THE MICROSCOPIC BLACK SWAN

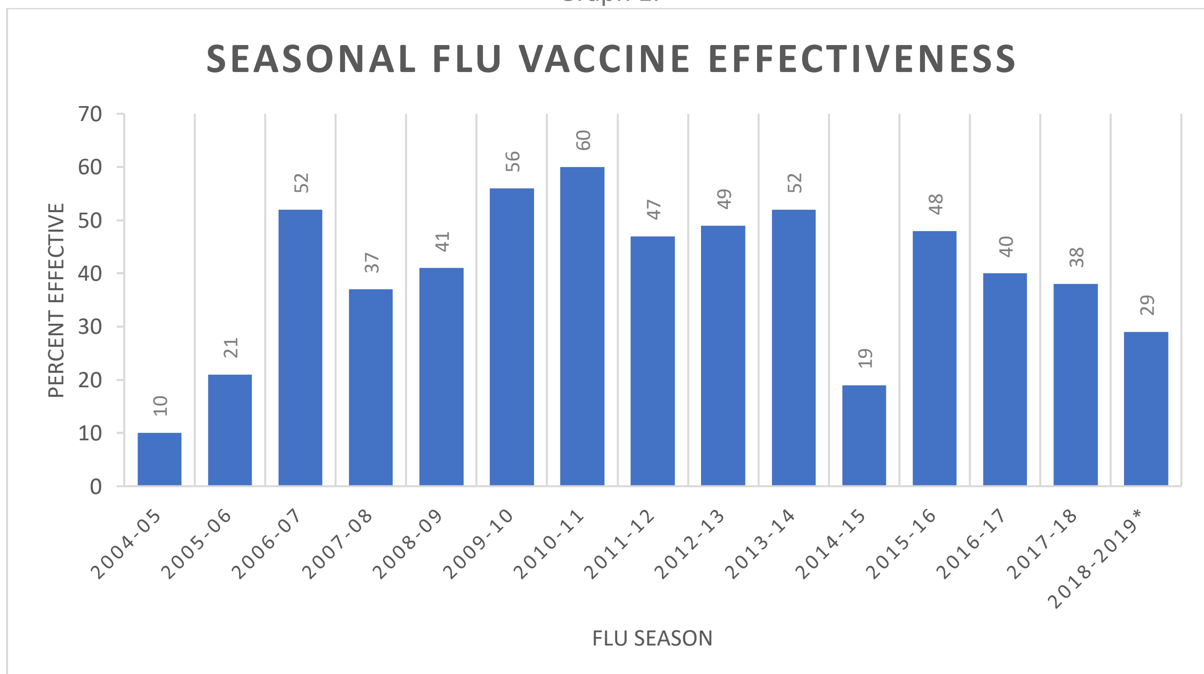
The next two weeks will be crucial in determining whether or not the corona virus, which has spread beyond China, will be classified as a pandemic. Even if it has not, the fact that is has infected hundreds of thousands of people, means it is now established in the human race. Therefore, it is not this winter, but next winter, which will determine how virulent it is. In the meantime, the virus has already sent the markets into intensive care.

It is only a matter of time before resignation sets in and the medical authorities add the corona virus to their repertoire of seasonal influenza viruses. For this reason, they should have designated it strain E rather than COVID-19 to sit alongside influenza type viruses A – D. The annual seasonal viral death toll is likely to rise from two thirds of a million to two million globally. It must be recognised that seasonal influenza kills 3000 people daily in winter, about the same as the toll exacted by COVID-19 to date (well officially at least).

