FASANARA CAPITAL

"Learn how to see. Realize that everything connects to everything else."
— Leonardo da Vinci

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FASANARA CAPITAL | SCENARIOS

The Market Economy In 2025: A Visualization Exercise

Emergence of New Capital Markets

To any market participant who has been more than 10 years in activity, financial markets are unrecognisable, lampooning the laws of physics: rates are negative as the asset class of gov't/IG bonds is retired, equities' links to fundamentals are severed for good, leading to bitcoin-type price discovery and anti-gravitational patterns of behaviour - markets are characterized by chronic fragility and intermittent crashes.

More relevantly, the market economy itself is going through tectonic shifts: deposits are taxed (by negative rates), taxes are negative (subsidies and Universal Basic Income), the governments are taking over the private sector directly through infrastructure spending and indirectly through guarantees and orchestrating Central Banks' money printing, currencies are debased relentlessly and distrusted by most, cash is gone, inflation is missing, oil is phased out, banks are relicts, savings rise over investments. Excruciatingly day after day, the bites-economy devours the atoms-economy. Allocating capital from rigged-fake markets into a zombie-fake economy has become impossible, as both are ruled by randomness and futility.

What then, are we to do, in the endangered species of rational investors? Is there an oxymoron move that makes sense in a senseless context? Further, is there a silver lining emerging from chaos; is a better future lying in waiting after the tumultuous ride ahead?

We think so. The market economy of 2020 was entirely predictable. Here below we attempt at visualising the one of 2025.

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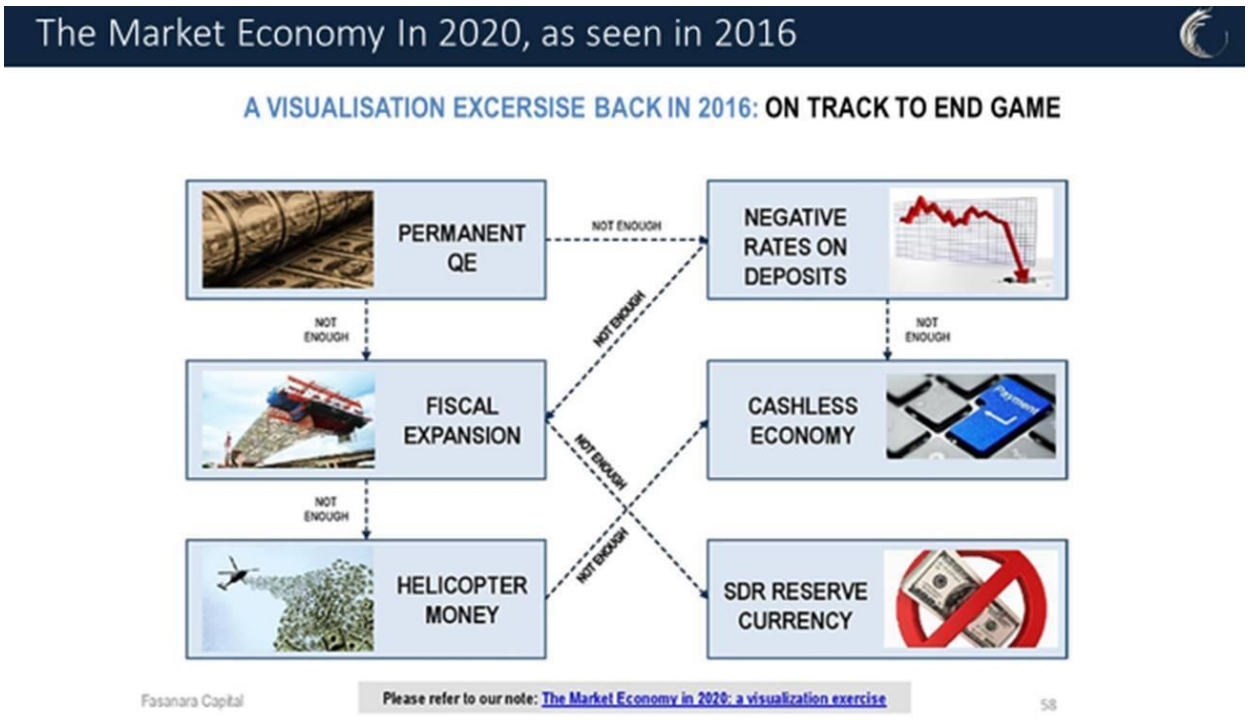
The Market Economy in 2020, as visualized in 2016

This thought piece is a sequel to the one we wrote in June 2016, titled ''The Market Economy in 2020: a visualisation exercise. The Emergence of a New Monetary Orthodoxy''. At that time, we argued as follows: ''it is not the first time in history that we were going through an **existential crisis of global capitalism**. In the 20's, structural deflation led to Keynes revolution in economics. In the 70's, chronic inflation led to Milton Friedman counter-revolution, and governments like Thatcher or Reagan. Market-based economies survived both. Again now, **a new form of global capitalism is being worked out, a system that is consistent with the disruption arising from technology: a new evolutionary phase of combining QE, deficit spending, and 'helicopter money' - the nuclear fusion of monetary and fiscal policies** – might well be the next stop for policymakers, as they move from price setting to direct resource allocation, in certain markets more than others, in certain places sooner than others.''



Source: Fasanara Capital | SCENARIOS, 7th June 2016. **The Market Economy in 2020: a visualization exercise.** *The Emergence of a New Monetary Orthodoxy* (link)

Back then, we thought the market economy of 2020 would feature six key components, excerpts below:

- **Component 1: Permanent Quantitative Easing** "Monetary printing failed to inflate away our debts, and its marginal effectiveness is both limited and further decreasing. However, that is not to say that it will likely be discontinued anytime soon. While failing to kick-off inflation, **it continued to debase the currency all along. It served its purpose in the race to the bottom between currency debasement and structural global deflationary trends**."
- **Component 2: Deeply Negative Interest Rates On Deposits** "**They were imagined for different purposes**, ranging from preventing the currency from appreciating, to de-incentivizing cash hoarding for banks while forcing them to lend to the real economy, to show markets that Central Banks are not out-of-bullets at the zero-bound on interest rates. **All remain valid still and therefore one may assume negative rates are here to stay, and perhaps become more negative**"
- **Component 3: Cashless Economy** "A cashless society is no more science fiction than QE or NIRP policies, much as we have never seen either of them before in modern history. It is rather a **consequence and a necessary complement** of them both. A **cashless economy would help ease the opposition of inflation averse actors (think Germany) against fiscal and monetary expansion**, by arguing that better control is exerted on inflation risks down the line. While traditional monetary policy impacts the quantity of money but not so directly the velocity of money, a cashless economy can claim to better handle both. **In a cashless economy, the Central Bank is more in control over not only the quantity but also the velocity of money, therefore more able to stem hyperinflation right at the outset, should it ever arise**. Finally, **a cashless economy may eventually occur anyway.** Moving cash around is inefficient and ineffective. Already today close to 70%/80% of transactions in developed countries take place without cash. Our kids will likely never visit a branch. **Fintech** may just be an unstoppable trend in this respect"
- **Component 4: Fiscal Expansion, Deficit Monetization** "If flooding banks with liquidity did not help, government may eventually assume the role of resource allocator, through public spending financed by a permanent increase in the money stock. If government spending does not prove effective, then helicopter money might, which is to allocate resources directly into the pockets of households, via tax cuts or negative taxes. **Quantitative Easing and negative interest rates policies (NIRP) have turned out to be deflationary. QE led to banks hoarding cash**, resulting in a reduced impact on money supply, and becoming capital destructive at negative rates. **QE also led to oversupply in most commodities** on the planet, the workout of which ends up being deflationary. **QE finally contributed to greater income inequality and discontent**. **Fiscal expansion may help, when coupled with monetary printing**. Public spending in infrastructure, clean energy to cope with global warming, digital transformation, education/re-skilling are obvious candidates"
- **Component 5: Helicopter Money** "The concept of helicopter money refers to Milton Friedman's thought experiment of 1969. **If there are negative rates why cannot there be negative taxes?** So far in this list of policy tools, **negative rates are synonyms of wealth tax, and bail-ins in disguise** - as such, **intrinsically deflationary**. Which means **self-defeating**, as the whole point is to

