Let $f$ be the price of a derivative contingent on the stock price process
\[ dS = \mu S dt + \sigma S dz. \]
Portfolio $\Pi = h(f, S)$ satisfies
\[ d\Pi = h_1 df + h_2 dS, \]
where
\[ df = (\mu f S + f_t + \frac{1}{2} \sigma^2 f_{SS} S^2) dt + \sigma f_S S dz. \]
The multiplier of $dz$ in $d\Pi$ is zero only if
\[ h_1 f_S + h_2 = 0. \]
Thus $h(f, S) = \text{const}$, showing the nonexistence of risk-neutral measures.