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The really wise man knows that the unicorn, being no reality but a life-enhancing myth, must never be hunted, and may only be glimpsed by the well-disposed and the lucky; it cannot be captured, and it is encountered only by indirection. (Robertson Davies)

Liquidity premium: myth or reality?

The existence, magnitude, measurability and applicability of liquidity premia are currently the subject of a lively debate among practitioners, accountants, actuaries and regulators. The outcome of the debate will have an impact on the future price of certain financial products and the capital required to support them as well as, arguably, the cost of finance for firms selling illiquid debt through the capital markets.

What is liquidity premium?

The "liquidity premium" is a measure of the difference in price (or yield or expected return) between a liquid and equivalent illiquid asset. In other words, an asset (or asset class) which is costly to buy or sell and another asset which offers equivalent future cash flows in any possible state of the world, but with zero or negligible dealing costs. The cost of buying and selling the assets is different but all other economic characteristics are identical. The comparable liquid asset is normally chosen as either a traded highly liquid asset or a notional asset whose price is estimated using a model.

Both the terms "liquidity premium" and "illiquidity premium" are used and this can cause confusion. The fundamental point is that assets which offer trading liquidity (i.e. they are relatively cheap to buy and sell) will have higher prices than comparable assets with higher associated trading costs. This premium price is quite naturally described as a "liquidity premium". Note that if asset valuations are expressed in terms of yields, the illiquid asset will offer a higher yield than the liquid asset. This has caused some people to use the term "illiquidity premium". Although somewhat confusing, these terms are interchangeable when used in this context. The convention we follow is to refer to a liquidity premium (LP) in line with the idea that a premium price must be paid for liquid assets.

Does liquidity premium exist?

We believe the liquidity premium is no myth. There is a large body of theoretical and empirical evidence to support the view that liquidity premia are real and measurable. As part of our ongoing research into liquidity premia (LP) we have recently reviewed the published research on the subject – see our recent research report "Liquidity Premium: Literature review of theoretical and empirical evidence", September 2009¹. We focus on two questions: What is the evidence for LP? What methods are available for estimation?

1. Available from: http://www.barrhibb.com/documents/downloads/Liquidity_Premium_Literature_Review.PDF

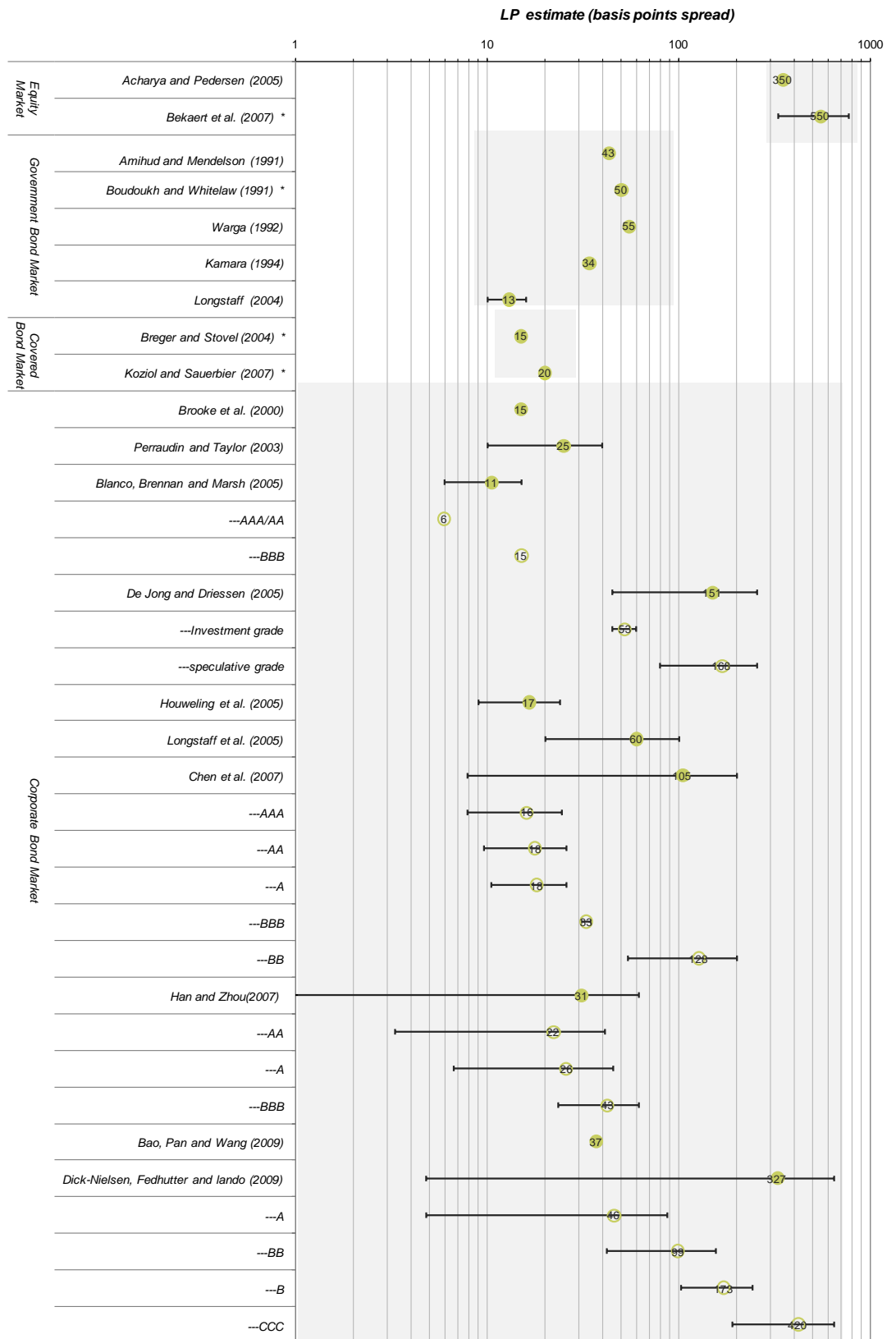
What is the consensus among researchers?

