### Long Hot Summer Reading List, and Shakespeare's Annotated Guide to Bitcoin

The last two Eye on the Market pieces covered our views on the sequence of events around recessions: markets decline, then earnings, then GDP and finally employment. Also, the worst mistakes of this cycle (YUCs – young unprofitable companies, SPACs, renewable energy with limited commercialization potential, Fintech dependent on regulatory arbitrage and/or catering to the lowest quality borrowers, Metaverse, crypto, etc) have all been repriced, which is positive in terms of where we go from here. I envision one last leg down later this summer, since the Fed has more work to do on the inflationary aftershocks of the most stimulative policy in 150 years.

Most summer reading lists are carefully curated, inspirational, guaranteed not-to-offend elegies to the human spirit. This is not that. See below for materials to inform your discussions on energy, economics, finance, the Supreme Court, geopolitics, China and COVID/cancer research as this long hot summer rolls on. We conclude with the recently unearthed "Shakespeare's Annotated Guide to Bitcoin".

### ENERGY

Vaclav's 47<sup>th</sup> book, "How the World Really Works", is an interdisciplinary and comprehensive look at food, energy, data, globalization, viruses and the main pillars of the modern world. Required reading for the legions of futurists trying to redesign the world we live in. Having Vaclav as an energy mentor for the last decade has been one of the most rewarding experiences of my career.

https://www.amazon.com/How-World-Really-Works-Science/dp/0593297067

"The Elephants in the Room". Our 12<sup>th</sup> annual energy piece starts with the energy crisis in Europe, the recovery in the oil & gas sector and a warning label on industrial electrification and carbon sequestration forecasts. We examine electric vehicle adoption, the transmission quagmire, bans on combustion of fossil fuels for heating in favor of electric heat pumps and a deep and skeptical dive on the hydrogen economy.

https://privatebank.jpmorgan.com/content/dam/jpm-wm-aem/global/pb/en/insights/eye-on-the-market/2022-energypaper/elephants-in-the-room.pdf

"Russia's War Is the End of Climate Policy as We Know It". Ted Nordhaus of the Breakthrough Institute believes that geopolitical strife and energy scarcity will do more for the climate than decades of climate policies.

https://foreignpolicy.com/2022/06/05/climate-policy-ukraine-russia-energy-security-emissions-cold-war-fossil-fuels/

Some cabinet members bring ample prior applicable technical experience to bear on their critical functions, while others bring almost none. Here are the last six Secretaries of Energy. Politics is a strange profession.

https://privatebank.jpmorgan.com/content/dam/jpm-wm-aem/global/pb/en/insights/eye-on-themarket/links/secretaries-of-energy.pdf

#### MACROECONOMICS and FINANCE

*"The Death of Modern Monetary Theory"*. My former colleague Simon Lack of SL Advisors conducts a funeral for Modern Monetary Theory by dissecting its flawed premises and its most avid academic cheerleaders. <u>https://privatebank.jpmorgan.com/content/dam/jpm-wm-aem/global/pb/en/insights/eye-on-the-market/links/death-of-mmt.pdf</u>

"How the Fed Bond Binge Predictably Stoked Inflation", and "How did they get inflation so wrong?" As Yellen and Powell (and Krugman) walk the plank on their inflation mistakes, the Council on Foreign Relations and the *Atlantic* deconstruct what the Fed got wrong. The CFR piece makes it clear: the rising gap between Treasury bond buying and bank excess reserves was a very good indication of where inflation was going next.

<u>https://www.cfr.org/blog/how-fed-bond-binge-predictably-stoked-inflation?utm\_source=blognotification&utm\_-</u> <u>medium=email&utm\_campaign=Blog%20Post%20Notification%20Geo-Graphics&utm\_term=GeoGraphics</u> <u>https://www.theatlantic.com/ideas/archive/2022/06/what-is-causing-inflation-janet-yellen-jerome-powell/661237/</u> "Squaring venture capital valuations with reality". Researchers from Stanford found that unicorn valuations have been vastly overstated by an average ~50% (!!) over fair value. The primary reason: sloppy valuation methods which use the valuation ascribed to the latest round of capital, even if that round benefits from IPO return guarantees, liquidation preferences, vetoes over down-IPO rounds and/or seniority over other investors. The average unicorn has eight share classes; after valuing each class based on its specific terms and conditions, almost half the unicorns in this analysis lost their billion dollar unicorn status. This has implications for how unicorns are marked on the way up, and on the way down.