resurrect inflation in a moribund economy overloaded with too much nominal debt. But **negative rates may become a pure incentive to spending, and boost the velocity of money, if and when coupled with various forms of tax cuts, both temporary and permanent ones: raising minimum salaries, temporary / depletable spending coupons**. **Negative short rates but also negative taxes**. Some of the traits of this form of fiscal expansion may be inspired by **Roosevelt's New Deal**, a series of government programs implemented between 1933 and 1938 to provide relief to people suffering during the Great Depression. This policy activism may lead to a **temporary suspension of laissez-faire capitalism**"

- ## Component 6: De-Dollarization and IMF's SDR Reserve Digital Currency

"This step arrives last, as it requires global coordination. As Claudio Borio and Sheng/Geng remind us, **in a zero interest rate environment, a strong Dollar plays the same deflationary role in global markets as the Gold standard did in the 30's**. Any global reflation would normally have to pass by an increasing current account deficit in the reserve currency, the US, thus enlarging liquidity across the globe. But the US may be unwilling or unable to provide for that, owing to, amongst other things (i) lower propensity to invest by US households and businesses and (ii) disconnect of their business cycle due to their supremacy in technology. Sheng/Geng speak of one possible way of dealing with it: National Central Banks could increase their SDR allocations at the IMF (thus expanding their balance sheets in the process, which accounts for more QE), who would then play the role of resource allocator and invest in member countries. Investments may include supra-national projects for the greater good of all: for instance, an estimated $6trn is needed annually over the next 15 years to address global warming, while an estimated additional $7.1trn is necessary for global growth to sputter back to life. Incidentally, shifting reserve currency regime and **investing in SDRs achieves a dual mandate of Quantitative Easing and Fiscal Expansion** on social impact and growth-enhancing projects. Also, **it takes the utility function away from mere US domestic needs**, at a time in which there is disconnect between what serves the interest of the US and what matters to the rest of the world. Europe has similar issues between Germany and the rest of the Union, which the EU could not address as yet: a supra-national body may attempt that again, with or without the EUR. Needless to say, such policy coordination may well be utopistic and far-fetched; however, the US Dollar plays its current role only given the global coordination that took place at Bretton Woods in 1944, so not much reason to believe this is an eternal fact of life either. Not long ago (2009), China also specifically highlighted Keynes' proposal for a common accounting unit, the Bancor – a notion dismissed at the Bretton Wood conference"

To this moment, it seems like we were not too far off the mark. **The COVID crisis is an accelerator of pre-existing, entrenched trends**, more than a watershed moment giving birth to new ideas of its own. The transformative **trend into a digital economy** was already well underway: consumers, households and businesses were transitioning into the bits-economy at the accelerating pace dictated by network effects and the demographic clock. In this respect, COVID only reminded us of the need of a sustainable/resilient economy in the

face of known, recurrent risk factors: wars, pandemics, trade tensions, changing centres of gravity in the geopolitical landscape.

The economy was going cashless anyway, not because banknotes are conducive of viruses, but because they are costly, ineffective, old.

Rates were already negative in 2016, although it was presented as a transient factor at the time, engineered to force escape velocity of the economy and re-ignition of inflation to wipe out the debt overhang, that was so gruesomely burdening the productive economy. Except, the experiment failed, created twin bubbles in bonds and equity that now seem inescapable, and stark income inequality. It seemed predictable, at the time, that such novelty would stay as a structural connotation of markets: permanent QE, negative rates on bonds and deposits.

Helicopter money/UBI, infrastructure spending, deficit monetization were all already queuing up back in 2016, ready for implementation as soon and as certainly as the transmission channel from commercial banks to the real economy would fail. Beyond that, UBI was always going to be adopted in western societies anyways, at some point down the road, as robotisation/automation/globalisation/AI/AGI kept on stealing jobs from the politically-relevant middle/lower-middle classes. Inherently, **UBI is not even a true novelty**, as one could argue that vast swathes of society nowadays are receptors of UBI in disguise: parts of government sector / public sector, portions of the private sector that merely exist to second government regulation (notary services, legal & administration, etc), that exchange taxpayer dollars for little more than time. We might as well then remove the illusory optics and the hypocrisy of a job that is no longer needed, that is therefore not a support but impediment to the real economy, and free the human capital to go into personal, business or artistic activities, cash-neutral. Both the economy and society at large would benefit, in production (less frictions, less red tape) and animal spirit (more spending, creativity, beautiful art). This again would be no novelty: the Middle Age and the Renaissance are filled with work categories funded by governments (or their equivalent at the time, the ruling-families), purely there to beautify/study the world: without that, we would not have had top sculpturers in Florence and Rome, composers in Wien and Cologne, painters in Paris and Madrid, writers in Frankfurt and Ravenna, philosophers in Edinburgh and Konigsberg, naturalists in Bath and Bazentin, theoretical physicists in Wien or Ulm. Today again, who knows, we may lose a bureaucrat and discover a Michelangelo. Statistically, as population is 15 times larger than back then, we may discover 15 Michelangelos.. and net worth in excess of FANG stocks.. (Fugazi enough? 😊).

The **digital SDR currency** that we discussed in 2016 has not established itself, but a number of CBDCs (Central Bank Digital Currencies) are being live tested by China on large-scale experiments, theorized and tested by the ECB, the FED, the SNB and the Riksbank. It is our opinion that the final **solution will be multi-currency**, instead of a national champion, for the simple reason that a digital equivalent of the EUR, USD, RMB, Yen already *partially* somehow exists every time that cash is not used in a transaction. The ambition of a common digital currency goes beyond efficiency, speed and cost savings on cross-border/domestic payments. It must be **fit for the borderless digital age, while tackling the US Dollar's global reserve currency status and exorbitant privilege**: a sovereign-light (not -less) mean of exchange, a distributed store of value. In this regard, the Facebook-sponsored Libra project, and even Bitcoin/Ethereum, are better designed than any digital RMB or computer USD. A digital SDR would resolve the trust issues plaguing the truly global digital alternatives and stable-coins being attempted. But, the window of opportunity is closing down. Trust can suddenly be granted by wide-spread customer adoption, at some point down the road, at some tipping point after which runaway effects take hold and become irreversible. We believe such tipping point to be in close proximity. A **digital SDR stable-coin requires less than the full coordination of all major Central banks**: a single bank, like the ECB, could lead the charge and move from laggard to front-runner in the race for a global CBDC. COVID has made the ECB and the EU stronger than they were before, both political capital and scale are at disposal. However, this is a long discussion and the subject matter for a different note.

So much for past views. What about the next five years. Is it going to be reversion to the mean, to pre-COVID or even perhaps pre-GFC status. Or a different equilibrium altogether is likely for the market system?

