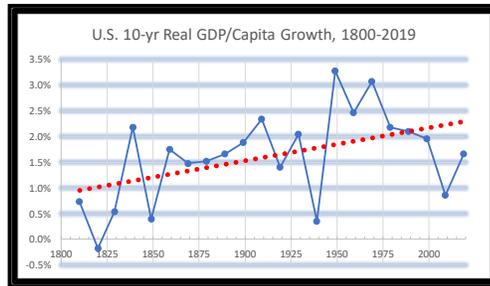


Understanding America



Class 2: April 29: What were the drivers of America's rapid cyclical rise?

Joe Coffey

jocoffey@outlook.com
coffeynotes.com

Class 1 focused on understanding the history and the case for American Exceptionalism. Class 2 will focus on understanding the drivers or explanations of America's Exceptionalism.

History, as well as life itself, is complicated; neither life nor history is an enterprise for those who seek simplicity and consistency. – Jared Diamond

Understanding America

- Welcome back Zoomers!
- Hope you are remaining well and keeping safe
- Welcome any feedback on the class and the Zooming
- I will send out an evaluation survey with notes to Class 4
- I'm toying with offering another "Understanding" zoom class in June – "Understanding South America"
- Class 2: April 29: What were the drivers of America's rapid cyclical rise?
- Class 1 focused on understanding the history and the case for American Exceptionalism.
- Class 2 will focus on understanding the drivers or explanations of America's Exceptionalism.

What were the drivers of America's rapid cyclical rise?

- Great men or women? (Founders)
- Geography? (Rivers and resources)
- Technology – (Inventors)
- Culture? (Anglo-Saxon)
- Religion? (Protestant ethic)
- Genetics? (Diversity)
- Institutions? (Democracy, Capitalism)
- Timing? (Enlightenment, Industrial Revolution)
- Luck?



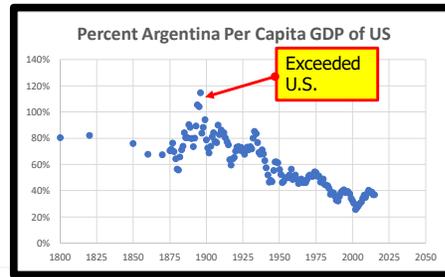
Global historical patterns suggest that growth is not random but correlated with many factors, especially inclusive institutions.

What were the drivers of America's rapid cyclical rise?

- Great men or women? (Founders)
- Geography? (Rivers and resources)
- Technology – (Inventors)
- Culture? (Anglo-Saxon)
- Religion? (Protestant ethic)
- Genetics? (Diversity)
- Institutions? (Democracy, Capitalism)
- Timing? (Enlightenment, Industrial Revolution)
- Luck?

Global historical patterns suggest that growth is not random but correlated with many factors, especially inclusive institutions.

Countries do not get rich by accident; they make choices



- U.S. & Argentina 1900 rivals
 - Both young, dynamic with fertile farmlands and exports
- Before Great Depression
 - Argentina among 10 richest economies
 - Millions of immigrants torn between: Pampas or Prairie?
- A century later:
 - U.S. - one of most successful economies in history
 - Argentina - inept, corrupt, defaulting - one of worst performing major economies

Source: Alan Beattie, *False economy, a surprising economic history of the world*, 2009, page 6

3

- *Countries do not get rich by accident. They make choices It is not always clear which is the right path [C]ountries that succeed are ... are flexible enough to learn ... and that do not become captured by groups ... sharply at odds with those of the country as a whole.*
- *One short century ago, the United States and Argentina were rivals, starting off in similar places. Both were riding the first wave of globalization at the turn of the twentieth century. Both were young, dynamic nations with fertile farmlands and confident exporters. Before the Great Depression..., Argentina was among the 10 richest economies in the world. The millions of immigrant Italians and Irish fleeing poverty at home at the end of the nineteenth century were torn between two destinations: Buenos Aires or New York? The pampas or the prairie?*
- *A hundred years later, ... one had become one of the most successful economies in history. The other was a broken husk, ... where inept, corrupt governments had ... stolen ... from their own people ...and from foreign investors....*

Source: Alan Beattie, *False economy, a surprising economic history of the world*, 2009, page 6

Engines of early progress: invention, river network, ample resources, and immigration

