ANALYTICS INVESTMENT ADVISORS, LLC

The Wise Whys

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"If you find a <u>why</u>, then you can bear any <u>how</u>." [1]

Introduction

The following pages provide answers to the *whys* of stagflation, i.e., slowdown or cessation of economic growth, simultaneous with acute inflation, and *how* the existing maladies can be ameliorated.

Aggregate Demand & Supply

- Market prices are determined by the relative relationship of supply and demand. If changes in demand exceed the production of goods and services, this excess demand will result in an increase in price levels; and conversely, will fall when supply out paces demand.
- Changes in Gross Domestic Product (GDP) is the most popular indicator of a nation's overall economic health in that it measures the value of final goods and services produced annually.[2]
- The BEA uses four major components to calculate U.S. GDP: personal consumption expenditures, business investment, government expenditures, and net exports. In 2019, U.S. GDP comprised 70% personal consumption, 18% business investment, 17% government spending, and -5% net exports.
- Chart 1 depicts the annual GDP for the U.S. between 1929 to 2023, whereas Chart 2 is an aggregation by 10-year periods, except for the last segment which comprises 13 years.[3]

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[1] ibid. Frankl (4). Victor Frankl was asked to express in one sentence the meaning of his own life; he replied, "... to help others find meaning in their lives", p.165. This is relevant in a public welfare context, where the U.S. political class is obligated by the Bill of Rights and Constitution to maximize the social benefits to the U.S. population by achieving efficient allocation of scarce resources commensurate with strong growth, i.e., GDP. As the following paragraphs demonstrate, the trends of, and rationale for, this declining metric are neither encouraging nor necessary.

[2] Ibid., BEA.

[3] Yearly observations greater than 7% and less than -5% were excluded to account for inordinate volatility such as world conflicts and economic abnormalities.

