

## Is it a game ? Or is it real ?

**“Joshua/WOPR:** Shall we play a game ?

**David:** Oh!

**Jennifer:** I think it missed him.

**David:** Yeah. Weird isn't it? Love to. How about Global Thermonuclear War ?

**Joshua/WOPR:** Wouldn't you prefer a good game of chess ?

**David:** Later. Let's play Global Thermonuclear War.

**Joshua/WOPR:** Fine.”

- From *WarGames* (1983), written by Lawrence Lasker and Walter F. Parkes, directed by John Badham.

“When human traders show a loss, they search for scapegoats. Perhaps the only real difference between algorithms and humans is that the computers do not blame homo sapiens when they lose money.”

- Daniel Mauro, Chief Investment Officer, Army Capital, Chicago, *The Financial Times*, 24<sup>th</sup> January 2019.

**Sid Meier's 'Civilization'** was what started it. A turn-based strategy game which you can play against the computer, 'Civ' is now in its sixth incarnation, but irrespective of which version you play, there are some constants. The game begins in 4000 BC, and can last until at least AD 2100 – or until you get beaten. You win by either conquering your opponents or winning the Space Race. You can also win victories relating to culture or diplomacy. Crucially, there is a strict scientific and historic logic which controls your development of new technologies. You cannot invent a new technology without having mastered the raw cultural or material ingredients that precede it. For example, you cannot develop railroads without having previously discovered dynamite. And you cannot research dynamite until you have already mastered military science and discovered fertilizer. And you cannot develop those until you've already mastered metallurgy and chemistry and, prior to that, gunpowder. 'Civilization' is a great way to teach children (and, let's face it, adults) about science and history. It is also horribly addictive. And it is easy to get waylaid by the hardwired brutality of the human condition. You may begin with the best of intentions, seeking a diplomatic or cultural victory. But the lure of developing and unleashing the Giant Death Robot on your rivals can be overwhelming (and immensely satisfying).

And then there's 'Supreme Commander' (Gas Powered Games, 2007). This correspondent is representative of the UK consumer population as a whole, in that the gaming market in the

UK now accounts for more than the film and music markets combined. Given that it was a particularly uninspired Christmas when it came to festive viewing, 'Supreme Commander' won the battle for this correspondent's attention relative to, say, Sky Movies or HMV (RIP).

'Supreme Commander' follows in the same vein as 'Civilization'. It is a real-time strategy game that you can play against the computer, in the guise of multiple opponents powered by Artificial Intelligence. But it ditches all that cultural and diplomatic nonsense. There is only one way to win, and that is to reduce your opposition to smouldering ash.

This may sound easy, but the game's AI opponents can be fiendishly clever. 'Supreme Commander' has its own constraints on each player. Your development of military sophistication and heft is naturally limited by access to two resources: energy and mass. Without sufficient access to either, you will spend your game watching despairingly as you build your units with ever-increasing slowness while the rest of your army gets pounded to oblivion. Your opponents may be artificial but their sneakiness is very realistic. And the game allows for almost infinite subtlety and variety. As in 'Civilization' there are multiple units, multiple strategies, and multiple paths to victory – but even more to abject defeat, which is invariably accompanied by a blinding mushroom cloud enveloping what's left of your territory. (Under no account should President Trump be exposed to this game.)

### **The markets are taking a bit of a beating**



Courtesy MGM / UA

It turns out that how you choose to play this game to win may well reflect your attitude to investing. It is, admittedly, possible to go 'hell for leather' and launch aggressive, pre-emptive strikes against your opposition before they've amassed the materiel to overwhelm you. Even then, early victories can be deceptively easy, given that you may be playing against up to seven separate combatants, many more patient or disciplined or simply sneakier than you, and all equipped with that guileful AI. But it is equally possible to take the long view and delay your

expansion until you've already developed bulletproof defences that will repel all but the most belligerent marauders.

The financial markets contain multitudes of different types of players, ranging from individuals with skin in the game to economic agents with no skin in the game to algos and HFT programs that don't even have skin. But the price is still the price. The 'investing in 2019 as battle for survival in a largely AI combat zone' thesis is perhaps most intriguing when it comes to: the unanticipated reversal. All investors will also have experienced this. As the German military strategist Helmuth von Moltke is credited as saying, no battle plan survives contact with the enemy. You may have thought that your deployment of Heavy Assault Bots on your western flank would ensure swift victory, but Xahvres with his Tech 3 Missile Ships had other ideas. In the same vein, you – like us – may have concluded that unconstrained long-only 'value' investing mingled with some absolutely uncorrelated investments was the way to go, but 2018 showed the limitless expression of the gods' sense of humour while we make our little plans. When it comes to AI in the markets, we're non-combatants: the core of our portfolios is long-only equity value, but we're open to using elements of machine learning or AI in our trend-following exposure - in the cause of both asset and psychological diversification. Why deploy one high-performing strategy (over the long run, at least) when you can deploy two ?

Playing the long game – whether in markets with multiple participants, all with different risk attributes and time horizons, or against opponents in a video game exclusively deploying AI – is easy to say but notoriously difficult to practise. The tendency to change horses midstream in response to adverse conditions, and what might simply be a run of bad luck, is understandable, but hardly desirable. It is most definitely **not** a robust strategy. If you don't know to which port you're sailing, no wind is favourable.

2018 was a peculiar year, in which virtually nothing worked by way of investments. It was a little akin to 2008, but without any overarching investment narrative. What does 2019 hold in store ? We try not to be distracted by narrative fallacies, putting our trust in the simple mathematics of already successful businesses simply compounding away returns. If there is reason for caution it comes in the apparent phase transition in attitudes towards technology investing, as reported by Rob Copeland for the Wall Street Journal ('Silicon Valley's Unbridled Optimism Gets Fresh Reality Check', 22 January 2019). Venture capitalist Josh Wolfe is quoted as remarking that tech investors are swapping FOMO for SOBS; i.e. "Fear of Missing Out" is being replaced by the "Shame of Being Suckered". On a similar note, the always interesting Ben Hunt in a recent Epsilon Theory [piece](#) suggests that

For asset owners and long-term investors, the greatest risk to your portfolio is a change in the zeitgeist.

Hunt goes on to suggest that the zeitgeist is changing in three ways:

- Deflationary expectations, now 40+ years old, are becoming inflationary expectations.
- Cooperative and multi-play games in both international politics and domestic politics, now 70+ years old, are becoming competitive and single-play games.
- Modern capital markets, now 150+ years old, are becoming political utilities.

Of the three, the first – to us – seems both the least contentious and by far the least subjective.

SOBS already kind of encapsulates the investor experience of last year. If it is taking hold in the tech sector in 2019, a lot of equity investors are already furiously pedalling air beyond the cliff's edge. Let's not even **mention** the heartbreak likely building in the bond market..

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