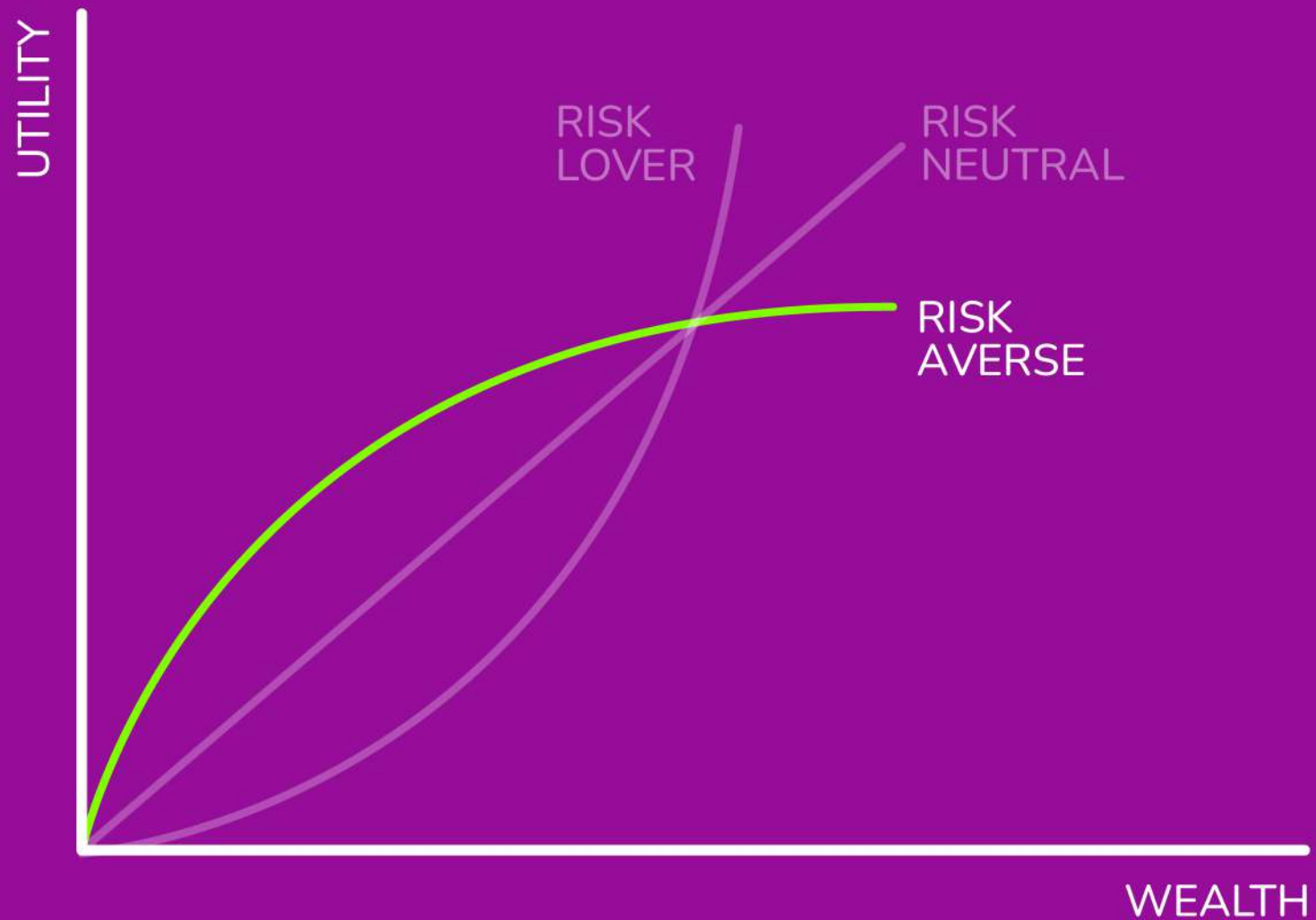


RISK AVERSE PERSON

UTILITY AND RISK
PREFERENCE

1 / 3

