Strange stochastic portfolio theory in infinite dimensions

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ABSTRACT

Strange stochastic theory has never been used to model investment portfolios (do not even think about infinite dimensions) but who cares – it is just an example. They have even not been rigorously defined in literature. Some hints and intuitions were given in my recent work of [2]. Anyway, we can warmly think about strange stochastic portfolios that could be defined like [1] did it in case of strange options\textsuperscript{a}, i.e.

\[ d\text{strange}_{\text{portf}}(t) = (\alpha_t + \text{strange}_{\text{portf}}(t))dt + \beta_t dw_s(t), \]

where $w_s$ is Strange motion.

\textsuperscript{a}By the way, they have never been defined either.

References