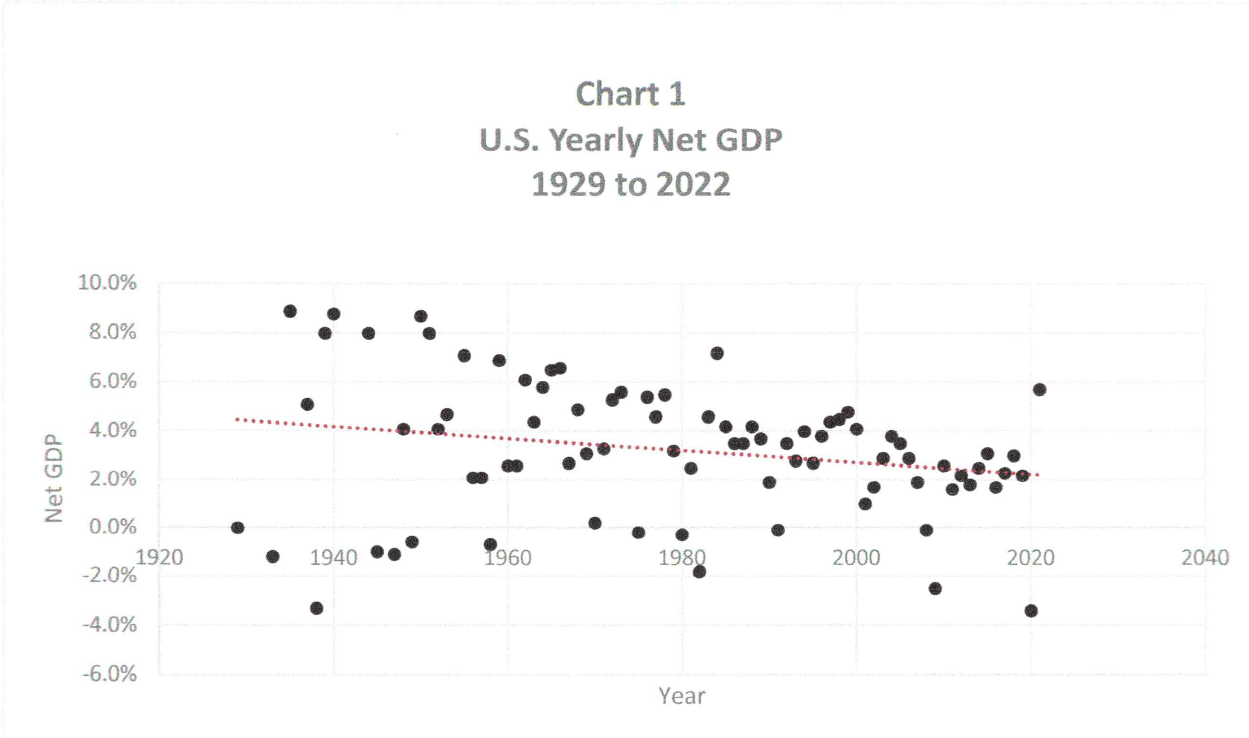


Chart 1
U.S. Yearly Net GDP
1929 to 2022
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
-2.0%
-4.0%
-6.0%
Net GDP
1920
1940
1960
1980
2000
2020
2040
Year

