

**JULEX** CAPITAL

# Are U.S. returns over the last 74 years representative?

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## Are U.S. returns over the last 74 years reasonable or exceptional?

- Are U.S. stock/bond returns over the last 74 years representative and repeatable?
- Should they be used . . . or referenced?
  
- Spoiler alert
  
- **NOPE !!**
  
- Not ever . . . . unless it's to show what won't happen again . . . in your lifetime or mine

## Why is this such a **serious** issue?

- Because
- These are . . . the returns that investors and their advisors/consultants are relying on
- And . . . they diverge so radically from all other geographies and time periods
- We can (and should) do better

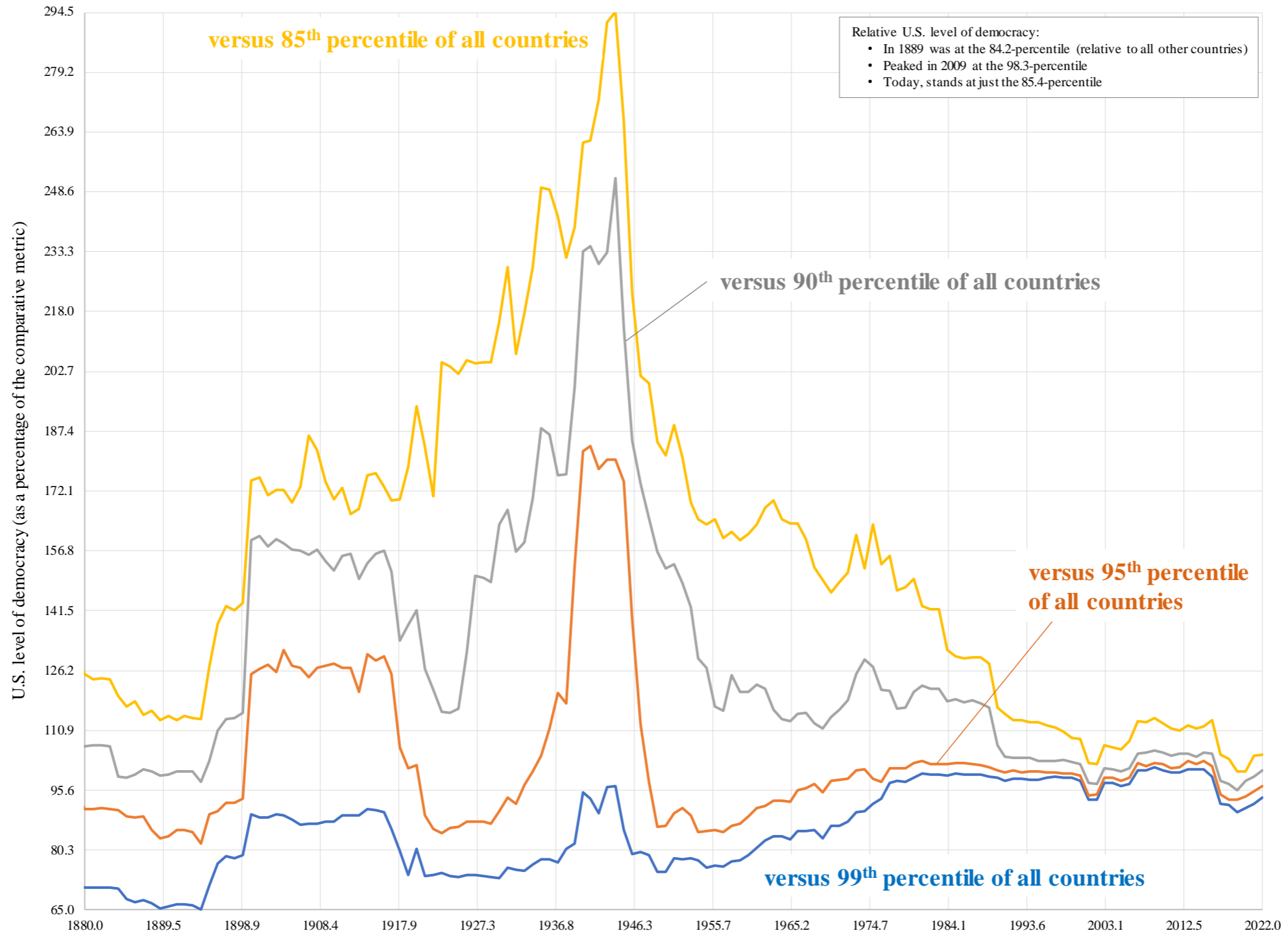
# American exceptionalism was real, genuine, and game-changing

But . . . it was also old-hat, commonplace, and seen again & again throughout history

