



LIVING IN THE FUTURE · 2024

The Economic Singularity

Beyond 2030, AGI and robots break the Magic Formula itself. We have six short years – and the greatest macro trade of all time is the life raft.

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The Economic Singularity

My job is to live in the future. So let's project into a world where everything we measure stops making sense.

EXCERPTED FROM

GMI Monthly, April 2024 – the Deep Thoughts feature, “The Economic Singularity,” with “The Greatest Macro Trade of All Time (again...).”

April 2024.

As a macro analyst, strategist, and entrepreneur, it is my responsibility to project into the future and evaluate how the world might then look, and determine a probabilistic route to get there from the present day. I can clearly see how in the next twelve months, maybe sooner, we will have the first “baby” AGI. To be honest, I think OpenAI has already built it and is using it to build up to its own launch.

The learning curve for AGI is truly exponentially growing, only held back by compute and energy. Microsoft is looking towards nuclear energy as its solution. By 2030, we will see a complete change in the landscape of compute and energy. In the next six years, going into 2030, we will see AGI models accelerating in power and collapsing in costs. As David says, they will be like water – everywhere and nearly free.

Beyond 2030, an economic singularity

We are going to be hitting a golden age of technological productivity, where infinite-knowledge workers enter the economy, keeping prices low and output high. This much is pretty well understood. But what is not understood is that I think that beyond 2030 we are about to hit an economic singularity. Let's go back to the Magic Formula.

THE MAGIC FORMULA, BROKEN

Trend GDP Growth = Population + Productivity + Debt Growth

If Robots + AI equate to infinite “population” growth, and cheaper electricity plus faster compute lead to unprecedented productivity growth – then what will an economy even look like?

If a world based on a system of scarcity now transitions to a system of infinite abundance, what is GDP? Does it even matter? A post-2030 world could begin to see GDP growth not being a useful measure of anything for humanity. For starters, the economy could double in a year... or eventually in a week. The maths shows that this is easily possible. In a system without scarcity, we have no idea what use is money – though we do know the blockchain can create artificial scarcity in a digital world.

As everything becomes increasingly, unstoppably digital, it is going to question the very notion behind physical nation-states. Tax systems will have to be overhauled to tax the robots and AI, not the people. And before you know it, as AGI gains power, it will begin to have economic and social rights. It is inevitable; it is just a matter of when.

The death of the capital cycle

Let's bring it back closer to 2030. If everyone begins to use AGI models to build businesses, then the velocity of business formation will be unprecedented – but it also means every business gets disrupted in record time. Most business moats that don't involve a community of actual humans talking to humans will be disrupted almost instantly. Soon, most startups will trade like ICOs – rapid capital formation and rapid destruction. There is zero point zero chance of IPOs in twenty years' time. The capital cycle will get faster and faster until it doesn't function at all. That, to me, is the death of VC investing. P/E investing too, most likely in the next ten years.

We have six years

This has seriously made me think about the future of wealth creation and investing. I honestly think we have until 2030 to make as much money as possible. That is the entire game now, all down to six short years.

That, to me personally, means taking absurd risks in crypto investing – as this is the biggest macro opportunity of ALL time.

Beyond 2030, crypto will reach the maturity stage and the returns will be lower, and the machines will be in control. Tech stocks will get you there too, but with a lower outcome than crypto. I also think if you own a business, you need to sell it in the next decade. If we have this much uncertainty around what the economic system looks like, best get the fuck out of Dodge. The only solution I find is to accumulate as much wealth as possible, hold some scarce assets, and chill. You can't disrupt someone sipping Piña Coladas on a beach.

The Greatest Macro Trade of All Time (again...)

I've talked ad nauseam about the pensions and retirement crisis over the last eighteen years. The median Baby Boomer has around \$150,000 of retirement savings – but I didn't realise that Gen X, now in their 50s, have saved so little. The system has failed everyone. The debasement of currency over the last decade-and-a-half has put all the gains into the hands of those who owned assets, while wages never kept up.

Most Gen Xers have little saved for retirement

Retirement balances of working US residents born between 1965 and 1980 as of December 2020 (\$)

