Threshold concepts in finance: the role of mathematics

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Threshold concept theory proposes that there are a limited number of transformative concepts that are central to the mastery of any discipline (Meyer & Land, 2003, Cousin, 2006). Research into threshold concepts in finance is limited to the work of Diamond (2011, 2013) and Diamond and Smith (2011) in relation to quantitative finance and business statistics.

We report on a broad project to investigate staff and student perceptions of threshold concepts in finance, with the aim of improving curriculum design and identifying specific pedagogical practices for teaching threshold concepts in order to improve student engagement and outcomes. The particular focus of this part of the project is the investigation of mathematical and statistical threshold concepts in finance programs.

The project combines qualitative and quantitative methods in the collection and analysis of primary data from finance staff and students. Initial findings indicate a degree of ambiguity in relation to the role of mathematics in the finance curriculum. Threshold concepts offer a way to be specific and explicit about the role of mathematics in finance and address this ambiguity.