

The Deep Thought Commentary: Innovation + World Peace

July 2024

August is traditionally a vacation month in America, a time when families travel together to enjoy new experiences and bring a close to the summer months. It felt like an opportune time to issue our first annual Deep Thought Recap.

Over the first six months of the year, our deep thoughts ranged from a focus on the world happiness index and the Olympics to innovations in aviation and the positives and negatives of AI. Each one of these topics materially contributes to the world economy and therefore the financial markets.

Al has taken the world by storm. Markets are exuberant over its potential, as are students, office workers and really anyone who can rely on Al to mitigate their own work or further enhance their own brain (depending on one's perspective and general goals in life). There is no question that Al technology is disruptive and should contribute to an increase in human wealth while leading to amazing benefits in our lifetime. Our <u>first Deep Thought highlighted the benefits and detriments of mind control and online cloning.</u> Mind control can assist those paralyzed in communicating with the world (amazing!) or assist a controlling government in knowing your thoughts (scary!). Cloning can assist commercially in having oneself everywhere at once, answering and reacting to multiple streams of media/interactions (amazing!) or to deepfake someone else maliciously (scary!). Our <u>second Deep Thought stayed on topic, with a highlighted warning from an event we attended featuring Yuval Noah Harari</u>.

Our May Deep Thought took place at an AI tech event in New York City where we found a loon-shot in aviation to be the most exciting pitch. The capability to deliver anything anywhere in the world, precisely (within 100 meters of a geolocation), and within an hour is mind blowing. Whether the company succeeds or not, we imagine it will contribute to the onward march of innovation surrounding global delivery and transportation (i.e., can one never get off a couch and still get everything they need by simply thinking about it within a short time period? – amazing and scary!).

We discussed methods of increasing peace in the world through highlighting Ubuntu philosophy in our March Deep Thought, a conflict resolution tool that has been used successfully in Rwanda and throughout Africa. The aspirations and hopeful benefits of the Olympics, which was our Deep Thought focus in June and is currently taking place in France, is to have differing cultures meet, talk and hopefully recognize a path to peaceful partnership and growth through sport. We explored some ideas of increasing that capability while lowering the overwhelming bill that is typically charged for building out the infrastructure necessary to host the Olympics in the first place.

Open trade with less global conflict directly correlates with wealth. It allows less people to suffer, which results in more capability to be productive. It allows the sharing of ideas that blossom into innovation and





new technologies, which benefits everyone. We highlighted this by discussing the Happiness Index in our April Deep Thought. It is no surprise that the least happy countries are those mired in conflict while the happiest tend to be successful, rather homogenous, countries far from conflict (with one exception). Here is hoping that the next year brings everyone's score up – especially (and biasedly) America's score which we highlight as concerning.

We all tend to get caught up in today's headlines. Who will be the next president? What is happening currently in the relevant wars of the world? No doubt these are important topics, but sometimes stray too close to a day-to-day reaction to market performance and the like when we are, as a group, primarily focused on investing over decades. Deep Thoughts is designed to purposely zone out and take a broader and longer-term view on some of the factors that are and will affect our global economy.

Below are the previously published Deep Thoughts from the first part of the year that are referenced above.

June Deep Thought: Universal Olympics!

The Summer Olympics will be taking place beginning in late July in Paris! The original Olympics took place for close to 12 centuries (800 BC – 400 AD) in Greece, primarily Mount Olympia. They were played naked and only by men. They were so popular that a war was delayed due to an upcoming scheduled Olympic event! And eventually outlawed by the Roman's due to their pagan ways.¹



The Olympics is supposed to be about coming together as a people. The Olympic rings represent the [ideal] unity of the five inhabited continents. In an increasingly ominous global geo-political landscape, getting together over sport and food sounds like a good idea.

However, countries competing for hosting and then primarily getting destroyed economically when building the necessary sport infrastructure to support the games seems problematic. It supposedly took Montreal

² Welcome to the Ancient Olympic Games (olympics.com)



¹ Welcome to the Ancient Olympic Games (olympics.com)



30 years to pay off its Olympic price tag and the list goes on of cities that were simply clobbered in a number of ways (displaced people, cost overruns, empty stadiums).³

A universal Olympic city (perhaps in or near Greece – Greek island?) can solve many of the aforementioned problems with rotating the host which may assist in focusing on the true meaning and benefit of the games! We did not come upon this concept until learning more about the games, but it sounds worthy, matching the idealism of those who bought the games back into being.⁴

May Deep Thought: Advances in Aviation

The first week of June is <u>tech week in NYC</u>, with close to 200 events a day. We had the opportunity to go to a networking event. The most interesting conversation we had was what I would consider a bit of a long shot, but in the founder's estimation is about a year away: **The ability to send a care package anywhere in the world within ONE HOUR.**

A warehouse is placed approximately 300 miles above Earth which holds certain necessities. This is a government-based product so visualize weapons and medical equipment. The warehouse is automated with space capsules and balloons at the ready. Once a request is made, such as a commando unit in some trouble in a hard to supply location, the supplies are sent with an expected landing range of 100 meters.