We have long argued that **the market economy system is in phase transition zone, and will reset into a completely different stable state**, after completing its unfolding transformation through the 'edge of chaos'. We utilise the lens provided for by Complexity Theory (which is commonplace in physics and natural ecosystems, but rarely used in finance and economics) to isolate the universal properties of systems in transition: critical thresholds/tipping points, positive feedback loops propelling into disequilibrium and chronic fragility, impending chaos and runaway effects, early warning signals, indicators of system instability and far-from-equilibrium dynamics. We will not expand on it here, as we did so extensively on previous write-ups (all available on our portal: www.fasanara.com). Suffice it to say that we are convinced, owing to both (i) empirical evidence in confirmation of our theories formulated during 2017-2019 blue-sky markets and (ii) the tracking of complexity-

based mathematical quantities detecting phase transition / chaos ahead, that **the market economy system is going though meta-morphosis, and the critical transition is well underway. Financial market inferno is not behind us, as we foresee a likely sequence of W-shaped market patterns laying ahead.**

However, this piece is part of our SCENARIOS series, and not a market OUTLOOK. Its goal is solely to help describe a potential scenario in the years ahead, high-level, a conceptual framework within which we can inform investment decisions.

Here below then, we enlist the key components of the market economy as we imagine it to look like in 2025. Lets start.

The Market Economy in 2025: key components

A few macro forces will interplay.

Component 1: Chronic Fragility in Fugazi Markets

When looking at the markets of 2016 to 2019, in one big dimension at least, one could not escape the feel of **'Fake Markets'**. Back then, we described them as markets where the magnitude and duration of artificial flows from global Central Banks and passive investment vehicles managed to overwhelm and narcotize data-dependency and macro factors. A **stuporous state of durable, un-volatile over-valuation, arrested activity, unconsciousness produced by the influence of artificial money flows** (the Sharpe ratio of the S&P in 2017 was almost 5). Markets where record-low volatility bred market fragility. Liquidity-induced markets that, down the road, would be prone to asset bubbles and recurring bouts of volatility.

Fast-forward to today and 'Fake Markets' does not cut it any longer. **Markets have entered chaotic territory, moving fast and furious after intermittent periods of illusory peace, deceitful and dangerous, expensive like hell across equities and bonds** (art, real estate, private equity and private debt, etc). They are still unauthentic, but no longer peaceful; they are rather hysterical, PTSD-burdened, spoiled & over-reacting, soft & entitled like society at large, in need of grandfathering at every pitfall. In a word, **enter "Fugazi Markets"**.

Fugazi markets are defined as being pure players in two factors alone: chaos and futility. Chaos because they **move little and slowly first, and then fast and big suddenly**, the very definition of chaotic behaviour. Futile, because it does not really matter where they are when it comes to fundamentals, **price-discovery is a joke**: the S&P could be at 2,000 or 4,000, and it would not really matter much, it could easily be justified ex-post due to whatever X, wherever Y or whenever Z. At 2,000 it is the right price to track the real economy and radical uncertainty (VUCA); at 4,000 it is still fine when measured against currency debasement, policy stimulus outweighing transient economic damage, and technology saving the world.

In fake- and fugazi-markets, critically, it becomes **impossible to diversify**. All traditional, liquid asset classes move in sync. Furthermore, it proves **impossible to allocate capital due to merit and fundamentals** (it is just numbers -> **Bitcoin-ification of markets**). The only course of action is to go with the flow, momentum chasing (we all morph into retail -> **Retail-ification of the investor community**). De-anchoring from value puts you in a **senseless limbo without purpose** - blind navigating the oceans without compass or guiding stars, waiting (and asking) for an iceberg to hit.

Mental quirks dominate market narratives all along. In behavioural finance, the spell can be broken down in the 'illusion of knowledge' trap, the 'ostrich effect', the 'anchor bias'. The mental hacks that allows us to ignore the bigger picture and focus on a single element that worked well for us in the recent past, thus sticking the head in the sand to protect against warning signals. Human minds are naturally biased to reach conclusions too fast and then changing those ideas too slowly: the urge to explain is such that a new narrative is formed to make sense of what happened in recent times.

Think of **negative rates**, which have become to investors the equivalent of **a natural law** in physics. By habituation, we got so used to them that they became part of the furniture, boring and dismissed as a sort of déjà vu'. A magic spell **leading investors' minds to hibernate**, as most market participants think it is OK for a bond to yield negatively. Except, it is not OK. A bond without a coupon, bought at par, is no longer a bond. Perhaps, it is an anti-bond, or a **fake-bond**, or **fake-cash**; but surely not a bond. We have entered the ''**No-Bond world**''. Bonds as an asset class are in an existential crisis. The largest of all asset classes in modern financial markets has effectively been retired. No wonder that markets are insensitive to fundamentals, dominated by passive vehicles, fraught with systemic risk. In a word, again: Fugazi.

Broken markets where bonds disappeared, and it is all one single long-only equity trade.

Except, **lunacy does not stop at bonds**. Equities (especially US) are more expensive than real estate in Tokyo in 1989. Not only absolute levels are bat-crazy, but price dynamics are burlesque. Last August, we learned that option manipulation by relatively minor retail flows and a single rogue private agent could spin the largest equity sector globally – US Tech stocks - out of control. This is no cornering of the relatively-minor silver market, or Italian Telcos at the turn of the century, or the tiny $2.5bn XIV ETN in February 2018 (VIX-complex) - but rather a $9 trillion juggernaut, alone larger than the entire market cap of Europe. If you have a better example of market parody / mockery, please provide it – we would like to hear of it.

In a sense, **the S&P/Nasdaq is the new Bitcoin**. It is a bitcoin-type market. It makes little true sense to invest into on spurious claims of fundamental analysis. Then, if anything, it makes more sense to buy&sell bitcoin itself (go for the original), as it exhibits more inefficiency (due to retail dominating flows) and more volatility (especially non-discontinuous volatility, while vol in public markets is confined to the quick sands of leptokurtosis / gap risks).

Even discussions over **inflation vs deflation** are degraded to a coin-flipping exercise. We have reasons to believe inflation will resurrect (owing to supply chain bottlenecks to goods and people, de-globalisation and trade tensions, system pressures building up, etc), but as the road to get there is fraught with systemic risks, a crater vortex could open up at any moment underneath, and bring deflation up first.

Our personal contention is that the **chaos dynamics may determine W-shaped crashes and recoveries**, with the possibility for the final attractor / centre of gravity of the market ecosystem to be way lower. Buy-and-hold may then likely suffer, traditional investment strategies are at risk, buy-the-dip strategies will also have a hard time as levels switch fast between subsequent dips (in complexity parlance: flickering and bi-modality).

In the face of chaos and radical uncertainty, policymakers resorted to throwing the kitchen sink at it, using monetary+fiscal singularity, under the clout of COVID. This is unlikely to change anytime soon, preventing normal market operations from resuming, possibly all the way into the market economy of 2025.

As money flows concentrate further into the largest stocks / asset managers, the by-product is that **capital allocation into smaller worthy projects outside of market hype will have to**

happen outside of public markets and the traditional institutionalised Asset Management industry, through alternative specialist funding channels: non-bank lenders, often non-AM either. Novel and **parallel capital markets** will keep on emerging, as a way for the system to rebalance itself, **away from elitist market bubbles, plugged straight into the real economy**.