- Engines of historical change were people who build something out of nothing -inventors like Thomas Edison, Henry Ford, Thomas Watson, and Bill Gates
- Did not progress smoothly nor uniformly - divided into free capitalist North vs. agrarian slave-owning South
- Enjoyed an abundance of capital, land, and labor
 - More miles of navigable rivers than rest of world
 - Great rivers flow diagonally drawing country together
 - Magnet for people - population multiplied 15 times to exceed any in Europe except Russia

Source: Alan Greenspan and Adrian Wooldridge, *Capitalism In America*, 2018, page 8-9



4

Engines of early progress: invention, river network, ample resources, and immigration

- Engines of historical change were people who build something out of nothing -inventors like Thomas Edison, Henry Ford, Thomas Watson, and Bill Gates
- Did not progress smoothly nor uniformly - divided into free capitalist North vs. agrarian slave-owning South
- Enjoyed an abundance of capital, land, and labor
 - More miles of navigable rivers than rest of world
 - Great rivers flow diagonally drawing country together
 - Magnet for people - population multiplied 15 times to exceed any in Europe except Russia

Source: Alan Greenspan and Adrian Wooldridge, *Capitalism In America*, 2018, page 8-9

Founders saw America as a risky experiment



- Founders were inventing something new: a democratic republic that would endure contrary to teachings of history and far from sure of success
- George Washington inaugural: "America was an experiment entrusted to the hands of the American people"
- American and Industrial Revolutions about same time
- Americans have rejoiced in unremitting technological change unrestrained by custom or tradition or timidity.
- Acceleration of change compelled to perceive life as:
 - Motion not as order
 - Not as complete but as unfinished
 - Change was irreversible

Source: Arthur M. Schlesinger, Jr., *The Cycles of History*, 1999, Mariner's edition, foreword



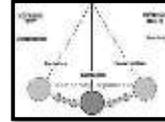
5

Theory of America: experiment or destiny?

- Founding Fathers believed they were trying something new – that a democratic republic might endure ran against all teachings of history and far from sure of success
- George Washington said in his inaugural: "America was an experiment entrusted to the hands of the American people"
- Two divergent conceptions: Does America mean 1) a commitment to a national experiment or 2) a consecration of a national destiny?
- American Revolution and Industrial Revolution began about the same time - Americans have rejoiced in unremitting technological change unrestrained by custom or tradition or timidity.
- Acceleration of change compels us to perceive life as motion not as order; the universe not as complete but as unfinished. And they thought that change was irreversible.

Source: Arthur M. Schlesinger, Jr., *The Cycles of History*, 1999, Mariner's edition, foreword

Alternative explanations of America's cyclical rise



- **Political (Schlesinger):** Two alternating phases –
 - **Liberal** (increasing democracy & human rights)
 - **Conservative** (limiting government and property rights)
 - Liberals ended by activism burnout
 - Conservatives ended by accumulation of unsolved problems
- **Generational (Strauss–Howe):** Recurring generation cycle that unleashes new era lasting long human life (80-90 years) which next generation changes
- **Stages of Growth (Rostow):** Begins with traditional subsistence society; then spread of market and technology and ultimately “take-off” of urbanization, industrialization and technology culminating in age of mass-consumption
- **But – my focus will be mostly Friedman and some Greenspan/Wooldridge**

6

Alternative explanations of America's cyclical rise

- **Political (Schlesinger):** Two alternating phases –
 - **Liberal** (increasing democracy & human rights)
 - **Conservative** (limiting government and property rights)
 - Liberals ended by activism burnout
 - Conservatives ended by accumulation of unsolved problems
- **Generational (Strauss–Howe):** Recurring generation cycle that unleashes new era lasting long human life (80-90 years) which next generation changes
- **Stages of Growth (Rostow):** Begins with traditional subsistence society; then spread of market and technology and ultimately “take-off” of urbanization, industrialization and technology culminating in age of mass-consumption
- **But – my focus will be mostly Friedman and some Greenspan/Wooldridge**

Productivity, creative destruction & politics

Job	Early 1900s	Early 2000s
Farm workers	12,000,000	700,000
Railroads	2,076,000	111,000
Engineers	38,000	2,028,000
Airplane pilots & mechanics	-	255,000
Truck drivers	-	4,171,000
Computer programmers, etc	-	2,648,000