Eleven years ago, Bezos went on CBS's 60 Minutes to announce that his company intended to deliver parcels by drone within 30 minutes. He thought this would occur in five years. He was off with the timing and still a ways away from national, but Amazon is beta testing delivery in and around College Station, Texas.⁵

Roughly 25 years ago, Kozmo.com promised one-hour local delivery of videos, games, DVDs and so on.⁶ Their high-tech solution in getting product to client in under an hour was to have college kids biking and running to location (a far cry from Bezos drone idea...).

In all seriousness, attempting to put a warehouse in space and provide delivery anywhere in the world is an incredible project that will provide huge value regardless of whether it is successful because of the engineering feats or other benefits that result from trying. It is something governments and investors get involved with to bring further innovations to the world.



³ Why Can't We Just Host the Olympics in the Same Place Every Year? - Bloomberg

⁴ Why Can't We Just Host the Olympics in the Same Place Every Year? - Bloomberg

⁵ Amazon Approval From FAA Gives a Boost to Drone Delivery Program - Bloomberg

⁶ Kozmo.com - Wikipedia



April Deep Thought: Happiness and Well-being

GDP, population statistics and job characteristics may provide some indications reflecting the happiness and well-being of a country's population, but it does not tell a full story. I am not sure "happiness" is a pure goal, perhaps measuring life "satisfaction" would be a more meaningful measure. However, there is a bit more of a ring to the "World Happiness Report" that has just been issued. The 10 most happy countries are a composite of smaller northern European countries with the outlier of Israel (the happiest by far of the middle eastern countries and sporting the 2nd happiest youth in the world) and Australia. The 10 least happy countries are a bit easier to guess with Afghanistan ranked as the least happy country in the world, with a composite of war torn, desperately poor and/or problematic governance materially negatively affecting populations. I included Yemen as #11 least happy given they have been in the news as of late.

Happiest 😊 + America 😐

Table 2.2: Ranking of life evaluations by age group, 2021- 2023

Country	All Ages	The Young	Lower Middle	Upper Middle	The Old	Happiest	Least Happy
Finland	1	7	1	1	2	Old	Young
Denmark	2	5	3	4	1	Old	Young
Iceland	3	4	4	2	5	Young	LowerMiddle
Sweden	4	18	8	3	4	Old	Young
Israel	5	2	2	7	18	Young	Old
Netherlands	6	9	5	5	7	Old	Young
Norway	7	20	6	6	3	Old	Young
Luxembourg	8	6	11	8	12	Young	LowerMiddle
Switzerland	9	13	9	11	14	Young	UpperMiddle
Australia	10	19	14	10	9	Old	LowerMiddle
United States	23	62	42	17	10	Old	LowerMiddle

Saddest 😕

Country	All Ages	The Young	Lower Middle	Upper Middle	The Old	Happiest	Least Happy
Yemen	133	135	135	136	129	Young	UpperMiddle
Zambia	134	136	131	138	142	Young	Old
Eswatini	135	134	134	137	136	Young	UpperMiddle
Malawi	136	137	140	135	132	Young	LowerMiddle
Botswana	137	133	133	140	140	Young	Old
Zimbabwe	138	139	138	139	137	Young	UpperMiddle
Congo (Kinshasa)	139	140	137	134	139	Young	Old
Sierra Leone	140	141	136	132	133	Old	LowerMiddle
Lesotho	141	138	141	142	138	Young	UpperMiddle
Lebanon	142	142	142	141	141	Young	Old
Afghanistan	143	143	143	143	143	Young	Old

⁷ Read the Reports | The World Happiness Report

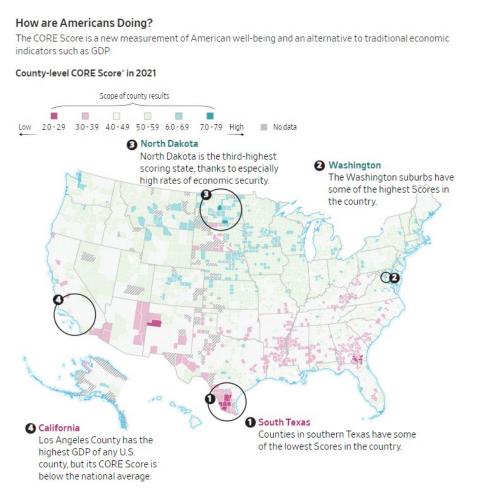
⁸ Read the Reports | The World Happiness Report



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Of concern, is that the US, despite all of its natural as well as developed global advantages, has a youth that is ranked roughly middle of the pack in happiness. Our youth is ranked 62 out of 143 countries in happiness, a spot behind the Dominican Republic and 6 spots ahead of Russia. This makes me sad. What is going on with our youth?