In a sense . . . it's boring and vanilla

# EXHIBIT 1

## U.S. Level of Democracy Relative to the Rest of the World



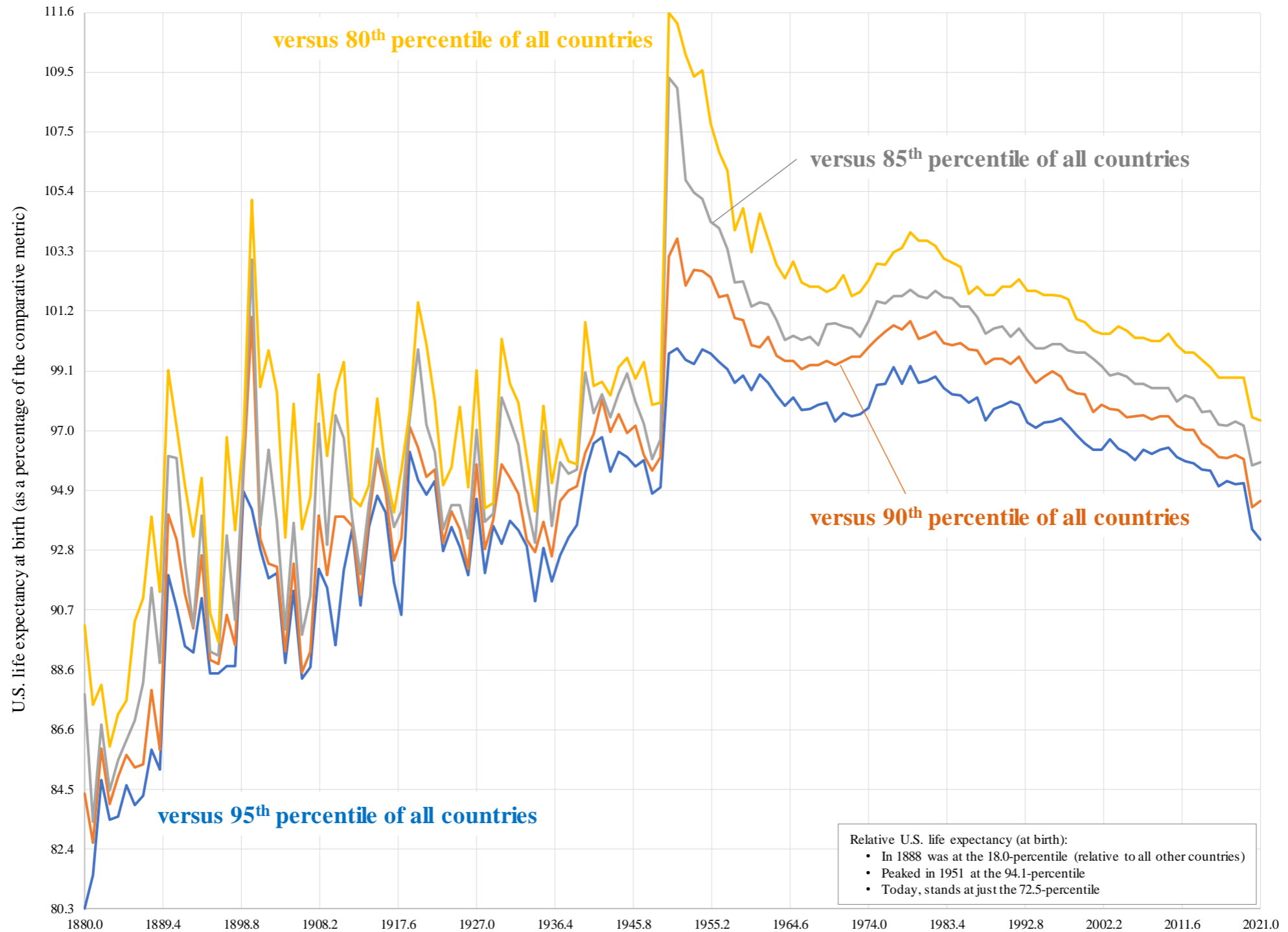
## EXHIBIT 2

### Fifteen Largest Military Powers Throughout History

Country	Description	Estimated active personnel (1,000s)	Date	Notes
China	The Xia Dynasty	12	2000 BC	Believed to have been the first fighting force in history to top 10,000 soldiers
Egypt	The Army of Ramses II	100	1250 BC	Successfully repelled the Hittite armies of Anatolia
Iran	The Persian Army of Cyrus the Great	500	600 BC	Persian empire stretched from Libya to Central Asia, including Egypt and Turkey
India	Mauryan Empire	630	300 BC	Mauryan Empire expanded west across central and western India by defeating the satraps left by Alexander the Great
Italy	The Roman Empire	500	400	Became the dominant western army by 250 BC and reached its peak by 200 AD
China	The Tang Dynasty	634	800	The Tang dynasty or Tang Empire ruled from 618 to 907
Mongolia	Mongol Empire	> 900	1300	The Mongol Empire was the largest in all of human history as measured by geography controlled
China	The Ming Dynasty	1,300	1500	The Ming Dynasty ruled China from 1368 to 1644 AD, during which China's population doubled
France	French Empire	2,500	1800	Napoleon Bonaparte marched the French army across Europe
Germany	The German Empire of WWI	5,300	1918	WWI lasted from 1914 through 1918
Russia	The Soviet Union in WWII	11,000	1943	Some estimates place Russian troop strength as high as 13.2 million (temporarily)
Germany	The Third Reich	12,100	1944	WWII lasted from 1939 through 1945
U.S.	The U.S. Army in WWII	12,200	1945	Today, the U.S. maintains 480,000 active duty soldiers
Russia	Soviet Military	4,500	1981	The size of the soviet army was boosted to address their invasion of Afghanistan
China	The Modern Chinese Army	2,200	2022	The largest number of active-duty personnel in the world today belongs to China