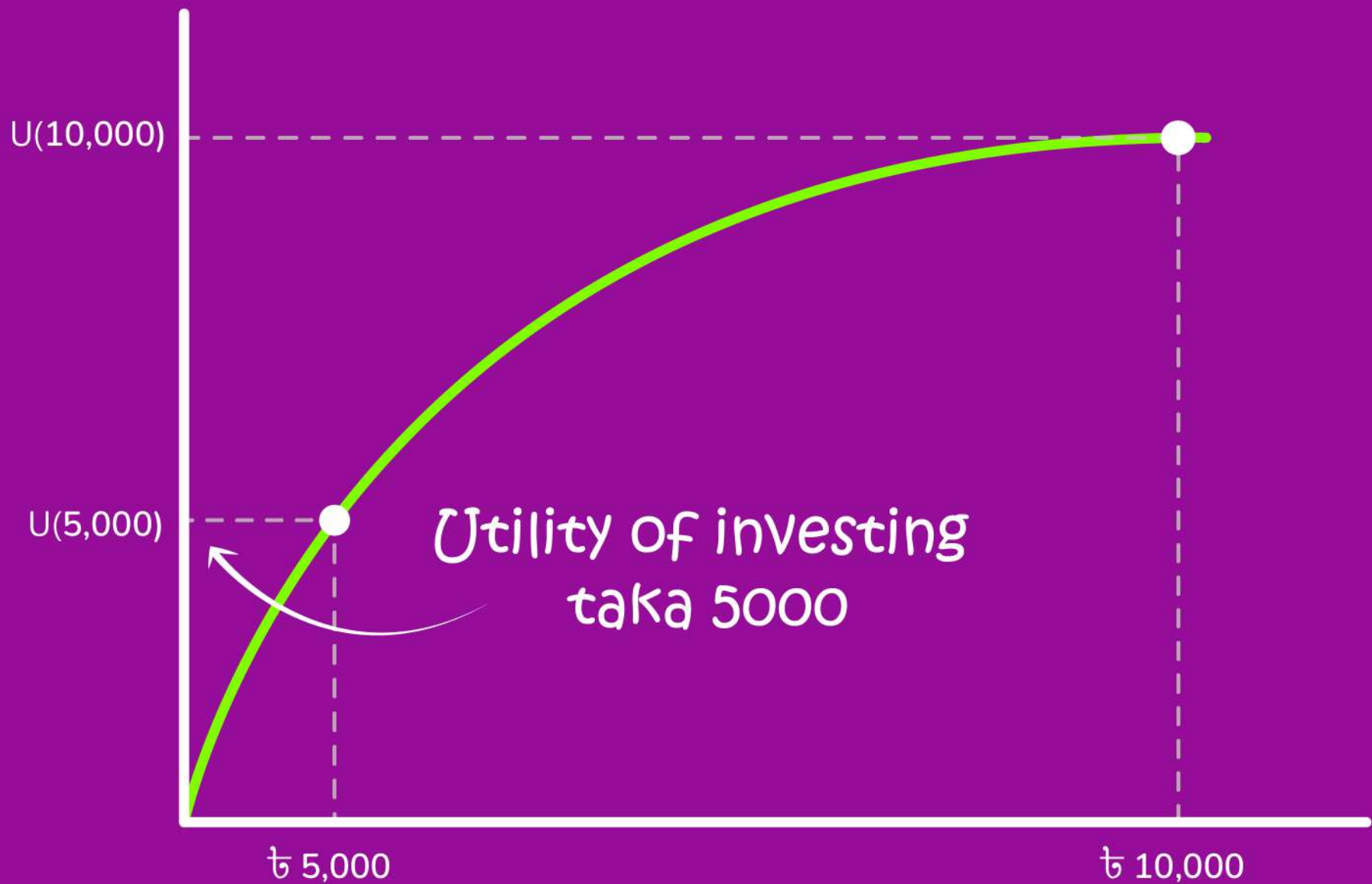


A Risk Averse person is going to exhibit a diminishing marginal utility of wealth.

