

Back in my day, a pack of gum cost a...

What other items seem to have increased rapidly in value?

(Please write your responses on the board with the Promethean pen)

Gas Prices
Candy
College Tuition
Starbucks

Bottled
Water

Today's learning objective:

By the end of class, I will be able to differentiate the types and functions of money as well as describe how inflation impacts the time value of money.

Today's language objective:

*I'll use the following terms verbally with peers:

Inflation

Time value of money

Fiat money vs commodity money

Liquid vs illiquid

Basket

Do we want inflation?

If yes, how much? Why?

If no, why?

2%

YOLO

• (spurs current year consumption)

Benefits of Inflation

- *Lack of stagnation because money continues to flow
- *For loans, you'll pay back "less" on debt you incur today

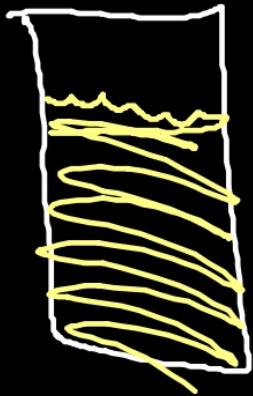
Drawbacks of Inflation

- *Money you have currently is worth less in the future
- *Inflation could be used as an excuse to raise prices disproportionately
- *Very high inflation rates are terrible

How do we calculate inflation?

*
$$\frac{N - 0}{\frac{.01}{0.22}} = .045 \quad 4.5\%$$

1922



\$0.22

1923



\$0.23

$$\frac{N}{0} - 1$$

Calculating inflation

We look at the average price of several baskets of goods and services we typically buy.

We analyze the prices in one year and compare them to the prices the next year.

This is called the Consumer Price Index (CPI).

What are the "baskets?"

Housing
Food/Bev
Apparel
Transpo*
Medical
Recreation
Education
Other

*Transpo = transportation

2015 USA

Housing	\$1,200
Food/Bev	\$420
Apparel	\$210
Transpo*	\$410
Medical	\$220
Recreation	\$120
Education	\$110
Other	<u>\$40</u>

2730

2016

Housing	\$1,500
Food/Bev	\$480
Apparel	\$230
Transpo.	\$380
Medical	\$230
Recreation	\$150
Education	\$150
Other	<u>\$50</u>

3170

How should we calculate the CPI inflation rate ?

16.1%

$$\frac{3170}{2730} - 1 = 0.161$$

2015

Housing	\$1,200
Food/Bev	\$420
Apparel	\$210
Transpo*	\$410
Medical	\$220
Recreation	\$120
Education	\$110
Other	\$40

2016

Housing	\$1,500
Food/Bev	\$480
Apparel	\$230
Transpo.	\$380
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Recreation	\$150
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Other	\$50

How should we calculate the CPI inflation rate ?

Add the baskets for each year.

2015	
Housing	\$1,200
Food/Bev	\$420
Apparel	\$210
Transpo*	\$410
Medical	\$220
Recreation	\$120
Education	\$110
Other	\$40
	<hr/>
	\$2730

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Other	\$50
	<hr/>
	\$3170

How should we calculate the CPI inflation rate ?

*Add the baskets for each year

2015		2016	
Housing	\$1,200	Housing	\$1,500
Food/Bev	\$420	Food/Bev	\$480
Apparel	\$210	Apparel	\$230
Transpo*	\$410	Transpo.	\$380
Medical	\$220	Medical	\$230
Recreation	\$120	Recreation	\$150
Education	\$110	Education	\$150
<u>Other</u>	<u>\$40</u>	<u>Other</u>	<u>\$50</u>
	\$2730		\$3170

How should we calculate the CPI inflation rate ?

*Add the baskets for each year

*Divide newest year by earlier year

2015	
Housing	\$1,200
Food/Bev	\$420
Apparel	\$210
Transpo*	\$410
Medical	\$220
Recreation	\$120
Education	\$110
Other	\$40
	<u>\$2730</u>

2016	
Housing	\$1,500
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Recreation	\$150
Education	\$150
Other	\$50
	<u>\$3170</u>

$$\frac{3170}{2730} = 1.16$$

Subtract 1 to give you 16%. This means that inflation was 16% that year. Wayyyy too much (good thing this example is for illustrative purposes only; actual inflation graphs are available on my website!)