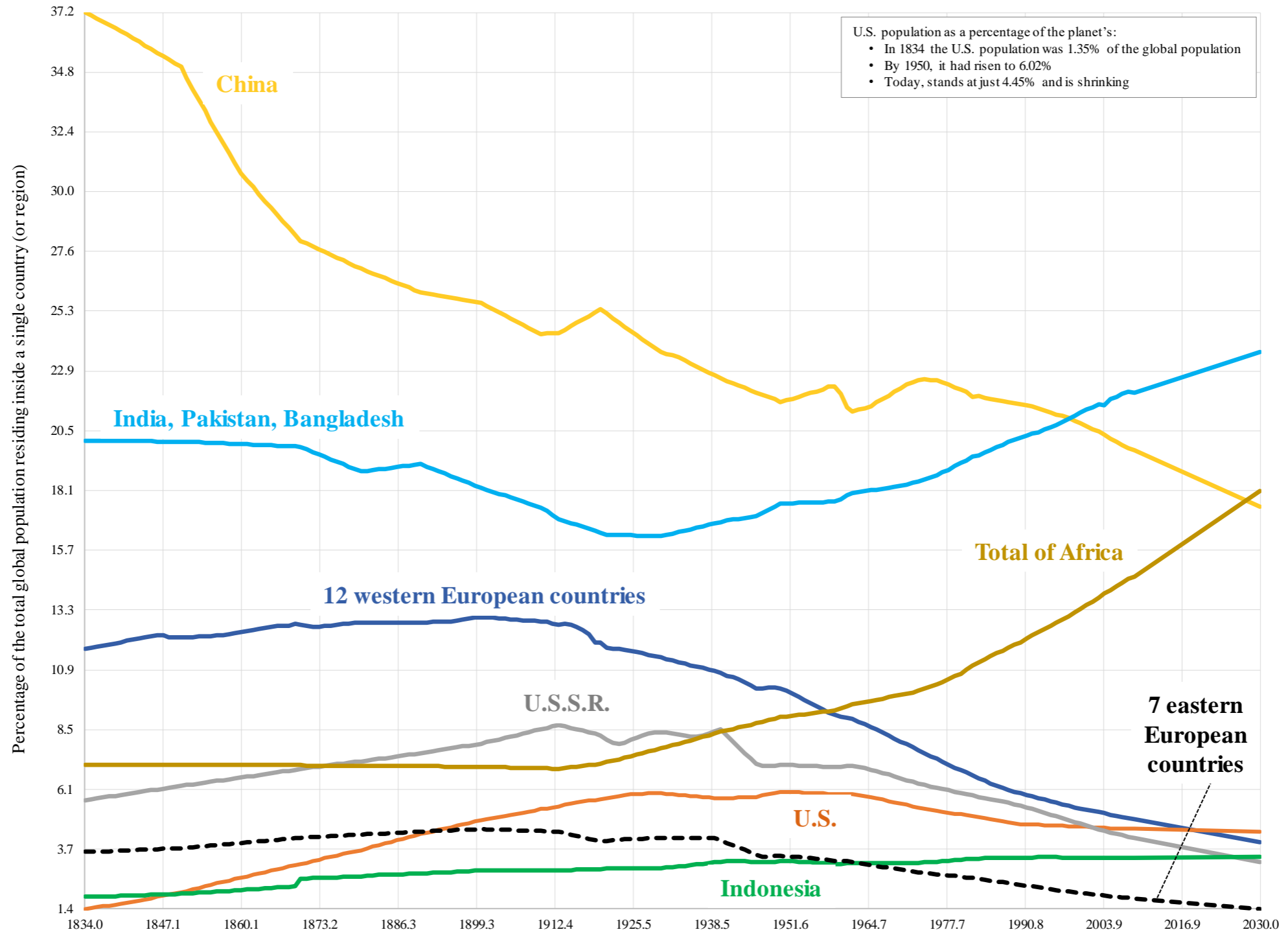
# EXHIBIT 3

## U.S. Life Expectancy (at birth) Relative to the Rest of the World



# EXHIBIT 4

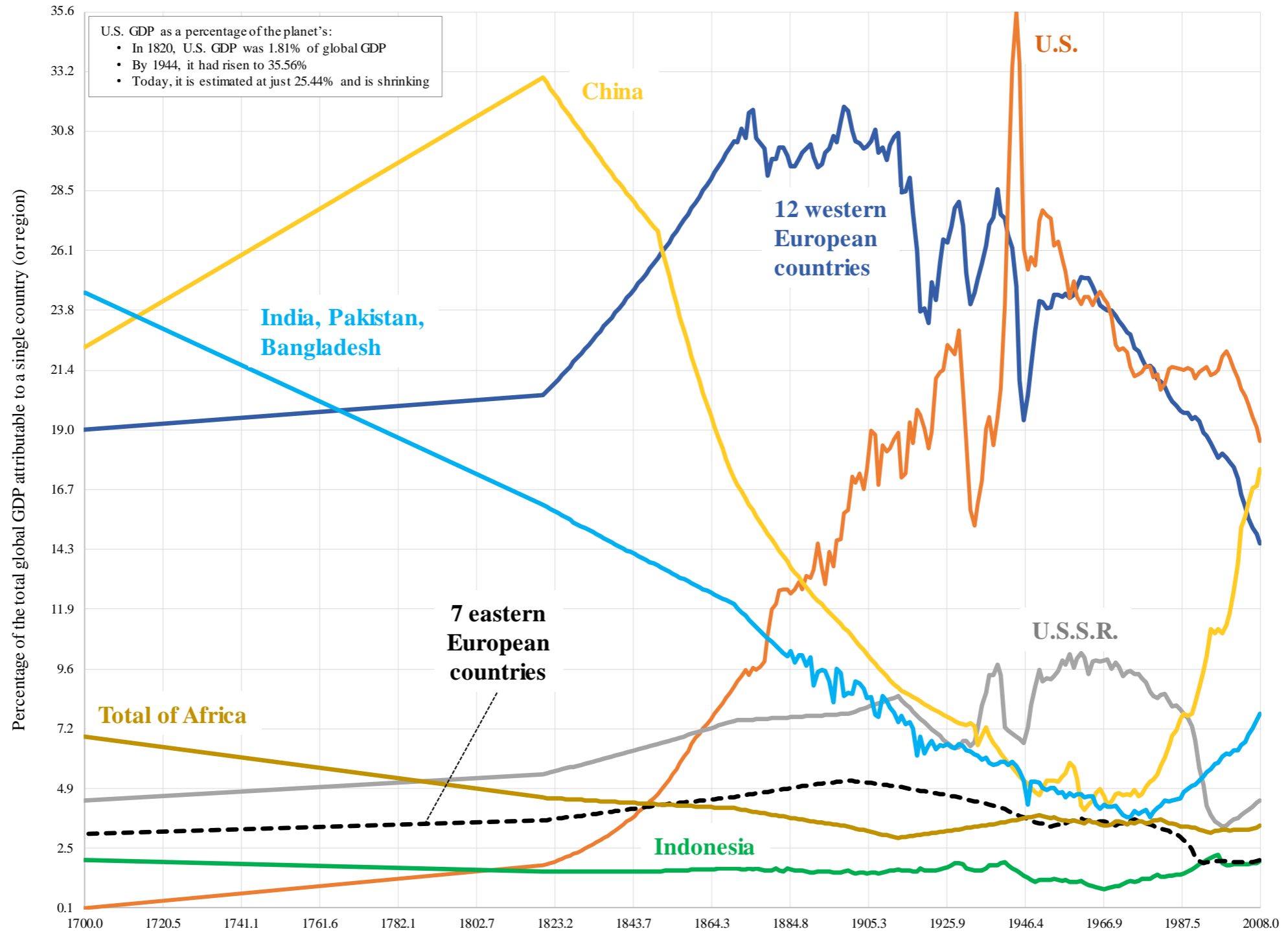
## U.S. Population Relative to the Rest of the World