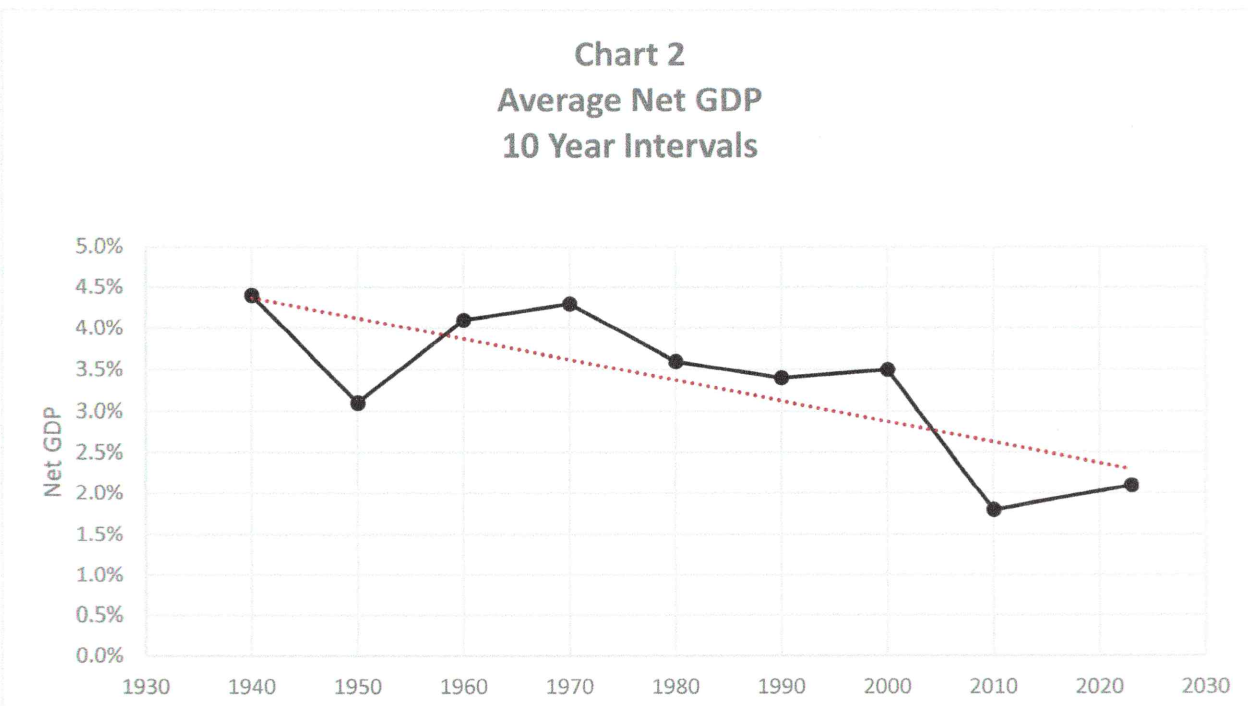
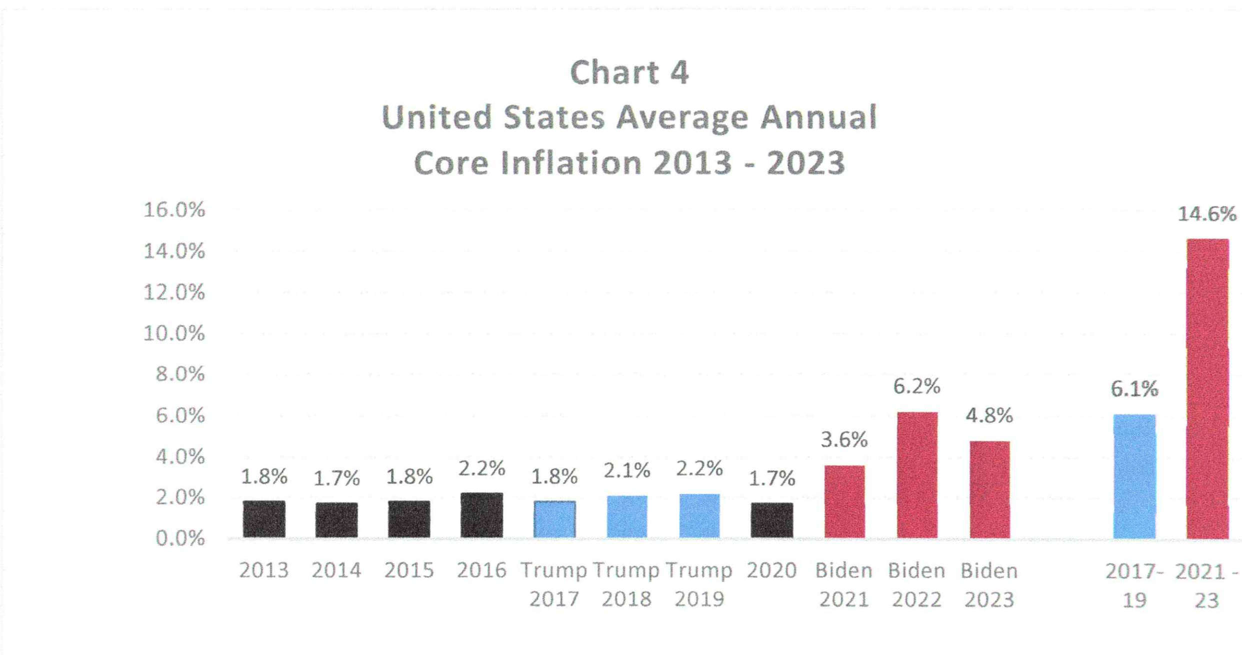


Chart 2
Average Net GDP
10 Year Intervals
5.0%
4.5%
4.0%
3.5%
3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
Net GDP
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030



[4]

[4] ibid., Chart 1, 2, 3, & 4, BEA (2) and BLS.(3).