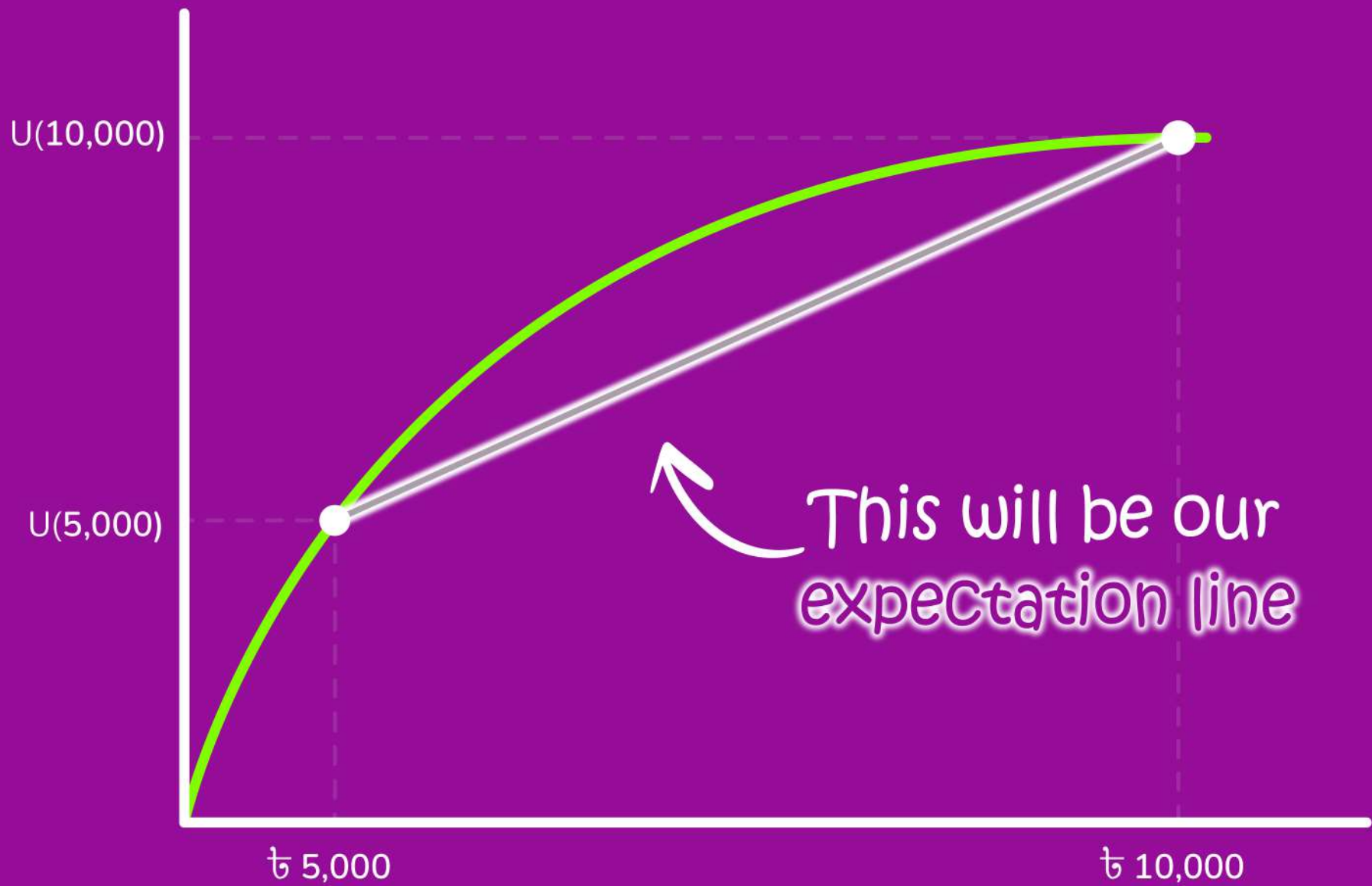
In other words, as their wealth increases, their utility increases at a decreasing rate

Let's take a look at an example...