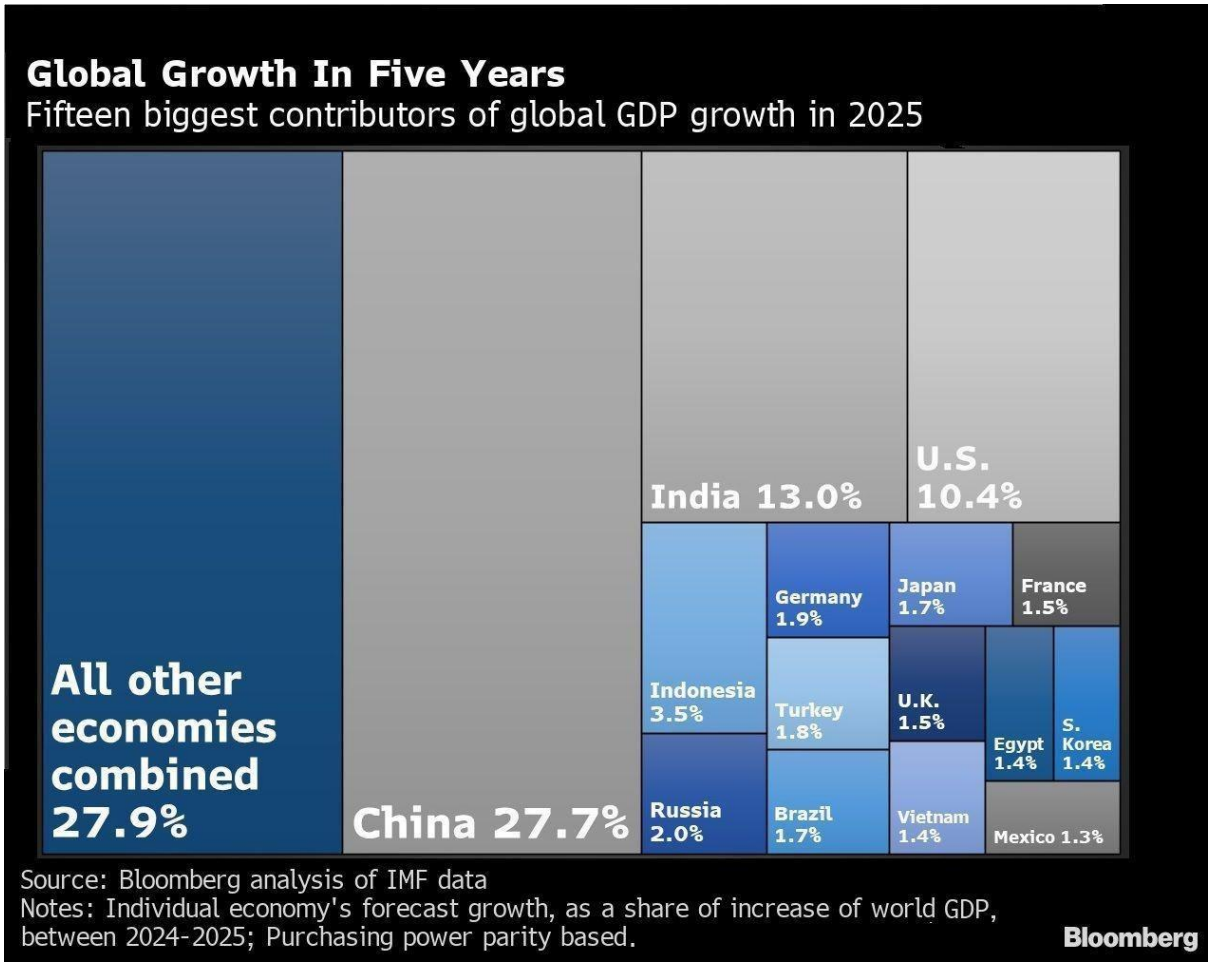
Component 2: End of 'Pax Americana', De-Globalisation, De-Dollarization

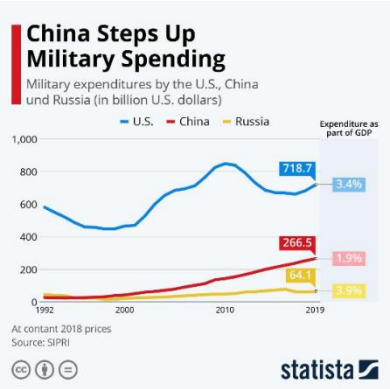
In 2025, the secular transfer of economic gravity from the west back to the east is completed. This is not to say that China's share of wallet of global GDP will increase further: that much is obvious. This is to say that China will be at the absolute top, comfortably and measured against most relevant metrics, already by 2025.

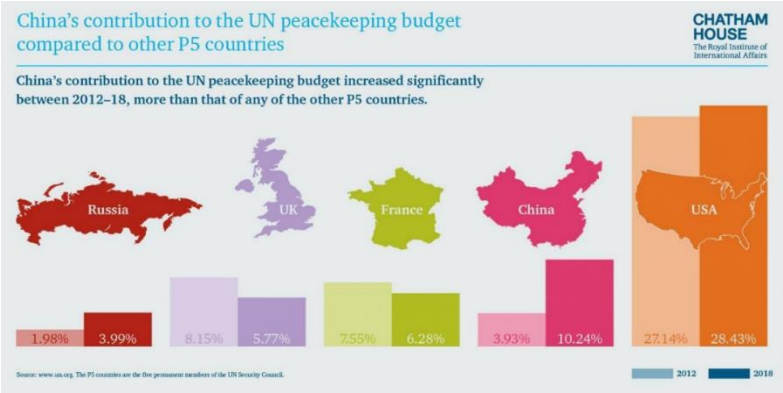
In 2020, China has already displaced the U.S. to become the largest economy in the world, on PPE metrics (purchasing power parity), that both the IMF and CIA now judge to be the single best metric for comparing national economies: $24.2 trillion versus the U.S.'s $20.8 trillion.

By 2025, the value of all goods and services produced in China will likely exceed US value, even when calculated using a more common metric called MER (market exchange rates). Leaving no doubt as to which one is the largest economy on the planet.

Notably, the overtaking in 2020 happened in spite of trade tensions / trade wars / global recession. It occurred as China was the sole country projected to grow in 2020. This leaves those in fear of the overtaking to be more fearful now. It is therefore **legitimate to expect the next 5 years to be the period when chickens may come home to roost**. Tensions are bound to flare up, hopefully staying confined in trading and in court and not ending up in military confrontations (differently than how secular shifts in economic super-powers have typically played out in history). The collision seems unrelated to whoever wins the upcoming US elections, as issues are felt widely across both American and Chinese societies.







Needless to say, this is a **deep break from the American-led world order post-WWII** that most of us were born into. The void created by the US would then be filled by a revanchist Russia in Europe – clashing against EU's interests – and by a growingly assertive China in Asia – clashing against Japan, India and others. The military duopoly Russia/US that reigned after WWII and morphed into US hegemony in early 90's is now derailed by the **ascension of China beyond a critical tipping point.** As we argued in the past, more than Russia ever did, China is taking active steps to charge against the US-centred system. A

rising China is establishing its economic web, by means of its 'one belt, one road' policy, having formed its own version of the IMF (the Contingent Reserve Arrangement – CRA – and the New Development Bank, formerly BRICS bank), its own version of the World Bank (the Asian Infrastructure Investment Bank – AIIB), its own version of regional free-trade agreement to rival the TPP. China's reach extends beyond Asia-Pacific into LATAM, Mexico included.