Chart 5
Oil Price Forecast
March 2023 to April 2027

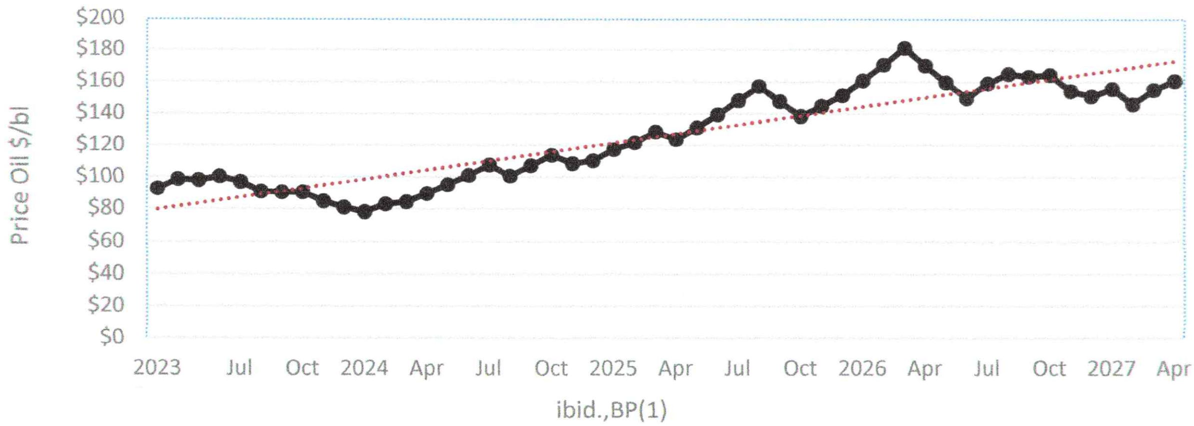


Chart 6
Global Energy Consumption
Five Year Intervals 1965 -2020, 2021

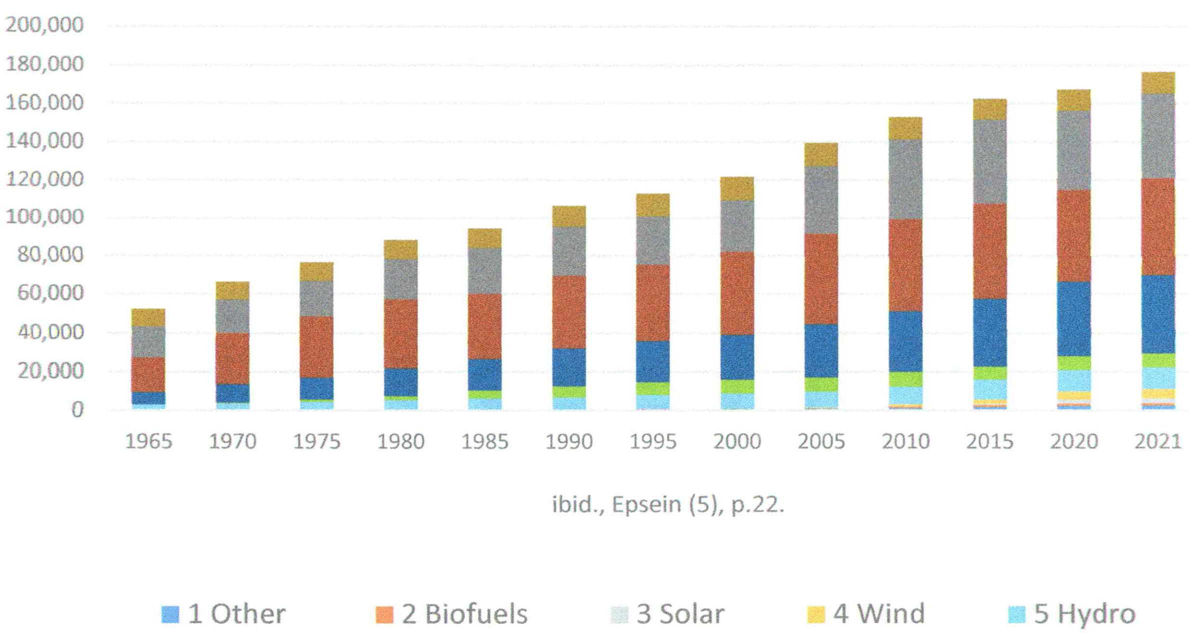


Table 1

World GDP Per Capita using UN's Five Scenarios

		Ending Value	Total % Return	Annual Return
$180,000	Fossil Fuel	$180,000	1,040	2.22%
$160,000				
$140,000				
$120,000				
$100,000	Sustainable	$100,000	600	1.63%
$90,000				
$80,000	Middle of the Road	$80,000	450	1.39%
$60,000				
$40,000	Inequality	$54,000	290	1.00%
$20,000	Regional Rivalry	$30,000	170	0.40%
	2000 2020 2040 2060 2080 2100			