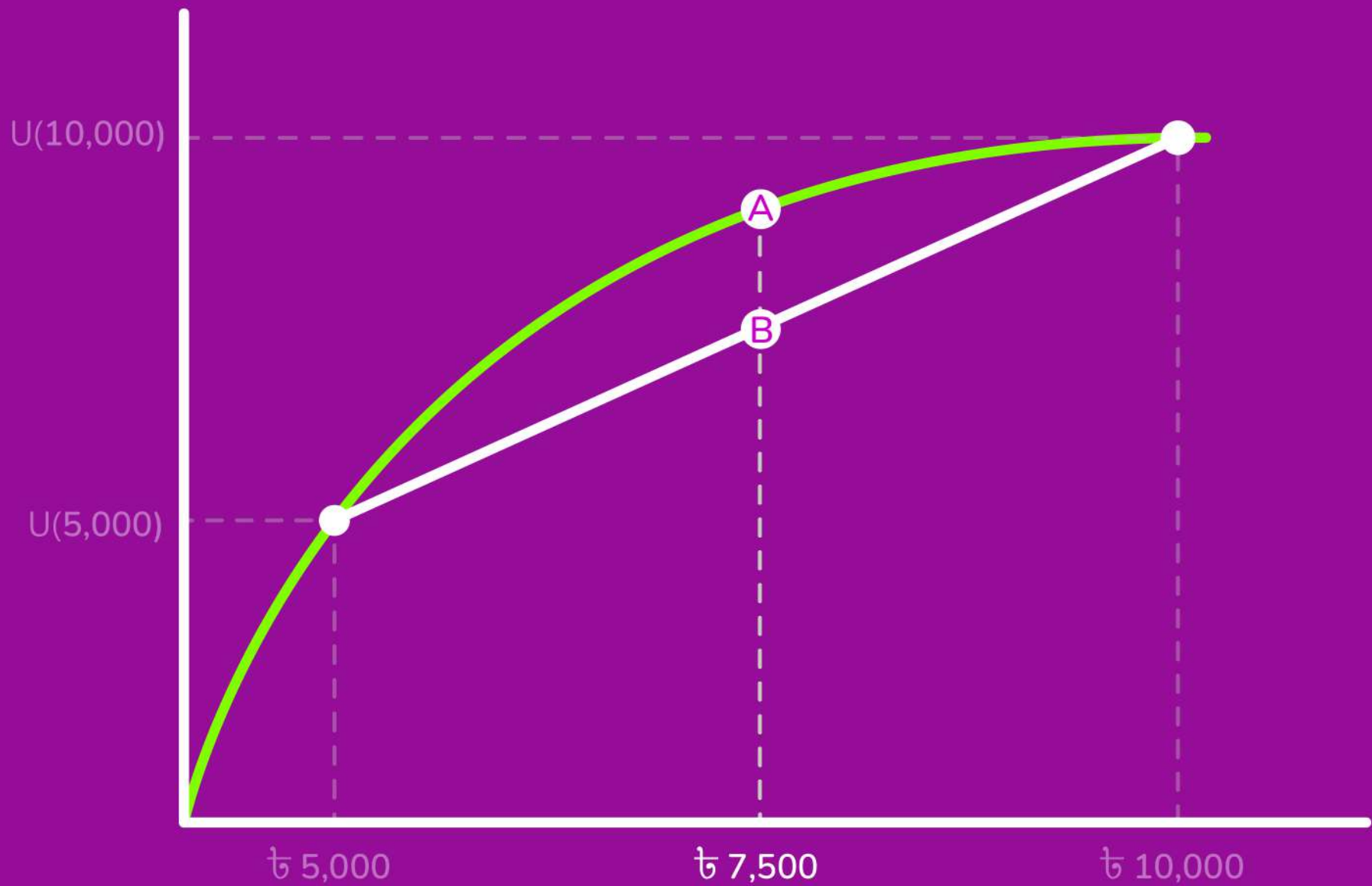
Consider a gamble where an investor has a 50% chance of winning 5000 tk and a 50% chance of winning 10000tk.



