Net Present Value: First Principles of Finance

What role do Financial Markets play in Investment and Financing decisions?

Financial Marketplace

- Anonymous Financial Markets
  - allow individuals/corporations with differing consumption choices to economically coexist
  - create financial instruments at *prevailing market clearing rate*

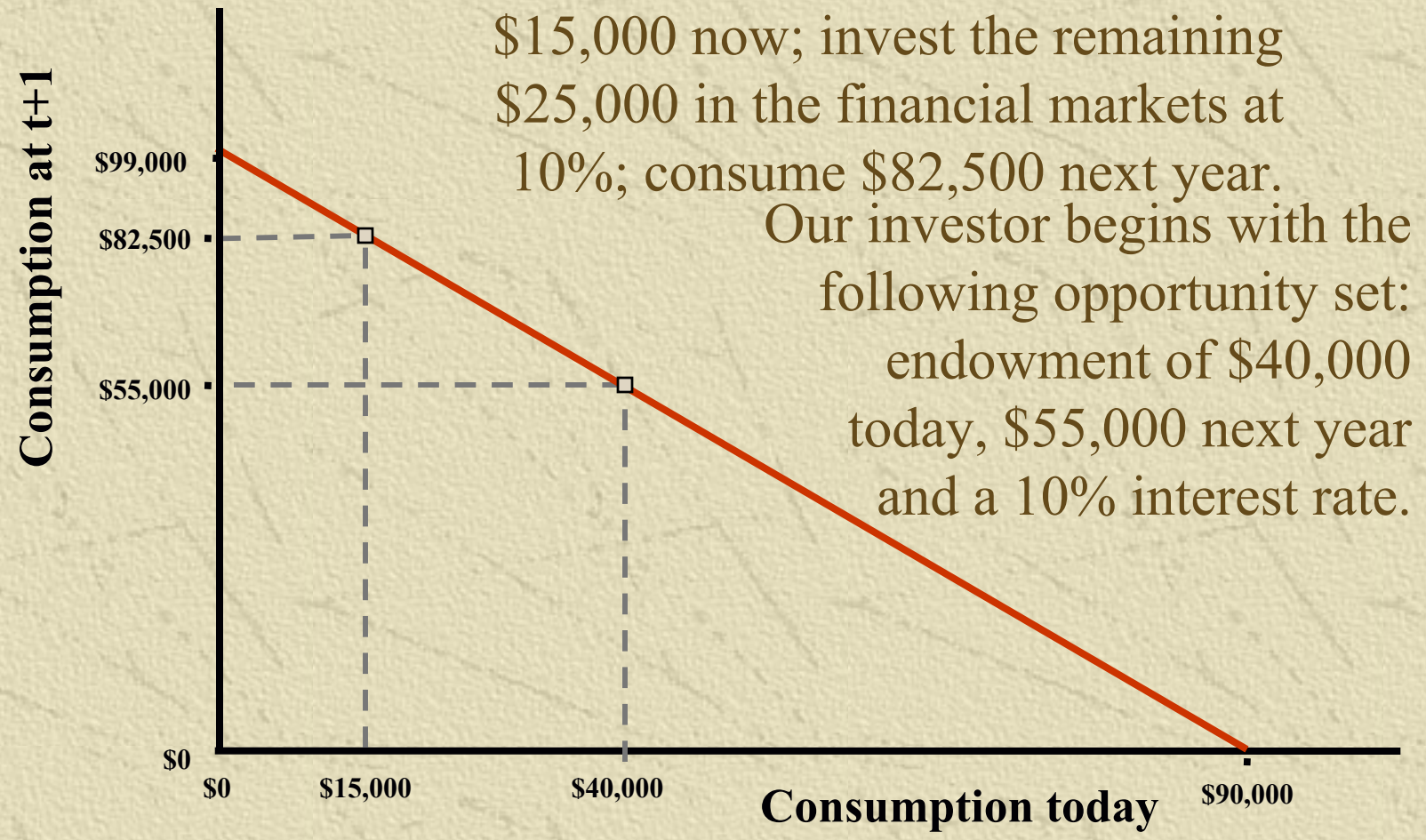
E.g., of Intertemporal Consumption Opportunities

- e.g., Current income: $40,000
  Next year's income: $60,000
  - I/Rs = 15%
  - What is the maximum I can consume this year?
  - What is the maximum I can consume next year?
  - If I want to consume equal amounts @ year?
  - If I/Rs go up to 20%, what would be my most likely consumption response?

