

# Lecture 05 - News, Stocks, Go

---

## News

---

### 1. Crypto Crash....

New York Times, Today, Fri Jan 28 06:18:24 MST 2022

<https://www.nytimes.com/2022/01/27/opinion/cryptocurrency-subprime-vulnerable.html>

"Recent developments in El Salvador, which adopted Bitcoin as legal tender a few months ago, seem to bolster the skeptics: Residents attempting to use the currency find themselves facing huge transaction fees. Still, crypto has been effectively marketed: It manages both to seem futuristic and to appeal to old-style goldbug fears that the government will inflate away your savings, and huge past gains have drawn in investors worried about missing out. So crypto has become a large asset class even though nobody can clearly explain what legitimate purpose it's for."

1. Turkey - attempting to support the Lyra - ForEx down to 7.55B, with \$10-11b a month in foreign gas purchases. An inflation forecast from the CBT (Central Bank of Turkey) of 22.3% - and - desperate measures. If a country can't support its own currency how do you expect Teather to support it's?

2. Facebooks, Deim project offically shuts down. <https://www.washingtonpost.com/technology/2022/01/28/facebook-cryptocurrency-diem/>

"...so that it would be pegged to the U.S. dollar to create more stability..."

"...16 percent of Americans have invested in or traded cyptocurrencies..."

From: <https://www.forbes.com/sites/teresaghilarducci/2020/08/31/most-americans-dont-have-a-real-stake-in-the-stock-market/?sh=5783d5331154>

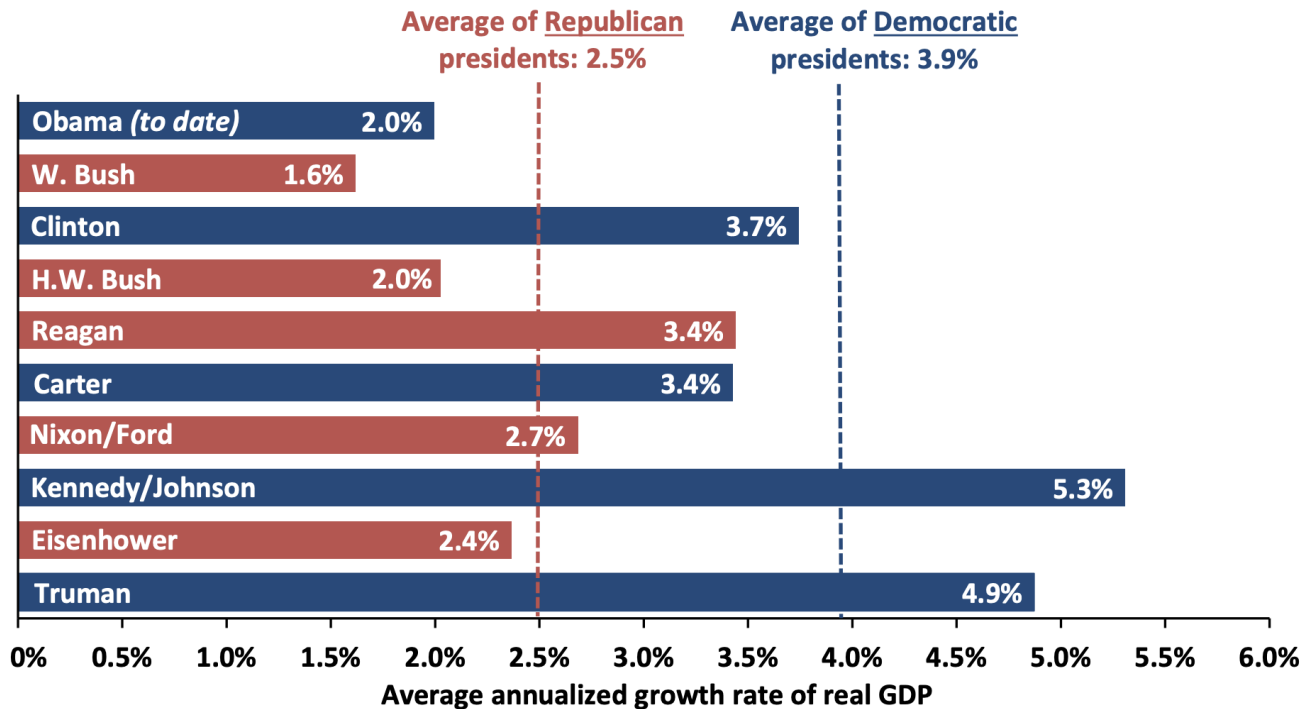
"...via the Federal Reserve from 2016, shows a relatively small share of American families (14%) are directly invested in individual stocks but a majority (52%) have some market investment mostly from owning retirement accounts such as 401(k)s."

## An example of Arbitrage

---

Stocks v.s. Realest - over - Democrat v.s. Republican.

# The Economy Has Grown Faster Under Democratic Presidents



**Real GDP has grown about 1.6 times faster under Democrats, on average**

Source: JEC Democratic staff calculations based on data from the Bureau of Economic Analysis (updated through Q1 2016, second estimate, released in May 2016)

Notes: GDP data begin in Q1 1947 (when data became available), while President Truman took office in Q2 1945; weighted average for Republican and Democratic presidents adjusts for number of terms and incomplete data for Presidents Truman and Obama; average annualized growth rate by president is calculated as change from Q1 of year assumed office to Q1 of year left office



## More On Go

Maps do not synchronize automatically. So... Synchronization Primitives:

```

1: package main
2:
3: import (
4:     "fmt"
5:     "sync"
6:     "time"
7: )
8:
9: // SafeCounter is safe to use concurrently.
10: type SafeCounter struct {
11:     v map[string]int
12:     mux sync.Mutex
13: }
14:
15: // Inc increments the counter for the given key.
16: func (c *SafeCounter) Inc(key string) {
17:     c.mux.Lock()
18:     // Lock so only one goroutine at a time can access the map c.v.
19:     c.v[key]++

```

```
20:     c.mux.Unlock()
21: }
22:
23: // Value returns the current value of the counter for the given key.
24: func (c *SafeCounter) Value(key string) int {
25:     c.mux.Lock()
26:     // Lock so only one goroutine at a time can access the map c.v.
27:     defer c.mux.Unlock()
28:     return c.v[key]
29: }
30:
31: func main() {
32:     c := SafeCounter{v: make(map[string]int)}
33:     for i := 0; i < 1000; i++ {
34:         go c.Inc("somekey")
35:     }
36:
37:     time.Sleep(time.Second)
38:     fmt.Println(c.Value("somekey"))
39: }
```

## A Go Core/Panic

First the Code

```
1: package main
2:
3: import "fmt"
4:
5: var mm map[string]int
6:
7: func main() {
8:     fmt.Println("vim-go")
9:     mm["bob"] = 3
10: }
```

Then the bad output.

```
vim-go
panic: assignment to entry in nil map

goroutine 1 [running]:
main.main()
    /Users/philip/go/src/github.com/Univ-Wyo-Education/S22-4010/class/lect/04/go_panic.go:9 +0x71
exit status 2
```

## Stock Stuff

---

What is a Stock?

What is a Dividend?

SEC Reg(D)?

SEC Enforcement of Securities Laws.

Wyoming Laws on Stocks.

What is a NFT - and is it a security?

What is a Bond? What is a Fixed Coupon v.s. a Variable Capon?

What is Yield?

How are dividends payed?

Other Investments (Gold, Diamonds, Houses, Apartments)