

# HOW TO SPEND MONEY (CAPITAL BUDGETING TOOLS)

## Payback Period

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# PAYBACK PERIOD

How long it takes to earn back initial investment

## Decision rule

Invest if payback less than X

# PAYBACK PERIOD: EXAMPLE

Project	Cash Flow				Payback
	0	1	2	3	
X	-\$500	\$500	\$250	\$0	1
Y	-\$500	\$100	\$200	\$600	3
Z	-\$500	\$300	\$400	\$400	1.5

# PAYBACK PERIOD

The good:

- Time is money!

- Reflects the opportunity cost

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The bad:

- Neglects cash after the payback

- Neglects timing

- Neglects risk

- Arbitrary cut off

# PAYBACK VS NPV

Project	Cash Flow				Payback	NPV (10%)
	0	1	2	3		
X	-\$500	\$500	\$250	\$0	1	\$161
Y	-\$500	\$100	\$200	\$600	3	\$207
Z	-\$500	\$300	\$400	\$400	1.5	\$404

# PAYBACK: WRAP-UP

- ▶ Often a weak capital budgeting tool
- ▶ Accept projects where  $\text{Payback} < X$
- ▶ Measures time to recovery
- ▶ Arbitrary, no risk or timing, ad hoc