

## **Preliminary Recommendation Regarding Investor Education Around Secondary Market Liquidity in the Corporate Bond Market for Retail Notes**

The Corporate Bond Transparency Subcommittee (“Subcommittee”) of the Fixed Income Market Structure Advisory Committee (“FIMSAC”) examines how pre-trade and post-trade transparency affect the corporate bond markets. Following extensive research, the Subcommittee found that secondary market liquidity in retail notes, such as InterNotes, is low in comparison to the liquidity in bonds issued by the same issuer to institutional investors. The Subcommittee recommends additional efforts to educate retail investors about the cost of secondary trades in retail notes, as described further below.

**Background:** InterNotes are corporate bonds that many issuers (See Figure 1) sell directly to retail investors, thereby allowing the investors direct access to primary transactions and allowing the issuers direct access to individual investors. Figure 2 compares the broad characteristics of InterNotes with institutional bonds. Another similar type of retail oriented bond referenced in Figure 2 are ‘Baby bonds’. These trade on the NYSE and are not further addressed in this note. InterNotes have several features designed to appeal to retail investors. These typically include:

- Regular issuance (typically weekly), priced at par.
- Yield enhancement due to a callable feature.
- A survivor option that allows beneficiaries of the original buyer to put the bond back to the issuer at par (under certain circumstances) following the death of the original buyer.

Prior studies have shown that secondary market trading costs of retail size transactions are significantly higher (about four times) than trading costs for institutional sized transactions on the same bond issue. Figure 3 provides transaction cost statistics for retail and institutional size trades over 2006-2016.

Similar to these studies, we find that the trading volumes and average trade size in InterNotes are much lower than that in institutional bonds of the same issuers (Figures 4 and 5), and trading costs are much higher (Figure 6). Moreover, as shown in Figure 7, the transaction costs for InterNotes are higher than institutional bonds of the same issuer even when we restrict the comparison to small retail sized trades (< \$100,000). We believe this may be due to the bespoke nature of InterNotes along with their lower issue sizes (Figure 8, typical issues have sizes in the millions compared to same issuer institutional offerings which are in the billions).

**Recommendation:** We feel it is important that investors in these notes fully understand the liquidity and other risks associated with them. The FIMSAC recommends that the SEC and FINRA educate retail investors on the uses, characteristics, and risks of retail notes. The initiative should identify the embedded issuer call option and survivor put options that are typical in these notes along with other options that may have an impact on the pricing of these notes. In addition, investors should be made aware of their lower secondary market liquidity compared to similar securities from the same issuer. These objectives might be accomplished through the issuance of an “Investor Bulletin.” FIMSAC leaves the final form as well as content of the education to the discretion of the SEC and FINRA.

Ally Financial
Bank Of America
Calvert Impact Capital
Capital Impact Partners
Caterpillar
Citigroup Inc.
Credit Agricole CIB
Credit Suisse
Deutsche Bank
Discover Financial Services
Dow Chemical
Farmer Mac
Federal Farm Credit
Ford Credit
GM Financial
Goldman Sachs
IFC
John Deere
Morgan Stanley
NRUC
Prospect Capital
Prudential
RBS
Societe Generale
TVA
Verizon
World Bank

Fig 1. InterNotes issuers. Source: Incapital.

## InterNotes / Baby Bonds – Summary of Market Statistics (2018 Data)

		InterNotes	Baby Bonds	Institutional Bonds
Primary Issuances	Amount <sup>1</sup> Outstanding	\$22B	\$13B <sup>2</sup>	\$5T
	Primary <sup>1</sup> Issuances	\$1.6B	\$1.3B	\$1.2T
	Denominations	\$1,000	\$25	\$1,000
	Investor Characteristics	Retail / Established Fixed Income Portfolio	Retail / New Fixed Income Portfolio	Institutions
Secondary Market	Average Daily Liquidity <sup>3</sup>	\$5M	\$34M	\$17.5B
	As % of Total Outstanding	0.023% <sup>4</sup>	0.260% <sup>4</sup>	0.350%
Example Bond Trading Data <sup>5</sup>	Notional Outstanding	\$207M - VZ 2047	\$1.3B - T 2066	
	3 Month Volume	\$28M	\$11M	n/a
	Number of Trades	711	30,273	