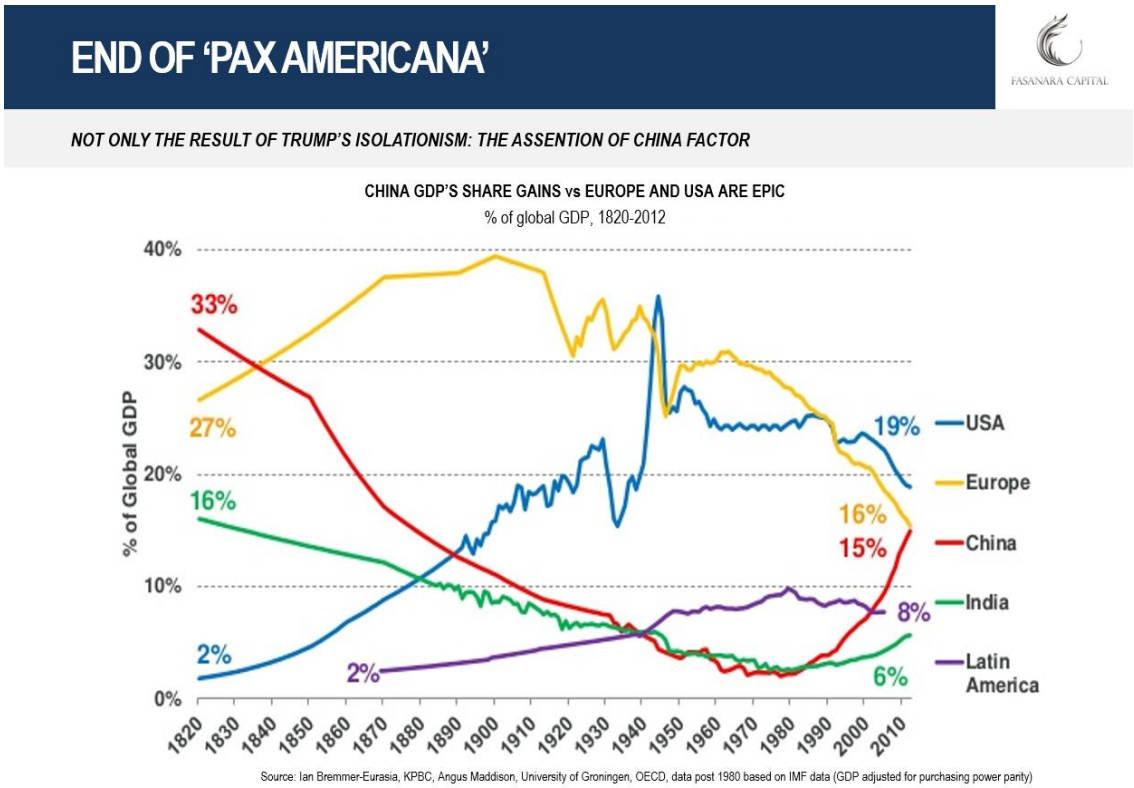
The most immediate impact imaginable is a durable rupture to global supply chains, the re-onshoring of production, de-globalization / protectionism. As argued in the past, a case can be made for this outcome to be a positive one, when peaceful, in more dimensions than one: it leads to a more socially sustainable economy, less exposed to wild globalisation and the too-rapid demise of the middle-class in western economies (thus taming income inequality, leading to more inclusive growth in the west), a more environmentally-friendly solution, a more inflationary economy at a time when debt deflation is a common enemy / symmetric shock.

Another by-product is that **the De-Dollarization trend will likely gather momentum**, under the double hit of China's bloc conflicting interests and the advent of digital technologies. Today's imbalance stems from the basic fact that the US is 15% of the global economy, while the US Dollar accounts for 70% of global trade flows (as a payment currency inter-regionally in value), makes over 60% of exchange reserves of central banks, and 70% of countries have the US Dollar as their anchor or reference currency. On the other hand, not long ago the Renminbi got included in the SDR, the IMF's currency unit. China already settles 20%+ of its international payments in CNH, a staggering amount. De-dollarization is regarded by China as a matter of national security, high up on their long-term policy priorities. Technology is the other actor at play, when thinking of both non-sovereign distributed currencies (Bitcoin et alia) and corporate-currencies (e.g. Facebook's Libra).

The ramifications of the long overdue re-balancing are far and large. As a starter, **is the US Dollar stronger or weaker as it is dethroned from sole global reserve currency status?** We think it will be stronger, with bearish pressures on the commodity-complex, Emerging Markets and global Equity, adding a dangerous stressor to an already fragile market structure. However, most market participants seem to believe the opposite, that the US Dollar will be weaker, which would instead work in favour of all of the above. Even assuming it goes weaker, we need to see the shape/tempo of the adjustment: if the

weakness is too much/too fast (in the perfectly chaotic style that spun around the Dollar Index DXY during March's ides/jitters), inflationary pressures could ensue, pushing rates higher, debt service costs higher to where bankruptcies are triggered (e.g. when interest rates or default rates rise, the FED prints out of this air leveraging off her exorbitant privilege, except when the privilege is not there and it equates to spilling oil on fire, driving the currency weaker still, rates higher further - turning today's virtuous cycle/goldilocks scenario on its head).

It should also be noted that Asia - led by China - was already the dominant power in the history books, representing close to 60% of the world's economy until the late 1800s. China alone was over a third of world's GDP in early 1800. Bilal Hafeez at Macro Hive (previously Nomura) reminds us that China's predominance in the world's economy may just have to be looked at as reversion to the mean: '' *by the early 1100s, China produced more cast iron than Britain did in the late 1700s. Iron production was more than double what Britain was able to produce on the eve of its industrial revolution 600 years later in 1788*.''



Component 3: Technology Dominance, Permeating All Sectors

The 4th Industrial Revolution started years ago, and is now unfolding at full speed / escape velocity. Critically, **tech is no longer a sector, tech is everywhere. It is either tech or it is nothing/little/irrelevant. Tech is the new market economy altogether.**

We did not need COVID to know that **e-commerce is the future, that consumers / businesses are embracing digital as the new normal**, entrenching it in spending/borrowing/investing habits. Consequentially, e**ntire sectors are suddenly obsolete and in need of a complete overhaul: Banking & Insurance, Asset Management, Utilities, Energy, Transports ..** to cheerfully name a few.

Component 4: Emergence Of New Capital Markets

We are on the cusp of the deepest, fastest, most consequential disruption of financial system infrastructure in modern history.

In this vein, as we argued in a recent podcast with MacroVoices, **"banks are dead but banking is not". A new refreshing wave of non-bank, non-AM actors has been emerging to challenge the status-quo, and is today at the third or fourth iteration already, where it gets closer and closer to cracking it and get scale**. Getting in proximity to the tipping point for mass adoption, the critical threshold beyond which it becomes the new normal.

The existential crisis of the market economy as we know it will likely be settled by 2025. Hopes of a reversion to the pre-GFC mean will be shattered for good. Traditional commercial banks will likely classify no longer as private sector but rather ramifications of the Central Bank itself, as non-profit(able) actors ensuring financial stability of their respective monetary ecosystem. At the top of the food-chain, in further consolidation, there will be three central banks, that only truly matter and need coordinating: **FED, ECB, PBOC**.

The Asset Management industry is not immune to disruption and will have to reinvent itself from the ground up. Our sense is that the direction of travel is to become incubators, a balanced blend of PE/PD/Tech that can be put to some real use, to the real economy. Outside of the senseless limbo of gambling in auto-referential public markets, to **fill the void left by banks**. Expectations to get paid for market-timing or cherry picking across zero-yield

fake-bonds and crazy-rich growth equities seem - at this point - delusional. What is there to choose between bonds at different levels of negatives rates: is a -60bips nonsense-bond expensive versus a nonsense-bond yielding -30bips? In what (non)sense? What is there to choose between US equities, when if they fall 30% tomorrow they become merely expensive. In truth, passive-aggressive ETFs have taken the helm and will not be displaced by active managers even when markets crash on them multiple times over, despite them contributing meaningfully to such crashes, in perverse ways.

