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Turning massive challenges into meaningful change

Four years after the atomic bombing in Hiroshima the writer Norman Cousins found the city had been almost completely rebuilt on a temporary basis and that its people were "alive" and "vital":

“As you stand you wonder why people would ever come back to the city again, to this place of compressed agony. The answer is all around you. You could see it in the brisk, life-loving walk of the young people. You hear it in the full laughter of children. The answer you found was that there are deeper resources of courage and regeneration in human beings than any of the philosophers had dared to dream. The answer you found was that the greatest force on this earth-greater than any device yet conjured up in the laboratories-is the will to live and the will to hope (1949:31).”

Heyokha's Qi

Turning massive challenges into meaningful change	1
Realize that X-Events provide windows of opportunity for positive change	3
Expect more frequent X-Events	4
The key to benefit from X-events is to be resilient	6
The U.S. Navy SEALs: masters of resilience	6
The American Psychological Association on resilience	8
What works for us	9
Heyokha Holistic.....	9
Breathing exercises help us calm down	9
Meditation helps us heal and sharpen our minds	10
Can Breathing Like Wim Hof Make Us Superhuman?.....	10
Healthy thinking keeps us focused on the right things.....	12
With the prospect of MMT, should we prepare for inflation?.....	13
Inflation despite a low growth environment?	14
The case for gold	16
Appendix I: Human Response to Disaster - myths vs facts	23
Appendix II: Mind-body healing moves to the mainstream	24
Appendix III: Applying Taleb's lessons from "Antifragile" and "The Black Swan"	27



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Turning massive challenges into meaningful change

Not another Corona forecast

The current situation is very distressful, with many people being confronted with a (potential) loss of health, jobs, wealth, freedom, community, and loved ones.

We experience fear of being infected, of not being able to be treated, of dying alone, or not being able to say good-bye.

In this context, we at Heyokha wish to not add to the endless stream of upsetting news about COVID-19, or detailed “fortune telling” that covers how our lives will be reshaped in the years ahead.



“I find wearing a mask helps.”

CartoonStock.com

Instead, in this report, we focus on how you can turn these massive challenges into meaningful change.

First, let's admit that we are all clueless about the pandemic's progression

There is simply too little that we know about the virus at this stage to make any predictions superior to guesses. Key inflection points affecting human behaviour in the future will be either the invention of medicine that can kill the Coronavirus, or vaccines that can prevent infection by the same.

It is uncertain when these inventions will become available, and even if at all. As such, we don't think it is useful to join the debate about whether the path of economic recovery will be U shaped, L shaped, or whatever.

But we are certain the pandemic brings us closer to a tipping point

Before the corona pandemic occurred, we wrote that we are at a critical juncture, where various socio-economic issues are reaching a tipping point and economic and political systems can be overturned (See our [Q3-2019 report](#)).

The issues we highlighted are: Modern Monetary Theory, tech disruption, calls for closing the gaps between the have's and the have not's, deglobalisation, demographic change, and environmental action.

We believe it is fair to say that observations so far indicate that the pandemic has only accelerated developments around these issues.

With uncertainty as the new normal, we better be adaptable

While the GFC gave us a sense of how interconnected, turbulent, and unpredictable our (economic) systems are, the ongoing pandemic has certainly reinforced these feelings on us.

In this report, we highlight that extreme events are likely to increase in the future due to how we organise our societies, and due to what nature throws at us. Stress and change are unavoidable, so we better have faith, be adaptable, and develop an antifragile mindset.

If you Can't Go Outside..
GO INSIDE.





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As beautifully written by Dana Klisanin¹, “Developing an antifragile mindset doesn't mean denying feelings of anxiety and stress, but instead, training ourselves to summon the opposite responses. We can combat stress with relaxation; hopelessness with hopefulness; anxiety and panic with mindfulness meditation.”

Luckily, extreme events are as much a problem as they are an opportunity.

How this report is structured

This report consists of two main sections. In the first section, we explore the positive impacts of extreme events and how we can stay in control, sane, and healthy in this difficult time. In the second section, we set out how we believe the Corona

pandemic is accelerating the speed in which we are heading for a financial X-event and if there is one instrument that you should consider to add to your portfolio, go for the gold.

“Everything can be taken from a man or a woman but one thing: the last of human freedoms - to choose one's attitude in any given set of circumstances”

-Viktor Frankl, Holocaust survivor, neurologist, and psychiatrist-

¹ <https://www.psychologytoday.com/us/blog/digital-altruism/202003/the-antifragile-mindset>



Realize that X-Events provide windows of opportunity for positive change

It may seem inappropriate, to talk of extreme events such as pandemics as windows of opportunity. It may even sound brutal to claim that extreme events are a form of necessity.

Nonetheless, research suggests that larger crises and disasters can be threshold events leading to meaningful change.

“Disasters are not only characterized by ‘death’, ‘destruction’, ‘disintegration’, and ‘disease’, they also provide conditions for ‘vitality’, ‘reconstruction’, ‘integration’, ‘growth’, and ‘health’”

-Charles Fritz, disaster research pioneer and Captain in the US Army during WWII-

The opportunity:

Borrowing heavily from three research papers^{2,3,4} about disaster recovery, we present the most mentioned advantages and opportunities:

- (1) Build back better - disasters are often perceived as creating the opportunity of a “reset button” for building infrastructure and institutions in better ways.
- (2) Paradigm shifts – disasters can lay bare past political processes and can present opportunities for populations to critically review established ways of thinking, the social contract, and the competencies of elected leaders.
- (3) Individual empowerment - there is emerging evidence of how a disastrous experience can trigger a “positive transformation” within individuals, i.e., the ability to transform experienced trauma into an agency.

- (4) Social bonding - a shared experience of disaster survival can bring the best out of people; it can enhance solidarity, helpfulness, and amiability; facilitating bonding among people, who would otherwise not have met due to their social situations
- (5) The shift of resources – disasters can prioritise funding for alternative projects and agendas, which may be politically “unpalatable” in normal time
- (6) Conflict resolution - the conflict-resolving power of disasters has been widely noted in both intuitive writings and in the disaster research literature.

The necessity:

Major movements in human social progress are almost without exception driven by extreme events that wipe away existing power relations and social structures that have outlived their usefulness⁵.

Such extreme events are a “necessary” condition for major human progress. This refers to Schumpeter’s famous idea of “creative destruction” which assumes that long-standing arrangements and assumptions must be destroyed to free up resources and energy to be deployed for innovation.

Yet, in many cases, some factors prevent such change, such as status quo bias, lack of resources, institutional impediments, and interconnected vested interests.

In such cases, a shock must take place for social organizations to open up space for new ideas, new products, new ways of doing business.

Here are a few examples of how extreme events created a shock by destroying the old power relations and reconstructing social structures in different parts of the world:

² “Leveraging Post-Disaster Windows of Opportunities for Change towards Sustainability: A Framework” Brundiers (2018)

³ Nat Hazards “Extreme events and disasters: a window of opportunity for change? Analysis of organizational, institutional and political changes, formal and informal responses after mega-disasters” Birkmann et al. (2008)

⁴ Fritz, C. Disaster and Mental Health: Therapeutic Principles Drawn From Disaster Studies; Historical and Comparative Disaster Series; University of Delaware Disaster Research Center: Newark, DE, USA, 1996.

⁵ <http://globalxnetwork.com/wp-content/uploads/2013/10/X-Events-in-Social-Processes-Article-by-John-Casti.pdf>



1. The bubonic plague in the 14th century - The massive scarcity of labour created by the plague shook the social structure in Western Europe, shifting the balance of power from the lords to the peasants.

It enabled peasants to free themselves from compulsory work, obtain better wages, and gain an improved standard of living⁶.

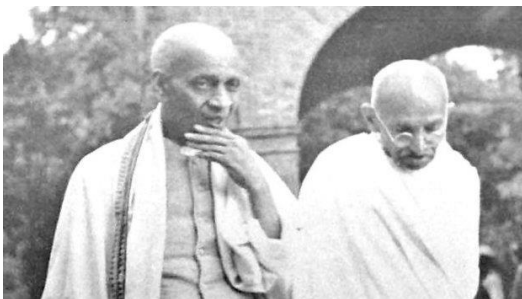
2. The Second World War made it obvious to everyone that there was a need for global change. It brought about the decline of overseas colonial empires of the major European powers, leading many nations to regain their independence.

It led to the unification of the European nations in the European Economic Community, the establishment of the International Monetary Fund, and the creation of an element of the World Bank to promote peace and prosperity.

The United Nations was then founded on the same principles.

3. The Spanish Flu is another factor seen by historians as contributing to the independence of several nations such as India⁷.