(1) – Sources: InterNotes - Incapital; Baby Bonds – Bloomberg

(2) – Corporate Senior Unsecured Notes with a \$25 Par value and tenors between 30 & 50 years

(3) – Sources: Institutional Bonds – Bloomberg; InterNotes – Incapital; Baby Bonds - NYSE

(4) – Trades executed via Incapital and NYSE only. Broker dealers who sell InteNotes also provide a source of liquidity to investors.

(5) – Sources: InterNotes – MarketAxess; Baby Bonds – Bloomberg. There are numerous CUSIPs with varying tenors and issuance sizes, resulting in varying liquidity characteristics

Fig 2. Characteristics of InterNotes, compared to institutional notes.

Table III  
**Estimates of Transaction Costs on Customer Trades: 2006–2016**

This table reports estimated one-way trade execution costs paid by customers in customer-to-dealer principal trades for the aggregate market, Top 70% and Constant Dealer samples described in Table I. Transaction costs are estimated following the regression-based model implemented by Bessembinder, Maxwell, and Venkataraman (2006). Small, medium, and large issue sizes are defined by \$500 million and \$1 billion cutoffs. “Young” refers to bonds that have traded less than one year. “Clicking” trades comprise trades in young, investment-grade, large issue bonds that are less than or equal to \$5 million. All other trades are categorized as “calling” trades. Percentages of total volume attributable to each size category are reported in italics.

	January 2006 to June 2007	July 2007 to April 2009	May 2009 to June 2010	July 2010 to March 2014	April 2014 to October 2016
	Precrisis	Crisis	Postcrisis	Regulatory	Volcker
Aggregate Market Sample	0.40%	0.65%	0.63%	0.47%	0.42%
Top 70% Sample	0.24%	0.45%	0.35%	0.26%	0.25%
Constant Dealer Sample	0.31%	0.56%	0.54%	0.43%	0.39%
By Trade Size: Aggregate Market Sample					
Transaction Cost (%): ≤\$100K	0.61%	0.89%	0.87%	0.69%	0.62%
<i>% of Total Volume</i>	<i>1%</i>	<i>2%</i>	<i>2%</i>	<i>2%</i>	<i>2%</i>
Transaction Cost (%): >\$100K & ≤\$1M	0.25%	0.47%	0.42%	0.31%	0.29%
<i>% of Total Volume</i>	<i>7%</i>	<i>9%</i>	<i>9%</i>	<i>9%</i>	<i>10%</i>
Transaction Cost (%): >\$1M & ≤\$10M	0.19%	0.33%	0.28%	0.21%	0.20%
<i>% of Total Volume</i>	<i>60%</i>	<i>60%</i>	<i>58%</i>	<i>61%</i>	<i>61%</i>
Transaction Cost (%): > \$10M	0.16%	0.29%	0.23%	0.18%	0.16%
<i>% of Total Volume</i>	<i>32%</i>	<i>29%</i>	<i>31%</i>	<i>28%</i>	<i>27%</i>
By Bond Characteristics: Aggregate Market Sample					
Transaction Cost (%): Investment Grade	0.36%	0.71%	0.65%	0.45%	0.38%
<i>% of Total Volume</i>	<i>58%</i>	<i>64%</i>	<i>68%</i>	<i>63%</i>	<i>69%</i>
Transaction Cost (%): High Yield	0.46%	0.50%	0.56%	0.51%	0.51%

(Continued)