- Productivity (output/person)
 - Measure of economic success - standard of living (GDP/Capita)
 - Sources: 1) capital (plant and equipment); 2) hours worked adjusted for education and skills; 3) Multi-factor productivity (MFP) - unexplained left over
- Creative destruction - drives productivity growth
 - Displacing previously productive assets and their jobs with newer technologies and their jobs (e.g. moving assembly line, cheaper steel, energy, transportation, information)
- Politics: Deals with creative vs. destruction
 - U.S. more accepting - tolerance for bankruptcy, protecting economy from interference

Source: Alan Greenspan and Adrian Wooldridge, *Capitalism In America*, 2018, p 12-13



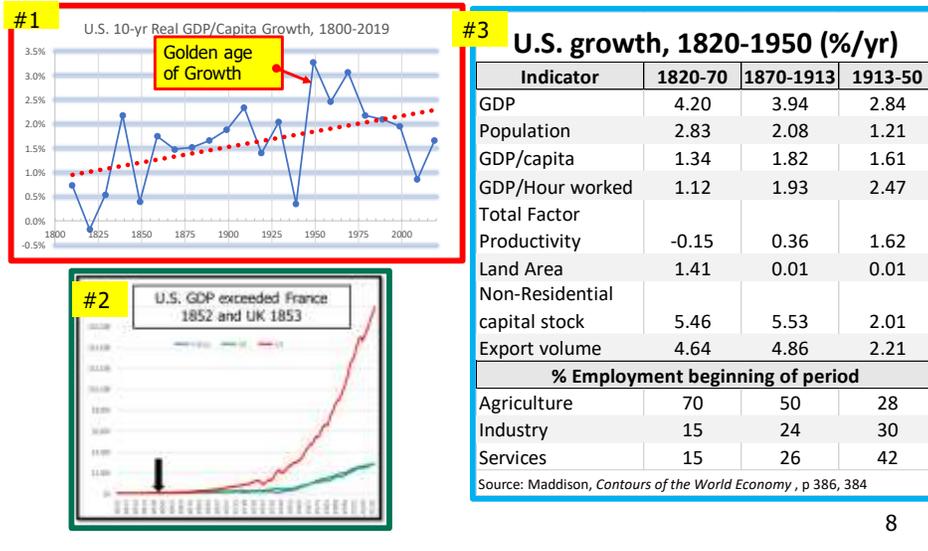
7

Productivity, creative destruction & politics

- Productivity (output/person)
 - Measure of economic success - standard of living (GDP/Capita)
 - Sources: 1) capital (plant and equipment); 2) hours worked adjusted for education and skills; 3) Multi-factor productivity (MFP) - unexplained left over
- Creative destruction - drives productivity growth
 - Displacing previously productive assets and their jobs with newer technologies and their jobs (e.g. moving assembly line, cheaper steel, energy, transportation, information)
- Politics: Deals with creative vs. destruction
 - U.S. more accepting - tolerance for bankruptcy, protecting economy from interference

Source: Alan Greenspan and Adrian Wooldridge, *Capitalism In America*, 2018, p 12-13

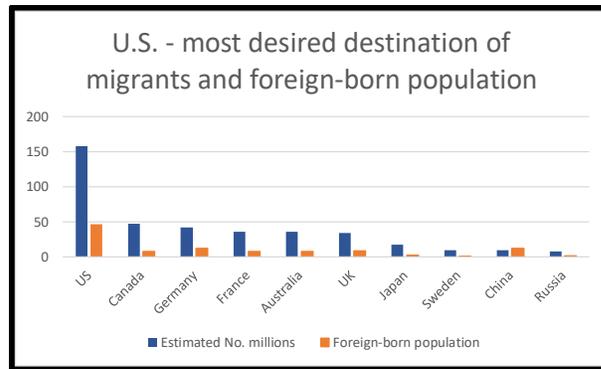
Growth cyclical, not smooth, but upward trend, and faster than others thanks to ample and increased resources and productivity



Growth cyclical, not smooth, but upward trend, structural changes and faster than others thanks to ample resources and productivity