The fortunes of the British colonizer had always been vastly different from those of the Indian people, and nowhere was the split starker than during the influenza pandemic.



Gandhi himself was reportedly contracted the flu, but survived and he led a sophisticated independence movement

Source: Telegraphindia.com

Influenza became one more example of colonizer injustice that spurred Indian people on in their fight for independence, strengthening the nationalist's currents in India and support for their leader Mahatma Gandhi.

This, in turn, inspired other Nationalist independence movements, such as in the Dutch East Indies (Indonesia).

4. The 2014 Tsunami contributed to the resolution of the conflict in Aceh – the region of Banda Aceh, Indonesia, was subject to a 30-year long violent conflict between the GAM and the national government.

The 2014 Tsunami event that triggered massive destruction and external support is considered⁸ to be the driver for peace in Aceh and for local political actors to change their positions and sign an MoU in August 2005.

See that the trend-changing extreme events are as much a problem as they are an opportunity. It is up to our attitude and imagination what the current pandemic presents to us. Big or small, a positive change always counts.

Expect more frequent X-Events

While the Corona pandemic is giving us a taste of how extreme events feel like, it may well be that this is just the *Hors d'oeuvres* in a full course dinner.

Many great minds believe that the incidence of extreme events will only increase. Two major drivers are (i) complexity overload and (ii) what nature throws (back) at us.

⁶ Acemoglu, D. (2013). Why nations fail: The origins of power, prosperity, and poverty (Pbk. ed.). New York: Crown Business.

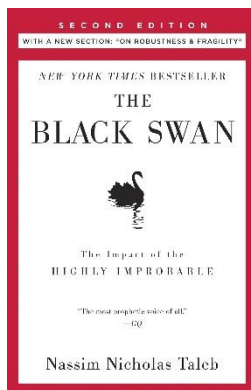
⁷ <https://theconversation.com/1918-flu-pandemic-killed-12-million-indians-and-british-overlords-indifference-strengthened-the-anti-colonial-movement-133605>

⁸ Birkmann, Joern & Buckle, Philip & Jaeger, J. & Pelling, Mark & Setiadi, Neysa & Garschagen, Matthias & Fernando, Nishara & Kropp, Jürgen. (2010). Extreme events and disasters: A window of opportunity for change? Analysis of organizational, institutional and political changes, formal and informal responses after mega-disasters. Natural Hazards. 55. 637-655. 10.1007/s11069-008-9319-2.



Complexity scientists have been warning us for the mathematical fact that complexity breeds fragility⁹.

As our world is becoming impossibly complicated, relying on ever more advanced technology that is developing at an exponential rate, our systems are becoming increasingly more fragile and susceptible to collapse.



As Nassim Taleb writes in this book “The Black Swan”: “Black Swan effects are necessarily increasing, as a result of complexity, interdependence between parts, globalization and the beastly thing called ‘efficiency’ that makes people now sail too close to the wind.”

To explain further, Taleb pointed out in his book “Antifragile” that, “man-made complex systems tend to develop cascades and runaway chains of reactions that decrease, even eliminate, predictability and cause outsized events.

So the modern world may be increasing in technological knowledge, but, paradoxically, it is making things a lot more unpredictable.”

An example of how a small failure in a complex interconnected system can lead to major unexpected outcomes is this precedent:

Example: On August 14, 2003, a high-voltage power line in northern Ohio brushed against some trees and shut down. That tiny accident triggered a series of cascading failures throughout the complex, interconnected the northern U.S. and south-eastern Canadian power grid.

In the end, 50 million people lost power for up to two days in the biggest blackout in North American history. The event contributed to at least 11 deaths and cost an estimated \$6 billion.

Another example: On August 31, 1859, the sun ejected a giant burst of charged particles, hitting the earth 18 hours later. Currents induced in telegraph wires prevented transmission, and sparks from the wires started fires.

A 2008 National Academy report¹⁰ concluded that a similar event now would cause “extensive social and economic disruptions.” Power outages would last for months, and there would be no GPS navigation, cell phone communication, or air travel.

The last example illustrates that many possible events that once would have been manageable now could have enormous unexpected effects. The consequence is that forecasting is becoming an ever more challenging thing to do and that we better get used to living through turbulent and uncertain times.

⁹ <https://sloanreview.mit.edu/article/understanding-and-managing-complexity-risk/>

¹⁰ <https://www.nap.edu/catalog/12507/severe-space-weather-events-understanding-societal-and-economic-impacts-a>



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The key to benefit from X-events is to be resilient

So, what is the antidote to extreme events? According to Nasim Taleb, it is to be “Antifragile”. In his latest book, *Antifragile*, Taleb distinguishes three states, being Fragile, Robust, and Antifragile.

Fragile things break when subjected to shocks, robust things, like a hammer, stay the same. Yet, Antifragile things, like a muscle, become stronger.

Instead of trying to manage risk, we should try to manage our fragility. Mr. Taleb contends that we must learn how to make our public and private lives (our political systems, our social policies, our finances, etc.) not merely less vulnerable to randomness and chaos, but actually “antifragile” — poised to benefit or take advantage of stress, errors, and change.

“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change”

—Charles Darwin¹¹—

Taleb’s idea is neat. We found some of his thoughts a useful reminder when looking at investment opportunities (see appendix). However, we had trouble understanding from his book *how* we can actually become antifragile. So, to learn how to *be* antifragile, we felt we had to turn to other sources.

While studying the topic, we found that Taleb’s definition of “Antifragile” closely resembles the definition of “Resilience” by the American Psychological Association (APA)¹².

Psychologists define resilience as the process of *adapting well in the face of adversity*, trauma, tragedy, threats, or significant sources of stress. They emphasize that becoming resilient will help us get through difficult situations and empower us to improve our life along the way.

To understand how to be resilient *slash* antifragile, we need to turn to the most resilient men on earth.

The men who claim to “persevere and thrive on adversity”. And who claimed that what sets them aside from other men, is their ability to control their emotions and their actions, regardless of circumstance. What better institution to learn from than that who creates the U.S. Navy SEALs?

The U.S. Navy SEALs: masters of resilience



Navy SEALs is (probably) the world’s most resilience team
Source: Pinterest

Imagine your life as a soldier. Going without food or sleep for days. Jumping out of a plane at 35,000 feet. Trade gunfire with the Taliban in the mountains of Afghanistan while being outnumbered. If you were a part of Navy SEALs, you would not call it a nightmare. It’s a “Tuesday”.

Building resilience is paramount as soldiers are expected to keep going while being subjected to severe stressors and rapidly changing conditions. Not for nothing, SEAL recruits are subjected to one of the toughest training programs in the world.

Roughly 75 percent of people who make it into the initial six-month SEAL training course, known as Basic Underwater Demolitions/Seal Training (BUDS), wind up washing out. However, the Navy noticed that they were also losing good recruits, not because they couldn’t physically cope, but because they had a *mental* block.

¹¹ Or not actually Charles Darwin, according to <https://quoteinvestigator.com/2014/05/04/adapt/> it was Leon C. Megginson’s interpretation of Darwin’s book *The Origin of Species*, which was then condensed and restated by others.

¹² <https://www.apa.org/topics/resilience>



Big Four of Mental Toughness

An article on Psychology Today¹³ indicated that after Navy SEAL recruits were educated about four simple psychological techniques, their passing rates increased from 25 percent to 33 percent. The techniques were the following:

1. Goal setting – recruits were taught to set goals in extremely short chunks, like “make it to lunch”.
2. Mental rehearsal – visualising succeeding in their activities and going through the emotions.
3. Self-Talk – speaking positively to yourself to learn how to override fears resulting from the amygdala, a primal part of the brain that helps us deal with anxiety.
4. Arousal control – by being taught how to breathe, to help mitigate the crippling emotions and fears.

Various former Navy SEALs who published books about mental toughness, such as Lars Draeger and Mark Divine swear by these now time-tested skills as they have proven to work well even in the most chaotic situations.

According to Mark Divine, former Navy SEAL Commander and author of “Unbeatable Mind”, how we react to stress is actually a story we tell ourselves.

By changing the story, we change how the stressor(s) affects us mentally and physically. By strengthening mental toughness, we can train ourselves to perceive stress differently.

To put it simply, we need to shift our focus on the right things that matter and silence the noise that keeps our chin down.

Meditation and mindfulness as a new weapon

Mark Divine graduated first in his Navy SEAL class, also known as the Honor Man. “I think that happened because of my skills in breath control, concentration, visualization, and being able to

intercept the reactionary mind and focus,” says Mark in an interview with Forbes¹⁴.

He probably got that right, as mindfulness is inching into the military in the United States and those of other nations, according to an article in The New York Times¹⁵.