The devaluation of money

- * Inflation essentially devalues your money
- * Since "healthy" inflation is 2%, your money is typically worth 2% less each year!



Defeat inflation: intelligent consumption

What are some ways you can consume intelligently in order to minimize the impact of inflation on your monthly budget?

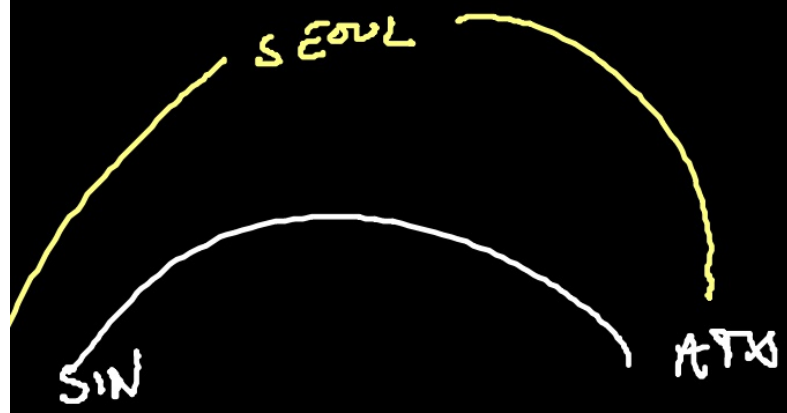
- coupons
- clearance
- avoid branding Premium

Defeat inflation: intelligent consumption

What are some ways you can consume intelligently in order to minimize the impact of inflation on your monthly budget?

- *Use coupons *debit* ↗
- *Cash back credit cards
- *Buy items you need on clearance
- *Use online pricing tools to find cheapest price for goods you need to buy (wikibuy.com)

3% groceries
5% gas
5% phone bill
3% restaurant



biz class

\$220

Defeat inflation: intelligent savings and investment

What are some ways you can invest or save intelligently in order to minimize the impact of inflation on your monthly budget?

- high interest savings
- Roth IRA (non-taxable)
 - S&P 500 90 yrs of ~10%
(VOO)

Defeat inflation: intelligent savings and investment

What are some ways you can invest or save intelligently in order to minimize the impact of inflation on your monthly budget?

- *Invest in the S&P 500

- *Ideally invest in a retirement account like a Roth IRA to minimize the impact of taxes

- *If you have an emergency fund, keep it in a fee-free savings account earning at least ~1% interest

- *Ensure you aren't paying fees for your checking accounts at your bank

Fiat Money

Commodity Money

Fiat Money

- *Literally means "faith" money
- *The paper has value because it's backed by the "full faith and credit of the US gov't"

Commodity Money

- *The currency actually has inherent value
- *For example: gold, silver, other precious metals

We were formerly on the "gold standard" which meant that a certain amount of money was equal to a corresponding amount of gold. This was referred to as the "gold standard" which was subsequently abandoned in 1971.

SPARKY

SINCE 1971, U.S. CITIZENS HAVE BEEN ABLE TO UTILIZE FEDERAL RESERVE NOTES AS THE ONLY FORM OF MONEY THAT FOR THE FIRST TIME HAD NO CURRENCY WITH ANY GOLD OR SILVER BACKING. THIS IS WHERE YOU GET THE SAYING THAT U.S. DOLLARS ARE BACKED BY THE "FULL FAITH AND CREDIT" OF THE U.S. GOVERNMENT.

Who controls the amount of money in the system?

*The Federal Reserve

*We'll have a whole lesson on this in the next unit!

ASSETS

Liquid

Illiquid



ASSETS

Liquid

Illiquid

*Cash

*Stocks

*Savings accounts

*Houses

*Cars

*Buildings