- These charts trace the US economy for past 220 years
- Chart 1: Shows the up and down cyclical nature of US growth by decade and the rapid growth in the 1945-70 Golden Age
- Chart 2: Shows how 175 years ago, and only 75 years after independence, US economy (GDP) exceeded that of France and UK and has greatly widened the gap ever since.
- Chart 3: Shows structural shift in US growth by 3 major periods.
 - 1820-70: Rapid GDP growth driven by expanding population and land but low productivity
 - 1870-1913: Still rapid GDP growth, thanks to increased productivity as shifted from agriculture to industry and services
 - 1913-50: Tho including Great Depression and both world wars, productivity became the driver elevating GDP/hour worked

U.S. became an empire



- Not formal empire, but from its size, power and culture
- Tremendous global influence (English language, largest import market, technology leader)
- Constantly irritates world but top desired destination
- Prone to domestic complacency until blind-sided by a Pearl Harbor, fall of wall, financial crisis, 9/11, Covid-19

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles

9

U.S. has become an empire

- Not a formal empire but from the power deriving from the size of its economy, its military and its seductive culture
- But the U.S. is uncomfortable about being an empire but remained so despite its ineptness and global condemnation
- Unlike most other nations, U.S. was founded as a moral project-where both human rights and national interests could thrive but there is a tension and conflict between the values of morality and nation
- For example, founders wished to avoid foreign entanglements and wanted to be an exemplar of moral virtue and protect and spread American principles
- But sometimes spreading American values requires abandoning them- for example, in World War II having to ally with Joseph Stalin's Soviet Union

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 , p 83

Dangers of Empire (Even greater danger if not?)

America has been in
war 45% of time since
1775



- But as a global power, must be restrained or constant war
- U.S. tries (not always successfully!) to be selective
 - Didn't respond if Soviets not involved
 - If Soviets (or now China, Russia...) involved, obsessed
- War stresses institutions and require their transformation

Source: George Friedman, *The Storm Before the Calm*, Part 2: American Cycles

10

Dangers of Empire (Even greater danger if not?)

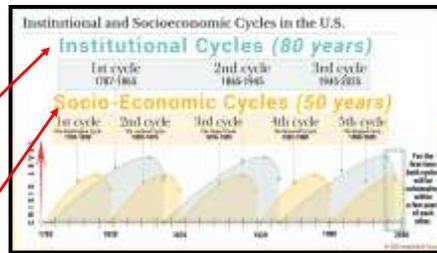
- Permanent war - always a fire
- Lose citizen support - if exhausts
- U.S. tries (not always successfully!) to be selective
 - Didn't respond if Soviets not involved
 - If Soviets (or now China, Russia, Iraq...) involved, obsessed
- Wars stress institutions and requires their transformation
- American power means foreign entanglements
- But as a global power, must be restrained or constant war

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles

Friedman: America driven by cycles

Gov't

Society & economy



- Impersonal forces – geography, politics, economics ...
– govern world leaders not other way around
- We'll focus on underlying structural changes in government's relationship to society and productivity
- Way US was invented gave a rare ability to shift rapidly and transform from weak colony to world power
- American driven by two regular cycles:
 - Institutional cycle every 80 years: Revolutionary war (1770s-1780s), Civil War (1860s), World War II (1940s)
 - Socio-economic cycle every 50 years of cultural dynamics

11

Friedman's Thesis: American is driven by cycles

- Impersonal forces – geography, politics, economics ...
– govern world leaders not the other way around
- Focus on underlying structural changes in Federal government's relationship to society and productivity growth
- Way US was invented gave a rare ability to shift rapidly and transform from weak colony to world power
- American driven by two regular cycles:
 - Institutional cycle every 80 years: Revolutionary war (1770s-1780s), Civil War (1860s), World War II (1940s)
 - Socio-economic cycle every 50 years of cultural dynamics

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020

Friedman's 1st & 2nd Institutional cycles

- 1st (1787 from Constitution to 1865 Civil War end)
 - **Problem:**
 - Federal relation to states unclear
 - Division: Industrial Free North vs. Agrarian & Slave South
 - **Solution:**
 - Civil War, Emancipation and Reconstruction
- 2nd (1865 from Civil War until end WW II in 1945)
 - **Problem:**
 - Hoover's frugality failed
 - Federal gov't lacked authority over economy & society
 - **Solution:**
 - Roosevelt elected thrice, New Deal and technocracy

Source: George Friedman, *The Storm Before the Calm*, 2020 Part 2: American Cycles

