

A Money Demand Function

Answers to the Exercise

$$r_R = \frac{r_N - \eta^e}{1 + \eta^e} = \frac{2.0 - 0.5}{1.0 + 0.5} = 1 = 100\%$$

A Specific Money Demand Function

$$m_{it}^d = \xi \frac{1 + r_N}{r_N} c_{it}$$

$$c_{it} = \frac{1}{(n - i + 1) + \xi(n - i)} z_i$$

An Illustration

- $y_2 = \$100,000$, $y_3 = \$200,000$, $y_1 = y_4 = 0$
- $r_N = 200\%$, $\eta^e = 50\%$
- $\xi = 1/3$

The Real Rate

$$r_N = r_R + \eta + r_R \eta$$

$$r_R = \frac{r_N - \eta^e}{1 + \eta^e} = \frac{2.0 - 0.5}{1.0 + 0.5} = 1 = 100\%$$

The Demand for Money

Calculations in Real terms									
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Price Level
Non-monetary Assets Carried Over	Carry over Plus Real Return	Money Balances Carried Over	Wage Income	Present Value of Future Income	Wealth	C	Money Holdings	Assets, End of Period	
1				\$100	\$100.0	\$20	\$10	\$(30.0)	1.000
2	\$(30.0)	\$(60.0)	\$6.7	\$200	\$146.7	\$40	\$20	\$(13.3)	1.500
3	\$(13.3)	\$(26.7)	\$13.3	\$200	\$186.7	\$80	\$40	\$66.7	2.250
4	\$66.7	\$133.3	\$26.7		\$160.0	\$160			3.375

The Demand for Money

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End

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