Mortgage Risk Segmentations

An international bank, worried about future rises in variable interest rates, approached 2OS to help identify the customers most at-risk within its home loans portfolio. The client wanted the 2OS team to build out a risk segmentation along with contact and offer strategies for each segment.

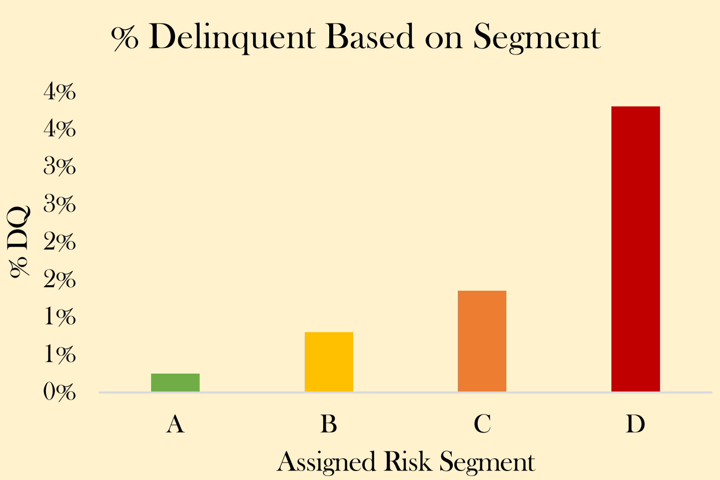
Analysis of US housing data

As the client's portfolio had never experienced major jumps in interest rates, 2OS first used publicly available data from the 2008 US Housing Crisis to identify key risk splitters. Each variable was examined univariately, as well as in conjunction with payment shock amount, to determine how loans performed especially when hit by increases in monthly payment.

Application to client data

Using the insights the US data provided, 2OS approached the client's portfolio with potential segmentation variables. Further analysis of client data refined those variables and assigned scores to each cut to create a segmentation with multiple variables as inputs and four segments as outputs.

Segmentation Output



Segment D (the highest risk bucket) of the created segmentation displayed **14x** more risk than segment A (the lowest risk bucket) when averaging across multiple performance windows, with risk sloping and key variables rank ordering across all four segments.

2nd Order solutions

*Note: data shown is illustrative data that is representative of actual client data