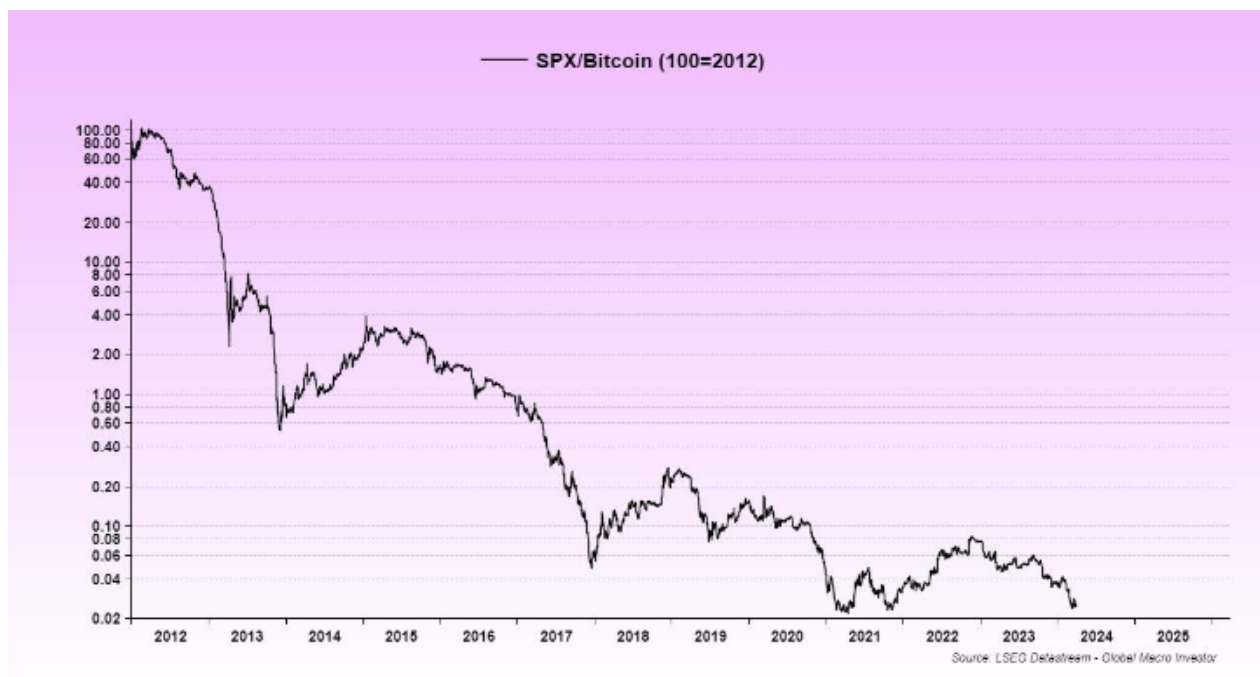


FINANCIAL TIMES

Source: [National Institute on Retirement Security](#)

RETIREMENT BALANCES OF US RESIDENTS BORN 1965-1980 · FINANCIAL TIMES / NIRS

In terms of asset-purchasing power, everyone is getting poorer. The purchasing power of wages in terms of equities has fallen 50%. The entire US retirement complex is based around buying equities to fund retirement. It has failed. But slowly, people have begun to realise the power of crypto in getting their purchasing power back. Equities are 99.9% cheaper versus BTC since 2012 – and the same is true for houses.



SPX PRICED IN BITCOIN (100 = 2012) · EQUITIES 99.9% CHEAPER · GMI

This is why the bitcoin ETF has been the most successful ETF launch in history. And crypto is the single most reflexive market in all history: number go up = more investors = number go up. This pattern is broken every four years by the business cycle, but then resumes due to The Everything Code, and the returns compound exponentially over time. This ongoing onboarding of billions of people is creating the greatest macro trade of all time – and we are still just in the middle of it. It is the life raft.

A truly alien asset class

Just look at this table. We have never – in all human history – been given an asset class like this, with annualised returns over 150% over thirteen years. It truly is an alien asset class; it is beyond comprehension.

EXPAAM

Digital Assets Have Been The Best Performing Assets In 11 Of The Last 14 Years.