Army infantry soldiers at Schofield Barracks in Hawaii have begun using mindfulness to improve shooting skills. The British Royal Navy has given mindfulness training to officers, and military leaders are rolling it out in the Army and Royal Air Force for some officers and enlisted soldiers.

The New Zealand Defence Force recently adopted the technique, and military forces of the Netherlands are considering the idea, too.

Mark Divine believes mindfulness is the key to breaking free from negative patterns in our behaviour. By looking within, we allow ourselves to fully recognize them in the first place.



Corps of Cadet Recruits train in transcendental meditation to prevent PTSD by providing coping tools before exposure to combat or stressful situations.
Source: theguardian.com

Otherwise, we often resort to detrimental behaviours from substance abuse to overwork to self-harm as we try to distract our minds from some unacknowledged inner turmoil.

He notes that when he joined the service, topics like meditation and mental illness were stigmatized. Now, they’re a regular part of military training.

¹³ <https://www.psychologytoday.com/us/blog/communication-central/200911/how-the-navy-seals-increased-passing-rates>

¹⁴ <https://www.forbes.com/sites/robduke/2019/06/24/how-this-elite-navy-seal-found-strength-and-success-through-mindfulness/#242cfa8513bf>

¹⁵ The Latest in Military Strategy: Mindfulness, The New York Times, April 5, 2019, by Matt Richtel



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The American Psychological Association on resilience

Strategies to foster resilience

Like building a muscle, increasing your resilience takes time and intent, writes the APA. Focusing on four core components — connection, wellness, healthy thinking, and meaning — can increase your capacity for resilience. The APA suggests using these strategies.

1. Build your connections
2. Foster wellness
3. Find purpose — help others, be proactive, move towards your goals
4. Embrace healthy thoughts — Keep things in perspective, accept change, maintain hope

These strategies resonate well with us, as at Heyókha, as we believe in a holistic approach to wellbeing. In the later sections, we want to share with you what worked for us in terms of fostering wellness and embracing healthy thoughts.



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What works for us

Heyokha Holistic

At Heyokha we have always appreciated a holistic approach to wellbeing and believe in the connection between mind, body, and spirit. This has suddenly become especially useful during the ongoing COVID-19 pandemic that challenges us to overcome not only external stressors but also ourselves.

For instance, a few months ago, one of our team members experienced stress and anxiety during the first month of isolation, which also manifested itself physically.

What made things worse was that the symptoms of this anxiety resembled those of COVID-19, creating a negative feedback loop of even more anxiety and even stronger physical symptoms.

That was until one team member – an avid practitioner of Qigong - suggested to do an “inner smile meditation”, which is a popular Taoist practice in which we smile inwardly to each of the major organs of our body, activating the energy of loving-kindness within us.

While sceptical at first, our team member reported feeling improvements in his condition after each meditation session. To his surprise, it worked! It is one thing to be told - or “to know” - that something works, and another to actually experience it¹⁶.

Most of our team members have been long time practitioners of Qigong and/or martial arts, which both comprise ways to connect the mind, body, and spirit. We always aim to push ourselves and our team to grow, whether it is by training together, eating more plant-based food during weekdays, going to seminars, and doing intermittent fasting.

Mind-body healing used to be this new-age wuzzy wazy thing or something that “those crazy Asian people” do. But in fact, it turns out that mounting evidence for the role of the mind in disease and

healing is leading to a greater acceptance of mind-body medicine¹⁷.

In the appendix of this report, we elaborate on scientific research that concludes that many “new-age” and ancient methods find their merits in eliciting the “relaxation response” in the body, which significantly promotes healing. Also, we point to how the placebo effect is “proof” of the healing power of the mind. Check it out.

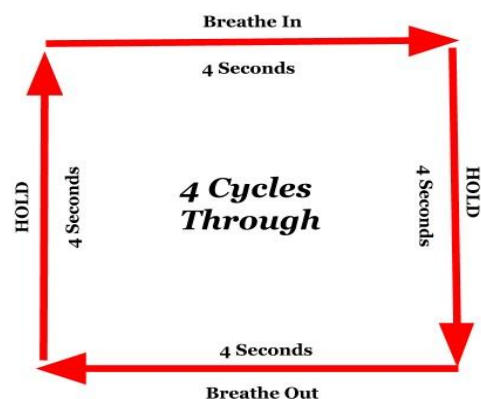
For us, breathing exercises, meditation, and healthy thinking play a vital role in dealing with the ongoing pandemic. Not only does it improve the resilience of our immune system, but it also helps provide us with the hard-needed equanimity and optimism to approach the challenges and opportunities that the pandemic presents.

Breathing exercises help us calm down

We use breathing exercises for two purposes: (i) when there is a need to calm down and clear the mind, but there is no option to meditate, or (ii) to prepare ourselves to meditate.

When Navy SEALS gets caught in a shootout, they cannot just get comfortable and meditate to remain calm. In such situations, they have to rely on their breathing techniques and self-talk to stay in control and complete their tasks.

Retired Navy SEAL commander Mark Divine has popularized the concept of **Box Breathing**, which we find helps to calm us down.



¹⁶ If you'd like to try yourself, we recommend listening to this YouTube video called "Inner Smile Meditation by Qigong Master Lee Holden".

¹⁷ "Mind-body research moves towards the mainstream", Vicki Brower, retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1456909/>



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The technique is also known as “resetting your breath” or four-square breathing. It is easy to do, quick to learn, and can be a highly effective technique for people in stressful situations. Here is how it works:

- (1) Inhale slowly and deeply until the count of four;
- (2) Hold your breath for four;
- (3) Exhale slowly for four;
- (4) Hold your breath for four, and repeat.

If you find this too challenging to begin with, you can also try counting to three instead.

Also, when you are all revved-up you are probably not in a good state to start any meditation. Consider using deep breathing exercises to calm yourself down first and then try to meditate.

Aside from the above box-breathing technique, one of our team members uses the “Wim Hof Method” app to aid with breathing exercises. See the grey box for more info on the legendary Wim Hof.

Meditation helps us heal and sharpen our minds

In our team, we practice mostly Qigong. As said earlier, it even helped one of our most sceptic team members to reduce his anxiety symptoms during the early days of the pandemic. But there is more to meditation than health benefits and calmness: it gives us perspective and mental clarity.

“The mind is definitely something that can be transformed, and meditation is a means to transform it.”

-14th Dalai Lama-

Can Breathing Like Wim Hof Make Us Superhuman?



Source: Okezone.com

In his 60s, Hof has run marathons barefoot and topless with shorts above the Arctic Circle, dove under the ice at the North Pole, and languished in ice baths for north of 90 minutes — all feats that he attributes to a special kind of breathing practice.

For many years Wim’s incredible achievements were thought scientifically impossible and he was viewed as nothing more than a circus act. Things quickly changed in 2011 following the first Radboud University study which showed he was able to voluntarily influence his autonomic nervous system.

The study showed that by using his method, Wim was able to voluntarily influence his autonomic nervous system - something which until then was thought impossible. This ground-breaking finding, published in PNAS and Nature, established credibility, quite literally rewrote biology textbooks, and piqued scientists’ curiosity.

On [his website](#), he outlines the basics of his method, which you can easily try for yourself. According to Discover Magazine¹⁸, Hof says that his method will lead to tangible health benefits such as more energy, lowered stress levels, and an improved immune system if the breathing practice combined with repeated exposure to the cold.

For him, it enables seemingly superhuman feats of endurance, brought on by the physiological changes that his breathing techniques impart.

¹⁸“Can Breathing Like Wim Hof Make Us Superhuman?”, Nathaniel Scharping, retrieved from <https://www.discovermagazine.com/health/can-breathing-like-wim-hof-make-us-superhuman>



Don't take it just from us. Lots of research has been done on meditation.

Benefits that are often associated with meditation include the ability to better deal with stress, a way to potentially reduce chronic pain, improved immune function, improvements in positive mood states while decreasing stress, reducing distractive and ruminative thoughts (worry) and behaviours. Moreover, the benefits of anxiety-reduction tend to stick for years after with continued practice.^{19,20}

What surprised us, was learning that meditation can actually physically change your brain! Harvard neuroscientist Sara Lazar explains that whenever you engage in a behaviour over and over again, this can lead to physical changes in your brain. This is called Neuroplasticity.

Lazar used brain scans to show meditation changes the size of key regions of our brain, improving our memory and making us more empathetic, compassionate, and resilient under stress. She presented her findings at a TEDx talk in 2011, which you could view [here](#) if you are interested.

If you are more into anecdotes, then consider that many of our (mutual) superheroes also practice meditation.