ETF in 2025 will be like Autonomous Electric Vehicles 10 years in the future. In comparison, traditional investment strategies will look like Radio Taxi, dead since 10 years prior.

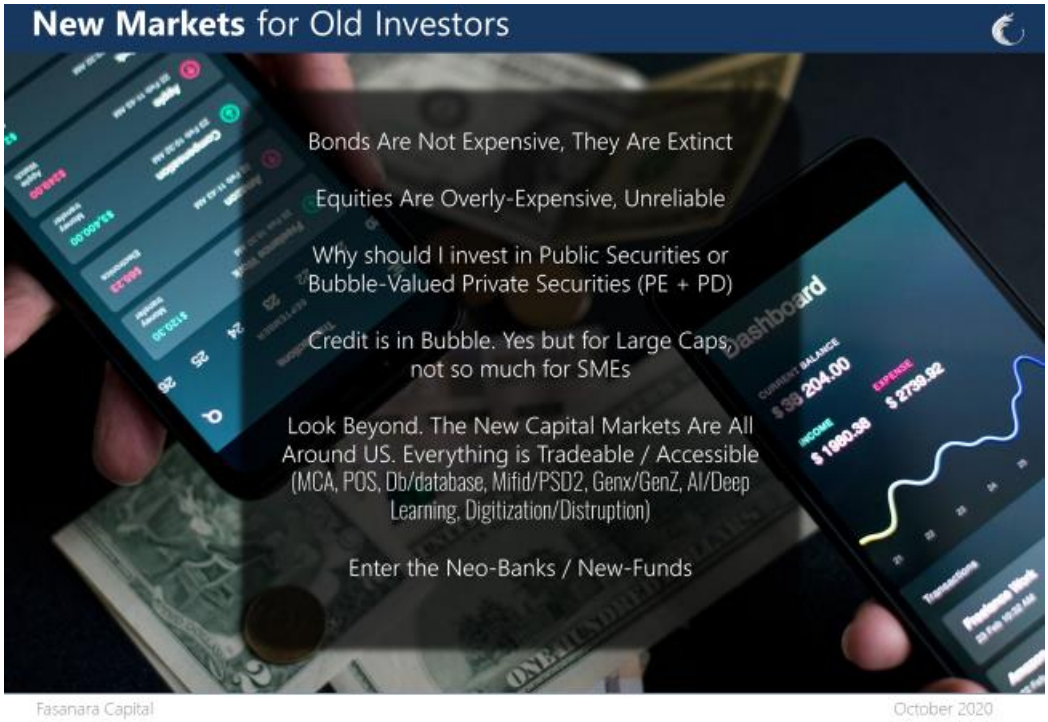
The good news is that the new fabric of the market economy of the future started to emerge in recent times. The New Capital Markets are in sight: forget equity and bonds, which have been engulfed in twin bubbles for years now. Everything is tradeable around us.

A few ideas, keeping it high level and without presenting specific house products:

- **Digital Lending**, technology-enabled transparency, democratic accessibility to credit, skin in the game alignment. The interplay of (i) traditional Banks retrenching due to capital constraints, legacy positions, limitations in IT (ii) advances in processing power and Big Data analytics, (iii) changing customer behaviours in consumers and businesses, create brand-new markets. Non-Bank / Alternative Lenders can enter markets historically confined to traditional commercial banks and exploit the opportunities at scale using technology. Offering income in robust formats to institutional investors at a time when yields are zero-ish, and risk-adjusted expected returns are deeply negative. Think for example of the SME sector, that has never experienced the abundance of liquidity for large corporates, therefore never seeing a bubble: it has rather continued to be left behind by mainstream funding sources, all along, paying to investors a proper price for risk all the way through.

- **Digital Assets** go institutional, no longer a fluke. Legitimate scepticism missed a key point: (i) the unmet need / lack of alternatives in the real economy, (ii) the availability of sources of alpha in trading.

- **Quant strategies designed to benefit from market fragility**: how can Tech help you achieve a genuine edge in broken markets, how can you embed structural fault-lines in the market system (inherent fragility) and turn them to your advantage. Most strategies do not even try to address these questions / thus not have a plan in VUCA times (*plans are useless, but planning is indispensable* - Dwight D. Eisenhower).



Demise & Re-Birth Of The Market Economy: A Timeline

The phoenix market economy of 2025 can arise from the ashes of its 2020 predecessor.

Here below we trace-track the interplay of the key factors presented above, drawing a timeline. A few horrible neologisms help visualise the series of events as they happened:

- ***T_0* | Short-Termism Syndrome**: on one dimension, the full hard lockdown response to the pandemic is no dissimilar from QE / MMT / UBI / Populism, swapping short term solutions for long term problems. It defines an ingrained mentality that all is due to a soft & entitled society that elects to kick the can down the road whenever presented with the opportunity to do so.

- ***T_1* | Retail-ification of the investor community**. It goes beyond RobinHood phenomenology (WFH and speculate), to be a wide-spread investing disease among investors - however sophisticated. Most **investment strategies behave like retail, in a bid for survival**: all long beta/carry, all short vol/tail risk, all stay long during drawdowns and buy more at every dip. **Demand grows with price** (Giffen good). Based on religious belief in policymakers as saviours in rainy days: QE + Fiscal + MMT. Moral Hazard institutionalised.

- ***T_2* | Bitcoin-nization of mainstream markets / failed transmission to Real Economy / Institutional Investors must go**: chronic fragility of bonds and equities, not a transient feature. It's all fugazi markets, rich-quick schemes over fundamental investing/patient capital, markets like videogames, real economy left behind. Unintended consequence: funding gap to corporates/consumers is the largest in history, despite abundant public liquidity for top 10% of corporates / consumers. **As public markets become video games, they critically fail to allocate capital efficiently to the real economy. As Banks recede, institutional investors have both the need and the opportunity to leave the casino and fill the gap in the real economy**. An overarching ESG pressing need, beyond the common use of the term.

- ***T_3* | Platform-ification of Credit & Banking / The New Capital Markets for the Real Economy**: as public markets are bubbly/unattainable and banks no longer provide;

alternative sources of stable funding are needed/sought after by the Real Economy – the residual 90% of corporates / consumers. **Data-driven open ecosystems (platforms) substitute rigid top-down centralized structures (banks)**. Seeking **redundancy/resiliency** and network effects/distributed ledgers, in providing funding to the real economy of both consumers and businesses unbanked/underbanked. Seeking **sustainability / endurance** during economic downturns / credit crunches (anti-cyclical), instead of the efficiency/vulnerability of status quo, withdrawing support to SMEs during downturns, exacerbating crunches. Corollary to this, is the emergence of **Embedded Finance**, which is about enabling any business to manage and sell innovative financial services; seamlessly integrating creative forms of payment, debit, credit, insurance or even investment into their end user experiences. Further, **Blockchain / Tokenization**, that allows to convert in tokens all assets: buy a Picasso, put it in a shell company and issue tokens, now everybody can have a share of a Picasso painting. Related to this, a major shift takes place **from Ce-Fi to De-Fi**. Ce-Fi is the traditional, middle-men orchestrated, finance. De-Fi is the world of decentralised finance, where financial actors interact directly under the overarching rules of cryptographically enforced computer software. This summer, we saw a first display of what this ecosystem can offer. In the short span of 3 months the industry drowned market participants in new lending protocols, derivative trading, insurance, mom-and-pop market making liquidity pools and asset management solutions (not passive, but actively managed by a community voting on investment strategies). This market is currently trading just short of half a billion dollars per day, generating approximately $1mn in fees per day. All in all, **as FinTech platforms, embedded finance, blockchain/De-Fi arise and evolve, the liquidity gap between public and (new) private markets will keep on shrinking, getting the full attention of institutional investors in the process.**