Utility of investing taka 5000 and 10000 is $U(5000)$ and $U(10000)$ respectively

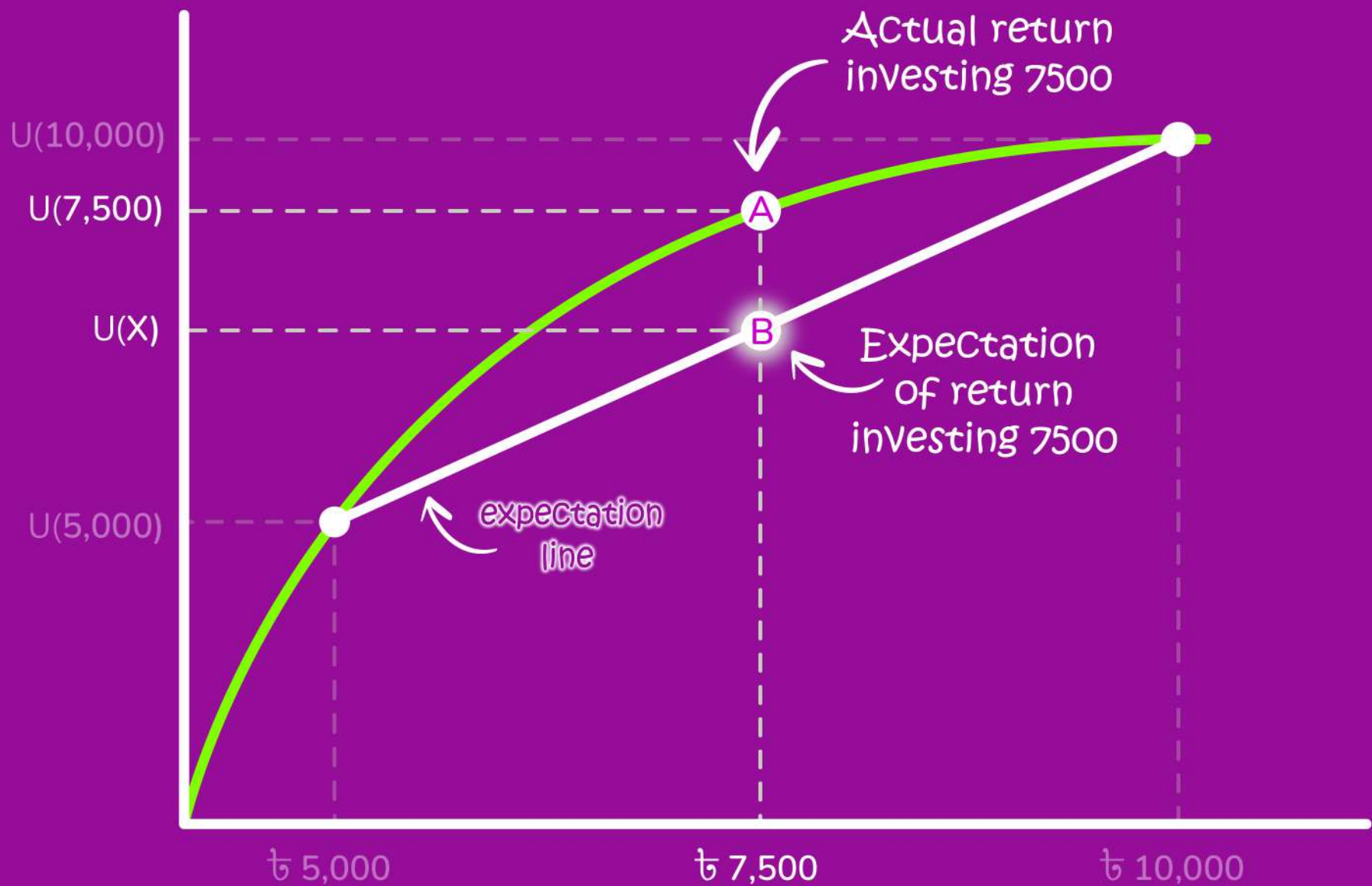


Connecting this two point of the curve we
get the EXPECTATION line



Here 7500 taka is the expected value or the average of two options 5000 and 10000 taka