In addition, instead of improving the overall health of the nation, which is the best defence against disease, the authorities will reach for the cheaper option of herd inoculation. But vaccines are no solution. The much-touted flu vaccine tends to have an efficacy of between 25% and 50%. But it must be said these are based on the most optimistic Pharma encouraged estimates. https://www.evidentlycochrane.net/influenza-vaccines-how-effective-are-they/ The US CDC has done its own trials. Over the last 15 years the average success rate has been 40% and in only 4 of the 15 years did the success rate rise above 50%. This was balanced by 4 years when the success rate fell below 30%. https://www.cdc.gov/flu/vaccines-work/effectiveness-studies.htm

In desperation, since 2013 health bodies have been inoculating with a *quadrivalent influenza vaccine*. This is designed to cover both A and B type viruses in one hit. Despite this scatter gun approach, as the graph taken from the above CDC report shows, it did not improve matters, particularly in 2018/9. Over two thirds of a million people worldwide typically die from flu every winter. Thus, even if a vaccine for the corona virus is ready for next winter, its efficacy may be no higher than that of current flu vaccines which are decades old.

Graph 1.

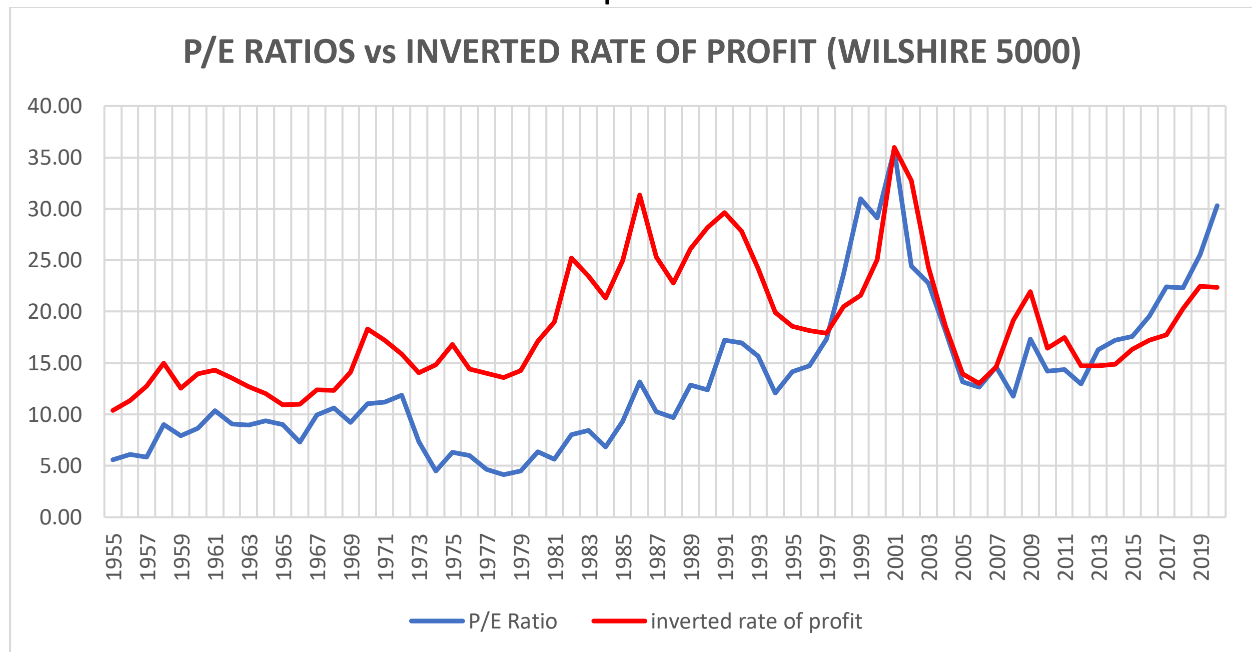


The stock markets.

Stock Markets peaked on the 19th February having added 8.3% since January 1st (Wilshire 5000). In monetary terms, this little earner amounted to over $2 trillion in the USA alone. This sharp and undeserved rise continued to elevate the P/E ratio further above the inverted rate of profit.

