Risk Profiling Case Study

Jean is a 50 year old single professional planning for her retirement. Her risk tolerance score is 56 out of 100 and her current portfolio has a risky asset exposure of 57%. The balance of 43% is held in cash and term deposits.

Jean has $500,000 in super and plans to retire at 60. She believes she can save a further $20,000 each year. To reach her goals, you advise her that she will need to be pretty fully exposed to equity markets and suggest a portfolio with 86% in shares, property and other growth or risky assets. To keep matters simple, we will assume that she can afford to live with the volatility of that portfolio. Hence, the target portfolio that's most likely to meet her needs in good times, and bad, is 86% growth asset exposed.

Jean's current portfolio, 56% growth (risky) assets, is comfortably within her preferred (green) risk zone, as the illustration below shows. But her target portfolio, with 86% growth assets, at this stage of the planning process, is well outside her natural preferences and is deeply in the red. So how to advise her?

Comparing Jean's asset allocation consistent with her risk tolerance with that needed to meet her needs.

Growth Assets	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Worst Fall	7.0%	8.1%	13.3%	13.9%	19.1%	21.0%	26.1%	31.3%	36.0%	41.5%	46.3%
Best Rise	42.9%	31.7%	32.4%	107.2%	124.7%	136.6%	140.2%	63.0%	127.3%	70.7%	76.3%
10yrs Real Annualised Return	4.4%	4.9%	5.3%	5.6%	5.9%	6.2%	6.5%	6.8%	7.1%	7.3%	7.5%
10yrs Real End Value of $1,000	$1,597	$1,667	$1,730	$1,771	$1,834	$1,888	$1,950	$2,014	$2,074	$2,132	$2,182
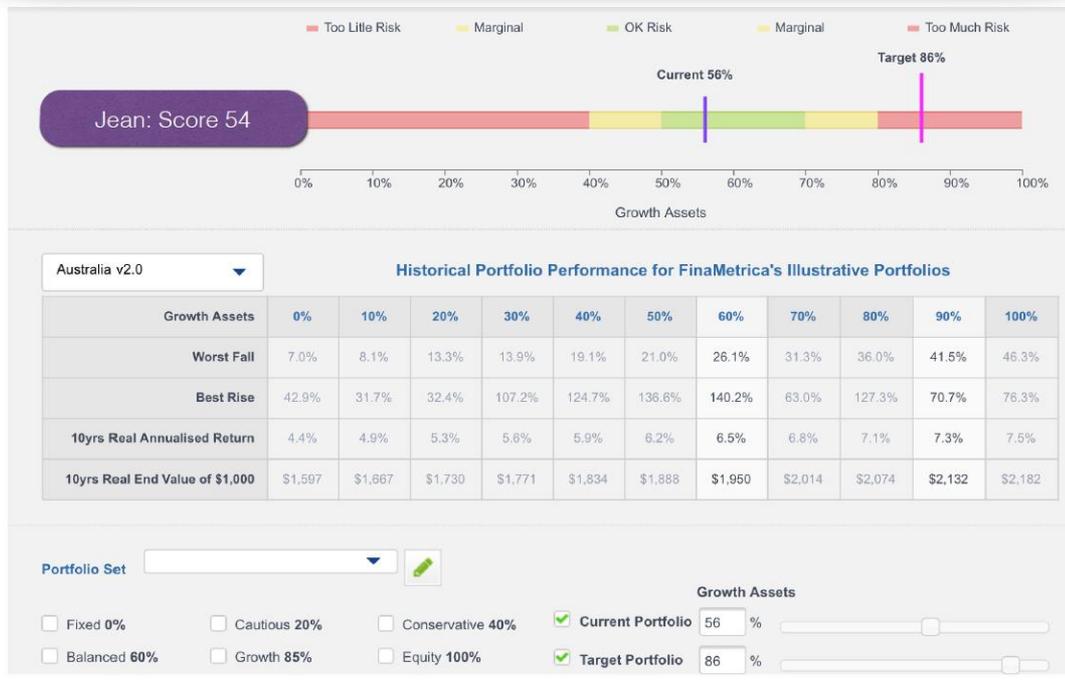
History has shown that the higher exposure to growth assets in a portfolio the further it drops in a correction. And the greater a portfolio falls, the slower it generally is to recover. If we look at the history of the two portfolios we can see the following:

Comparison of the ten biggest falls between Jean's current and target portfolios

A 60% growth portfolio shows a drop of 25.5% and top to bottom and return of 33 months.

A 90% growth portfolio on the other hand shows a drop of 41.5% and top to bottom and return of 65 months.

Her adviser should walk Jean through the historical range of portfolio losses and recoveries. Jean should be challenged to think about how she might feel if somewhere in the future her then $600,000 portfolio dropped to near $450,000 over a 20-month period.

Alternatively, would she be significantly more anxious if her portfolio dropped to $350,000 over a shorter16-month period? Recovery timings are significantly different in each. The more growth-oriented portfolio took over four years to come back to its original nominal value, while the 60% growth asset exposed portfolio recovered in a more sprightly 13 months. How did she think she might respond over the 49 months while her portfolio clawed its way back to its original high? And of course it's worth pointing out that while these were the biggest drops for each of the two portfolios, they actually occurred more than 30 years apart. One was in response to the 1973 Oil Crisis. The other is the more recent GFC of 2008. Clearly asset mixes play a role in performance.

The numbers in this example are based on simple accumulation indexes. They are idealised. They don't take into account fees, taxes and other frictions.