For instance, Ray Dalio, one of the world's most successful investors, claims that meditation has benefited him hugely throughout his life because he found it produces a calm open-mindedness that allows him to think more clearly and creatively.

"I practice Transcendental Meditation and believe that it has enhanced my open-mindedness, higher-level perspective, equanimity, and creativity. It helps slow things down so that I can act calmly even in the face of chaos"

-Ray Dalio-

Another superhero, Arnold Schwarzenegger says a year of practising Transcendental Meditation in the '70s changed his life.

The number of successful people swearing by meditation is endless. Tim Ferris, the author of the 4-hour workweek, interviewed more than 200 world-class performers for his podcast The Tim Ferris Show.

In this book Tools of Titans, he distills their tactics, routines, and habits. Ferris concluded that of all the routines and habits, the most consistent among guests is some form of daily meditation or mindfulness practice. More than 80%²¹ of the world-class performers he interviewed shared this trait.

Before you embark on a journey of meditation, realise that it can be quite difficult. At least it was for us. What helps is to be aided by a good teacher.

We have a very good experience with Mr. Budiman, who teaches Qigong in Indonesia (Check out <http://circulationofqiforhealth.org/>).



Mr Budiman and team from Circulation of Qi for Health
Source: [Circulationofqiforhealth.org](http://circulationofqiforhealth.org)

We have participated in his courses years ago and joined some again during the pandemic. But if you prefer to explore meditation by yourself, perhaps you could consider using an app, like Headspace. One of our team members also uses the app called "Breathing Room" and finds it very helpful.

We highly recommend that you just give it a try.

¹⁹ <https://pubmed.ncbi.nlm.nih.gov/7649463/>

²⁰ <https://pubmed.ncbi.nlm.nih.gov/16272874/>

²¹ From: <https://medium.com/the-mission/the-one-routine-common-to-billionaires-icons-and-world-class-performers-28ed11a49eda>



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Healthy thinking keeps us focused on the right things

After rain comes sunshine and after winter comes spring. Having faith fosters a positive mind-set and is essential in these days. Somebody who brings us back to this notion is Tony Robbins.

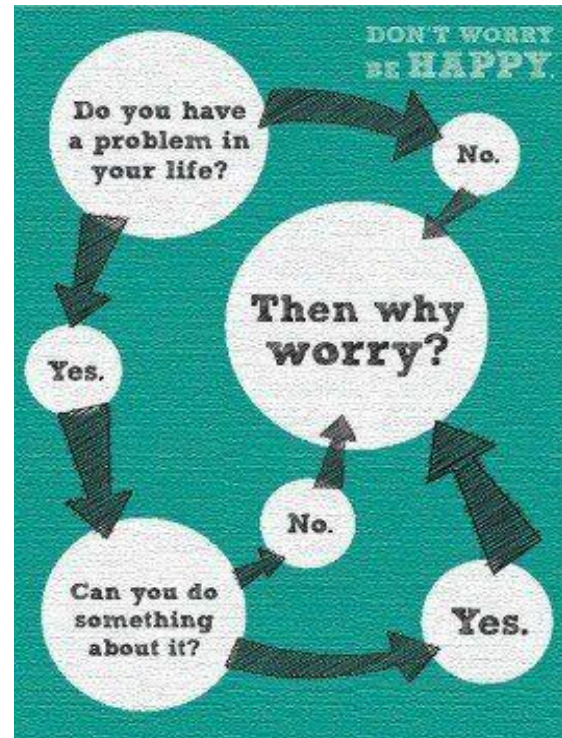
Our regular readers know that we are fans of Tony Robbins, the top leading life coach. We have taken part in a few of his events and find his advice simple, yet especially useful. We share some key takeaways about what he feels people should focus on. Here they are:

1. Focus on things you can control
2. Focus on things that excite you
3. Focus on the present
4. Focus on what you have

Tony explains further that worrying about things outside our control will only lead to stress. Hence, we need to be realistic about things that we can control and ask ourselves what empowering meaning can be drawn from such a situation.

This will help us understand that while we don't have control over many of the universal forces that bring about change, we do have control over how we respond to this change and what we choose to focus on.

As Tony Robbins puts it "where focus goes, energy flows".



Source: Pinterest



With the prospect of MMT, should we prepare for inflation?

As indicated at the beginning of this report, we do not pretend to know how the pandemic will unfold and how long it will take before things recover. But one thing is for sure, the pandemic is accelerating key trends around the issues identified in our [Q3-2019 report](#)

The issues we highlighted are: Modern Monetary Theory (MMT), tech disruption, calls for closing the gaps between the have's and the have not's, deglobalisation, demographic change, and environmental action.

One development that we would like to highlight again in this report is those most relevant for our investment thesis, being: the advent of MMT and resulting inflation.

Another trend that is accelerated by the pandemic is the Federal Reserve balance sheet expansion. This trend started to happen after the repo crisis in August 2019 (several months before COVID-19) which has more than cancelled out the balance sheet reduction that happened in the previous 22 months, from Nov'17 to Aug'19.

During the pandemic, the trend is reinforced. The pace of expansion only accelerated, we have seen an increase of US\$ 3 trillion in just about four months from March-June 2020. We believe more balance sheet expansion is going to happen in the following quarters and years.

This time around, the governments make sure that the money will reach citizens and companies by providing lending incentives and guarantee to the commercial banks. As a result, one notable difference from the GFC era is that this time commercial banks loan grew,

Money supply has increased sharply and when the velocity of money returns one day, we are likely to see the end of decades of disinflation, and the new era of inflation has arrived.

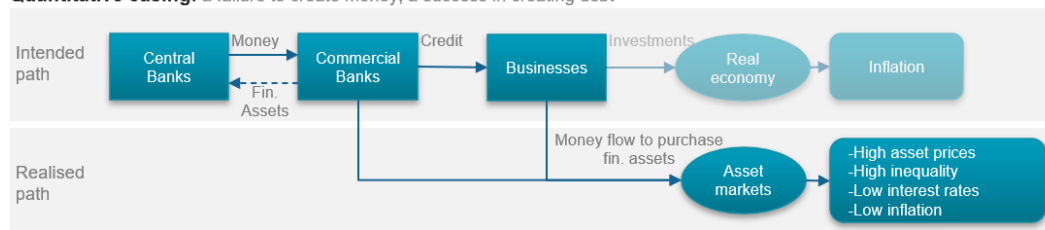
Quantitative Easing (QE): central bank buys bonds or other assets and pays with newly created money. As these assets are mostly held by savings institutions, the savers then ended up with more money and re-invested that cash by buying assets.

This pushed up asset prices. As opposed to being used for consumption.

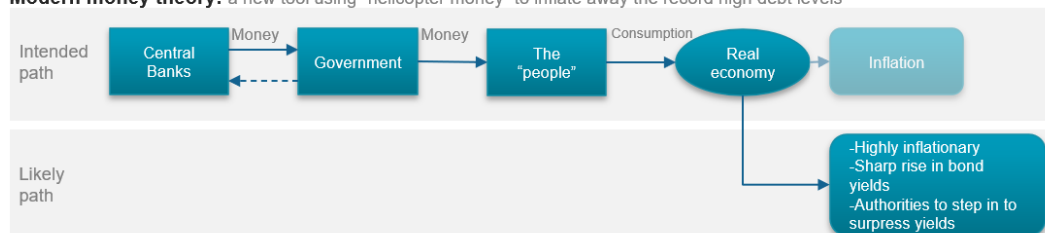
Modern Monetary Theory (MMT): central bank credits the government directly with newly created money. The government then distributes this money to the people either through cutting taxes or spending more.

This will directly lead to increased consumption which will be highly inflationary.

Quantitative easing: a failure to create money; a success in creating debt



Modern money theory: a new tool using "helicopter money" to inflate away the record high debt levels



Lose faith in fiat money; positive for gold!

MMT will be a completely new uncharted monetary regime placing money directly in the hands of the people to boost consumption. We believe this will be highly inflationary.

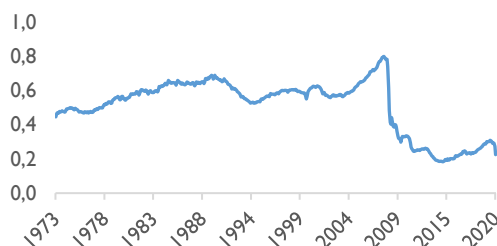


Post-GFC Quantitative Easing: money did not end up in the hands of “the people”

If Quantitative Easing (QE) initiatives after the GFC did not result in inflation, why would this time be different? Well, the problem of QE was that it did not cause the commercial banking system to lend more money.