The Wall Street Journal has created a CORE score that measures America well-being. It measures economic security, opportunity, health, and political voice. It shows wide disparities of CORE scores across America, with the Northeast and Mid-West having relatively high scores, while the south lags with South Texas having some of the lowest scores in the country. Can increasing health costs with minimal social umbrella, aging politicians (note presidential race), and relatively expensive housing be affecting our nations youth's happiness? Or can we just blame all our issues on others and claim it's Tik-Tok?

⁹ Do the GDP and Dow Reflect American Well-Being? - WSJ





March Deep Thought: Ubuntu Philosophy – Can we all just get along!?

Pascah Mungwini, a prominent African Philosopher: "Ubuntu is rooted in the realization that 'human beings must assume the responsibility of creating a humane environment within which they exist together."

Conflict has been an unfortunate reality from at least the time that humans shifted from hunter/gatherer to agrarian organization. There have been notable shifts in populations dead-set on killing other populations prior to finding a path to long term, meaningful, peaceful coexistence. Examples include Germany and Japan after World War II, and Rwanda after the genocide of the minority Tutsi population at the hands of the Hutu.

The map to the right illustrates global conflicts tracked by the Council on Foreign Relations.¹⁰ Using the link in the footnote, one can click on the dots to review details of the highlighted conflict.

Can Ukrainians and Russians coexist in the future? How about Israelis and Palestinians in the West Bank and Gaza?¹¹

Ubuntu philosophy, whose roots are in Africa, was instrumental in allowing members of the Hutu and Tutsi tribes in moving on from the genocide in Rwanda. It is yet another tool / philosophy to perhaps assist in tamping down conflict on local, regional, national and government levels.



While geopolitical tensions have been rising steadily, there are always off-ramps.

This deep thought is borrowed heavily from: "African Thought Can Rescue Western Philosophy". 12

¹² African thought can rescue Western philosophy | Emmanuel Chiwetalu Ossai and Lloyd Strickland » IAI TV



¹⁰ Global Conflict Tracker I Council on Foreign Relations (cfr.org)

¹¹ As opposed to the 20% of Israeli citizens and permanent residents who are Arab (and primarily Muslim) and identify as either Israeli, Palestinian, or both, and live in reasonable harmony with Jewish Israelis.



February Deep Thought: Al Taking Over the World

This past Sunday, I had the opportunity to attend an event featuring Yuval Noah Harari in Conversation with Ian Bremmer on "Why the World Isn't Fair" at 92nd Street Y. Mr. Harari's chief concern was the power of Al. For the first time in history, powerful technology can make decisions for itself.

"Al is different from every previous technology in human history because it's the first technology that can make decisions by itself, that can create new ideas by itself and that can learn and develop by itself. Almost by definition, it's extremely difficult for humans, even those who created the technology, to foresee all the potential dangers and problems." – Mr. Harari. 13

- Autonomous weapon systems making independent decisions?
- Bots conducting conversations with individuals, collecting all necessary data, and figuring out the perfect argument to convince humans of anything?
- Al-provided guidance to do something by any means necessary?
- Add your own science fiction soon to be reality scary scenario...

The relevance to this particular commentary is (1) the increased use of AI within advanced militaries, and (2) the increased use of AI within social media, which may result in material misinformation leading into an important US election cycle.

If the entire world does not agree on AI regulation (similar to nuclear proliferation), then none of the world can work to limit the potential risks involved.

On our podcast, Investment Wars, we ask, "Will Robots Take over the World?" It seems like Yuval Harari is more concerned with AI taking over the world.

January Deep Thought: Deepfake!? Mind Control?!

During our recent **Advisor Summit,** I used some of my speaking time to attempt to scare the participants with amazing innovations that can also go wrong – which brings up the topic of regulation: How much do we want certain industries regulated?