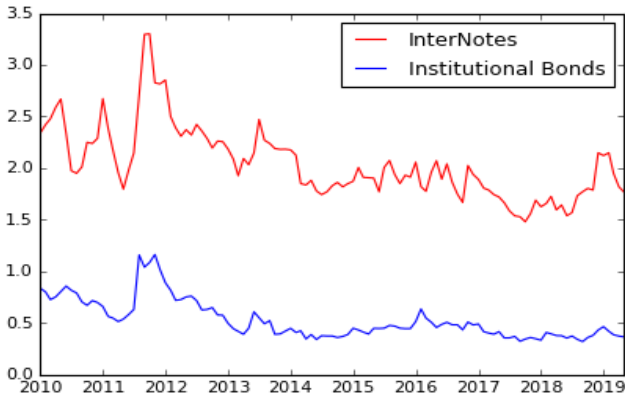
**Fig 3.** Comparison of transaction cost for retail vs institutional trades in corporate bonds. Source: Table 3 from Bessembinder, H., Jacobsen, S., Maxwell, W., and K., Venkataraman 2018, Capital Commitment and Illiquidity in Corporate Bonds, Journal of Finance, Vol LXXIII, No. 4, 1615-1661.

Age	Par Value in \$MM per Day		Number of Trade per Day		Par Value per Trade in \$	
	Customer Sell	Customer Buy	Customer Sell	Customer Buy	Customer Sell	Customer Buy
<=1yr	0.4	1.4	10	46	41871	31124
1-3yr	0.8	0.8	23	35	32918	21556
3-5yr	0.6	0.6	21	29	27473	19870
5yr+	0.5	0.5	25	31	21348	17238

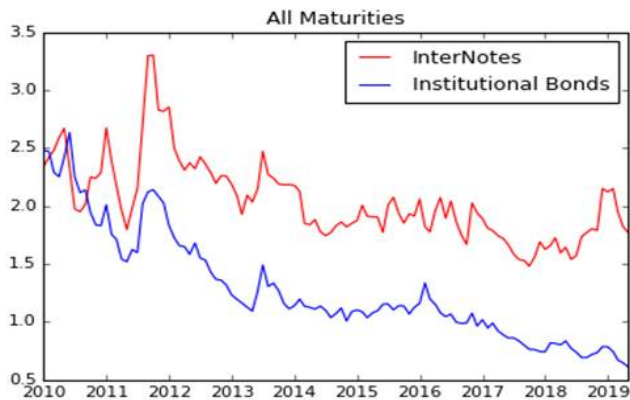
**Fig 4.** Daily trading statistics for InterNotes from 01/2010 – 05/2019. Source: Calculation based on TRACE database.

Age	Par Value in \$MM per Day		Number of Trade per Day		Par Value per Trade in \$MM	
	Customer Sell	Customer Buy	Customer Sell	Customer Buy	Customer Sell	Customer Buy
<=1yr	131	135	105	220	1.3	0.6
1-3yr	74	78	151	220	0.5	0.4
3-5yr	30	31	89	131	0.3	0.2
5yr+	27	29	108	110	0.3	0.3

**Fig 5.** Daily trading statistics for institutional bonds of the same issuers from 01/2010 – 05/2019. Source: Calculations based on TRACE database.



**Fig 6.** Average transaction costs for all InterNotes vs institutional notes from the same issuers from 01/2010 – 05/2019. Source: Calculation based on TRACE database.



**Fig 7.** Average transaction costs on InterNotes compared to institutional bonds of the same issuers from 01/2010 – 05/2019 (transactions < \$100,000 only). Source: Calculation based on TRACE database.

avg Issue Size	Institutional (in \$Bn)	InterNotes (in \$MM)
Overall	1.6	6.1
BAC	2.2	15.4
C	1.8	3.1
CAT	0.7	3.3
CS	2.0	1.5
DB	1.1	2.2
DE	0.6	23.6
DFS	0.7	3.5
DOW	0.9	4.6
F	1.2	10.3
GM	1.1	6.3
GS	2.3	8.7
MS	2.4	4.0
NRUC	0.5	3.4
PRU	0.8	20.3
RBS	1.7	3.8
VZ	3.4	11.3

**Fig 8.** Average issue size for InterNotes compared to institutional bonds from the same issuer from 01/2010 – 05/2019. Source: Calculation based on TRACE database.