There is a truly vast research literature on the subject of liquidity premia and their estimation which has been accumulated over a period of more than 30 years. We have carried out an extensive (although not exhaustive) review of the literature and the consensus is clear - Liquidity premia do exist. They can be substantial and can vary significantly through time.

Whilst there may not be a generally acknowledged unique method for estimation there are number of objective approaches that have been used by researchers to understand and quantify the impact of liquidity on asset prices. For those interested in measuring the LP available in the corporate bond markets, there are a number of interesting strands to the research:

- *Microstructure approaches* provide worthwhile insights into why liquidity premia could and should exist in markets with trading frictions. Although they tend not to lend themselves well to empirical estimation, they do provide guidance on what fundamental factors should be linked to actual liquidity premia.
- *'Direct' approaches* (including the CDS-based 'negative basis' approach) involve choosing a pair of assets or asset portfolios which – other than liquidity – are assumed to be equivalent and then comparing prices, expected returns or yields.
- *Structural model approaches using the Merton model*. These are closely related to the direct method in that a corporate bond is compared to the cost of manufacturing an approximately equivalent synthetic position from a risk-free (liquid bond) and an option (or options) on the issuing firm's total assets.
- *Regression-based approaches* which typically regress one or more measures of asset liquidity and trading costs (whose choice is inspired by the microstructure literature) on observed asset prices or yields. Statistically significant regression coefficients are interpreted as providing an estimate for the 'pure' price of liquidity.

Estimates for liquidity premia are made at different times and for different points on the liquidity spectrum and vary between a few basis points in periods of stability for small liquidity differences to hundreds of basis points for highly illiquid assets in times of market distress. The figure below shows a range of estimates for different asset types (and estimated over different time periods) from a number of different research studies.



*Bekaert et al. (2007) analyse emerging markets, Joudoukh and Whitelaw(1991) study Japanese market data, Breger and Stovel(2004) and Kozial and Sauerbier (2007) analyse the German covered bond market (Euro). All other studies investigate US market data.

In CP40 paragraph D.17, CEIOPS says:

"Currently there is a suggestion from some undertakings that liabilities which cannot be surrendered should be considered as sufficiently illiquid and therefore the cash-flows of these liabilities could be discounted using a risk-free rate increased to allow for a "illiquidity premium". However, to date there is no generally acknowledged method which will derive the illiquidity premium in a prudent, reliable and objective way."

The overwhelming conclusion of researchers is that LP are entirely real, will vary through time and across asset type.

Just because they are hard to see doesn't necessarily mean we should simply conclude they are part of mythology.

Measurability

The quantification of liquidity premia at a specific point in time and for a specified portfolio of assets, remain contentious and creates technical challenges for firms and regulators. **The current consensus among** European regulators (CEIOPS) is to adopt a conservative position on this question and it is proposed that, because liquidity premia are difficult to estimate, they should be excluded from valuations². Whilst these estimation challenges do undoubtedly exist, as researchers have demonstrated, it is possible to generate estimates. We do not believe that the nature of the estimation challenge should be the reason for rejecting the use of liquidity premia in valuation.

The methods set out in our literature review appear to offer valuable information in assessing the level of liquidity premia at a point in time. These measures might be used individually or combined together. Regulators will clearly need to evaluate them against their own standards of reliability, objectively and prudence and compare this performance against the costs of removal.

Applicability

We acknowledge that a further practical issue concerns the circumstances in which a liquidity premium can be used in valuing liabilities. Our view is that this should be determined by the composition of the least-cost matching portfolio. If a firm can demonstrate that cash-flows are sufficiently illiquid and predictable to hold illiquid matching assets to maturity then it seems reasonable to recognise this in valuation.

Where next?

The overwhelming conclusion of researchers is that LP are entirely real. Long-techniques have been developed to estimate different points on the LP spectrum. These premia will vary through time and across asset types. This is no surprise given the different levels of liquidity offered by different assets. For the purposes of those concerned with valuation of illiquid (i.e. predictable) cash flows the remaining challenge is to distil this broad array of possible measures into practical and objective outputs capable of persuading a sceptical regulator to move from their current position. Just because liquidity premia are hard to see doesn't necessarily mean we should simply conclude they are part of mythology.

²See CP40 paragraph D.17.

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