Here is the article I referenced: Mind-Decoding Technologies Raise Hopes (and Worries) (undark.org)¹⁴ highlights the existing capability of scientists to introduce artificial memories in mice. They could therefore most likely introduce them in humans in the not-too-distant future. It also highlights the *current capability*

¹⁴ https://undark.org/2024/01/03/brain-computer-neurorights/



¹³ Al could cause 'catastrophic' financial crisis, says Yuval Noah Harari | Artificial intelligence (AI) | The Guardian



to read human minds. The positive is the capability to allow mind control for positive reasons such as allowing a fully paralyzed person to communicate. The negatives are dystopian nightmares similar to Minority Report, 15 where crimes are stopped prior to taking place by reading people's thoughts.



Jerry Tang prepares to collect brain activity data using an fMRI machine at the University of Texas at Austin. Using a large, expensive machine is a hurdle for widespread use of Huth and Tang's decoder. Visual: Nolan Zunk/University of Texas at Austin

More relevant perhaps to this Commentary is the increasing ability to assume someone's identity—the recent Taylor Swift AI deepfake, for example, has captured international attention. While it is not inspiring (because why can't we all just be nice humans!), perhaps future posts will come with a level of authentication provided through blockchain technology that essentially verifies the author. Us non-famous world participants may not need it, but Taylor Swift certainly may be interested. She can use a private key in validating anything she puts her stamp of approval on, and the rest of the world can verify through a public key.

¹⁶ https://undark.org/2024/01/03/brain-computer-neurorights/



¹⁵ Minority Report (2002) - IMDb



Talking Points: July 2024

Monthly Market Recap

Events in July have seemingly solidified the likelihood of the Federal Reserve ("Fed") initiating a credit easing cycle (lowering interest rates on federal debt which generally heavily dictates short term debt costs). Inflation data from the month of June showed exactly what markets were looking for - a trend lower and no surprises to the upside. Inflation has now been running at close to 3% annually, above the stated goal by the Fed of 2% but nonetheless, a reasonable rate and well below the current Federal Reserve target interest rate of 5.25% - 5.50%. This, coupled with recent weakness in some labor market data, has markets certain that the Fed is positioned to start cutting rates at their next meeting in September. The icing on the cake was the commentary from Fed chair Jerome Powell throughout the month, where he seemed to be "setting the table" for a cut of rates in the very near future. By the end of July, derivatives markets were showing a 100% probability of at least a 0.25% decrease in rates in September.

All of that being said, both the S&P 500 and the Nasdaq declined for the month of July while the Dow Jones Industrial Average ("Dow 30") increased. This was the result of what is known as a "market rotation" that developed throughout the month where investors looked to derisk portfolios by selling high-flying growth stocks, which have performed extremely well recently, in favor of value sectors and small caps (relatively smaller public companies).

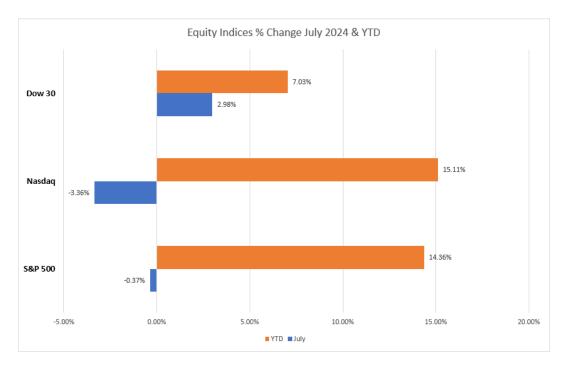
The Fed's goal is to use "tightening" and "easing" of monetary policy to help maintain a well-functioning economy. The Fed "tightens" monetary policy (for example, by increasing interest rates, among other tools) generally during periods of financial market exuberance and to combat inflation. Tightening occurs by increasing interest rates, which makes it more costly to borrow money and therefore slows the economy. The Fed will "ease" monetary policy during periods where it believes it needs to spur the economy by, among other tools, lowering interest rates. When there's a lack of capital investment, consumer spending, and other generally deflationary characteristics, the Fed will generally focus on "easing" monetary policy.