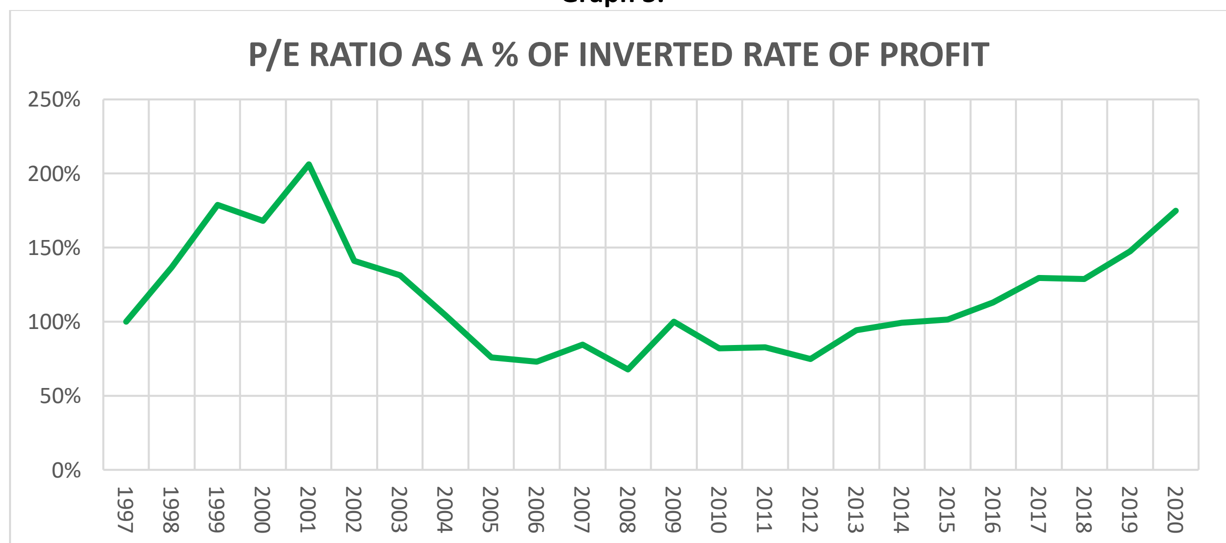
To remind the reader, the P/E ratio here is obtained by dividing the market cap of the Wilshire 5000 (97% of listed shares) by the unadjusted after-tax profits found in NIPA Table 1.14. As the two graphs below show, the abnormal relationship between the two multiples began in the late 1990s and has been maintained since then. By abnormal we mean the P/E multiple sits above the profit multiple.

Graph 2.



This is a more accurate graph then previously used, because a better estimate of profits for the 4th Quarter was possible due to corporate profit reports, and, the latest release for capital consumption data for the final quarter, enabled a better estimation for fixed capital. If we extrapolate to the 19th February, then the following graph shows the deviation between the two multiples on that date.

Graph 3.



The current deviation between the fictitious multiple (the P/E multiple) and the real multiple (inverted rate of profit) at 175% is not as high as that which obtained in 2001. However, the current difference of +75% is far removed from the -16% difference that obtained in 2007 before the financial crash of 2008. This shows that the potential for a stock market crash today far exceeds that of 2008.

A potential stock market crash is in the making. Fears are mounting about the virus turning into a pandemic. Currently, most major stock markets have fallen into correction territory, that is to say, they have fallen by over 10% from their previous high. The abrupt turnaround from a sharp rise at the beginning of the year to a sharp fall now, has only occurred once, immediately prior to the market crash in 1929

In addition, the 10-year yield has fallen below 1.2% to its lowest point ever, lower than the 1.32% level in 2016. Once again, an inversion has occurred between this rate and the 3-month rate. This time the inversion is highly significant, because unlike 2019, it coincides with a deepening slump on the Stock Markets.

The inflated US GDP figures

US GDP figures are inflated by personal consumption expenditures and the growth in the federal budget deficit. Trump may boast about how strong the US economy is, just as the Tories crowed about the resilient UK economy before the elections, but digging under the hood, we find the US economy to be much weaker than the headline figures assume.

