principal components analysis.

3. Produce separate individual forecasts of each of the Z_{t+1} , that is measures of $\mathbb{E}_t[Z_{t+1}]$.

2. Reduce this set of factors to a few dominant components, Z_{t+1} , using

1. Start from a set of pricing factors F_{t+1} .

4. To measure the conditional expected factor returns, apply these forecasts to factors using their loadings on the dominant components.5. To engage in factor timing or estimate the SDF, use these forecasts to construct the portfolio given in Equation (10).