QE did not result in higher loan disbursements by banks

US commercial bank total loans / total monetary base, in %



The ratio of total loans to the monetary base collapsed since the Fed began QE in 2008. QE does not translate to higher loan disbursement by the banks.

Source: St. Fed Louis

Instead, the money was directed to purchasing assets, which drove up asset prices. This disproportionately benefited the elites, which widened the gap between the rich and poor, leading to the extreme political outcomes we are witnessing today across the globe.

In short, if banks don't lend, broad money will not be impacted. QE is not “money printing” and thus does not lead to inflation.

This time around, governments are making sure that it does

In this COVID-19 crisis, governments across the world are taking initiatives to financially support their citizens and companies affected by the crisis. Two methods are dominant: (i) through incentives for commercial banks to lend money, and (ii) direct cash payments.

Lending incentives: For instance, The Federal Reserve - through its “main street lending program” (total US\$ 600bn) - will purchase from the banks'

loans issued to small and mid-sized businesses. The Fed will purchase about 85-95% of each loan so that the banks retain exposure to the remaining portion.

The purpose of this left-over exposure is for banks to retain a “skin in the game” so that they will not take on too much risk.

According to the USA today²², the main street lending program is well received by lenders and borrowers. Boston Fed Eric Rosengren said that there are already more than 200 banks registered. He believes that banks would be signing up if they were not planning on lending.

In Japan, the BoJ will provide free funding to banks for them to lend to small businesses. The banks will earn 0.1% interest on the amount they lend out.

In Europe, “crisis loans” extended by banks in Europe are now 80% guaranteed by governments.

With these lending incentives provided to banks across the globe, we believe banks will be tempted to disburse more loans.

Direct cash payments: In addition to lending incentives, we have also seen direct cash payments by governments to its citizens and corporates globally, as if the governments are competing to give the most handouts.

In the US, phase 3 of the COVID-19 stimulus program involved US\$603.7bn direct cash payments to individuals. There is also a plan by the U.S. government to spend US\$2tn on infrastructure. This could yet be again another form of MMT, a form of fusion between fiscal and monetary policy.

It is clear that the era of helicopter money has arrived.

Inflation despite a low growth environment?

Warnings for inflation have been akin to crying wolf in recent years. QE post the 2008-09 GFC was supposed to be a catalyst for inflation, yet the disinflation prevails. But the differences between the GFC and COVID-19 crises are sharp.

²²“Can the Fed's Main Street loan program save midsize companies during COVID-19 crisis?”, Paul Davidson, retrieved from <https://www.usatoday.com/story/money/2020/06/21/coronavirus-federal-reserve-main-street-lending-save-firms-cares-act/3226772001/>



Monetary base expands at double speed

It is a widely accepted theory that inflation increases if the product of the money supply and its velocity grows faster than real GDP. Let's look at how these variables have changed

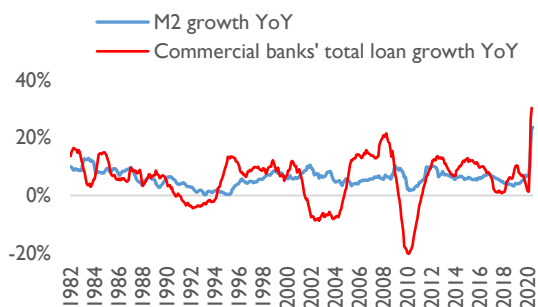
Money supply: The degree of monetary base expansion is far greater today than it was post-GFC (and before). The St Louis Fed's measure of the money stock is increasing at the fastest annual rate in 37 years.

This is double any moment from 2009-2019. Growth in the money supply from the European Central Bank is not far behind.

While the velocity of money has been very low in the past few years, it does need to fall even more sharply to offset today's gigantic growth in the money supply. The US M2 growth had gone up from 7.2% YoY in Feb 2020 to 24% YoY in June 2020.

US money supply growth is at the fastest pace since the 1980s, exacerbated by surged in commercial banks loan growth

US commercial bank total loans / total monetary base, in %



Source: St. Fed Louis

Moreover, post-GFC the banking system was significantly weakened to a degree that their lending has become muted. Nowadays, banks no longer need to build reserves or capital buffers. Also, as discussed above, governments are directly dropping money to individuals and companies.

There are all-out attempts by governments to make sure that central bank money printing spills into the real economy. When the aforementioned incentives have too little effect, the government can then force the banks to lend. If this happens, we know that the era of financial repression has arrived.

Commercial banks could be compelled to expand their balance sheets, so money is being created this time, unlike the period post-GFC.

Velocity / Spending: As discussed above, MMT involves direct handouts to individuals after the central bank credits the government with money that did not previously exist. In turn, the government credits that money to citizens.

The government gets money which it gives to those it thinks will spend. And we all know that the marginal propensity of a private individual to spend is not to be underestimated (whereby in the case of QE, marginal propensity for banks to spend is zero).

Private individuals typically spend money on goods and services, thus their actions will be much more likely to trigger higher prices of goods and services, whereby QE would only affect the prices of assets. In other words, MMT tends to be CPI-inflationary, in comparison to QE that inflates asset prices.

While cash is currently being trapped in the households and the velocity of money is super low, it is worth remembering that the marginal propensity of the private individuals to spend was high pre-COVID-19.

Inflation pressure from reversing globalisation

Another factor that may contribute to the return of inflation is the reverse of globalisation or de-globalisation. Consider that 1981-1982 was an important inflection point.

Inflation was peaking and its subsequent relentless decline coincided with the start of globalisation and the greatest bond bull market in history.



During globalisation's heyday, we were told that outsourcing is the way to lower the cost of production. Moreover, the sudden addition to the global pool of savings helped to lower the cost of funds. The result is 40 years of disinflation that led to Businessweek announcing the "death of inflation" in April 2019.

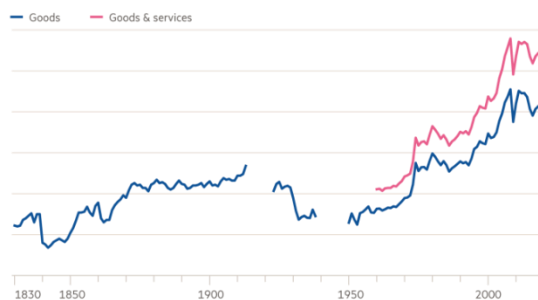


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On the subject of de-globalisation, it is interesting to read Martin Wolf's write-up in The Financial Times, "China-US rivalry and threats to globalisation recall the ominous past".

The peak of globalisation?

Ratio of gross foreign assets as % of total GDP



Source: Financial Times, Catao and Obstfeld (2019)

He argues that while we do not know how COVID-19 will change the world, one result is evident: a marked further deterioration in relations between the two superpowers.

He also warned of the longer-term consequences of the collapse of the second era of globalisation in world history (the first collapse in globalisation occurred in the early 20th century, and we knew what happened next).

The counterintuitive effect of lower demand leading to higher prices

Companies are in trouble and in need to make up for their losses during the lockdown, so they have no choice but to raise the prices.

It is a matter of survival. Even in the post lockdown era, restaurants, or airlines that can only run at half capacity will also need to raise prices to survive.

Of course, many consumers will not be able to afford this price increase, especially with the current level of joblessness. Thus, the result will likely be less supply, less demand, and higher prices.

Lastly, with the US election around the corner and messy handling of the COVID-19 crisis, the choice is for President Trump to spend massively.

Already, the Trump administration weighs US\$ 1 trillion for infrastructure and if this happens, we may see serious commodity price inflation.

It is hard to predict when inflation will come. We think it may be gradual first and followed by a sudden move. We prefer to be ready for the consequences.

The case for gold

Past monetary policies have brought a world of extremes and financial strain, featuring record low levels of interest and record-high levels of debt and inequality. The ongoing COVID-19 pandemic is now wreaking havoc on many economies, causing consumption to fall, GDP to decline, and tax revenue to shrink.

With a declining GDP, public debt to GDP levels will increase even further. Also, to raise money without increasing taxes, governments are bound to issue more bonds. This, in turn, would cause sovereign creditworthiness to decline.

With central banks rendered toothless, fiscal policy will likely replace monetary policy as the driver of economic stimulus.

Initiatives can range from massive infrastructure programs to forms of "helicopter money". This could result in a fall in the purchasing power of tax revenue, leading to even more money printing.

Whether the eventual outcome is a deflationary debt crisis or inflationary fiscal policies like MMT, we believe financial outcomes will be extreme. As such, we believe precious metals are the asset class to own.

