Consumption

More on the Life Cycle

	(1)	(2)	(3)	(3)
(1) Initial Assets	0	120,000	60,000	60,000
(2) Interest Income	0	60,000	30,000	30,000
(3) Financial Net Worth	0	180,000	90,000	90,000
(4) Wage Income	0	300,000	630,000	1,260,000
(5) PV of Wage Income	480,000	720,000	630,000	1,.260,000
(6) Wealth	480,000	540,000	540,000	1,170,000
(7) Consumption	120,000	180,000	270,000	585,000
(8) Net Income	0	240,000	600,000	1,230,000
(9) Saving	120,000	60,000	330,000	645,000
(10) Assets, End of Period	120,000	60,000	270,000	0

The Base Case

Period	Wage Rate
1	0
2	300,000
3	630,000
4	0

r= 50%

The Results

	(1)	(2)	(3)	(4)
(1) Initial Assets	0	120,000	60,000	270,000
(2) Interest Income	0	60,000	30,000	135,000
(3) Financial Net Worth	0	180,000	90,000	405,000
(4) Wage Income	0	300,000	630,000	0
(5) PV of Wage Income	480,000	720,000	630,000	0
(6) Wealth	480,000	540,000	540,000	405,000
(7) Consumption	120,000	180,000	270,000	405,000
(8) Net Income	0	240,000	600,000	135,000
(9) Saving	120,000	60,000	330,000	270,000
(10) Assets, End of Period	120,000	60,000	270,000	0

Expected Doubling of Income

Period	Wage Rate
1	0
2	~~300,000~~ 600,000
3	~~630,000~~ 1,260,000
4	0

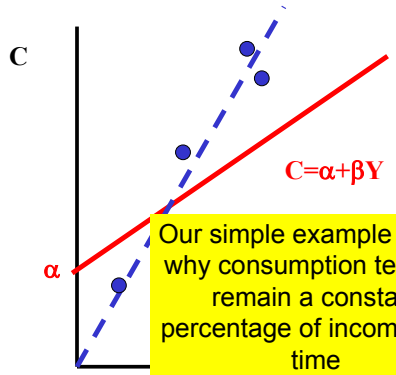
r= 50%

Period One Calculations

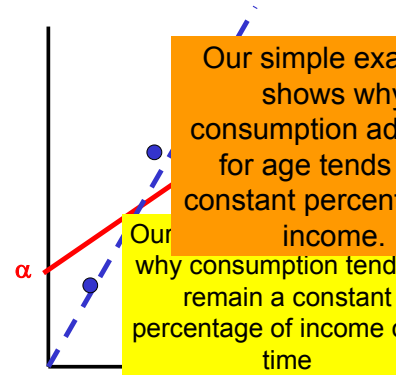
	(1)	(1)
(1) Initial Assets	0	0
(2) Interest Income	0	0
(3) Financial Net Worth	0	0
(4) Wage Income	0	0
(5) PV of Wage Income	480,000	960,000
(6) Wealth	480,000	960,000
(7) Consumption	120,000	240,000
(8) Net Income	0	0
(9) Saving	120,000	240,000
(10) Assets, End of Period	120,000	240,000

Consumption

	(1)	(1)
(1) Consumption 1	120,000	240,000
(2) Consumption 2	180,000	360,000
(3) Consumption 3	270,000	540,000
(4) Consumption 4	405,000	810,000



Our simple example shows why consumption tends to remain a constant percentage of income over time



Our simple example shows why consumption adjusted for age tends to a constant percentage of income.

Our
why consumption tends to remain a constant percentage of income over time

Some Assumptions

Period	Wage Rate
1	0
2	300,000
3	~~630,000~~ 1,260,000
4	0

r= 50%

Periods One and Two

	(1)	(2)
(1) Initial Assets	0	120,000
(2) Interest Income	0	60,000
(3) Financial Net Worth	0	180,000
(4) Wage Income	0	300,000
(5) PV of Wage Income	480,000	630,000
(6) Wealth	480,000	480,000
(7) Consumption	120,000	180,000
(8) Net Income	0	240,000
(9) Saving	120,000	60,000
(10) Assets, End of Period	120,000	60,000

Period Three

	(1)	(2)	(3)	(3)
(1) Initial Assets	0	120,000	60,000	60,000
(2) Interest Income	0	60,000	30,000	30,000
(3) Financial Net Worth	0	180,000	90,000	90,000
(4) Wage Income	0	300,000	630,000	1,260,000
(5) PV of Wage Income	480,000	720,000	630,000	1,260,000
(6) Wealth	480,000	540,000	540,000	1,170,000
(7) Consumption	120,000	180,000	270,000	585,000
(8) Net Income	0	240,000	600,000	1,230,000
(9) Saving	120,000	60,000	330,000	645,000
(10) Assets, End of Period	120,000	60,000	270,000	0

Period Three

	(1)	(2)	(3)	(3)
(1) Initial Assets	0	120,000	60,000	60,000
(2) Interest Income	0	60,000	30,000	30,000
(3) Financial Net Worth	0	180,000	90,000	90,000
(4) Wage Income	0	300,000	630,000	1,260,000
(5) PV of Wage Income	480,000	720,000	630,000	1,260,000
(6) Wealth	480,000	540,000	540,000	1,170,000
(7) Consumption	120,000	180,000	270,000	585,000
(8) Net Income	0	240,000	600,000	1,230,000
(9) Saving	120,000	60,000	330,000	645,000
(10) Assets, End of Period	120,000	60,000	270,000	585,000

Period Three

	(1)	(2)	(3)	(3)
(1) Initial Assets	0	120,000	60,000	**60,000**
(2) Interest Income	0	60,000	30,000	**30,000**
(3) Financial Net Worth	0	180,000	90,000	**90,000**
(4) Wage Income	0	300,000	630,000	**1,260,000**
(5) PV of Wage Income	480,000	720,000	630,000	**1,260,000**
(6) Wealth	480,000	540,000	540,000	**1,170,000**
(7) Consumption	120,000	180,000	270,000	**585,000**
(8) Net Income	0	240,000	600,000	**1,230,000**
(9) Saving	120,000	60,000	330,000	**645,000**
(10) Assets, End of Period	120,000	60,000	270,000	**585,000**

The Moral

- The response to changes in income depend on when expectations change.

A Problem

Period	Wage Rate
1	0
2	200,000
3	400,000
4	0

r=100%

A Variant

Our individual expects to receive an $80,000 inheritance in period 4

Period	Wage Rate
1	0
2	200,000
3	400,000
4	0

r=100%

End