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Comment on Wayne Ferson and Campbell Harvey: Economic, financial, and fundamental global risk inside and outside the EMU

Anders Löflund*

This paper provides an in-depth analysis of global equity market risks in 18 developed stock markets during the 1975-1997 period. The authors test several conditional international asset-pricing models with important global risk factors. A key insight in these models is that assets, which are highly sensitive to non-diversifiable risk such as recession risk, should be rewarded with a risk premium (sell at a lower price). Conversely, assets that provide additional income in states of the world where marginal utility of wealth is high (typically in recessions) would be highly valued in the market place because they provide insurance against significant economic risks. The average risk premium might then even be negative; see, e.g., Merton (1973). But if investment opportunities are changing over time in a partly predictable manner, the asset-pricing model prediction must be conditional upon the current state of the world to be consistent with market efficiency. Trying to take advantage of the predictability of returns might result in a more risky consumption flow for investors, and hence lower their utility level. Equilibrium prices will then fully reflect the predictability given the conditional asset-pricing definition of investment (and consumption) risk. The paper tests a linear conditional multifactor asset-pricing model where time-varying expected returns depend on conditional factor risk premia and conditional factor sensitivities. Changing investment opportunities are modelled as linear functions of observable instrumental variables. So the model used is very general and flexible and allows the testing of several interesting hypotheses.

The main questions of the paper are:

1. How important is currency risk in the new era with the euro for international equity investors?

* *Professor at the Swedish School of Economics and Business Administration, Helsinki, Finland.*

2. Is price-to-book a unique source of risk or does it merely reflect general macroeconomic risk (*recession risk*) in some way?

In fact, the paper considers price-to-book as a risk factor and as a local and/or global instrument. That is, it functions as an indicator of future investment opportunities or risk level (factor sensitivity as a function of price-to-book).

The paper contributes in significant ways to the international asset-pricing literature. The authors find that three global risk factors determine expected stock market returns: the world market return and the Japanese yen and euro currency factors. Interestingly, significant events associated with the EMU process have not affected stock market risk exposures (Figure 2). While average currency risk premia are close to zero, they display significant time variation, which suggests that investors should monitor currency risk in their dynamic global investment strategies.

The price-to-book factor is also a significant global risk factor but seems largely accounted for by the alternative world economic risk factors; world inflation and yield curve shocks, as well as changes in oil prices and world industrial production. Evidence is also presented that time-varying risk is due to variation in price-to-book. Together, these results support a rational resolution of the well-known value-glamour anomaly (low price-to-book stocks significantly outperform high price-to-book stocks even when market beta is accounted for): betas are negatively (positively) related, especially to world price-to-book (book-to-price) over time. That is, instead of killing the market beta—in the sense of Fama and French (1992)—price-to-book may be an important instrument that captures significant time variation in the market betas.

The analysis is very carefully done and several possible specifications of the model are tested and compared to each other. The data set is quite comprehensive. An interesting extension of the model would be to include a global size factor. But this may not be feasible with index-level data. Also, implementing portfolio strategies on an index level would probably pose some practical problems for global investors unless there is either low tracking-error index funds for specific stock markets or derivatives markets for local stock market indices (which probably do exist in late 1990s). A sub-sample split of the results would be interesting in order to see whether the role of price-to-book has stayed the same from year 1975 up to 1997. For

example, the small-firm effect seems to have diminished greatly in the 1990s.

Although the paper does include a monthly world industrial production factor, a further test from Lakonishok, Shleifer, and Vishny (1994) would be interesting to settle the value/glamour anomaly:

- Are value countries (low local price-to-book) actually hit worse by global recessions and/or financial panics than high price-to-book countries?
- Are currency risk premia particularly high in these instances?

The paper does show that country-specific risk exposures are not significantly higher at important EMU event dates.

A final comment relates to the highly persistent instruments, which typically best predict returns. High persistence explains why even quite low R^2s, in monthly return regressions, still may be economically important at longer horizons: the slowly reverting persistent instrumental variables seem to indicate the direction of the returns when cumulated over longer horizons. But from a statistical viewpoint, (almost) non-stationary regressors are used. This raises the question: How sensitive is the model to the exact definition of the instruments? The relationship between return predictability and the stationarity of the predicting variables is an interesting area for future research.

In summary, the paper provides an excellent account of important aspects of risk in global equity investing. Investors worry about global economic shocks as captured by the world market return, currency factors, and either price-to-book or a limited number of macroeconomic risk sources. Price-to-book is shown to be overshadowed by the world economic risk factors but plays an important role as an indicator of varying market risk (beta).

References

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