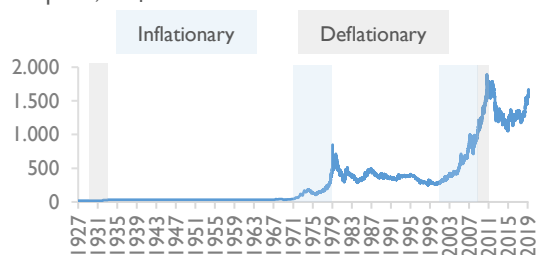
The case for gold

- I. Gold works especially well in extreme circumstances and it is currently significantly undervalued relative to financial assets and the monetary base

Each gold bull market occurred under completely different macroeconomic circumstances, be it deflationary, inflationary or both

- (1929-1934) 1st gold bull market (+70%)- took place in the middle of a massive deflationary economic collapse
- (1971-1980) 2nd gold bull market (+2,429%) – took place amidst a massive surge in inflationary expectations
- (1999-2011) latest gold bull market (+650%) took place when inflationary and deflationary forces strongly exerted themselves in different areas of the world economy simultaneously

Gold price performance in inflationary and deflationary circumstance
Gold price, US\$/oz



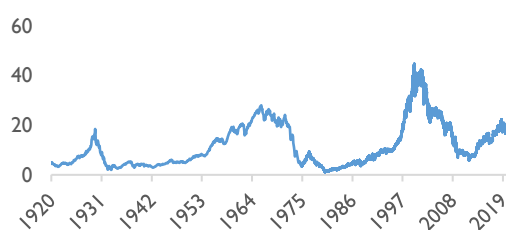
Source: Bloomberg

Gold is undervalued relative to financial assets such as the Dow Jones Industrial Average

- The Dow/Gold ratio measures the value of gold relative to financial assets.
- The Dow/Gold ratio peaked in three cases of extreme overvaluation of financial assets taking place in 1929, 1970, and 1999.

Gold price is undervalued relative to financial assets such as DJIA

Ratio: Dow Jones Industrial Average (index) divided by the Gold price (US\$)



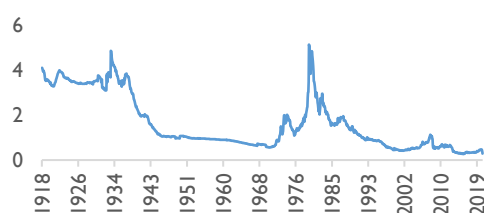
Source: Bloomberg

Gold is undervalued relative to The Fed's monetary base

- In 1980, the gold to the Fed's monetary base peaked as the market had lost faith in the ability of central banks to control inflation, leading to high gold prices.
- In 2000 – low ratio at the advent of a gold bull market.
- Now – ratio is at an extreme low due to the money printing activities

The gold price is at an all-time low compared to the Fed's monetary base

Ratio: gold price (US\$) divided by the Fed's monetary base (US\$ billions)



Source: Bloomberg

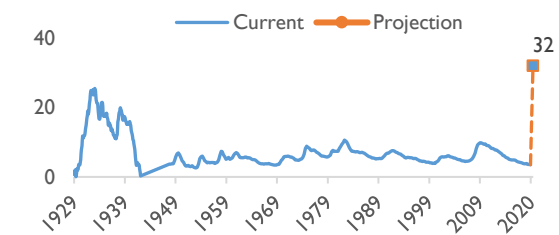
2. Unprecedented economic shock has led to unconventional measures

The unemployment rate is projected to rise beyond levels seen during the Great Depression

- The service sector has been the main engine of the US economy, contributing 69% of US GDP, but is now at risk. The jobless claims soared to a record high of 6.6mn in a week.
- The Fed projects the unemployment rate to rise beyond levels seen during the Great Depression

Unemployment rate to rise beyond levels seen during the Great Depression

US unemployment rate in%, the projection is made by The Federal Reserve Bank of St Louis



Source: St. Fed Louis Reserve

Quantitative easing has proven to be feeble as it has grown inequality, but not inflation

- QE is already causing cracks in morals / Ethics of society to break down
- Inflation is still subdued. Since QE, the 2% inflation target set by the Fed (based on PCE index) has not been achieved.

Quantitative easing has pushed up asset prices owned by the top 1%, which has widened inequality significantly

10-year return Knight Frank Luxury Investment Index by asset class, MSCI world index, and US median income



Source: Knight Frank, Bloomberg

Modern Monetary Theory is coming, fast!

- MMT will be a completely new uncharted monetary regime placing money directly in the hands of the people to boost consumption. We believe this will be highly inflationary.
- For example, in the CARES act, The US will provide direct financial assistance in the form of cheques ranging from US\$ 1,200-2,400 to every American. Also, Average weekly unemployment benefits have increased from US\$ 385 to US\$ 985.



"Let us suppose now that one day a helicopter flies over this community and drops an additional \$1,000 in bills from the sky, which is, of course, hastily collected by members of the community. Let us suppose further that everyone is convinced that this is a unique event which will never be repeated."

-Milton Friedman on Helicopter Money-



3. Unsustainable budget deficits could potentially result in hyperinflation

Historic precedents indicate that budget deficits above 20% are not sustainable

- According to the book “Monetary Regimes and Inflation”, it is concluded that almost all the hyperinflations occurred due to huge public budget deficits.
- A deficit of 20% seems to be the threshold.

At least 12 hyperinflations have all been caused by the financing of huge public budget deficits through money creation.

Historic hyperinflations (right)

Country	Period	Highest monthly inflation
Hungary	1945/46	4.19 x 10 ¹⁶ %
Serbia	1992/94	313000000%
Greece	1942/45	13800%
Armenia	1993/94	438%
France	1789/96	304%
Ukraine	1993/94	285%
Poland	1921/24	275%
Georgia	1993/94	211%
Tajikistan	1995	201%
Argentina	1989/90	197%
Bolivia	1984/86	183%
Kyrgyzstan	1992	157%
Austria	1921/22	129%

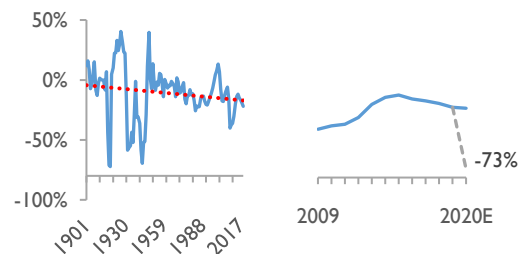
Source: Amazon.com

If the US government cannot make ends meet during the “awesome economy”, how steep will the deficit be during rainy days?

- During the ‘everything is the awesome economy’, The US federal budget deficit was close to US\$ 1tn in 2019 or widened to a 20% deficit of total expenditure.
- A downturn from COVID-19 will easily add another US\$ 3-4tn deficit which could easily bring the deficit at levels seen during the Great Depression.

Deficit likely to be much bigger than GFC and may even head towards level seen during Great Depreciation

The federal budget deficit as % of total expenditure



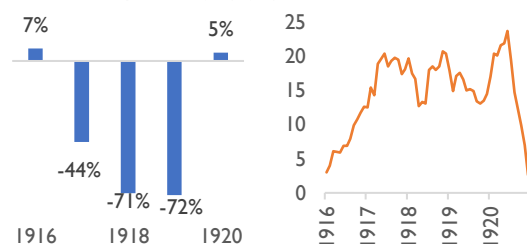
Source: Congressional Budget Office, Heyokha's estimate

Historical reference: High fiscal deficits often go together with high inflation

- Between 1917-1919, the Federal budget deficit was above 70%.
- During these steep budget deficits, inflation was averaging 17%.
- There is a high probability that this could be repeated this year. Is hyperinflation coming?

During a steep budget deficit, inflation was averaging 17%

The federal budget deficit as % of total expenditure (left), CPI inflation YoY in percentage (right) 1916-1920



Source: Congressional Budget Office, Bloomberg

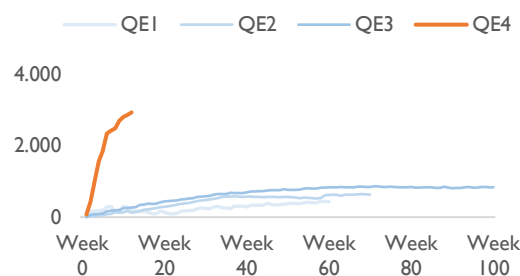
4. Speed and amount of stimulus deployed so far is unprecedented

Unprecedented speed and size of the latest QE dwarfs all three previous QE combined

- While QE4 has only just begun, its size is already nearing the total of all three previous QE combined!
- The Fed balance sheet is estimated to rise by an additional US\$ 2tn by end of the year, by former Fed strategist, Mark Cabana.