https://www.sciencedirect.com/science/article/abs/pii/S0304405X19301692

"The Chart that Everybody Hates". An update on an analysis we did a few years ago. The chart shows how entitlement spending is displacing discretionary spending on infrastructure, education, job retraining, energy and the judiciary that contribute to future growth, employment and intergenerational mobility. A forensic deep dive on what it would take to restore the prior balance between entitlements and discretionary spending, from the separate perspectives of fiscal progressives and fiscal conservatives. A real crowd-pleaser at parties.

https://assets.jpmprivatebank.com/content/dam/jpm-wm-aem/global/pb/en/insights/eye-on-the-market/chart-thateveryone-hates.pdf

"No free lunch". A piece I prepared for the bank's Operating Committee. Bank capital adequacy and liquidity rules established after the financial crisis reduce insolvency risk for depositors and taxpayers, but come at a cost: a decline in market liquidity and greater execution risks in multi-trillion dollar US fixed income markets. Almost all measures of liquidity and market depth are close to the lowest levels on record. A growing risk as the largest stimulus program in history is withdrawn, requiring fixed income investors to fend for themselves.

https://assets.jpmprivatebank.com/content/dam/jpm-wm-aem/global/pb/en/insights/eye-on-the-market/no-freelunch.pdf

## SUPREME COURT DOBBS vs JACKSON DECISION

Three studies of note: "Socioeconomic Outcomes of Women Who Receive and Women Who Are Denied Wanted Abortions in the United States", "Global Contraceptive Failure Rates: Who Is Most at Risk?" and "A Preview of the Future of Abortion Bans: Texas Senate Bill 8". Six months after denial, women who were denied abortions were 3.8x more likely to be in poverty, 37% less likely to be employed full-time and 6.3x more likely to receive public assistance than women who obtained abortions. Related topic: failure rates of contraception (5.5%-9.0% for the pill and 5.5%-18% for condoms), which would require a woman to bring a child to term in several states. While some states include language allowing abortions to save the life of the mother, patients with pregnancy complications or preexisting medical conditions that may be exacerbated by pregnancy are forced to delay an abortion until their conditions become life-threatening and qualify as medical emergencies.

<u>https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2017.304247</u> [American Journal of Public Health] <u>https://onlinelibrary.wiley.com/doi/full/10.1111/sifp.12085</u> [Johns Hopkins School of Public Health] <u>https://www.nejm.org/doi/full/10.1056/NEJMp2207423</u> [New England Journal of Medicine]

*"Planet of the Apes"* (1963), a science fiction novel by Pierre Boulle. Dr. Zaius and the other members of the Ape National Assembly are driven by an intense traditionalism and an originalist interpretation of the Sacred Scrolls. Any similarity to actual Supreme Courts or governing tribunals is purely coincidental.

https://www.goodreads.com/book/show/414895.Planet of the Apes

# **GEOPOLITICS and RUSSIA**

*"Interview with Sergey Karaganov: We are at war with the West"*. The world according to Putin/Yeltsin advisor Sergey Karaganov is a conspiratorial place not particularly rooted in historical accuracy.

https://www-corriere-it.cdn.ampproject.org/c/s/www.corriere.it/economia/aziende/22\_aprile\_08/we-are-at-war-withthe-west-the-european-security-order-is-illegitimate-c6b9fa5a-b6b7-11ec-b39d-8a197cc9b19a\_amp.html "Opposition to NATO expansion". A letter sent to President Clinton in 1997 warning that NATO expansion in Eastern Europe would be an error of historic proportions. Signatories included Paul Nitze (Secretary of the Navy), Stansfield Turner (Navy Admiral, commander of the Second Fleet, CIA Director of Central Intelligence), Robert McNamara (Secretary of Defense) and several US Senators and historians.

https://www.armscontrol.org/act/1997-06/arms-control-today/opposition-nato-expansion

## CHINA

*"US-China competition enters the decade of maximum danger".* A piece from the Baker Institute at Rice University on what the authors see as China's deteriorating long-run demographic and economic profile, its technological estrangement from the West, the issue of Taiwan and heightened risks for US-China relations. https://www.bakerinstitute.org/media/files/files/b63419af/ces-pub-china-competition-121321.pdf

## US GUN CONTROL and SUBSEQUENT IMPACT

A RAND Institute analysis of US gun control measures and their subsequent impact on gun violence. Each study is categorized as "inconclusive", "limited", "moderate" or "supportive". The clearest benefits: child access prevention laws decrease youth suicides and unintentional firearm deaths. The second link is a Congressional Joint Economic Committee report on the cost of US gun violence: \$230 bn per year, or 1.4% of GDP.