12

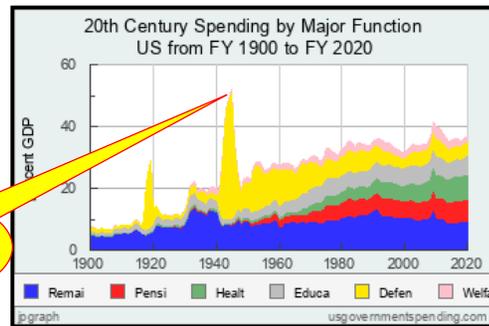
• Friedman's 1st & 2nd Institutional cycles

- 1st: 1787 from Constitution to end of Civil War in 1865)
 - **Problem:**
 - Constitution established federal gov't but its relation to states unclear
 - Division of Industrial North vs. Agrarianism and slavery in South
 - **Solution:**
 - Emancipation and Civil War and Reconstruction
- 2nd (1865 from Civil War until end WW II in 1945)
 - **Problem:**
 - Hoover's policy of frugality and exhortations to work failed
 - Federal gov't limited authority over economy and society
 - **Solution:**
 - Roosevelt elected and introduced New Deal's federal intervention in economy and society
 - Technocracy without an ideology would solve problems

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles

Friedman's 3rd and current cycle

7% of GDP in 1900, 50% WW II



- Great Depression ended with WW II A
- After WW II, defense expenditures lower but non-defense higher & military spinoffs of technology
- Idea evolved that state-managed by experts would do for America what it did for Depression and war
- Created a class who felt entitled and suitable to govern
- Technocracy about social engineering

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles

13

Expansion of government during Great Depression & WW II

- Great Depression ended with WW II war production
- After WW II, gov't expenditures smaller, rationing eliminated & military spinoffs of technology
- Idea evolved that state-managed by experts would do for America what it did for Depression and war
- Created a class who felt entitled and suitable to govern
- Technocracy about social engineering

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles

1st Socioeconomic cycle (Washington cycle) 1783-1828



- U.S. content between Atlantic and Appalachians
- Mercantile economy of agriculture, international trade, shipbuilding, and finance
- British Industrial Revolution & navy power threatened
- U.S. realized needed to expand and industrialize
- Thus, 1803 Louisiana Purchase
- War of 1812: Brits burned Capitol; U.S. didn't get Canada but got Tecumseh and safer West
- European financial crisis after Napoleonic wars triggered 1819 U.S. financial panic

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles, p118



14

1st Socioeconomic cycle (Washington cycle) 1783-1828

- U.S. content between Atlantic and Appalachians
- Mercantile economy of agriculture, international trade, shipbuilding, and finance
- British Industrial Revolution & navy power threatened
- U.S. realized needed to expand and industrialize
- Thus, 1803 Louisiana Purchase
- War of 1812: Brits burned Capitol; U.S. didn't get Canada but got Tecumseh and safer West
- European financial crisis after Napoleonic wars triggered 1819 U.S. financial panic

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles, p118

2nd socio-econ cycle (Jackson cycle) 1828-76

- Andrew Jackson, 1st president west of Appalachians, advocated easy money eventually had 1837 Panic
- Lincoln, also Westerner, championed Union and Homestead Act
- After Civil War, South broke and North industrializing big disparity

Comparison of Union and Confederacy, 1860–1864

	Year	Union	Confederacy	Total
		Share of Total		(Millions)
Population	1860	71%	29%	31.2
Free	1860	79%	21%	27.3
Slave	1860	12%	88%	4.1
Soldiers	1860–64	66%	34%	3.2
War deaths	1864	50%	50%	1.8
Manufactures	1860	90%	10%	100%
Exports	1860	30%	70%	100%

Source: https://en.wikipedia.org/wiki/American_Civil_War

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles, p 123

15

2nd socio-econ cycle (Jackson cycle) 1828-76

- Andrew Jackson, 1st president west of Appalachians, advocated easy money eventually 1837 Panic
- Lincoln, also Westerner, championed Union against Confederacy and Homestead Act of 160 acres in West if farm 5 years
- After Civil War, South broke and North industrializing – big disparity

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles, p 123

Comparison of Union and Confederacy, 1860–1864

	Year	Union	Confederacy	Total
		Share of Total		(Millions)
Population	1860	71%	29%	31.2
Free	1860	79%	21%	27.3
Slave	1860	12%	88%	4.1
Soldiers	1860–64	66%	34%	3.2
War deaths	1864	50%	50%	1.8
Manufactures	1860	90%	10%	100%
Exports	1860	30%	70%	100%