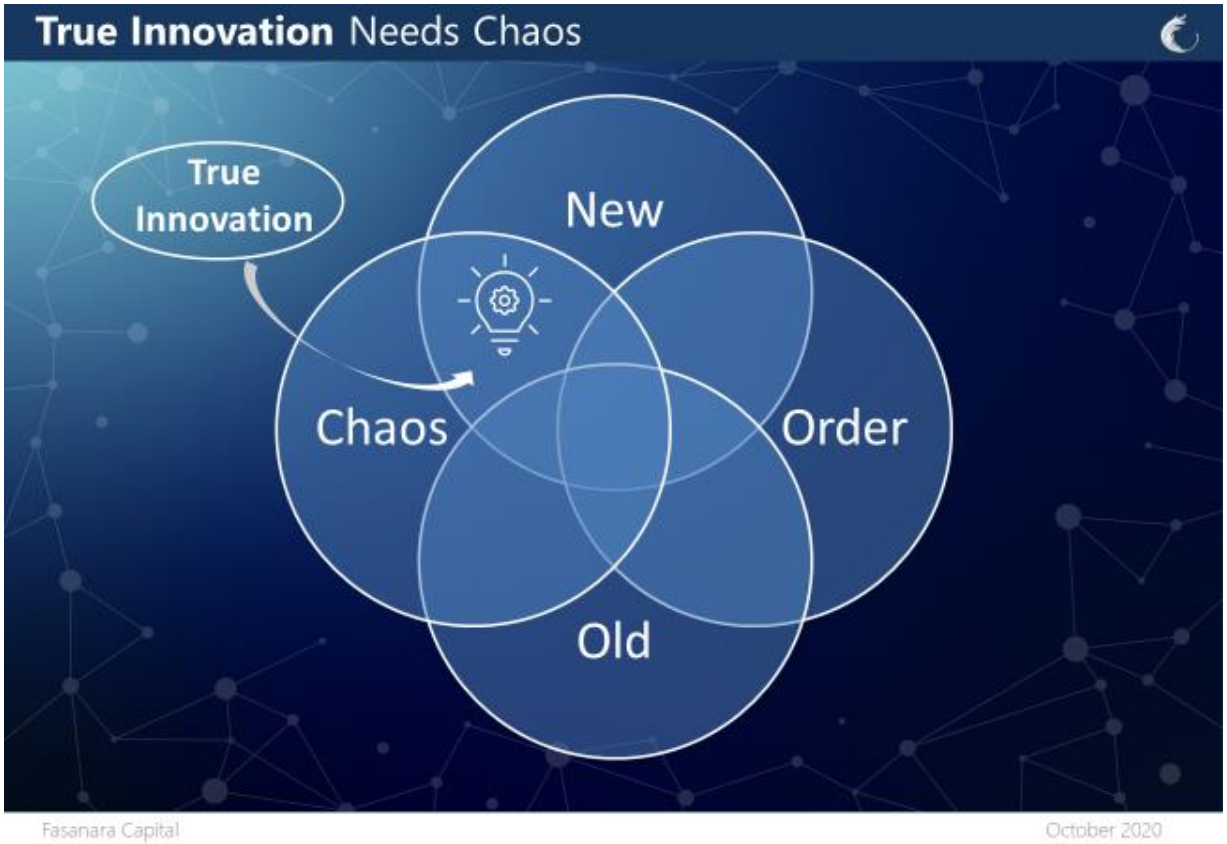

Market Economy 2025 Resurrecting From Ashes
T0
Short-Termism Syndrome
Full lockdown, QE, MMT, UBI, populism... are variations on the theme of an entitled society: buying time, kicking the can down the road, swapping s/t solutions for l/t problems.
Results in
T1
Retail-ification of the Investor Community
RobinHood Phenomenon, investment community behaving like retail investors chasing price increases, Long Beta/Carry, Short Vol/Tail Risk, Buying the Dip at every turn.
Results in
T2
Bitcoin-ization of Mainstream Markets
Public markets become video games, failing to allocate capital efficiently to the real economy. As Banks recede, institutional investors can leave the casino and fill the gap in the real economy.
Gives Rise to
T3
Platform-ification of Credit / New Capital Markets
Opportunity for data-driven, resilient & sustainable networks to close the funding gap in the real economy, with capital from institutional investors fleeing Fugazi Markets.
Fasanara Capital
October 2020


Era of OPPORTUNITIES
We are on the cusp of an era of transformation and opportunity
Machine Learning & AI
ESG
QUANTUM Computing
HEALTHCARE Paradigm Shift
5G
ENERGY Transformation
Fasanara Capital
October 2020

What Are We To Do? A Few Guiding Principles

To conclude, it is therapy time for 2020's:

- What worked won't work
- **Radical unorthodox** is the only way, experience is your enemy, experimentation your saviour
- Choose a strategy, not a trade. **Go anti-bubble**
- Go the extra mile, pull up your sleeves, go to the real economy, seek **infrastructure and technology**. Can't claim fees on the ability to pick stocks or bonds at zero rates - it's delusional
- In a word, leave the old, embrace the new, venture out: **experimentation vs experience**
- Finishing on a positive note, **with chaos comes opportunity**: new + chaos = truly innovative field, fertile ground for truly innovative ideas (not old ideas that are applied to a new context, or variations of existing ideas)



Previously, on Fasanara Capital:

24th February 2020
Helping Blind Navigation In Broken Markets: The Cockpit Of Complexity-Based Systemic Risk Alerts
Adding The Short-Wave Earthquake Alert: The 5d ETAS
How do you handle portfolio management in fake markets, where monetary jiujitsu is relentlessly utilised to cook the books and rig price discovery? A range of new-generation tools based on Complexity theory to assist in tackling an unconventional and unsustainable market environment link

22nd October 2019
How To Navigate The Cliff Edge In Markets
New Tools For Flaky Markets In Transition: Introducing The 15-Days EWS indicator
At a time in which bonds are no longer bonds but rather tax bills, and equities are as expensive as washing machines going on auction at 50 thousand dollars, what role is left to play for us rationale investors? At a time when machines dominate 90% of daily trading flows, are pitted against other machines to extrapolate a non-existent alpha, and a passive or quasi-passive true nature infected most brands of investing (ETF, risk parity, risk premia, low vol vehicles, quant funds, CTA, all), what role is left to play for us humans? link

21st August 2019
Transformational Markets: History Being Made
No-Bond World And The Risk Of A Daily Liquidity Crisis
Rates hit new lows this month. Symbolically, the 50-year swap rate in Europe dived into negative territory. Bonds as an asset class are in extinction, a major shift in modern finance as we know it, inadvertently turning 'balanced portfolios' into 'long-equity portfolios'. The 'nocebo effect' of enduring negative interest rates is such that negative rates are deflationary, hence self-defeating. Meanwhile, they have potent unintended consequences for systemic risk, which spreads around, leading the market into an historical trap. link

