

## The Time Value of Money and What if the Trend of the Last 40 Years Reverses in 2021? (Part 1 of 2)



**“A bird in the hand is worth two in the bush”, or so the old saying goes. But is it always the case? What if the bird in your hand is a dirty old London pigeon, and the two in the bush are fat juicy organic hand-reared turkeys, and Christmas is just around the corner?**

**Are you sure you wouldn't be better off taking a go at the two in the bush instead?**

Right now, I realise that you are probably not pondering the relative merits of pigeons and turkeys. Instead you are probably thinking: “What on earth is he gibbering on about?”

But the question is of huge relevance to the current investment environment – and the big change that may be about to engulf it.

**It all relates to the time value of money and what happens if it goes into reverse.**

The time value of money is one of the most basic concepts in finance - It might be as close to a Newtonian-physics-style rule as you'll get in this sometimes-cloudy arena.



In short, the concept is that money today is worth more than money tomorrow, or in a year's time. Or to put it another way, the bird in the hand is worth two in the bush.

However, there's quite a bit of wiggle room in there. Money today might indeed be worth more than the same amount of money in a year's time.

But how much more? How much bigger would the sum "I'll promise to pay you" a year from now have to be in order to convince you to turn down getting paid today?

### **That depends...**

One factor is risk. You can have your money today, but can you be sure that I'll actually pay you at this time next year? (This is what the "two in the bush" alludes to – not only are the birds further away, but they might also fly off before you can nab them.)



Another factor is inflation. If inflation is high, then money in your pocket today is worth a lot more than money a year from now - In fact, if you're unlucky enough to be living in a hyper-inflating economy (such as Venezuela) then the wage packet you got this morning will be worth a lot more than the one you're due to get in the afternoon.

So in a high-inflation environment, you need to get paid a lot more to wait.

If I want you to forgo the £100 in your hand today, I'll need to give you £120 in a year, say, to preserve your buying power. If inflation is low, then you won't be as worried about waiting to get your money. And the sum won't have to be much larger to convince you to wait. You might forego the £100 today in exchange for £105 in a year.

A related factor is the return you can get on your money...

If interest rates are high, then you can stick today's money in the bank, and by next year, it'll have grown. So if I'm asking you to wait for a year to get paid instead, then I'll need to offer you more money to compensate you for that foregone interest.

### **And that brings us to what's interesting about today's environment...**

A combination of deflationary pressure and even lower interest rates since the 2008 financial crisis, mean that – in some cases – the time value of money has gone into reverse.

If you're a big saver in certain countries, then you will be charged to sit on money, in the form of negative interest rates.



In those circumstances, money today is actually worth less than the same sum of money a year from now.

If you put £100 in the bank today, it might have shrunk to £95 by this time next year. So if I promised to pay you £98 instead, you'd probably be willing to wait.

### **You can also phrase it differently...**

In normal times, the present and near future are worth more than the distant future. But as interest rates and inflation fall, the "spread" (the gap in valuation) between the two shrinks, to the point where there may be almost no perceived valuation difference between present and distant future.

And if rates go negative, it might even reverse - So the future might be worth more than the present.

We have gone from a point in the late 1970s/early 1980s where the present was worth much more than the future. Inflation was high and so were interest rates. Money today was worth a lot more than money tomorrow.

That spread has narrowed consistently ever since then, up until now, when we're at a point where the future is worth at least as much, if not more than, the present.

This concept explains most of what's been happening in markets in the last four decades, but particularly since the financial crisis of 2008. More importantly, it can give us some clues as to what will happen when it reverses. Which might (and it's very much a 'might') be on the verge of happening.

### **Let's use Tesla as an example...**



If the future is worth the same as, or more than the present, and that trajectory is expected to continue, then that drives up the value of any fixed income stream.

And the longer you can lock in that payment, the more valuable it is. Hence bonds have done well, and long-dated bonds have done very well.

If the future is worth the same as, or more than the present, then companies with little or no cash flow but big dreams for a bright future (Tesla) will be valued more highly than companies with plenty of cash flow but an uncertain future.

Hence tech stocks have absolutely trounced oil stocks, for example.

### **You might be thinking – yes, but what about the risk of not getting paid?**

If you were thinking this, you'd be forgetting that central banks have been massively suppressing both volatility and bankruptcy risk for decades now, and in particular since 2008. So the valuation penalty applied to "big audacious dreams" is tiny to non-existent.

To that extent, Tesla is probably the epitome of these stocks.

It's a company whose present valuation is based entirely on two key things. The first is specific to the company. That is, the dream scenario (for Tesla investors) in which Tesla becomes the Apple of electric car manufacturers.

The car itself becomes a desirable mass-market luxury good, like the iPhone, while Tesla also creates its own walled garden of driverless technology software and battery expertise – or something along those lines.



In short, electric, self-driving cars become the dominant form of transport, and Tesla becomes the dominant player, or even the monopolist in that market.

That sounds like quite a wild scenario. And even if it does pan out, then it's surely still quite a long way into the future.

But that's where the second key thing comes in, which is all about the "big picture" backdrop we've outlined above.

In a world where the future and the present have the same value, it doesn't matter how far into the future Tesla's dream scenario lies. And in a world where central banks have eliminated credit risk (in as much as they can), then there's no real benefit in being sceptical about Tesla's prospects.

### **So - What will happen if the future stops being as highly valued as the present?**

In a (very basic) nutshell, if the valuation spread between "today" and "tomorrow" starts to widen again, as opposed to the continual narrowing we've seen since around the early 1980s, then the obvious result is this: the assets that have done well, will stop doing well, and the assets that have done badly, will stop doing badly.

But that's for January's newsletter - exploring further what might happen if the time value of money trend does reverse in 2021.