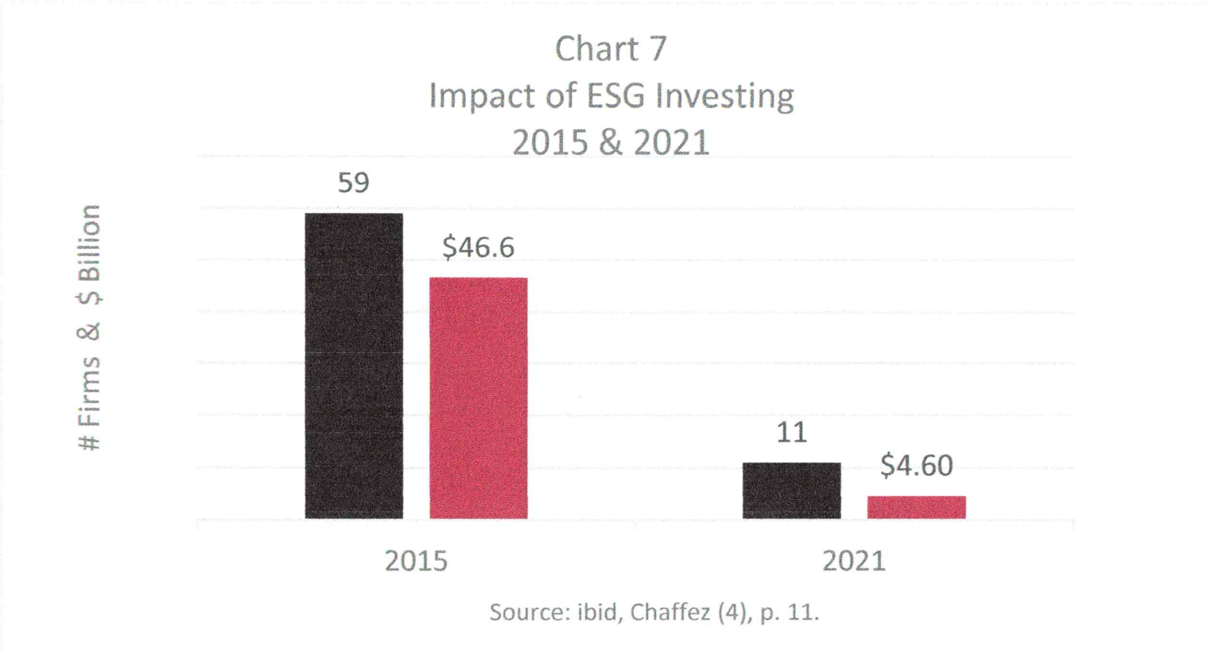
ibid., Lomborg (9), p. 126.

Table 2

The 12 Most Efficient Investment Portfolios

Tuberculosis - *The Silent killer of the world's poor*
Education - *In School but not learning*
Maternal and Newborn Health - *Childbirth deadly*
Agriculture R& D - *More & cheaper food*
Malaria - *Tackling the malaria curse in Africa*
Reducing Corruption - *Digital solutions to prevent*
Nutrition - *First thousand days*
Chronic Diseases - *Tobacco, alcohol, and salt*
Childhood Immunization - *Remarkable returns*
More Trade - *The return of Free and fair trade*
Highly Skilled Migration - *Reduce global inequality*
Land Tenure Security - *Property rights Africa*

ibid., Lomborg (10), pp 41-255.