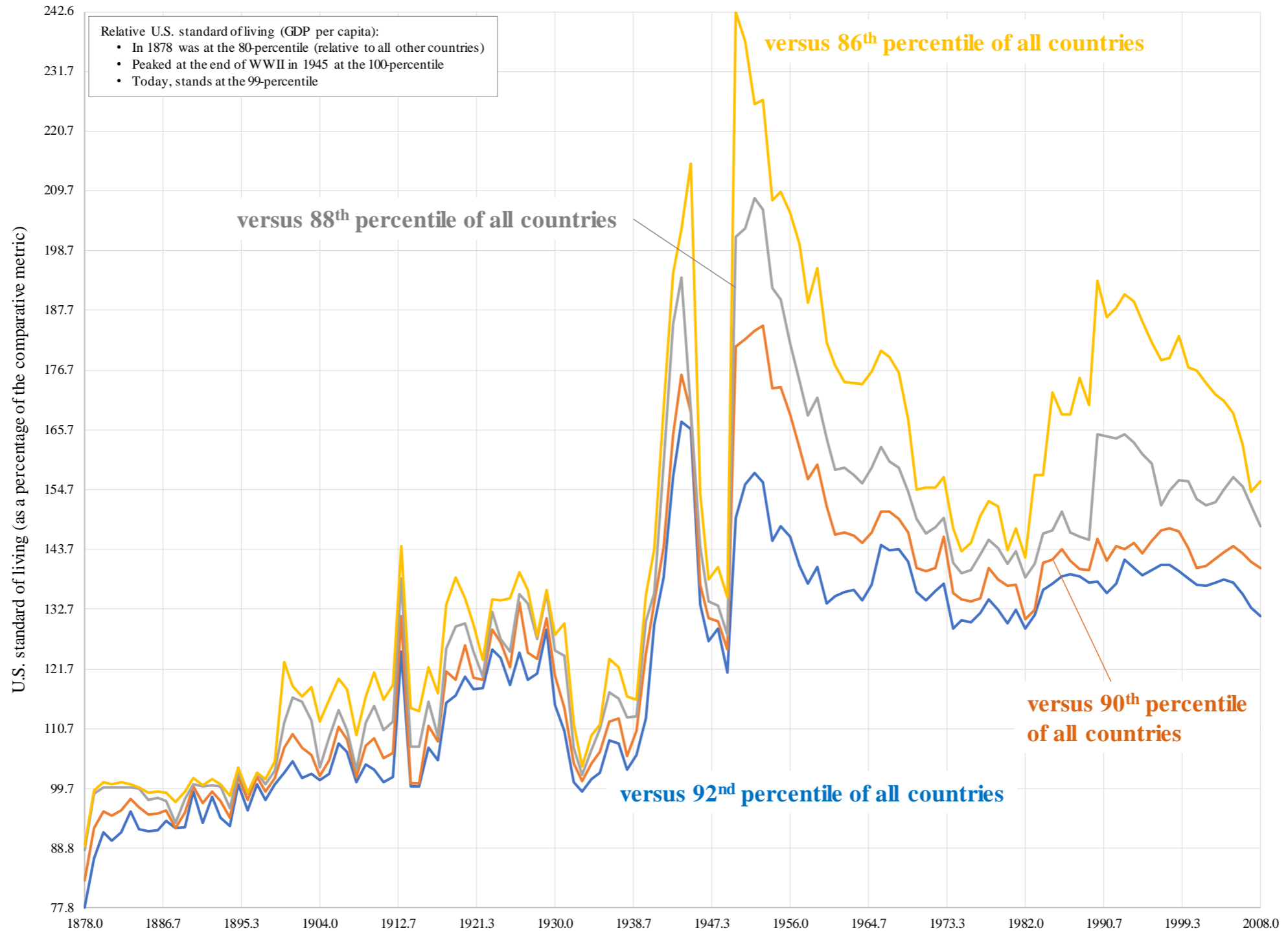
# EXHIBIT 5

## U.S. GDP Relative to the Rest of the World



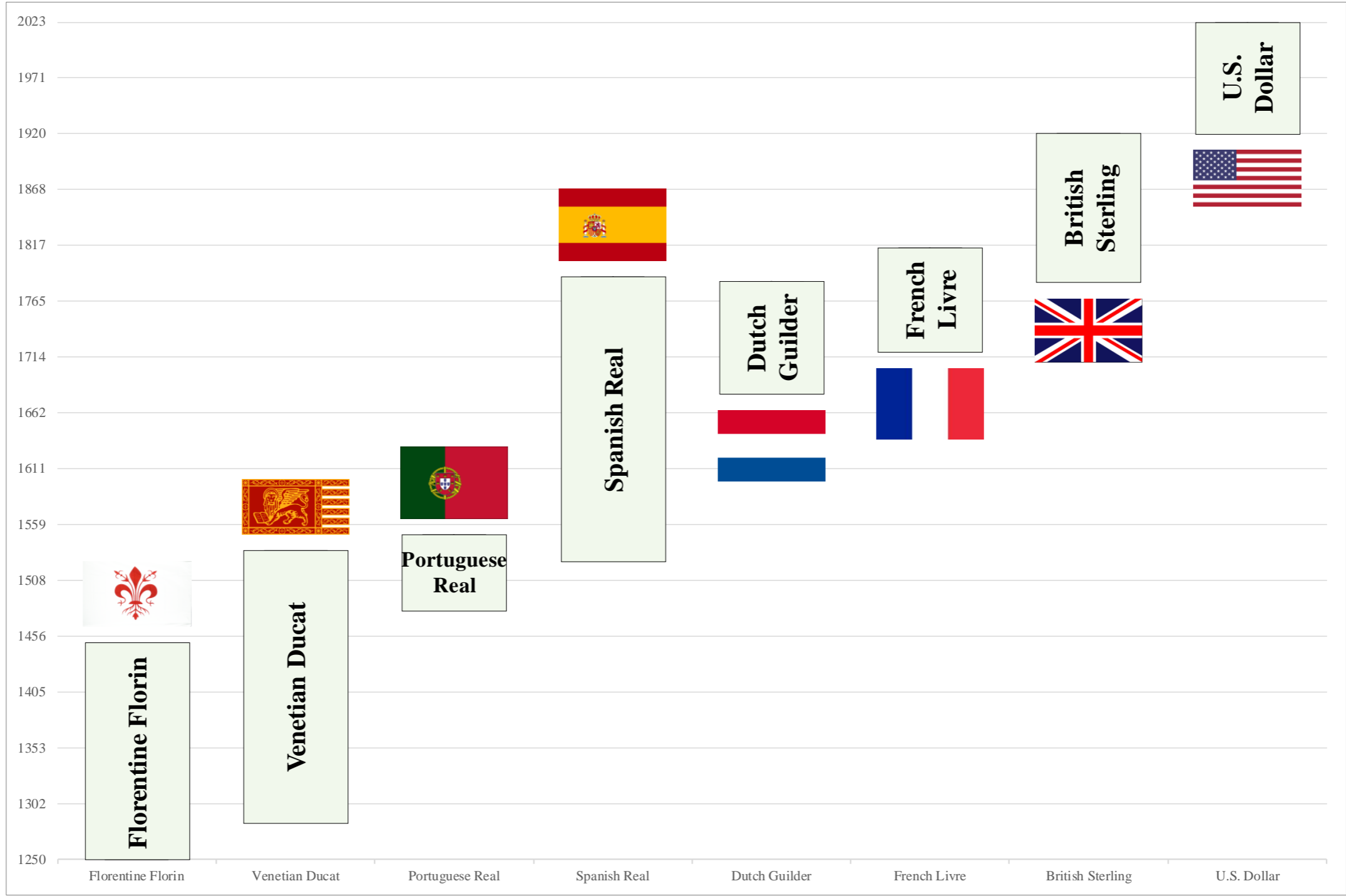
# EXHIBIT 6

## U.S. Standard of Living (GDP per capita) Relative to the Rest of the World



# EXHIBIT 7

## Major Global Reserve Currencies Since 1250



# The exact same rotation, also occurs with cities

Consider the U.S. since 1790

## 3<sup>rd</sup> and 4<sup>th</sup> largest U.S. cities throughout history

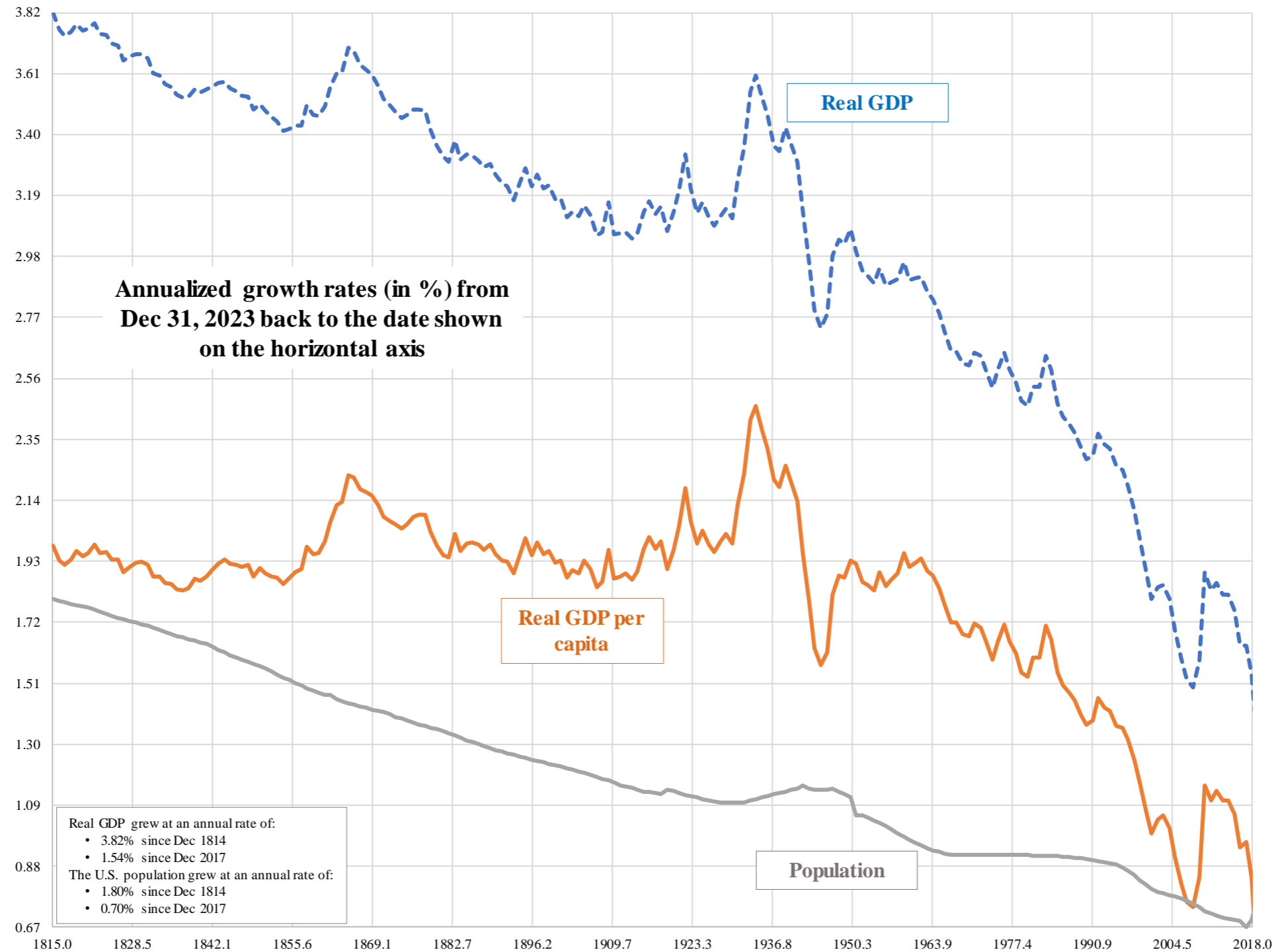
	3 <sup>rd</sup> largest	4 <sup>th</sup> largest
1790	Boston	Charleston, SC
1800	Baltimore	Boston
1830	Philadelphia	Boston
1840	New Orleans	Philadelphia
1850	Boston	Philadelphia
1860	Brooklyn, NY	Baltimore
1870	Brooklyn, NY	St Louis
1880	Brooklyn, NY	Chicago
1890	Philadelphia	Brooklyn, NY
1900	Philadelphia	St Louis
1920	Philadelphia	Detroit
1950	Philadelphia	Los Angeles
1960	Los Angeles	Philadelphia
1990	Chicago	Houston