Source: https://en.wikipedia.org/wiki/American_Civil_War

3rd Socioeconomic cycle: Hayes cycle, 1876-1929



- After Civil War, financial & railroad boom crashed
- Hayes, elected in 1876, instituted gold standard which instilled confidence and investments increased
- William Jennings Bryan, from Midwest gave “cross of gold speech” in 1896 but couldn’t win presidency
- Gilded Age - electricity and automobiles emerged
- By 1900, U.S. producing half world’s manufactures
- Roaring '20s crashed and then Great Depression

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles



16

3rd Socioeconomic cycle: Hayes cycle, 1876-1929

- After Civil War, financial & railroad boom crashed
- Hayes, elected in 1876, instituted gold standard which instilled confidence and investments increased
- William Jennings Bryan, from Midwest gave “cross of gold speech” in 1896 but couldn’t win presidency
- Electricity and automobiles emerged
- By 1900, U.S. producing half world’s manufactures
- WW I hurt customers & exports; so Great Depression
- But gold standard, frugality and hard work under Hoover worsened the falling economy

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles

4th Socioeconomic cycle: Roosevelt cycle, 1932-80

U.S. 7% world population
but produced 42%
manufactures, 43%
electricity, 57% steel, 62%
oil and 80% cars

- But gold standard and frugality of Hoover ineffective
- Roosevelt beat Hoover and launched New Deal
- Roosevelt created technocracy & big gov't
- It eventually worked - Golden Age of Growth 1945-70
- Stagflation and turmoil (Robert Kennedy & Martin Luther King, Jr murdered, wage & price freeze, OPEC oil embargo, Watergate, Nixon resignation...)
- Carter elected in 1976: capital shortage, high interest rates, competition from rebuilt Germany and Japan, stagflation, "malaise" ...

Source: George Friedman, *The Storm Before the Calm*, Part 2: American Cycles, p 131

17

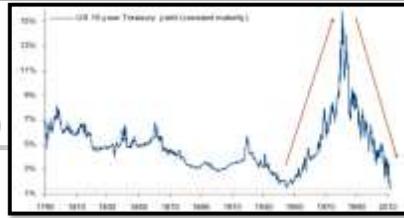
4th Socioeconomic cycle: Roosevelt cycle, 1932-80

(U.S. 7% world population but produced 42% manufactures, 43% electricity, 57% steel, 62% oil and 80% cars)

- Roosevelt defeated Hoover and launched New Deal
- Roosevelt era created technocracy & big gov't
- Roosevelt and Keynes policies worked: Golden Age of Growth 1945-70
- Stagflation and turmoil hit (Robert Kennedy and Martin Luther King, Jr murdered, wage & price freeze, OPEC oil embargo, Watergate, Nixon resignation...)
- Carter, elected in 1976, capital shortage, high interest rates, competition from rebuilt Germany and Japan, stagflation, "malaise" ...

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles, p 131

5th Socioeconomic cycle: Reagan cycle, 1980-2030



- Reagan solved capital shortage by reducing taxes
- Economy rose in U.S. and world until 2008 crisis
- Computer came along and further disrupted
- Manufacturers automated and relocated overseas
- Median household income stayed flat
- Loss of manufacturing jobs created Rust Belt
- Globalization created wealth on NE & West coasts

Now approaching end of cycle - tension and loathing

Stay-tuned for Class # 3

Source: George Friedman, *The Storm Before the Calm*, Part 2: American Cycles



18

5th Socioeconomic cycle: Reagan cycle, 1980-2030

- Reagan solved capital shortage by reducing taxes
- Economy rose in U.S. and world until 2008 crisis
- Computer came along and further disrupted
- Manufacturers automated and relocated overseas
- Median household income stayed flat
- Loss of manufacturing jobs created Rust Belt
- Globalization created wealth on NE & West coasts

Now approaching end of cycle - tension and loathing

Stay-tuned for Class # 3

Source: George Friedman, *The Storm Before the Calm: America's Discord, the Coming Crisis of the 2020s, and the Triumph Beyond*, Doubleday, 2020 Part 2: American Cycles

Drivers of America's rapid cyclical rise

Summary & Conclusions



Economic growth is not just a process of more and better ... but also a transformative and destabilizing process... Growth moves forward only if not blocked by the losers who anticipate their privileges or power will be eroded. **Anonymous**