Investment Decision

One choice available is to consume $15,000 now; invest the remaining $25,000 in the financial markets at 10%; consume $82,500 next year.

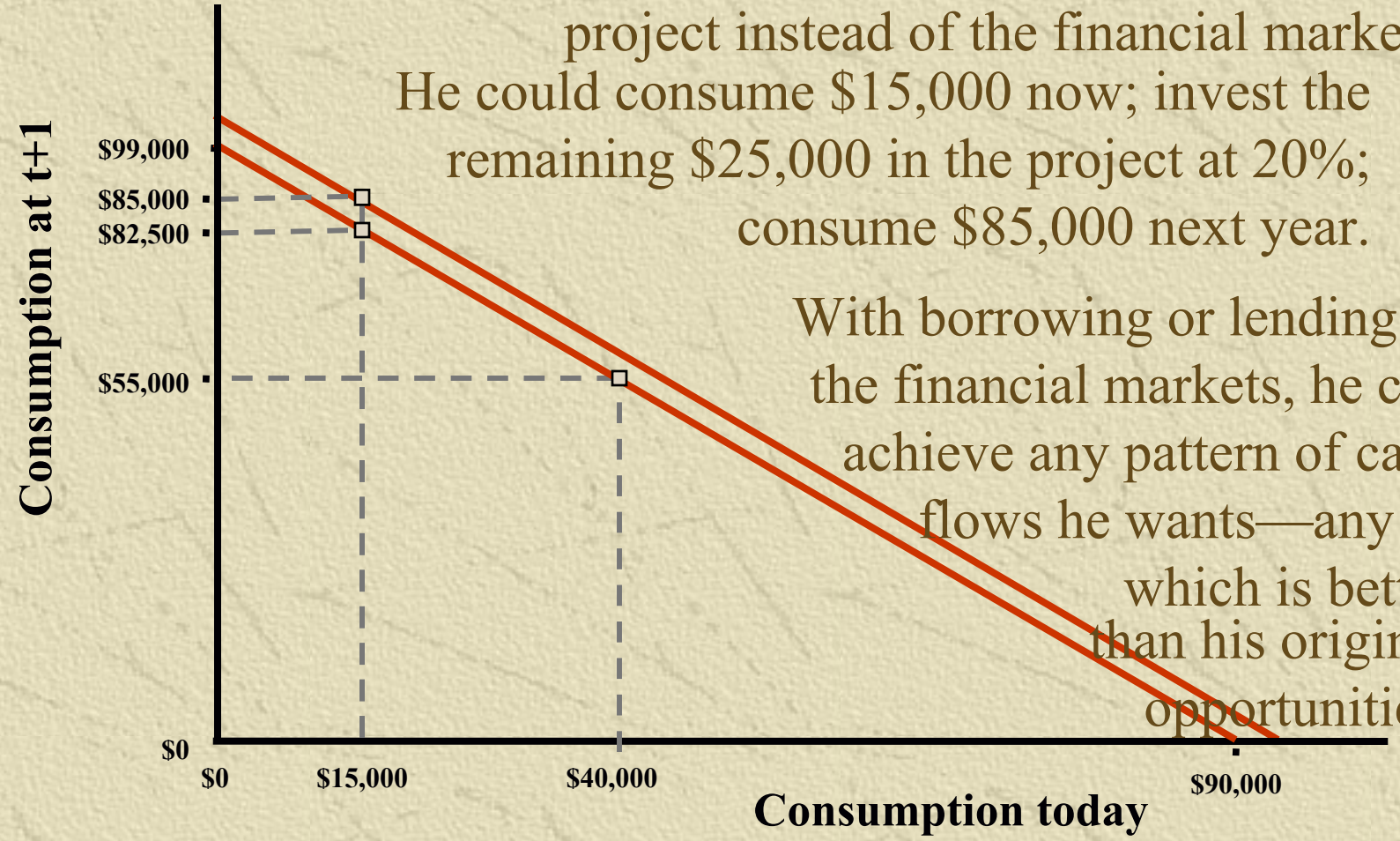
Our investor begins with the following opportunity set: endowment of $40,000 today, $55,000 next year and a 10% interest rate.



Investment Decision-- Contd.

A better alternative would be to invest in the project instead of the financial markets. He could consume $15,000 now; invest the remaining $25,000 in the project at 20%; consume $85,000 next year.

With borrowing or lending in the financial markets, he can achieve any pattern of cash flows he wants—any of which is better than his original opportunities.



Investment Decision-- Contd.

Note that we are better off in that we can command more consumption today or next year.