# Has American exceptionalism declined or evaporated?

Let the data speak for itself

# EXHIBIT 8

## U.S. Economy Grows Slower and Slower with the Passage of Time



# The Faustian bargain

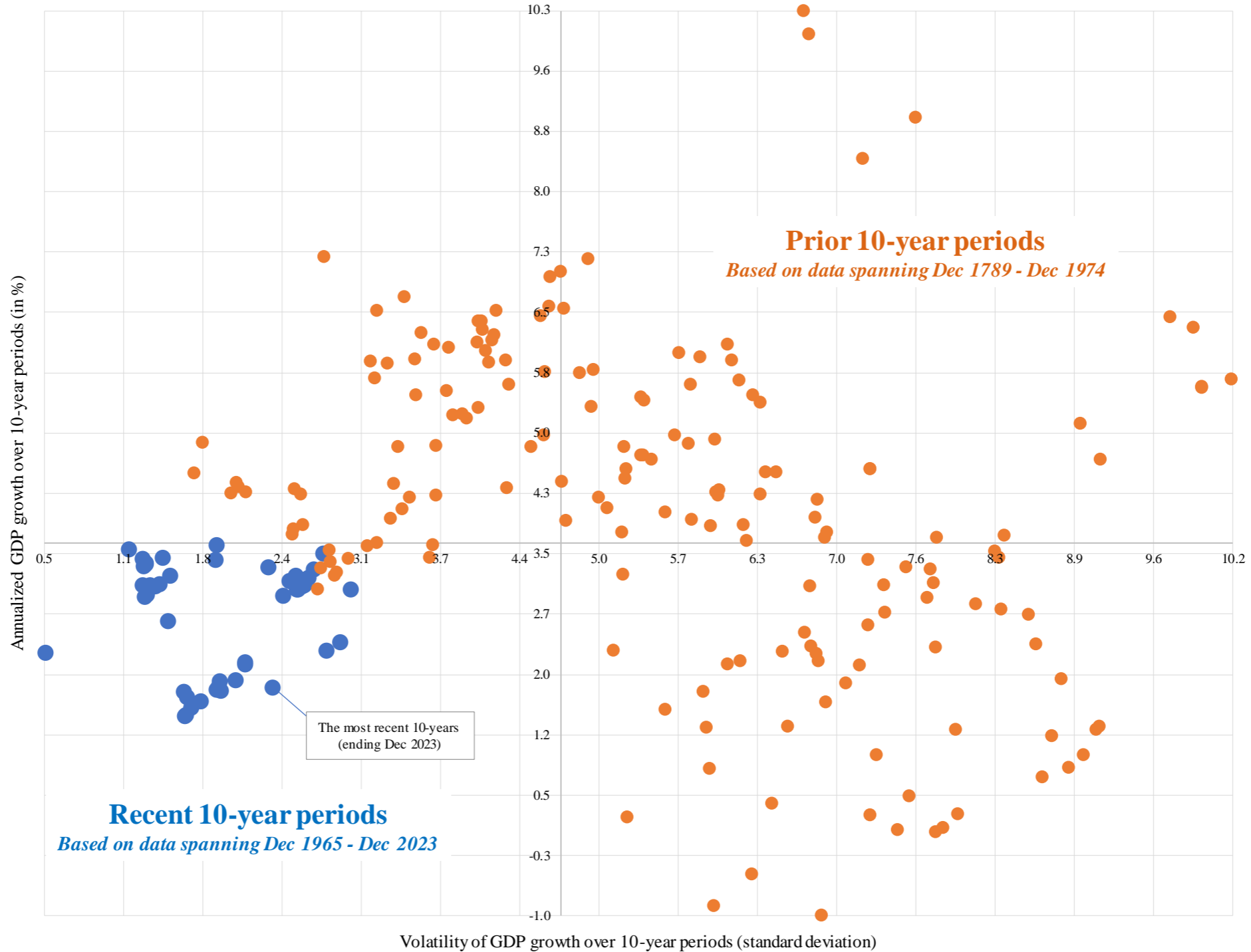
Trading stability for growth

Giving up improvements in prosperity . . . . for social cohesion



# EXHIBIT 9

## Last Five Decades - U.S. Economy is Growing Slower and with Reduced Volatility



# Cherry picking

Selecting the single best geography

Making it even worse . . . by selecting the single best time period

# EXHIBIT 10

## Average Returns - Post-Industrial U.S. vs Since-1914 U.S. and International

Portfolio	Region and time period	Investment time periods (in years)					
		1	5	10	15	20	25
Stocks	U.S. post-industrial	9.01	7.97	7.85	7.80	7.77	7.74
	U.S. since 1914	9.08	7.39	7.17	7.11	7.08	7.06
	International since 1914	7.34	5.94	5.76	5.71	5.68	5.66
Investment Grade Bonds	U.S. post-industrial	2.53	2.31	2.28	2.27	2.26	2.25
	U.S. since 1914	2.37	2.14	2.09	2.07	2.06	2.05
	International since 1914	2.73	2.15	2.05	2.00	1.96	1.94
60/40 Portfolio	U.S. post-industrial	6.03	5.63	5.59	5.57	5.56	5.55
	U.S. since 1914	5.93	5.29	5.22	5.19	5.18	5.17
	International since 1914	5.12	4.37	4.27	4.24	4.21	4.20

"Post-Industrial" spans the time period Jun 30, 1949 through May 31, 2023

"Since-1914" spans the time period Aug 31, 1914 through May 31, 2023

All statistics are based on monthly inflation-adjusted total returns

# EXHIBIT 11

## Annualized Standard Deviations - Post-Industrial U.S. vs Since-1914 U.S. and International

Portfolio	Region and time period	Investment time periods (in years)					
		1	5	10	15	20	25