- America's exceptional rise was not smooth or uniform
- America became rich, powerful, desirable, entangled
- Government expanded in size and involvement
- Creative destruction - creation, but also destruction

Class 3, May 6: Understanding today's discord and decline

19

Drivers of America's rapid cyclical rise

- America's exceptional rise was not smooth or uniform
- America became rich, powerful, desirable, entangled
- Government expanded in size and involvement
- Creative destruction - creation, but also destruction

Class 3, May 6: Understanding today's discord and decline

Background information

If you want to hear Friedman, watch this at
<https://news.gallup.com/podcast/308717/2020s-storm-leads-calm.aspx>

George Friedman on The Gallup Podcast: Will the 2020s Be a 'Storm' That Leads to 'Calm' in the U.S.?

How will the 2020s be a 'storm' that leads to 'calm' in the U.S.? GEOPOLITICIAN and Gallup Senior Advisor George Friedman discusses his new book, "The Storm Before the Calm." Reading his new memoirs in his new interview, Friedman suggests that the world's greatest global shift in a 100 years is underway: "and that these shifts will be a storm of major change (a storm, 'stormy seas') in a decade (perhaps building and building before the calm) that will be..."

By OPF Staff - April 17, 2020



The image shows a promotional graphic for a Gallup Podcast episode. It features the Gallup logo in green and white, with the word "PODCAST" in green below it. To the right is a black and white portrait of George Friedman wearing glasses. Below the portrait, it says "with Mohamed Younis". At the top of the graphic, there is a yellow play button icon and the text "Will the 2020s Be a 'Storm' That Leads to 'Calm' in the U.S.? Speaker".

Background information

US Population and Real GDP Growth 1775-2019				
Period	Year	Population (1000s)	GDP/Capita \$	GDP (mil\$)
Independence	1775	2,464	1,883	4,640
End Civil War	1865	36,031	3,607	129,964
Begin Depression	1929	122,245	10,543	1,288,829
End WW II	1945	140,474	15,992	2,246,460
End Cold War	1990	250,132	36,982	9,250,382
Begin Recession	2008	304,714	50,276	15,319,801
Latest	2019	329,000	57,108	18,788,524
Period	Annual growth by Period			
First century	1775-1865	3.0%	0.7%	3.8%
Gilded Age	1865-1929	1.9%	1.7%	3.6%
Depression-WWII	1929-1945	0.9%	2.6%	3.5%
Cold War	1945-1990	1.3%	1.9%	3.2%
Globalization	1990-2008	1.1%	1.7%	2.8%
Slow down	2008-2019	0.7%	1.2%	1.9%
Increase multiples	1775-2019	133	29	4,048

Source: Maddison Project Database 2018, GDP is real 2011 \$. Data after 1960 from World Bank database

Background information

Periods of U.S. growth, 1820-2003 (%/yr)

Indicator	1820-70	1870-1913	1913-50	1950-73	1973-2003
GDP	4.20	3.94	2.84	3.93	2.93
Population	2.83	2.08	1.21	1.45	1.06
GDP/capita	1.34	1.82	1.61	2.45	1.99
GDP/Hour worked	1.12	1.93	2.47	2.77	1.66
Total Factor					
Productivity	-0.15	0.36	1.62	1.75	0.91
Land Area	1.41	0.01	0.01	0	0
Non-Residential					
capital stock	5.46	5.53	2.01	3.27	3.3
Export volume	4.64	4.86	2.21	6.27	5.21
% Employment beginning of period					
Agriculture	70	50	28	13	4
Industry	15	24	30	34	31
Services	15	26	42	53	65

Source: Maddison, *Contours of the World Economy*, p 386, 384-86

Background information

Major Wars duration ranked by U.S. military deaths

Rank	War	Years	Deaths	Deaths as percentage of population	Months
1	American Civil War	1861–65	750,000	2.385% (1860)	48
2	World War II	1941–45	405,399	0.307% (1940)	45
3	World War I	1917–18	116,516	0.110% (1920)	14
4	Vietnam War	1961–75	58,209	0.032% (1970)	176
5	Korean War	1950–53	54,246	0.036% (1950)	40
6	Revolutionary War	1775–83	25,000	1.00% (1780)	76
7	War of 1812	1812–15	15,000	0.207% (1810)	33
8	Mexican–American	1846–48	13,283	0.057% (1850)	15
9	Iraq War	2003–2011	4,576	0.002% (2010)	76
10	Philippine–American	1899–1902	4,196	0.006% (1900)	37
11	Spanish–American	1898	2,246	0.004% (1890)	8
12	War in Afghanistan	2001–present	2,216	0.001% (2010)	205
?50th	Cold War	1947-91	31	.000% (1991)	535
Totals			1,450,918		1,310