- Charts 1 & 2 present a disturbing pattern of secular decline in U.S. GDP from 1940 to the present. Arthur Laffer and associates argue that historically Keynesians and monetarists have "glided over the clear impact" that tax rates have on every segment of an economy, *and* that case after case over the last century higher tax rates, at the federal *and state level*, including property and corporate income taxes, and tariffs, harm the economy; whereas, lower tax rates and less federal regulation resulted in greater economic expansion, employment, and social mobility.[5]
- Understanding the interrelationship of Aggregate Demand GDP = C (consumption) + *I* (private investment) + G (government expenditures) + NX (net exports), to Aggregate Supply = N (labor) + CG (capital goods) + NR (natural resources) + E (entrepreneurship), provides a meaningful framework to identify the potential sources of, and reasons *why* economic and social imbalances exist, and theoretically *how* they can be ameliorated.
- Accordingly, it is reasonable to hypothesize that a combination of the decrease in consumption by deficit spending through unproductive transfer payments, a lack of private investment because of underutilization of labor, less production focused on entrepreneurship, misallocation of scarce natural resources, and ineffective trade policies all have a significant role in the present U.S. stagflation.
- Alex Epstein writes "...ignoring the unique, massive benefits of ultra cost-effective fossil fuel energy to human flourishing, while calling for the rapid elimination of fossil fuels is an

[5]ibid. Laffer (7), p. 399-413.

irrational and dangerous approach to evaluating fossil fuels.[6] Chart 5 illustrate projected oil prices necessary to equate supply and demand to 2027 [7]; whereas, Chart 6, reproduced from the BP Statistical Review of World Energy data, illustrates that only fossil fuels will continue to provide necessary future low-cost, on-demand, versatile, energy on a global scale.[8]

- Cognizant of the financial implications of climate change, researchers for the United Nations climate science panel, published a report which examined five different scenarios to measure the difference in wealth accumulation based on factors such as geopolitical economic trade, migration patterns, education and health, the results of which are depicted in Table 1.
- The salient observations from these scenarios are: 1) when governments invest more in education, health, and technology, the world becomes much better off, with less poverty and reduced inequality; 2) the worst two scenarios resulted in only half of adults receiving a higher high school education, with virtually no change in life expectancy; and, 3) the two best scenarios, predicted everyone receiving a high school or university education, and life expectancy reaching 100.
- Most importantly, 1) the outcomes of these policy choices have nothing to do with climate change, and 2) the scenario yearly growth rates vary by less than 2% (2.22% - 40), but the observed differences in GDP growth allow for significant improvement in human advancement and well-being.[9]
- Bjorn Lomborg identified 12 initiatives in Table 2 that address the betterment of mankind that were implemented quickly, and quantified in terms of objectives, financial expenditures, and monetary and social benefits, to cost an estimated $35 billion dollars could save 4.2 million lives annually and make the poorer half of the world more than a trillion dollars better off each year thereafter.[10]
- A social scoring system is being implemented in the financial sector called ESG (environment, social, and government), where entities seeking investment dollars are scored by rating companies according to their compliance with certain political dogma, which is sometimes referred to a "sustainable investing".[11]
- This ranking system is controlled by powerful private entities which are profoundly hostile to healthy competition. As former House Speaker Newt Gingrich stated, "It's a way to shut off access to credit and services for the politically noncompliant, redirect capital to more politically favored industries, and position progressive political priorities as global census."
- Marlo Oaks, treasurer of Utah state said in an interview with Tucker Carlson recently that, "Today's inflation really starts with ESG. The reason we don't have enough oil and gas is that we don't have sufficient capital going into oil and gas projects", citing the data in Chart 7 as

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[6] Ibid., Epstein (5), 20-24.
[7] Ibid., BP (1).
[8] Ibid., BP (1).
[9] The annual rates of returns were calculated independent of the published world energy report and are consistent with Lomborg findings that more cost-efficient options can have significant humanistic and impactful outcomes.
[10] ibid., Lomborg (13) 3-5.
[11] ibid., Chaffetz (4), 7-15.

an example of the negative global impact on gas and oil investments between 2015 and 2021.