Stocks	U.S. post-industrial	16.49	7.59	5.72	4.74	3.83	2.90
	U.S. since 1914	20.95	8.72	5.38	4.05	2.98	2.20
	International since 1914	19.30	8.22	5.37	4.34	3.44	2.93
Investment Grade Bonds	U.S. post-industrial	7.88	4.18	3.20	2.78	2.45	2.19
	U.S. since 1914	8.43	4.76	3.73	3.13	2.56	2.11
	International since 1914	13.39	7.46	5.86	5.06	4.20	3.49
60/40 Portfolio	U.S. post-industrial	10.02	4.25	3.08	2.55	2.03	1.55
	U.S. since 1914	12.81	5.24	3.36	2.57	1.89	1.43
	International since 1914	14.43	6.60	4.66	3.90	3.17	2.68

"Post-Industrial" spans the time period Jun 30, 1949 through May 31, 2023

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# EXHIBIT 12

## Probability of Reaching Goal - Post-Industrial U.S. vs Since-1914 U.S. and International

Portfolio	Region and time period	Investment time periods (in years)					
		1	5	10	15	20	25
Stocks (earn at least 2% above inflation)	U.S. post-industrial	69.8	73.2	80.5	87.5	91.3	99.8
	U.S. since 1914	65.7	70.9	80.9	89.2	92.9	99.8
	International since 1914	62.1	72.5	77.9	81.1	84.9	86.0
Investment Grade Bonds (earn at least 0.5% above inflation)	U.S. post-industrial	62.7	64.9	65.8	66.6	66.6	69.2
	U.S. since 1914	64.2	62.6	62.6	64.1	61.7	67.4
	International since 1914	58.3	60.0	65.5	64.9	63.6	64.8
60/40 Portfolio (earn at least 2% above inflation)	U.S. post-industrial	68.4	78.1	83.3	88.7	92.4	98.5
	U.S. since 1914	65.0	71.3	79.8	89.9	94.6	99.0
	International since 1914	59.2	67.4	71.2	71.3	78.3	84.0

"Post-Industrial" spans the time period Jun 30, 1949 through May 31, 2023

"Since-1914" spans the time period Aug 31, 1914 through May 31, 2023

# What's so unique about America's post-industrial era

What drove this nonrepresentative and nonrepeatable period?