Source: United States military casualties of war from Wikipedia. Estimated 1,310 months of war or 45% of the total 2,928 months 1775-2019

Background information

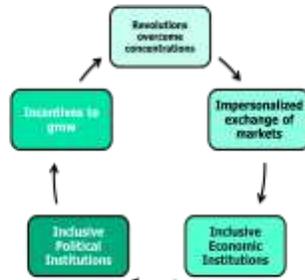
U.S. had several Depressions

U.S. Depressions (2 year real GDP decline of 10% +)	
Date	Length, depth and causes
1807	1807-10 Depression - US embargo and UK and trade restrictions , commodity and securities prices fell
1836	1836-38 Depression(33% decline) Bank failures, lack of confidence in currency, tightening of credit, crop failures
1838	1839-43 Depression (34% decline) Long and deep depression, deflation and defaults on debt
1865	1865-67 Depression (34% decline) After Civil War deflation during Reconstruction and international instability
1873	1873-79 Depression (34% decline) Longest contraction arising from economic problems in Europe prompting failure of largest bank in US which burst the post-Civil War speculative bubble.
1882	1882-85 Depression (33% decline) Boom in railroad construction ended hurting iron and steel industries
1902	1902-04 Depression (16% decline) Came about a year after a 1901 stock crash
1910	1910-12 Depression (15% decline) Mild but lengthy recession and deflation
1913	1913-14 Depression (26% decline) Decline not ended until start of WW I, Federal Reserve Act signed
1929	1929-41 Great Depression (27% decline) Banking panic, high unemployment, stock market crash
2007	2007-07 Great Recession (Only 5% decline-Not depression) Mortgage crisis, bust of housing bubble, banks and autos
2020	(2020-??) Now unknown extent of decline sparked by Coronavirus global 2020 pandemic

Source: List of recessions in the United States, Wikipedia.

Why nations rise or fail: the virtuous and vicious circles

Why Nations Rise? Virtuous Circle of Inclusive Pluralistic Institutions



Economic freedom: Freedom to produce, trade and consume goods and services acquired without the use of force, fraud or theft.

Why Nations Fail? Vicious Circle of Exclusive Centralized Institutions



Kleptocracy: A government that steals and enriches the ruling class at the expense of the population.

Background information

Productivity gains, not population have been major source of GDP gains since 1950

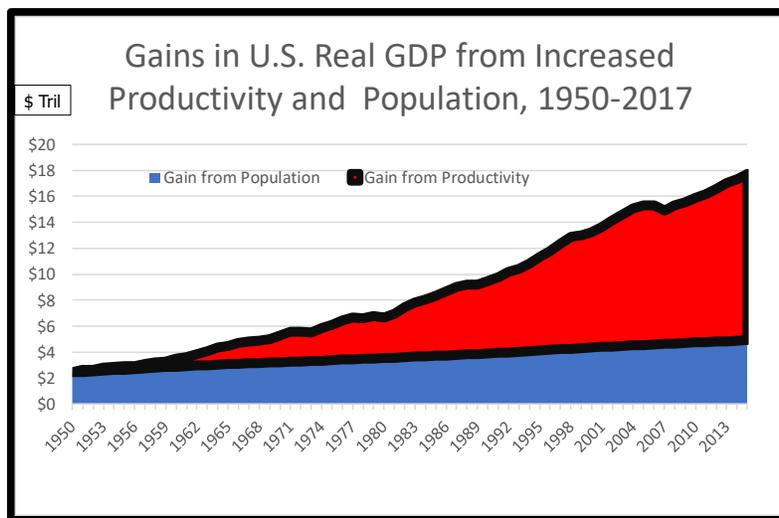


Chart based on data of PWT 9.1, at www.gdpc.net/pwt. Population gains assumes GDP/capita remained fixed at 1950-53 average and productivity gain is the rest.