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Investment Publications Highlights

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"Equities (Still) for the Long Run: A New Look at the Equity Risk Premium"

Michael W. Crook and Brian Nick, *Journal of Investing* vol 23, no. 1 (Spring 2014): 27–32.

The poor performance of equities during the 2000s and the lack of a simple, sound model for estimating the forward-looking equity risk premium have led investors to question the persistence of the premium. Michael Crook and Brian Nick, both of UBS, use the Shiller earnings yield and expected real bond yields to derive a reasonable forward-looking estimate for the United States.

At its core, the "equity risk premium" (ERP) is simply a measure of the excess return of stocks relative to bonds. References to the ERP, however, can mean many different things. One important distinction to make when discussing an ERP is whether the referenced bond return is for long-term instruments or shorter-term bills. Another crucial distinction is whether the ERP is historical or forward-looking. The historical ERP in a given market is straightforward to observe and serves as the basis for many asset allocation policies. In the United States, for example, stocks have outperformed Treasuries by approximately 6% per annum over rolling 20-year periods since 1926. In contrast, a widely accepted, forward-looking ERP has not emerged among investors despite its potentially significant implications for investment portfolios. The authors attempt to define such a measure in their paper.

One reason for the absence of a reliable, forward-looking ERP estimate is a lack of appropriate data. While the information needed to approximate an expected equity return has been available for a long time—the authors believe that inverting the Shiller P/E ratio, for example, is one acceptable method for doing so—estimating an appropriate bond return has historically been more challenging. Bond yields, while easily observable, cannot be compared to P/E ratios or earnings yields, since bond yields are nominal while P/E ratios and earnings yields are real. (The so-called Fed model of valuation has persisted for years despite making this fundamental error.) A proper bond yield estimate must subtract inflation expectations from nominal interest rates. Determining inflation expectations, however, is not straightforward. In an ideal world, yield differences between Treasury Inflation-Protected Securities (TIPS) and nominal Treasuries would be sufficient, but the relative historical illiquidity of TIPS adds a non-inflation-related influence to their yields.

The authors propose a model for ERP that uses recently developed data from Federal Reserve Bank of Cleveland to solve the problem of estimating inflation expectations, and thus the problem of estimating forward-looking real bond yields. The Cleveland Fed publishes a time series of inflation expectations dating to January 1982 that is based on inflation swap rates, nominal yields, and survey forecasts of inflation. To calculate real bond yields, the authors start with the nominal yields on either T-Bills or the longer-term Barclays Treasury Bond Index, and then subtract the expected inflation over the matching time horizon. For the equity component of the ERP, the authors use "Shiller earnings yield" of the S&P 500 as described above.

The authors' straightforward ERP estimate explains a considerable portion of realized equity returns relative to longer-dated bonds since 1982, with a correlation of 0.4 over ten years. The result is markedly better relative to shorter-term bills, with a correlation of 0.7 over ten years. Unsurprisingly, the model also indicates that stocks have rarely been as inexpensive relative to bonds as they are today, suggesting that a buy-and-hold US equity strategy will earn approximately 6% in excess of longer-dated bonds over the next ten years.

"Global Economics Weekly: Small Lessons from Big Crises"

Goldman Sachs, March 5, 2014.

Concern about a possible financial crisis within emerging markets has continued in recent weeks. Looking through history, Goldman Sachs' economics team argues that four common elements have preceded the most widespread and intense crises.

When trying to understand the potential risk of a financial crisis within emerging economies, it is especially helpful to look at three past crises: the Asian/EM crisis of the late 1990s, the global financial crisis, and, most recently, the Eurozone sovereign crisis. These three crises stand out in the sharpness of the growth collapse, the scale of damage to local banking systems, and the degree to which they appeared to threaten the global financial system. Despite the significant differences between these three episodes, they also feature similarities that are useful to recognize when assessing the risk of another crisis within emerging markets.

The first commonality between these three crises was the presence of asset pressure on levered balance sheets. All three were preceded by periods of loose lending standards that encouraged new forms of financing to spring up outside the traditional regulatory net. The assets that piled up on balance sheets were generally perceived to be safe and, in some cases, implicitly or explicitly guaranteed by governments (i.e., mortgage-backed securities, Greek sovereign debt). This "guarantee" fuelled banks' willingness to take on leverage against these assets and also generally led to low capital provisioning.

The second similarity between the crises was the presence of feedback loops that exacerbated the initial pressure on levered assets. In the case of the Asian/EM crisis, it was the unwillingness of lenders to provide liquidity to banks and corporations that had borrowed heavily in foreign currencies. In the global financial crisis, capital pressure led to credit restraint and asset sales, and in the Eurozone crisis, sovereign stress hurt bank balance sheets, which in turn added pressure back onto sovereigns. In almost all cases, uncertainty about exposures and how they would be treated also played a central role in exacerbating initial stress in the financial system.

The third commonality was a maturity mismatch in areas outside bank deposits, which created liquidity risk if short-term financing could not be rolled over. Because the liquidity problems lay in areas that were outside the conventional insurance and lender of last resort systems, existing mechanisms could not prevent the crises.

The fourth similarity was the inability or unwillingness of lenders of last resort to replace the lost liquidity quickly or to provide guarantees that might have halted withdrawals. In the Asian/EM crisis, local central banks were unable to provide liquidity due to a general lack of reserves. In the Eurozone crisis, the authority of the European Central Bank left national central banks unable to act independently as lenders of last resort to their own sovereigns and banks. And although the Fed ultimately extended emergency liquidity during the height of the crisis, it was only provided under extreme duress amid a near collapse of the global financial system.

Looking at the current state of emerging economies, asset exposure on levered balance sheets is a serious risk. Today, however, that risk comes less from mismatched foreign currency liabilities, and more from a rapid buildup in domestic credit, especially in China. Likewise, negative feedback loops will feature more of a focus on domestic credit channels than external ones. High inflation and weak currencies are

likely to pressure policymakers into tightening monetary policy, which will curb lending, slow growth, and create pressure on domestic assets, especially amid uncertainty about balance sheet exposures. In terms of maturity mismatch, today's EM banks have relatively limited reliance on non-deposit financing. Nonetheless, if increasing uncertainty causes healthy banks to become reluctant to lend to banks with funding needs, domestic credit provisioning may be disrupted even if the aggregate system is not short of funding. Finally, lenders of last resort today have relatively strong balance sheets to draw on, including high levels of foreign exchange reserves. Moreover, given that the riskiest debts are primarily denominated in local currency, central banks should theoretically be able to intervene effectively. The major challenges they will face are identifying the risky exposures and avoiding policy mistakes in dealing with them. ■