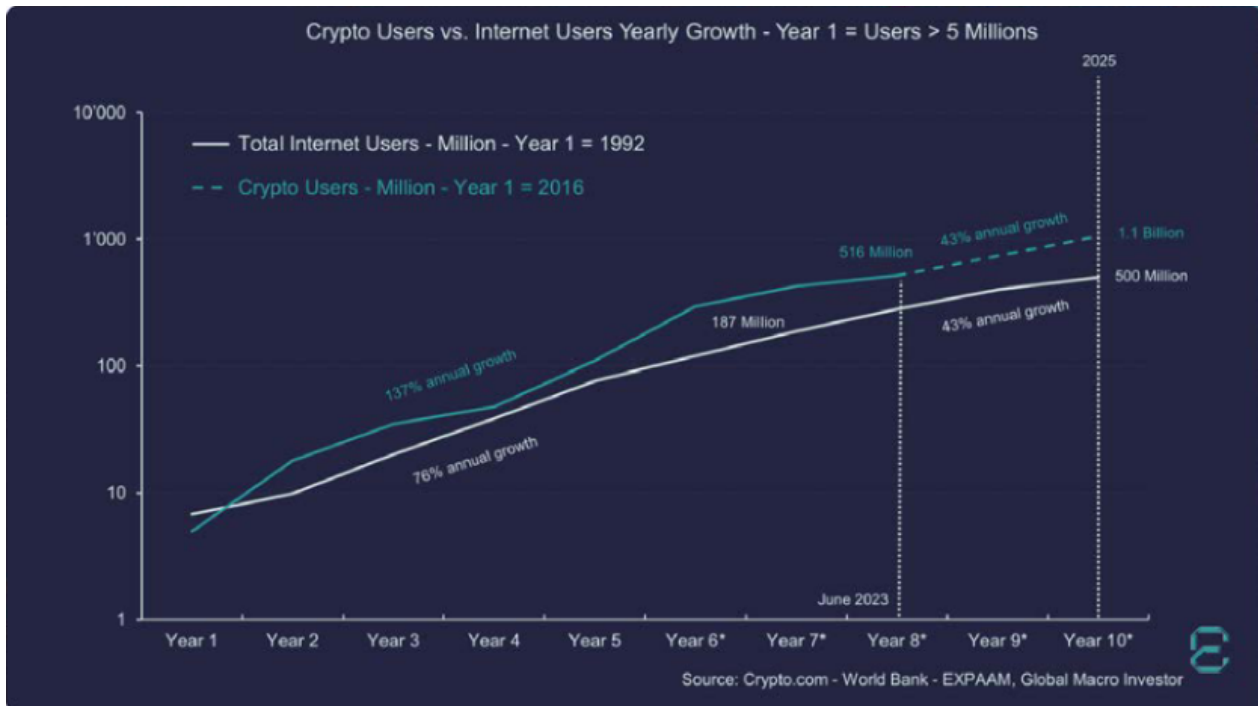
Returns, in %	ETF/Coin	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*	Cumulative	Annualized
Bitcoin	BTC	147%	186	5310	-56	33	126	1339	-73	93	308	60	-64	155	45	20,999,361	139
Ethereum	ETH						771	9082	-82	-3	473	399	-67	91	48	364,116	149
Solana	SOL											473	-94	922	16	7,213	197
US Nasdaq 100	QQQ	3	18	37	19	9	7	33	0	39	48	27	-33	54	7	798	17
US Large Caps	SPY	2	16	32	13	1	12	22	-5	31	18	29	-19	24	7	402	12
US Small Caps	IWM	-4	17	39	5	-4	22	15	-11	25	20	15	-21	15	2	204	8
US REITs	VNQ	9	18	2	30	2	9	5	-6	29	-5	41	-28	7	-3	141	6
LD Treasuries	TLT	-34	2	-13	27	-2	1	9	-2	14	18	-5	-32	-1	-4	39	2
Preferred Stocks	PFF	-2	18	-1	14	4	1	8	-5	16	7	7	-21	1	4	57	3
High Yield Bonds	HYG	7	11	6	2	-5	13	6	-2	14	4	4	-13	4	0	60	3
IG Bonds	LQD	10	10	-2	8	-1	6	7	-4	17	11	-2	-19	4	-2	45	3
EM Bonds	EMB	8	17	-8	6	1	9	10	-5	15	5	-2	-21	4	0	39	2
EM Stocks	EEM	-19	19	-4	-4	-16	11	37	-15	18	17	-4	-22	6	-1	6	0
Gold	GLD	10	7	-28	-2	-11	8	13	-2	18	25	-4	-1	13	-1	36	2
US Cash	BIL	0	0	0	0	0	0	1	2	2	0	0	0	-1	1	5	0
Commodities	DBC	-3	4	-8	-28	-28	19	5	-12	12	-8	41	19	-11	0	-18	-1
Highest Return	BTC	BTC	BTC	BTC	VNQ	BTC	ETH	ETH	BIL	BTC	ETH	SOL	DBC	SOL	ETH	BTC	SOL
Lowest Return	EEM	BIL	GLD	BTC	DBC	BIL	BIL	ETH	BIL	DBC	TLT	SOL	TLT	DBC	DBC	DBC	DBC

Source: CoinMarketCap, Yahoo Finance, * data until 2024-02-29

EXPONENTIAL AGE ASSET MANAGEMENT

DIGITAL ASSETS – THE BEST-PERFORMING ASSET IN 11 OF THE LAST 14 YEARS · EXPAAM

The crypto market in liquid tokens is going to go from \$2.7tn today to \$10–\$15tn at the end of this cycle, to \$100tn, then \$200tn, to bring it in line with other major asset classes. And this will happen in a decade. We will hit a billion users by the end of this cycle, and half the world by 2030.



CRYPTO USERS VS. INTERNET USERS · HALF THE WORLD BY 2030 · CRYPTO.COM, WORLD BANK, EXPAAM

An asset class that rises from \$2.7tn to \$100tn will create the fastest, largest accumulation of wealth in all history. There is nothing remotely close.

It is the same as creating the entire wealth and value of the US stock market in less than a decade – all 100+ years of market-cap appreciation – and doubling it. And all we have to do is get exposure to it and hold on. That is it.

It really is that simple. We have six years to make as much money as possible – and the greatest macro trade of all time is the life raft. It is literally a gift for humanity.

About the author

Raoul Pal is the founder of Global Macro Investor and of EXPAAM (Exponential Age Asset Management), and the co-founder of Real Vision. He retired from managing client money in 2004 and lives in the Cayman Islands. Previously he co-managed the GLG Global Macro Fund in London, having moved there from Goldman Sachs, where he co-managed the hedge fund sales business in Equities and Equity Derivatives in Europe.