- America's comparative edge/advantage resulted from several mutually reinforcing factors . . . these included:
  - Natural resources
  - Sizeable "empty" land (or one that could be made "empty")
  - Protected on the east and west by oceans, and on the north and south by friendly and/or distracted nations
  - Unique geography whereby the U.S. could simultaneously trade with both the "east" and the "west,"
  - Internal waterways providing economical transportation that spanned the nation,
  - Nation populated by immigrants who were motivated, desperate, hard-working, resilient, forward-looking, and willing to take risks (they self-selected for success)
  - New immigrants who'd been previously persecuted in their home-country, as a consequence, they're less inclined to persecute others in their new-country

# The proposed “solution”

It's all about expanding the geography and time period



# EXHIBIT 13

## Average Returns - Post-Industrial U.S. vs Since-1914 Global

Portfolio	Region and time period	Investment time periods (in years)					
		1	5	10	15	20	25
Stocks	U.S. post-industrial	9.01	7.97	7.85	7.80	7.77	7.74
	Global since 1914	8.17	6.93	6.77	6.73	6.71	6.69
Investment Grade Bonds	U.S. post-industrial	2.53	2.31	2.28	2.27	2.26	2.25
	Global since 1914	2.51	2.23	2.16	2.13	2.11	2.09
60/40 Portfolio	U.S. post-industrial	6.03	5.63	5.59	5.57	5.56	5.55
	Global since 1914	5.50	4.94	4.86	4.84	4.82	4.81

"Post-Industrial" spans the time period Jun 30, 1949 through May 31, 2023

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All statistics are based on monthly inflation-adjusted total returns

# EXHIBIT 14

## Annualized Standard Deviations - Post-Industrial U.S. vs Since-1914 Global

Portfolio	Region and time period	Investment time periods (in years)					
		1	5	10	15	20	25
Stocks	U.S. post-industrial	16.49	7.59	5.72	4.74	3.83	2.90
	Global since 1914	17.96	7.44	4.53	3.51	2.57	1.96
Investment Grade Bonds	U.S. post-industrial	7.88	4.18	3.20	2.78	2.45	2.19
	Global since 1914	9.76	5.88	4.71	4.03	3.33	2.76
60/40 Portfolio	U.S. post-industrial	10.02	4.25	3.08	2.55	2.03	1.55
	Global since 1914	12.27	5.38	3.62	2.94	2.26	1.81

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# EXHIBIT 15

## Probability of Reaching Goal - Post-Industrial U.S. vs Since-1914 Global

Portfolio	Region and time period	Investment time periods (in years)					
		1	5	10	15	20	25
Stocks (earn at least 2% above inflation)	U.S. post-industrial	69.8	73.2	80.5	87.5	91.3	99.8
	Global since 1914	65.4	71.8	82.2	92.0	98.6	99.4
Investment Grade Bonds (earn at least 0.5% above inflation)	U.S. post-industrial	62.7	64.9	65.8	66.6	66.6	69.2
	Global since 1914	62.2	62.2	64.5	63.7	62.1	66.5
60/40 Portfolio (earn at least 2% above inflation)	U.S. post-industrial	68.4	78.1	83.3	88.7	92.4	98.5
	Global since 1914	64.4	73.6	77.7	82.5	89.9	94.5

"Post-Industrial" spans the time period Jun 30, 1949 through May 31, 2023

"Since-1914" spans the time period Aug 31, 1914 through May 31, 2023

All statistics are based on monthly inflation-adjusted total returns

# But is this an important issue?

Consider three real world examples

# EXHIBIT 16

## Consequences of Ex-Post Cherry Picking - Three Practical Examples

Case	Cashflow description	Investor's goal	Probability of success	Time period and geography selected as basis	
				Post-Industrial U.S. returns	Since-1914 Global returns
<b>College Savings Plan</b> (529 Plan)	Deposit \$1,000 per month for 213 months. Immediately thereafter, withdraw a fixed-dollar amount (inflation-adjusted) each month for 45 months.	Maximize the fixed-dollar amount that can be withdrawn each month during the 45-month withdrawal period (while still meeting the probability of success requirement)	99%	\$4,917	\$3,632
			96%	\$5,142	\$4,409
			80%	\$7,270	\$6,220
			75%	\$7,890	\$6,547
<b>Retirement</b> (withdrawal and spending years)	Start retirement with \$1 million of savings. Immediately thereafter, withdraw a fixed-dollar amount (inflation-adjusted) each month for 360 months.	Maximize the fixed-dollar amount that can be withdrawn each month during the 360-month withdrawal period (while still meeting the probability of success requirement)	99%	\$3,546	\$3,049
			96%	\$3,739	\$3,417
			95%	\$3,779	\$3,455
			90%	\$4,034	\$3,606
<b>Defined Contribution Plan</b> (saving years)	Deposit \$1,000 each month for 480 months. Same time, same place.	Maximize the dollar amount that one ends up with at the end of the 480-month contribution and investment period (while still meeting the probability of success requirement)	99%	\$867,065	\$631,291
			97%	\$986,251	\$744,183
			75%	\$1,462,889	\$1,103,681
			70%	\$1,562,058	\$1,165,416

"Post-Industrial" spans the time period Jun 30, 1949 through May 31, 2023. "Since-1914" spans the time period Aug 31, 1914 through May 31, 2023.

All statistics are based on monthly inflation-adjusted total returns. It is assumed that all deposits and withdrawals are inflation-adjusted. The 60/40 portfolio (previously described) is used in all cases.

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# U.S. economy - growth, recession, slow-growth, and associated investment market returns

Monday

October 20<sup>th</sup>

11:00 a.m. eastern time zone

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One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the presentation of hypothetical performance results and all of which can adversely affect actual trading results.

The composition of a benchmark index may not reflect the manner in which a Julex portfolio is constructed in relation to expected or achieved returns, investment holdings, portfolio guidelines, restrictions, sectors, correlations, concentrations, volatility, or tracking error targets, all of which are subject to change over time.

No representation or warranty is made to the reasonableness of the assumptions made or that all assumptions used to construct the performance provided have been stated or fully considered.



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