QE4 dwarfed all the previous QE combined

Cumulative weekly change in The Fed's balance sheet since QE announced, in US\$ billion



Source: St. Fed Louis Reserve, Heyokha

A massive amount of fiscal stimulus deployed to save the day

- During the pandemic, the size and speed of stimulus dwarfed that of the previous crisis.
- As we mentioned earlier, we foresee fiscal stimulus to be more involved this time around as QE did not produce inflation and created a wealth gap.
- This time around, fiscal stimulus has become more dominant as opposed to a monetary stimulus (asset purchase program).
- In the phase 3 stimulus, 30% will be in the form of MMT. This comprises direct cash handouts to every American ranging from US\$ 1,200 - 2,000 and increased weekly unemployment benefits by US\$ 600 to US\$ 985/week. We believe this will be inflationary.
- We foresee there will be more stimulus to come. As we are writing this report, the democrats are pushing to provide a universal basic income of US\$ 2,000/month until 2021 for Americans who earned less than US\$ 120k/year.

The COVID-19 stimulus is three times more than GFC

Stimulus comparison between GFC and COVID-19 in the US

GFC: Total US\$ 2.2tn over 3 years	COVID-19: Total over US\$ 5tn in 1 month with unlimited QE
Nov'08 - QE1: US\$ 600bn	Mar'20 – phase 1 stimulus: US\$ 8.3bn
Mar'09 – QE2: US\$ 600bn	Mar'20 – phase 2 stimulus: US\$ 50bn and revival of QE US\$ 700bn
Nov'10 – QE3: US\$ 600bn	Mar'20 – phase 3 stimulus: US\$ 2tn (30% in form of MMT) and QE infinity
Sep'11 - Operation twist: US\$ 400bn	Apr'20 – The Fed unveiled US\$ 2.3tn lending program

Source: Heyokha



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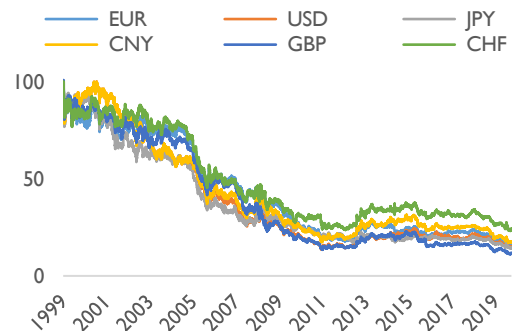
5. Fiat currencies tend to debase from gold, especially when it loses its status as the global reserve

All currencies have been devalued or died

- Of the 750 currencies that existed since 1700, only about 20% remain today, and of those that remain all have been devalued relative to gold.
- These devaluations are caused by money printing aimed to reduce debt burdens.
- On average, the major currencies have depreciated versus gold by a staggering 84% since 1999.

Major currencies debasement relative to Gold

Major currencies (Euro, US Dollar, Japanese Yen, Chinese Renminbi, Pound sterling, and Swiss Franc) relative to the gold price, indexed since 1999



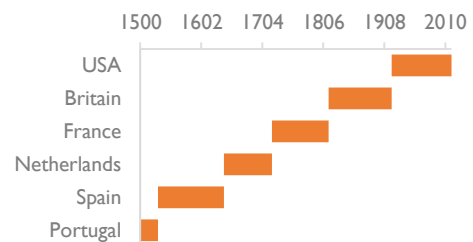
Source: Bloomberg

No currency reigns forever

- Global reserve currencies are typically issued by the era's most powerful nation, according to a study by Ray Dalio.
- China has become very powerful in technology, economy, trade, and military and will challenge the US as the existing superpower.
- The debasement of the US dollar will be an extreme bullish case for precious metals.

Many currencies have functioned as reserve currencies in history. Which will be next?

Global reserve currencies since 1450



Source: JP Morgan – Eye on the Market; Hong Kong Monetary Authority, Erste Group Research

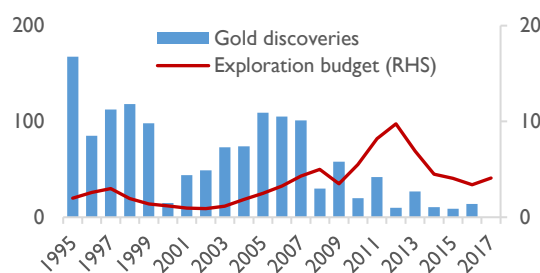
6. Supply is in favour of rising gold price

Poor discoveries despite increasing exploration budgets

- Giant gold discoveries have become increasingly rarer. The industry spent cumulatively US\$ 50bn in the last decade, which is twice as much as during the two decades before that. Yet discoveries are only 15% of those made during that time.
- Even if new gold discoveries are made, it will take 20 more years to bring these deposits into production.

No major gold discoveries despite rising exploration activities in the last decades

New gold discoveries in mn oz, exploration budget, in US\$ bn



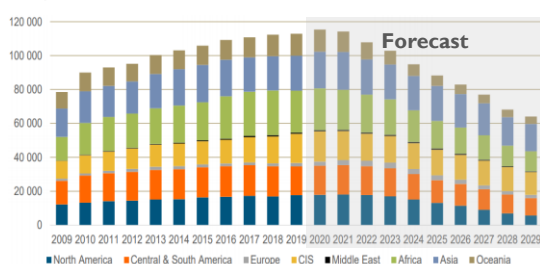
Source: SNL Metals & Mining

Gold production will decline structurally as reserves are depleting

- Gold production is expected to decline on the back of poor reserve replenishment
- It is estimated by 2024, gold production will be lower than gold demand in 2019. If we were to assume some growth (given central bank purchase), it could be much earlier.

Gold production is expected to decline

Gold production, in thousand oz



Source: AME Metals & Mining/Strategic Market Study Q2 2019

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-The End-

Human Response to Disaster - myths vs facts

Based on empirical research studies of behaviour in man-made and natural disasters and disaster-related events, Charles E. Fritz, a pioneer in disaster research, sought to confirm or refute hypotheses concerning human behaviour under wartime disaster conditions. Many of these hypotheses, like the stereotypes portrayed by the mass media reporting of natural disasters, were found to be myths rather than factual accounts of human behaviour.

Among the myths vs facts are the following:

1. Mass panic is not observed; behaviour is typically goal-oriented but confusing when viewed by an outsider.
2. Flight from the disaster is a lesser problem than the massive convergence of people, materiel, and message traffic into the impact area.
3. Looting is far less common than believed and substantially less than the altruism observed.
4. Hysteria is atypical, and greater self-control and self-sacrifice are common.
5. Those affected are rarely unable to help themselves (unless injured), i.e., they are not dazed and stuporous but rather active participants in search and rescue operations.
6. The mental breakdown does not occur, but acute emotional, physiological, and psychosomatic symptoms do emerge following a disaster.
7. Murder, assault, and other acts of aggression are less common rather than more prevalent.
8. Anarchy and the breakdown of civilization do not occur. Emergency (and often spontaneous) leadership is evidenced with greater community solidarity and productivity.

Source:

<https://journals.sagepub.com/doi/abs/10.1177/154193127401800315>

Mind-body healing moves to the mainstream

Mind-body healing used to be this new-age wuzzy wazy thing or something that “those crazy Asian people” do. But in fact, it turns out that mounting evidence for the role of the mind in disease and healing is leading to a greater acceptance of mind-body medicine²³.

In the Western world, the pioneer of scientific research on this topic is Dr. Herbert Benson, professor, cardiologist, and founder of Harvard’s Mind/Body Medical Institute. He extolled the benefits of meditation on the human body — reduced blood pressure, heart rate, and brain activity — as early as 1975.

Dr. Herbert Benson coined the term “Relaxation Response”, a physical state of deep rest opposite to the stress or fight-or-flight response.

Research has found that the Relaxation Response counteracts the adverse effects of stress in disorders like hypertension, anxiety, insomnia, and aging.

It seems that many of the “ancient” or “new-age” mind-body healing methods (such as yoga, meditation, and even prayer) ultimately find their merits from eliciting this Relaxation Response.

Relaxation Response – the key to healing

So how does this work? The premise is pretty simple. Two parts of our nervous system determine to what extent our body is in “Fight-or-Flight” mode or “Rest-and-Digest” mode.

Depending on what mode we are in, our body prioritises and deprioritises certain functions to ensure our survival.

For example, when our brain perceives threats, the sympathetic nervous system hits the “gas pedal” of our body, flooding our system with adrenalin, increasing blood flow to our limbs, and making us generally more alert and ready for action.