https://www.rand.org/research/gun-policy/analysis.html https://www.jec.senate.gov/public/\_cache/files/b2ee3158-aff4-4563-8c3b-0183ba4a8135/economic-costs-of-gun-violence.pdf

## COVID and CANCER RESEARCH

"The bright side of the COVID pandemic", and "A turning point in cancer". An article from Eric Topol at Scripps Research on the remarkable advances in medical research which have resulted from the COVID pandemic. Topol traces the long history of mRNA vaccines and how they are now being tested on malaria, HIV, cytomegalovirus, rabies, RSV, influenza A and chikungunya. mRNA therapeutics are also being used to amplify the body's immune response to various cancers and neurodegenerative diseases. mRNA + nanoparticle vaccination has also elicited tick resistance and prevented Lyme disease in an experimental model.

A related article from Topol reviews potentially transformational breakthroughs in the field of "individualized medicine", using genomics and artificial intelligence to treat cancer.

https://erictopol.substack.com/p/the-bright-side-of-the-covid-pandemic https://erictopol.substack.com/p/a-turning-point-in-cancer

We continue to maintain our online COVID web portal, which has data on infections, hospitalization and mortality, as well as summaries of the latest studies of vaccine efficacy in light of Omicron variant mutations. https://privatebank.jpmorgan.com/gl/en/insights/investing/eotm/coronavirus-research

## **RESEARCH ON FATHERLESS FAMILIES**

This is a controversial topic which is sometimes hijacked for reasons unrelated to sociology and human welfare. I believe that these two sources (the Annual Review of Sociology and the Minnesota Psychological Association) approach it from an unbiased academic perspective with the goal of understanding outcomes and impacts.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3904543/

https://www.mnpsych.org/index.php%3Foption%3Dcom\_dailyplanetblog%26view%3Dentry%26category%3Dindustry%2520news%26id%3D54

### Who says Shakespeare isn't still relevant to the modern world

Here's Shakespeare's take on Bitcoin. Quote #5 was the inspiration for the title of our crypto/blockchain piece from earlier this year, the <u>Maltese Falcoin</u>. See footnote for comments on the imploding DeFi lending market<sup>1</sup>.

# The Annotated Shakespeare's Guide to Bitcoin



Source: Bloomberg, William Shakespeare, JPMAM. July 2022.

Bitcoin related quote	Spoken by	<u>ln</u>
1 "What's past is prologue"	Antonio	The Tempest
2 "For here, I hope, begins our lasting joy"	Edward	King Henry VI
3 "Be not afraid of greatness: some are born great, some achieve greatness, and some have greatness thrust upon them"	Malvolio	Twelfth Night
4 "Fortune brings in some boats that are not steer'd"	Pisanio	Cymbeline
5 "We are such stuff as dreams are made on"	Prospero	The Tempest
6 "The common curse of mankind, folly and ignorance, be thine in great revenue"	Thersites	Troilus and Cressida
7 "My pride fell with my fortunes"	Rosalind	As You Like It
8 "I am constant as the northern star, of whose true-fix'd and resting quality there is no fellow in the firmament"	Julius Caesar	Julius Caesar
9 "Men shut their doors against the setting sun"	Apemanthus	Timoth of Athens
10 "This is the winter of our discontent"	Richard	Richard III
11 "All that glisters is not gold"	Prince of Morocco	Merchant of Venice
12 "Speak me fair in death"	Antonio	Merchant of Venice
13 "The miserable have no other medicine, but only hope"	Claudio	Measure for Measure

It would be hard to overstate just how "house of cards" the DeFi lending market is. DeFi lending failures so far include Celsius, Anchor Protocol, Babel Finance, BlockFi, Vauld and Voyager.

<sup>&</sup>lt;sup>1</sup> One issue roiling crypto: **the collapsing DeFi lending market**. From our February piece: "What kind of lending is actually taking place here? From what we can tell, most DeFi lending is simply over-collateralized crypto loans to other holders of crypto so that the latter can either (a) buy more crypto, or (b) obtain liquidity against appreciated crypto holdings without incurring capital gains taxes. Either way, it does not appear to be the kind of lending that could survive a large sustained decline in crypto prices themselves". As we anticipated last February, DeFi lending volumes have collapsed at almost the identical rate as Ethereum and other token prices.

Access our 12<sup>th</sup> annual energy paper here

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