The Fed's job is incredibly hard, given so many factors contributing to the direction of the economy and, generally speaking, it is very hard to get a full cycle "right" – meaning Fed actions do not result in increased volatility of the economy and/or financial markets. A year ago, the market conversation concerned fear of a "hard" landing, in which the market would drop materially with increased volatility due to a sector (or sectors) in the general economy under material stress or even breaking (e.g., commercial real estate which then may spread to other areas of the economy). This is in contrast to a "soft" landing, in which the economy, and therefore the market only experiences minor stresses (e.g., slightly increased unemployment, slight hit to commercial real estate that does not spread through the economy). The market however has remained strong, and the conversation has moved to a "no" landing vs "soft" landing for the most part (until early August at least though will see how the market is digesting news and data by the end of the

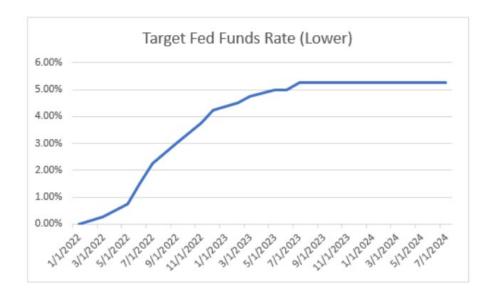




month). Will the Fed get it perfectly right? Is it right to lower rates just now when the economy is humming along? Only history will tell - as usual, with reward comes risk!



- Nasdag and S&P underperformed relative to the Dow
- YTD performance still strong for each index







- Fed funds target rate rose quickly off 0% in 2022 as the Fed raised rates at an historic pace to combat inflation ("tightening cycle").
- As inflation normalized, the Fed kept rates steady.
- With cuts potentially coming as soon as September, the question becomes how far and how quickly will the Fed bring rates down? ("easing cycle")

2024	January	February	March	April	May	June	July
Fed	MILDLY BEARISH	MILDLY BEARISH	MILDLY BULLISH	BEARISH	MILDLY BEARISH	NEUTRAL	MILDLY BULLISH
Interest Rate Decisions	NEUTRAL	n/a	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL
Commentary	BEARISH	MILDLY BEARISH	BULLISH	BEARISH	MILDLY BEARISH	MILDLY BEARISH	MILDLY BULLISH
Economic Data	NEUTRAL	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	NEUTRAL	MILDLY BULLISH	MILDLY BULLISH
Inflation	NEUTRAL	MILDLY BEARISH	BEARISH	BEARISH	NEUTRAL	BULLISH	BULLISH
Employment/Labor Market	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	BULLISH	NEUTRAL	MILDLY BULLISH
Housing/Real Estate	NEUTRAL	NEUTRAL	MILDLY BEARISH	MILDLY BULLISH	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH
GDP	BULLISH	n/a	NEUTRAL	BEARISH	MILDLY BEARISH	NEUTRAL	NEUTRAL
Consumer Spending	MILDLY BEARISH	NEUTRAL	NEUTRAL	MILDLY BEARISH	MILDLY BULLISH	MILDLY BULLISH	NEUTRAL
Consumer Sentiment	MILDLY BULLISH	NEUTRAL	MILDLY BEARISH	MILDLY BEARISH	NEUTRAL	NEUTRAL	NEUTRAL
Global Events/News	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH
China	MILDLY BEARISH	NEUTRAL	NEUTRAL	NEUTRAL	MILDLY BULLISH	NEUTRAL	MILDLY BEARISH
Europe	NEUTRAL	NEUTRAL	MILDLY BULLISH	MILDLY BULLISH	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH
Russia Ukraine War	NEUTRAL	NEUTRAL	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	NEUTRAL
Israel Hamas War	NEUTRAL	NEUTRAL	NEUTRAL	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	BEARISH
US Politics	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL	MILDLY BEARISH	MILDLY BEARISH	NEUTRAL
2024 Election	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL	MILDLY BEARISH	MILDLY BEARISH	NEUTRAL
Budget Negotiations	NEUTRAL						
Earnings	NEUTRAL	MILDLY BULLISH	MILDLY BEARISH	NEUTRAL	BULLISH	MILDLY BULLISH	MILDLY BULLISH
Banking Turmoil	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	MILDLY BEARISH	NEUTRAL	MILDLY BEARISH	NEUTRAL
Crypto	BULLISH	BULLISH	BULLISH	NEUTRAL	MILDLY BULLISH	NEUTRAL	NEUTRAL

The graphic above is a high-level summary of different factors that affected market performance during the month. The intention here is solely to capture the "market's reaction" to each of these categories in an effort to determine what really ended up driving performance. Although this seems like a simple quick visual there is much thought that goes into it.

A good example of how a category gets assigned a given sentiment (for example, bullish or bearish) is US politics. In this past month, when one Presidential candidate was almost assassinated and the other



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¹⁷ Internally created



dropped out of the race, the status ended up being neutral. How could this be you may ask? Well to put it plainly, markets just did not really care that much, and if anything, welcomed the news that Biden was dropping out as it meant less uncertainty moving forward heading into the election. From the market's perspective, no longer having to ask, "will he or won't he drop out" and quickly solidifying the candidate as Kamala Harris was a positive as it lowered uncertainty.

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