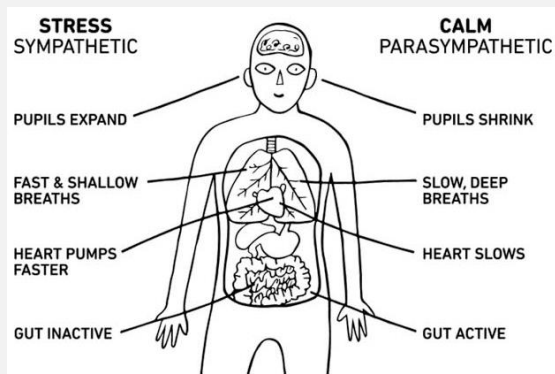
It also deprioritises certain functions, like digestion, detoxification, our immune response, and men’s ability to get an erection (boo!).

On the other hand, the parasympathetic system facilitates our “rest-and-digest” response, functioning like the “brake” that slows down bodily activity and helps re-establish balance (homeostasis) after a more stressful period. It prioritizes blood flow to our internal organs and reduces our heart rate.

All in the aid of helping us relax, digest, and heal.

Fight or Flight (Sympathetic nervous system)	Rest and Digest (Parasympathetic nervous system)
<p>Helps prepare our bodies for action, by:</p> <ul style="list-style-type: none"> • Increased heart rate; • ‘tunnel vision’ where your vision narrows – focusing on the danger point; • Increased blood flow to your muscles, as well as increased excitability; • Your hearing can become more acute; • In general, all of your senses go into overdrive • Stimulates the production of adrenalin which increases our blood sugar levels and fatty acids. This helps provide extra energy on a cellular level. • Converts fat into fuel for your muscles • Restricts bodily functions that aren’t immediately required to escape 	<p>Helps prepare the body to digest and recover, by:</p> <ul style="list-style-type: none"> • Slowing the heart rate; • Slowing our breathing; • Increasing salivary production; • Blood flow to sexual organs (wohoo!); • Digestion: your digestive organs are stimulated starting or restarting the process of digestion. In ‘fight or flight’ hormones like insulin are inhibited. They now get stimulated again and your body can process your food and metabolize it, getting all the nutrients you need for growth, repair, and energy.

²³ “Mind-body research moves towards the mainstream”, Vicki Brower, retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1456909/>



Source: Onthegophysicaltherapy.com

Chronic activation of 'fight-or-flight' response impairs health

Our 'fight-or-flight' response was great when our stresses were more short-term (like running away from danger) but nowadays our stresses tend to be chronic.

Think of stressful deadlines, never-ending to-do lists, 500 unread emails, busy traffic...the list goes on. However, this response becomes harmful when it is in a constant state of activation.

This is because our body is prioritizing the above actions, and so things like growth, repair, and digestion get put to one side.

Over time, this adds up and causes various health issues such as hypertension, headaches, insomnia, irritable bowel syndrome, and chronic low back pain, as well as heart disease, stroke, and cancer.

Fortunately, people can learn techniques to counter the stress response.

Eliciting the relaxation response

Eliciting the relaxation response is simple. Benson's advice is to do the following once or twice a day for 10 to 20 minutes: sit in a relaxed position, eyes closed, and repeat a word or sound as you breathe

That's it.

Benson found that there are scores of other ways to summon the relaxation response, as well. The most important thing is that you focus on a word, sound, phrase, repetitive prayer, or movement, and disregard everyday thoughts.

Millennia-old mind-body approaches that elicit the response include various forms of meditation (e.g., mindfulness meditation and transcendental meditation); different practices of yoga; Tai Chi; Qi Gong; progressive muscle relaxation; biofeedback; and breathing exercises, amongst others²⁴.

Placebo effect: the power of believing

Science is showing that how you feel isn't just about what you eat, or do, or think. It's about what you believe.

Case studies of spontaneous remission, as well as placebo and nocebo effect data, suggest that our thoughts powerfully affect our body when we believe we can get well.

Just like the mind can affect the physiological functions as discussed above (such as digestion, etc.), the mind can also cause the body to tap into its own pharmacy, flooding the nervous system with medicating neurotransmitters and hormones²⁵. It can help reduce symptoms of certain diseases, like Parkinson's.

Scientists have known about the placebo effect for decades and have used it as a control in drug trials. Now they are seeing placebos as a window into the neurochemical mechanisms that connect the mind with the body, belief with experience.

Some believe that the placebo effect will become a routine component of conventional medicine. Yet, this may take time as drug companies – who fund most clinical trials – aren't exactly lining up to champion this approach.

²⁴ Benson H, Proctor, W. (2011) Relaxation Revolution: Simon & Schuster.

²⁵ <https://www.nationalgeographic.com/magazine/2016/12/healing-science-belief-placebo/>

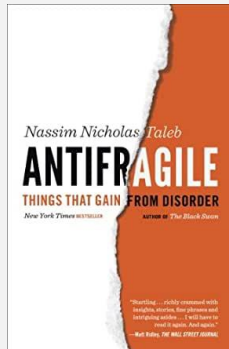
Dr. Benson's way to elicit the Relaxation Response

1. Sit quietly in a comfortable position.
2. Close your eyes.
3. Deeply relax all your muscles, beginning at your feet and progressing up to your face. Keep them relaxed. [Relax your tongue—and thoughts will cease.]
4. Breathe through your nose. Become aware of your breathing. As you breathe out, say the word "one"* silently to yourself. For example, breathe in, and then out, and say "one"*, in and out, and repeat "one."* Breathe easily and naturally.
5. Continue for 10 to 20 minutes. You may open your eyes to check the time, but do not use an alarm. When you finish, sit quietly for several minutes, at first with your eyes closed and later with your eyes opened. Do not stand up for a few minutes.
6. Do not worry about whether you are successful in achieving a deep level of relaxation. Maintain a passive attitude and permit relaxation to occur at its own pace. When distracting thoughts occur, try to ignore them by not dwelling upon them and return to repeating "one."*
7. With practice, the response should come with little effort. Practice the technique once or twice daily, but not within two hours after any meal, since the digestive processes seem to interfere with the elicitation of the Relaxation Response.

*Choose any soothing, mellifluous sounding word, preferably with no meaning or association, to avoid stimulation of unnecessary thoughts.

Applying Taleb's lessons from "Antifragile" and "The Black Swan" to investing

The following are some tips to develop an antifragile investment strategy. Most text is directly copied or paraphrased from the above-mentioned books.



Build-in, or look for, redundancies

Redundancy is ambiguous because it seems like a waste if nothing unusual happens. Except that something unusual happens—usually. Redundancy serves as insurance. Evolution gave us spare parts as insurance that allows us to survive

under adversity.

We have two eyes, two lungs, two kidneys, etc. and each has more capacity than needed in ordinary circumstances. So, redundancy equals insurance, and the apparent inefficiencies are associated with the costs of maintaining these spare parts and the energy needed to keep them around in spite of their idleness.

Avoid debt

Debt makes us too sensitive to perturbations. Debt implies a strong statement about the future and a high degree of reliance on forecasts. So, debt is dangerous if you have some overconfidence about the future and are Black Swan blind, which we all tend to be. Borrowing makes you more vulnerable to forecast errors.

Cultivate a barbell strategy

This represents playing it very safe in some areas (staying robust to negative black swans) and taking a lot of small risks in other areas (open to positive black swans), to take advantage of antifragility. While avoiding being “in the middle.”

If you put 90% of your net worth in cash or precious metals (in our case), and you use the other 10% for extremely aggressive and risky investments, you can never lose more than 10% of your net worth, but you're exposed to massive upside.

Make sure you are barbelled, whatever that means in your business

Don't try to manage risk; manage fragility. Look for asymmetries.

“It is far easier to figure out if something is fragile than to predict the occurrence of an event that may harm it. Fragility can be measured; risk is not measurable (outside of casinos or the minds of people who call themselves “risk experts”).

This provides a solution to what I've called the Black Swan problem—the impossibility of calculating the risks of consequential rare events and predicting their occurrence. Sensitivity to harm from volatility is tractable, more so than forecasting the event that would cause the harm.”

“And we can almost always detect antifragility (and fragility) using a simple test of asymmetry: anything that has more upside than downside from random events (or certain shocks) is antifragile; the reverse is fragile.”

Expose yourself to “positive black swans” – And, at the same time, hedge against negative ones. “Bet pennies to win dollars.” Look for asymmetries where favourable consequences are greater than unfavourable ones.

Optionality

Taleb discusses optionality, freedom of choice, as a means of robustness and antifragility. Simply, the more options you have, the more freedom you have to respond to unforeseen circumstances, and the less fragile you are to sudden events. Financial independence is a big form of it, but there are others.

Some Rules for Optionality

- Look for optionality and rank things according to their optionality
- Look for things with open-ended, not closed-ended, payoffs
- Do not invest in business plans but in people, people who could change careers six or seven times