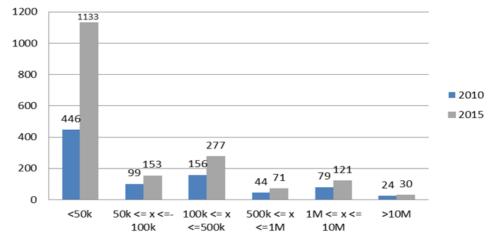
UNDERSTANDING ETF IMPLIED LIQUIDITY

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This blog post is relevant to institutional investors interested in trading exchangetraded funds (ETFs) in significant volume. Individual investors do not always have access to liquidity providers to trade ETFs as referenced below. The saying "Don't judge a book by its cover" can be applied to ETFs when discussing trading volume and liquidity. Oftentimes investors will rule out ETFs because they don't meet a certain average daily volume (ADV) threshold. This could eliminate from consideration hundreds of ETFs that could potentially be effective and impactful investment vehicles. Let's take a look at the ADV of all the U.S.-listed ETFs. As you can see in figure 1, more than half of the U.S.-listed ETFs in 2015 traded fewer than 50,000 shares a day, and only 151 funds traded more than 1 million shares. Many investors use 1 million shares as a volume threshold when surveying investment opportunities. By doing so, they are missing out on more than 90% of ETFs available. Figure 1: Number of Funds By Trading



Volume Bucket Source: Bloomberg, as of 12/17/15.

Introducing ETF <u>Implied Liquidity</u> ETFs are at least as liquid as their <u>underlying</u> <u>basket</u>, and there is a more accurate way for them to be measured than by the average daily volume of the ETF wrapper itself. ETF Implied Liquidity first looks at how many shares of each underlying component are in a <u>creation unit</u>. The final output assumes that if transacting in the underlying securities, how many ETF shares would that translate into while being no more than 25% of the 30-day average volume of any security in the basket. ETF Implied Liquidity is a conservative measure of what can potentially be traded in ETF terms based on the ETF's components, whereas average daily volume is historical. In order to effectively demonstrate the importance of implied liquidity, we can take a look at the <u>WisdomTree Japan Hedged Financials Fund</u>, DXJF. The 30-day average volume was 18,400 shares (as of December 16, 2015, per Bloomberg). If we judge this ETF solely by the average daily volume, it may get overlooked despite the fact that as of December 16, 2015, it had returned 11.64% since the beginning of 2015, and 27.37% since inception. But its implied liquidity for the same day was 1.6 million shares. That's a



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stark difference-18,400 shares versus 1,600,000 shares-especially in regards to evaluating the liquidity of an ETF. If investors can understand that the liquidity of an ETF lies in the components of the underlying basket, they can expand the realm of investment choices. Trading Large Blocks of Low-Volume ETFs In addition to liquidity misperception, many investors are worried about price impact on the ETF for a large trade size. Let's continue looking at DXJF as an example to see how large trade size can be executed without impacting the Fund. In figure 2 we see that on November 5, 2015, a 61,062-share block traded on the offer. That is more than three times the average daily volume! The client who initiated this trade was able to work with an ETF liquidity provider who had the ability to access other sources of liquidity to facilitate the block trade of 61,062 shares. ETFs with lower ADV typically execute in large size with minimal market impact through liquidity provider facilitation. This is the power of implied liquidity. Figure 2: DXJF Trades on 11/5/15

JF US Equity		Actions 🔹 97) Setting	s	Page	 Trade/Quote Reca
2 Trade Recap 3 Quote Recap rom 12:10:00 11/05/15 io 12:13:00 11/05/15 ioih 27:8396 Low 27.78					
Time BMM	KR E	Bid/Trd/Ask	E	Size (x100)	AMMKR Cond
				<min size=""></min>	
12:13:00	P	27.79/ 27.83	P	10×11	
12:13:00	P	27,70/27,83	P	13x11	
12:12:36	D	1 27.83		610.62	Т
12:12:27	ч	21	P	3811	
12:12:22		27.80/ 27.83			
12:12:22		27.80/ 27.83		3×1	
12:12:19		27.80/ 27.84		3x10	
12:12:19		27.81/27.84		3x10	
12:12:19		27.80/ 27.84		3x10	
12:12:19		27.81/ 27.84		3×10	
12:12:19		27.80/ 27.84		3x10	
12:12:19		27.81/ 27.84		3×10	
12:12:19		27.80/27.84		3x10	
12:12:19		27.81/27.84		3x5	
12:11:52		27.81/ 27.84		3x10	
12:11:52		27.81/27.84		3x5	
12:11:52		27.81/27.85		3x 6	
12:11:51		27.81/27.85		3×11	
12:11:51		27.81/27.85		3×6	
D Price: Best 0		ote. Previous Quote			Zoom 100

Source: Bloomberg as of 11/05/15.

Due to the importance of implied liquidity with regards to ETF selection and tradability, WisdomTree will begin making ETF Implied Liquidity information available daily on our website for all of our equity Funds. For an example of this powerful metric, see the <u>WisdomTree Japan Hedged</u> <u>Financials Fund, DXJF</u>. We do not want investors missing out on an investment opportunity because information was not widely disseminated outside of Bloomberg terminals previously. We want ETF investors to understand that the liquidity is available, and the 30-day average volume is not necessarily a true representation of the liquidity profile of an ETF. We hope that by providing this information, we are empowering investors and giving them the tools to make the best investment decisions.

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DEFINITIONS

<u>Average Daily Trading Volumes</u>: The average amount of individual securities traded in a day or over a specified amount of time. Trading activity relates to the liquidity of a security; therefore, when average daily trading volume is high, the stock can be easily traded and has high liquidity. As a result, average daily trading volume can have an effect on the price of the security. If trading volume isn't very high, the security will tend to be less expensive because people are not as willing to buy it.

Liquidity: The degree to which an asset or security can be bought or sold in the market without affecting the asset's price. Liquidity is characterized by a high level of trading activity. Assets that can be easily bought or sold are known as liquid asset.

<u>Average daily volume</u>: Average dollar amount traded over the course of a single trading day.

<u>Underlying basket</u>: Securities held by a fund to replicate an investment strategy or index.

<u>Creation Unit (CU)</u>: A specified number of shares issued by an exchange-traded fund (ETF) in large blocks, generally between 25,000 and 200,000 shares. The authorized participants that buy creation units either keep the ETF shares that make up the creation unit or sell all or part of them on a stock exchange.

Liquidity providers : Traders that facilitate the trading of ETF shares by conducting the transference of liquidity between the underlying basket shares and the ETF.

