | -0.1561**  | (0.0743) | -0.9681*** | (0.3317) |
| B                                 | -0.1903*** | (0.0508) | -0.0375    | (0.0510) | -0.8673*** | (0.1742) |
| B-                                | -0.3952*** | (0.0298) | -0.1788*** | (0.0443) | -0.9698*** | (0.1239) |
| CCC+                              | 0.3160     | (1.5413) | -0.7172*** | (0.0672) | 0.6647     | (0.7717) |
| CCC                               | -0.4857**  | (0.1994) | -0.3103*** | (0.0769) | -1.1900    | (0.7644) |
| CCC-                              | -0.6310*** | (0.0836) |            |          | -1.0952*   | (0.6002) |
| CC                                | -0.7890*** | (0.0844) |            |          | -1.2345    | (1.3228) |
| C                                 | -0.7587*** | (0.0978) |            |          | -1.1811    | (1.3052) |
| Controlled for                    |            |          |            |          |            |          |
| CRA Reported                      | Yes        |          | Yes        |          | Yes        |          |
| Market Area                       | Yes        |          | Yes        |          | Yes        |          |
| Originator Nation                 | Yes        |          | -          |          | Yes        |          |
| Year                              | Yes        |          | Yes        |          | Yes        |          |
| Obs.                              | 35,251     |          | 21,608     |          | 13,643     |          |

This table presents the Heckman's two-step model analysis of investment bank (IB) fees paid for ABS issuance. *IB Reputation* equals to 1 if an IB belongs to one of the top-tier banks, otherwise 0. *Spread* is the natural logarithm of the yield spread of a securitised bond at issuance. *Size* is the face value of a securitised bond and it is in the logarithmic form. *MBS* equals to 1 if the issue is backed by mortgages. *Weighted Average Life* is the natural logarithm of the total maturity of a bond. *Government Agency* equals to 1 if the ABS issued by one of the US government agencies (i.e., Freddie Mac and Fannie Mae). *Inverse Mills* ratio is the unobserved private information that can help understand the choice of matching between originator and issuer. *Credit Rating* is the rating assigned for a securitised issue at launch by one of the three big rating agencies. *CRA Reported* is the number of ratings obtained for a given structured bond at launch. *Market Area* is the country where the securitised bonds are sold for/at. *Originator Nation* is the country where the securitisation program takes place. *Year* is the year when the ABS is issued

\*\*\*, \*\* and \* indicate statistical significance at 1%, 5% and 10%, respectively

and Column 3, respectively. For the whole sample, we find that *IB Reputation* is positive and significant. It also carries a larger coefficient in comparison to our baseline results. Hence, these results confirm our earlier findings regarding the effect of *IB reputation* on fees. We also find a negative and significant coefficient for *Spread*. The coefficient of *IMR* is positive and significant, indicating that originators choose reputable issuers because of unobserved private information they possess and, therefore, are also ready to pay higher fees. The *IMR* coefficient also indicates that the baseline estimations may be exposed to selection bias. For the US sample (Column 2), we find similar results both for *IB Reputation* and *Spread*. It is worth to note here that in this model *IMR* is not significant, suggesting that self-selection bias may not be an issue for the US sample. For the European sample (Column 3), unlike the OLS estimates, we find *IB Reputation* to be positive and statistically significant. Given that *IMR* indicates the potential for selection bias in the OLS estimates, we can conclude that also in the European securitisation market reputable IBs receive higher compensation in comparison to other IBs. We do not find *Spread* to be statistically significant for the European sample.

## 5 Conclusion

This paper examines the relationship between IB reputation and fees paid in ABS issuance. We also investigate whether the initial yield spreads matter in determining the fee. To do so, we compile a large instrument level dataset of over 35,000 ABS issued between 1997 and 2018 in the US and the European market. We empirically model and estimate the initial pricing of ABS to gauge the value of IB reputation, controlling for a wide set of deal and originator characteristics.

We find that the reputation of IBs is influential in determining the compensation they are paid for their services in ABS issuance. On average, they receive 3.74% higher fees in comparison to other IBs. Moreover, our results show IBs' ability to obtain lower initial yield spreads for their originator customers. Hence, one plausible explanation of why originators choose to work with reputable IBs, and pay higher fees, could be the lower issuance cost in terms of lower yield spreads. Overall, our findings provide evidence to the arguments that reputable IBs with high market presence offer high-quality services and assurance to market participants (i.e., certification effect) leading to better deals. In return, they are able charge higher fees.

Based on our findings, we propose creating an annual ABS/MBS league table that can be used to determine IB service fees. This could incentivise IBs to deliver high quality service, thereby maintaining and enhancing their reputation. At the same time, the ranking could assist investors in mitigating information asymmetry within securitisation market.

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