- Stephen. Koonin recently commended the authors of a report by the Council of Economic Advisors and the Office of Management and Budget that analyzed 12 independent peer researchers who studied the relationship between GDP and global temperatures, for honestly delivering an unwelcome message, and that the rest of the Biden Administration and its climate-activist allies should moderate their apocalyptic rhetoric and cancel the climate crisis; "...exaggerating the magnitude, urgency and certainty of the climate threat encourages policies that could be more disruptive and expensive than any change in the climate itself.[12]
- Michael Shellenberger comes to a similar conclusion, stating that, "Environmental humanism will eventually triumph over apocalyptic environmentalism because most people in the world want both prosperity and nature, not nature without prosperity, but are confused about how to achieve both. So, while environmentalist claim their agenda will deliver a greener prosperity, the evidence shows that an organic, low energy and renewable powered world would be worse, not better, for most people and for the natural environment".[13]

Summary and Conclusion

- Out of control inflation and sluggish demand can be explained by examining the imbalance of the major components of aggregate demand and supply.

$$GDP\ (C + I + G + NX) = Output\ (L + CG + NR + E)$$[14]

- While overall demand is sluggish, supply constraints are more pervasive in the aggregate, causing the observed inflation trends in Charts 1, 2, 3, and 4. Consumer expenditures are stronger than normal due to massive and misplaced government spending (unemployment transfer payments and climate change), while business investments are skewed downward due to disincentives to invest because of ESG, all causing a misallocation of scarce resources and reduced productivity. And while the Trump administration championed free and fair trade that prioritized families and workers, combated China, and reduced the trade deficit, little effort to preserve and promote these efforts is evident by the present administration.[15]
- A steady labor participation rate of 62.5% in the last four months (compared to 63.5% in 2020), continues to be a drag on both GDP and Output. Moreover, the decision by our government not to take full advantage of our natural resources has been a significant detriment to production and entrepreneurship.
- Until these conditions are recognized and corrected by our government, the gross mismanagement of monetary and fiscal policies will continue to persist and manifest socially undesirable stagflation.

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[12] Ibid., Koonin (9). "The White House Tells the Truth About Climate Change, *The Wall Street Journal, July 7, 2023.*

[13] ibid., Shellenberger, 285.

[14] See page 6.

[15] Ibid., Lighthizer (11), estimated in a recent interview with Larry Kudlow, halving the trade deficit with China alone could improve GDP by 2%.