$$50\% \text{ of } 5000 + 50\% \text{ of } 10000 = 7500$$



Expected Utility

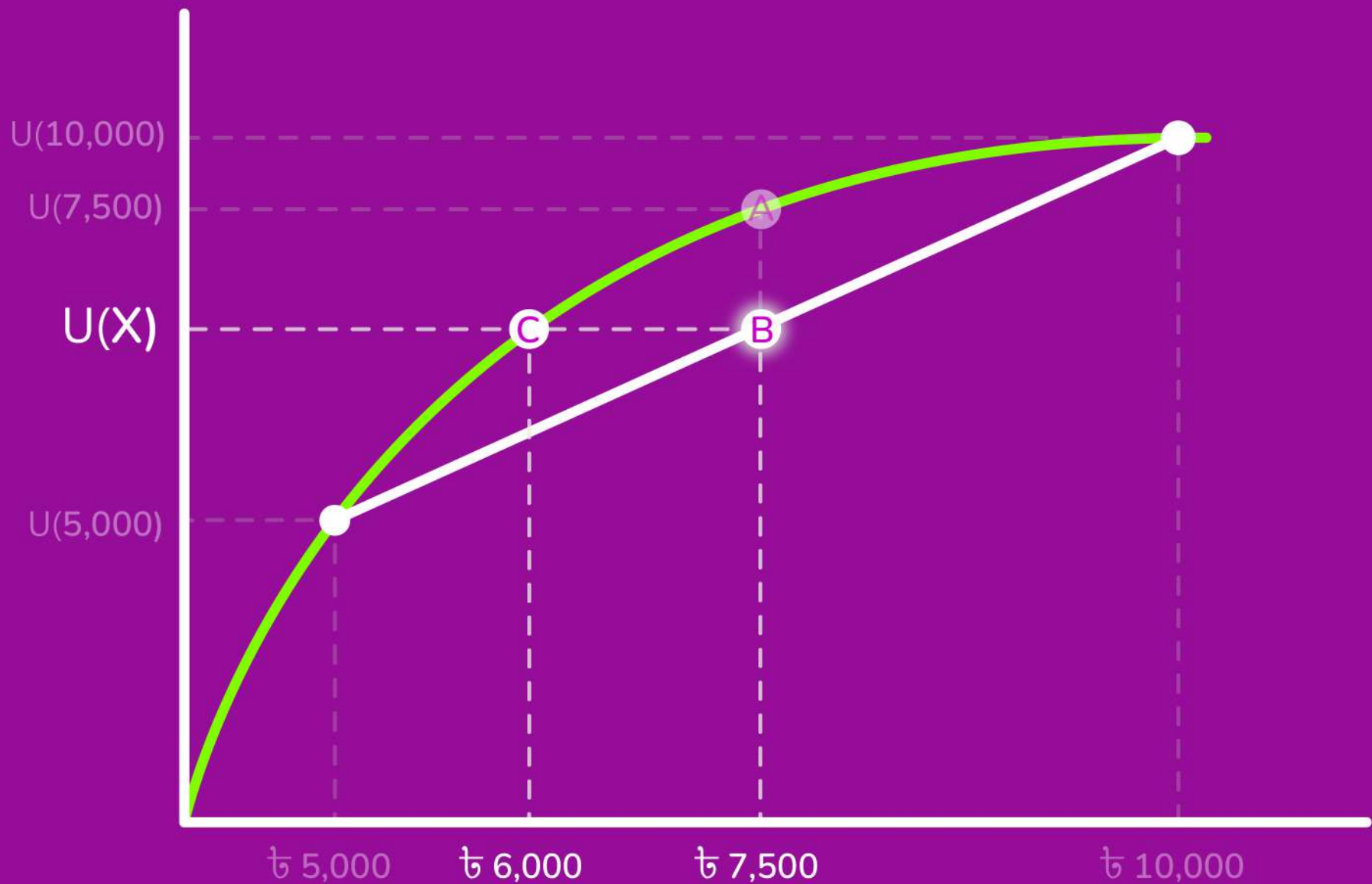
B



Actual Utility

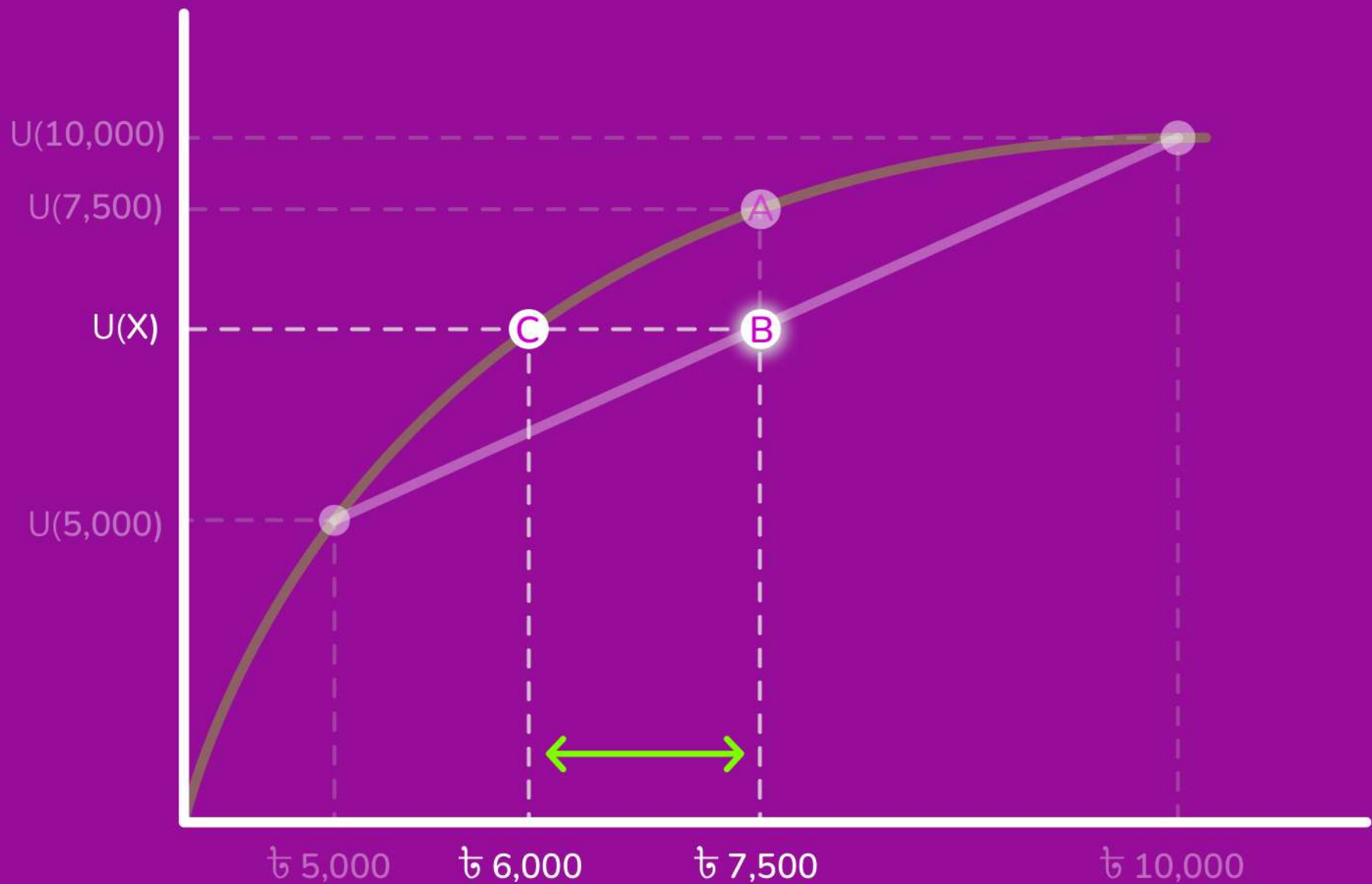
A

As the investor is reluctant to take risks under uncertain circumstances, he assumes that investing 7500 taka will give him a lesser utility (B), but that may not be the actual case.



$U(X)$

The utility he **expects** for 7500, is the **actual** utility of investing 6000 taka. Both point B and C shares the same utility $U(X)$



The level of utility he **expects** to achieve investing 7500 is **actually** possible to get by investing only 6000! The investor is underestimating his possibilities of investing.

Risk preferences plays a significant role in many areas of decision-making , and individuals attitudes toward risk has implications in both research and policy suggestions.



We can use the insight to analyse different scenarios in Finance and Economics. For example, in ‘Implicit Wage Contract Theory’ risk averse workers show a concave utility function like the one we have seen earlier.

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