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1 Q. Reference: Dr. Booth's Evidence, Page 43, Line 27 to Page 44, Line 5

Please explain the theoretical basis for the Conditional CAPM. Please provide any academic literature that supports the use of the Conditional CAPM to adjust for the artificially low interest rate environment that has been created by monetary policy.

7 8 A. The foundation are the two papers by Paul Samuelson and Robert Merton in the 9 Review of Economic and Statistics (August 1969) who both derived a multi-period 10 asset-pricing model. Both are Nobel prize winners and Merton showed in continuous time and Samuelson in discrete time the restrictions required to generate 11 12 the single period CAPM in a multi-period asset-pricing model. One of these 13 restrictions was that the risk free rate has to be non-stochastic. Otherwise, the CAPM 14 changes with changes in the risk free rate and individuals hedge against these 15 changes. Other parts of the opportunity set also have to evolve in a non-stochastic

manner.

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