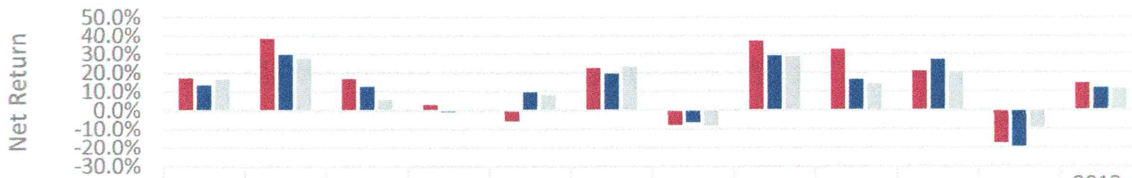
Credits

1. BP Statistical Review of World Energy.
2. U. S. Bureau of Economic Analysis (BEA).
3. U.S. Bureau of Labor Statistics (BLS).
4. Chaffetz, Jason, *The Puppeteers – The People Who Control the People Who Control America,* HarperCollins, 2023.
5. Epstein, Alex, *Fossil Future – Why Global Flourishing Requires More Oil, Coal, and Natural Gas – Not Less,* Penguin Random House, LLC 2022.
6. Forbes, Nathan Lewis, and Elizabeth Ames, *Inflation – What it is, Why it's Bad, and How to Fix it,* Encounter Books, New York, NY. 2022.
7. Frankl, Victor E. *Man's Search for Meaning,* Beacon Press, 2006.
8. Hasset, Kevin A. *The Drift – Stopping America's Slide to Socialism,* Regnery, 2020.
9. Koonin Stephen E. *Unsettled – What Climate Science Tells Us, What It, and Why it Matters,* Ben Bella Books Inc., Dallas Texas, 2021.
10. Laffer, Arthur B., Brian Domitrovic, and Jeanne C. Sinquefield, *Taxes Have Consequences – An Income Tax History of the United States,* Post Hill Press Book, 2022.
11. Lighthizer, Robert, *No Trade Is Free – Changing Course, Taking on China, and Helping America's Workers,* 2023.
12. Lomborg, Bjorn, *False Alarm – How Climate Change Panic Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet,* Hachette Book Group Inc. 2020.
13. Lomborg, Bjorn, *Best Things First – The 12 most efficient solutions for the world's poorest and our global SDG promises,* Copenhagen Consensus Center, 2023.
14. Shellenberger, Michael, *Apocalypse Never – Why Environmental Alarmism Hurts Us All,* Harper Collins, New York, NY, 2020.

Performance Summary[16]

	2012-22 Avg.	YTD[17] 06/30/2023	Beta	R^2	SD	Sharpe Ratio
S&P500 ($SPX)	14.97%	15.91%				
US Bond Index[18]	2.05%	2.18%				
Moderate	12.55%	11.06%	1.23	59	31.69	-.47
Assertive 1	14.27%	14.17%	1.53	61	35.15	-.50
Assertive 2	21.51%	62.00%	3.05	10	173.20	-.57
Aggressive	23.93%	73.80%	1.87	62	42.42	-.85

Risk Statistics (Beta, R^2, SD, Sharpe Ratio)



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2012-22
Assertive1	17.1%	38.4%	16.9%	2.9%	-5.6%	22.4%	-7.8%	37.0%	32.4%	20.8%	-17.4%	14.3%
SPX	13.4%	29.6%	12.6%	-0.7%	9.5%	19.5%	-6.2%	28.9%	16.3%	26.9%	-19.4%	11.8%
MSCI World	16.5%	27.4%	5.5%	-0.3%	8.2%	23.1%	-8.2%	28.4%	13.8%	20.3%	-9.4%	11.4%

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
S&P500	13%	44%	62%	61%	76%	110%	97%	154%	196%	275%	202%	250%
Assertive 1	17%	62%	89%	95%	84%	125%	108%	184%	276%	355%	275%	317%
Aggressive	23%	107%	111%	124%	98%	193%	152%	345%	507%	618%	469%	889%

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[16] Moderate: Prudent investors desiring portfolios designed to accomplish medium long-term return. Calculated risk is acceptable to achieve good returns. Assertive 1 & 2: Investors with sufficient income to invest mostly in capital growth. Higher volatility and more aggressive investments are acceptable to accumulate wealth in the long run. Aggressive: Investors intending to compromise portfolio balance in pursuit of higher long-term returns. Security of capital is secondary to potential wealth accumulation.

[17] Net Average Return, Portfolio Center, Schwab Portfolio Technologies. Fees are negotiable and range between .5% to 1.0% per year for assets under management. Risk Statistics, Morningstar Advisor Workstation; most recent 3 years, computed semi-annually.

Beta	Expected change in portfolio return per 1% change in market index return.
R^2	Percent of variation in regression equation explained by the independent variable (S&P500).
SD	Standard deviation of the dependent variable (Net Return).
Sharpe	Reward-to-Variability Ratio, i.e., portfolio return above risk free rate of return divided by standard deviation.

[18] Vanguard Total Bond BND.