29th April 2019
Cascade Effects In Modern Undiversified Passive Markets
The Ideal Environment For Overnight Gap Risk
While inconclusive, such tools help describe system degradation in recent years and today concur in framing systemic risk at high alert status, current market conditions as profoundly fragile, and in proximity to a major shift, a system-wide critical transition. link

11th January 2019
A Glimpse At 2019
Markets In Critical Transformation, Chaotic Behaviour Has Just Began
link

13th November 2018
How To Measure The Proximity To A Market Crash: Introducing System Resilience Indicators ('SRI')
A big crash will make investors realize how badly they need better ways to understand and track risk. link

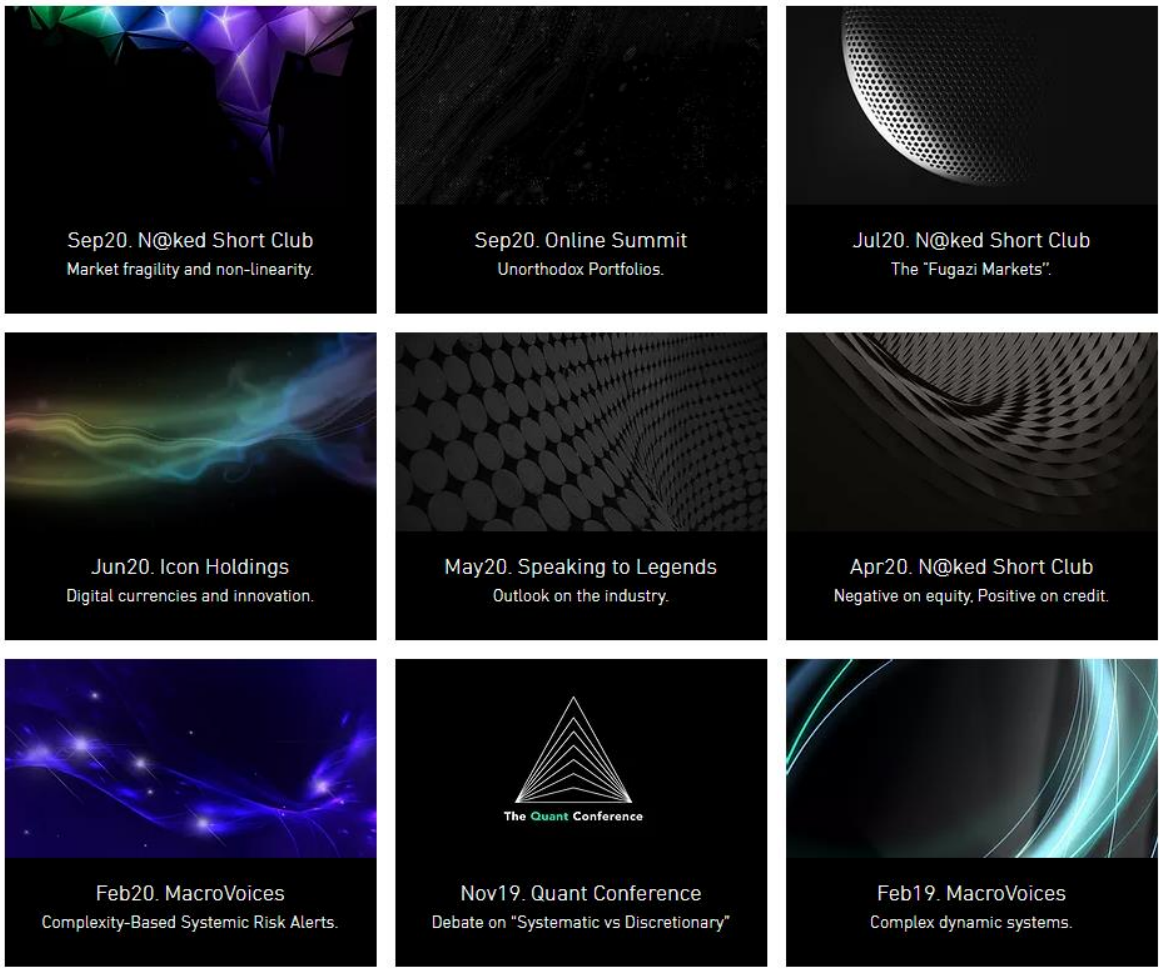
9th July 2018
Analysis of Market Structure: Towards A Low-Diversity Trap
This is the visual story of how the market structure weakened relentlessly in the last ten years, to get more concentrated, entropic-fragile, and ready to snap. We visualize the structure of the market network during good and bad times, trying to isolate the DNA of a market crash.
link

11th May 2018
Market Fragility (Part II)
Tipping Points & Crash Hallmarks

Presentation and Video Recording, on Markets as Complex Dynamic Systems and a conceptual framework for rethinking Systemic Risk as a Complexity Problem, in 3 steps: Tipping Point Analysis, Early Warning Signals Analysis, Butterflies Analysis.
link

10th January 2018
Fragile Markets On The 'Edge Of Chaos'
Financial markets are complex adaptive systems, where positive feedback loops undermine resilience and bring to the brink of critical transformation.
link

Podcasts



Available on www.fasanara.com

Insights from the team

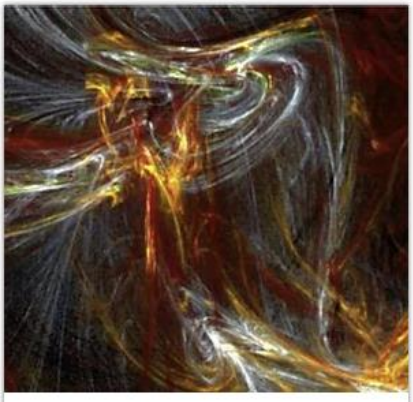
Our Outlooks, Cookies and Scenarios on the market

Cookies | Feb 2020
Helping Blind Navigation In Broken Markets: The Cockpit Of Complexity-Based Systemic Risk Alerts.

Scenarios | Oct 2019
How To Navigate The Cliff Edge In Markets

Outlooks | Aug 2019
Transformational Markets: History Being Made

Scenarios | Apr 2019
Cascade Effects In Modern Undiversified Passive Markets



Outlooks | Jan 2019
A Glimpse At 2019

Cookies | Nov 2018
How To Measure The Proximity To A Market Crash: Introducing System Resilience Indicators ('SRI')

Cookies | Sep 2018
Twin Bubbles: How Stretched?

E-Book | Aug 2018
Financial Complexity & Nonlinear Dynamics

Cookies | Feb 2018
The Market System Is Tight In All Directions

EVENT INFORMATION: GAIM Conference, digital edition, 27th October 2020

Fasanara will join the GAIM virtual online Conference for Alternative Investment - where global alternative investment managers and investors come together - chairing a panel debating ''The Future Of Quant In The New Reality''. Details on www.fasanara.com

EVENT INFORMATION: The Quant Conference, digital edition, 4th November 2020

We are excited to announce the fourth edition of The Quant Conference, with Fasanara Capital as leading partner. Our team member Nikita Fadeev @ Fasanara Digital is organizing the next edition of the Quant Conference, digital edition.

For the third year we continue to support The Quant Conference. With 1,000+ attendees expected and some of the biggest names in the industry attending, TQC is one of the premier quant conferences globally. We will be discussing cutting edge research, latest innovation in the financial application of machine learning as well as current and emerging trends in the industry. Fasanara Capital, as a leading partner, continues its efforts to expand our open ecosystem through the organisation and participation in the event. To us, it proved historically to be a great hub for reaching out to new talents: coders, algo traders, data scientists. It is key component of our quest to be an innovative Quantitative FinTech Investment Company. Details on www.fasanara.com

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