

Letter

Reply to a letter on 'Gold Shares versus krugerrands'

For assets in a well-diversified portfolio in a competitive market the finance literature generally accepts the applicability of the Capital Asset Pricing Model (CAPM) for measuring the relationship between their risk and expected return. This model expresses the expected return on such an asset (gold or gold shares in this case) as a linear function of market-as-a-whole related risk (β) i.e. the part of total risk (measured as the variance of returns) that is market correlated.

For exactly the reasons Dr Pouris has mentioned, the β of physical gold may well be expected to be negative as movements in the market may be expected to be associated with contrary movements in the price of gold. Thus, expected excess returns on gold may be negative but this disadvantage is offset by the enormous hedging potential of an asset negatively correlated with the market. The standard risk (variance of returns)/return framework thus deals perfectly adequately with an asset such as gold, quite the opposite from what Dr Pouris states, viz. 'Using the variability of returns as a risk surrogate, is a useful exercise only under the restrictive assumption that investors are interested only for stable and high returns.'

Dr Pouris feels there are other factors (which he calls risks) which should be incorporated into a comparative analysis of assets. There is, in fact, a considerable

literature which has examined the possible inclusion of other factors into the CAPM. With reference to Dr Pouris's comments, Litzenberger & Ramaswamy (1979) have considered an extended model which includes the effect of differential tax rates on capital gain and dividends; Tinic (1972) has considered whether asset liquidity is a significant factor in an extended CAPM. Neither study could reject the CAPM null hypothesis for assets on the New York Stock Exchange.

I do believe, however, that in the South African market the existence of exchange control provides a case for arguing a negative liquidity effect for krugerrands *vis-à-vis* gold shares. That is, holders of physical gold will accept a lower than CAPM expected return because of the liquidity (foreign exchange) advantages.

An issue relating to this which I find most interesting is that the premium of gold share prices locally (relative to London prices) is presently considerably higher than the premium for krugerrands. For gold shares the premium is about 2,5 (the inverse of the financial rand discount); for krugerrands it is considerably less (about 1,4).

References

- Litzenberger, R.H. & Ramaswamy, K. 1979. The effect of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence. *J. Fin. Econom.*, vol. 7, 163-195.
- Tinic, S.M. 1972. The Economics of Liquidity Services. *Quart. J. Econom.*, vol. 86, 79-93.

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