

36

You lend \$100,000 at 10% Nominal interest in 2024 to be repaid in 2025

CPI = 210

2024

You guess
Inflation will
be 5%

CPI = ?

2025

You earn

$$\text{Interest Income} = 100,000 \times 0.1 = \$10,000$$

If the **tax** on interest income is **25%**

Tax you owe

$$\$10,000 \times 0.25 = 2,500$$

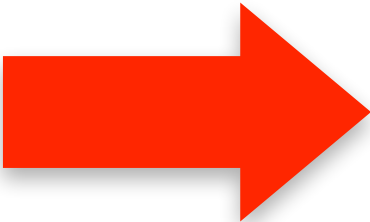


You earn

$$\text{Real Interest rate} = 10\% - 7\% = 3\%$$

$$\text{Real Interest Income} = 100,000 \times 0.03 = 3,000$$

Even though your **Real** Income was only **\$3,000**
the government still makes you pay **\$2,500**

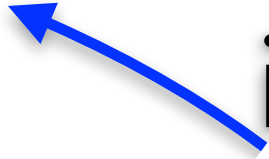


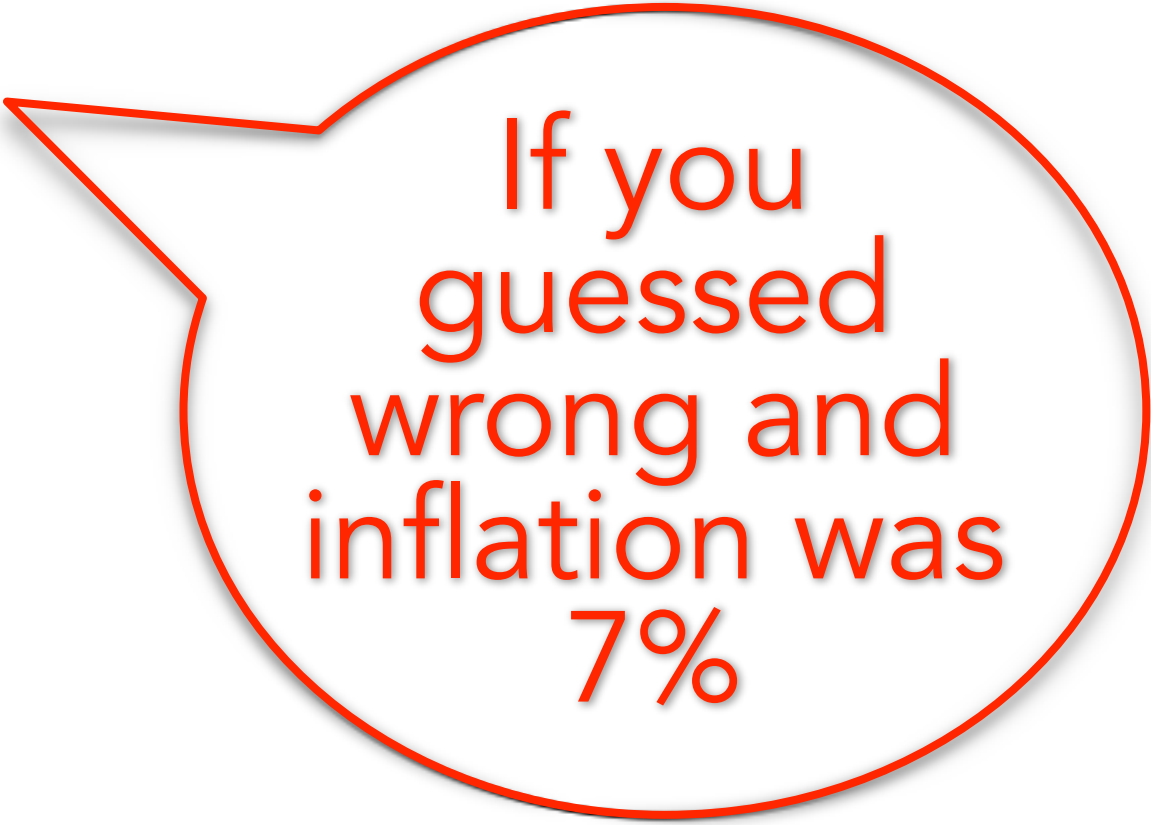
You pay 83%

instead of the 25%

you are supposed

to pay by law





If you
guessed
wrong and
inflation was
7%

Inflation imposes an **unfair** tax on Interest Income

$$\frac{2,500}{3,000} \times 100 = 83\% \text{ effective tax!}$$

CPI = 210
2024



CPI = ?
2025

If you
guessed
wrong and
inflation was
7%

Inflation imposes an **unfair** tax on Interest Income

You earn

Interest Income = $100,000 \times 0.1 = \$10,000$

If the **tax** on interest income is **25%**

Tax you owe

$\$10,000 \times 0.25 = 2,500$

You earn

Real Interest rate = $10\% - 7\% = 3\%$

Real Interest Income = $100,000 \times 0.03 = 3,000$

You pay **83%**
instead of the 25%
you are supposed
to pay by law

Even though your **Real** Income was only **\$3,000**
the government still makes you pay **\$2,500** $\rightarrow \frac{2,500}{3,000} \times 100 = 83\% \text{ effective tax!}$

CPI = 210
2024



CPI = ?
2025

You lend \$100,000 at 10% Nominal interest in 2024 to be repaid in 2025

You earn

Interest Income = $100,000 \times 0.1 = \$10,000$

Tax on interest income is 25%

Tax you owe

$\$10,000 \times 0.25 = 2,500$