Readers of this website will be aware that I have been challenging the US employment data as overstated. Recently the Bureau of Labour Statistics has owned up to this saying they have over counted the number of new jobs by about half a million. I am of the opinion the over-count is higher. https://www.bls.gov/web/empsit/cesbmk.htm

In addition, there has been an inflation of personal consumption expenditures as well. This is significant because these PCEs (Personal Consumption Expenditures) are the driver of GDP. Their increase was responsible for over three quarters of the 2.3% real GDP growth in 2019. (NIPA Table 1.1.2) However, just as I was unable to reconcile the increase in jobs with the hours worked, so it is impossible to reconcile retail sales (a large component of Personal Consumption Expenditures) with the production of consumer goods, inventories and net foreign trade.

The calculations can be found on the accompanying spreadsheet “2019 SALES VS PRODUCTION. Essentially the following applies. Retail sales increased by 3.4%. But the production of consumer goods fell by 0.9% over the same period. This fall in local could have been compensated for by a rise in net imports, but imports rose by a mere 0.2%. Nor was there a draw down in inventories to compensate. Inventories rather than falling, rose. In summary: (All data is based on annual comparisons.)

> Nominal retail sales growth, 3.4% less 0.2% rise in imports, equals 3.2%
> The balance of 3.2% suggests sales would have been met by increased local production,
> But instead of increasing, consumer goods production fell 0.9%
> Perhaps that could have been compensated for by a fall in inventories.
> But inventories as a share of sales rose by 1.3% instead of falling.
> Together the rise in inventories and the fall in production yields minus 2.2%
> Thus, the total difference is 5.4% in nominal terms (3.2% + 2.2%),
> or 3% in real terms when taking goods inflation of 2.4% into account.
> As goods sales represents 25% of GDP, a difference of 3% equals a fall of 0.75% in GDP growth.
> Instead of real GDP growth being 2.3% in reality it was 1.5% in 2019.

Another way to confirm this is to look at the sales of the large retailers. With very few exceptions, such as Amazon and Costco, most retailer sale increases came in between 2 to 2.4%, barely covering inflation.

But there is more to the story than this. The growing federal budget deficit also added 0.4% to GDP. This 0.4% increase resulting from the fast-growing deficit does not add value, but only debt in the ledger. It appears in the GDP tables in order to reconcile the output and spending sides. Removing this reduces GDP growth to 1.1% or a fall in GDP of 1.2% This figure of 1.1% can be substantiated. In 2019 the total hours worked increased by 0.6%. Productivity adjusted by this 1.2% fall in GDP amounted to 0.5%. Together they add up to the same figure of 1.1%. I do not intend to go further, but even this 1.1% figure is optimistic given the effect of imputed sales. Hence far from the US economy being so "brilliant" according to Trump, it is barely growing.

This reduction in GDP starts to overcome a number of key issues. The current CASS Freight index has the volume of truck shipments falling by 3.3% for the year. This is not consistent with retail sales rising by 2.1% in volume terms. Truck freight volumes are the ones most closely associated with retail. https://www.cassinfo.com/freight-audit-payment/cass-transportation-indexes/december-2019 In fact when we take the above discrepancy of 5.4% and adjust it for inflation (5.4% - 2.4%) we obtain a volume figure of -3% as well.

Furthermore, if this is the case, then the contradiction between consumer spending and the industrial economy is not so glaring after all. Non-residential investment less I.P. investment was -3% in real terms. (NIPA Table 1.1.1) and industrial production fell 1%. https://fred.stlouisfed.org/series/INDPRO/ This fall in investment and production is consistent with the ongoing fall in the rate of profit as I have shown in earlier postings. Goldman Sachs has just issued a report whose conclusion is that corporate profits will fall over 2020. https://www.cnbc.com/2020/02/27/goldman-says-buy-these-stocks-while-market-will-see-no-earnings-growth.html This being so, it means the mass of profits will have fallen for seven years in a row. This is unprecedented. A one-time event with the most serious of consequences in the end.

What is driving the remnants of GDP is the effect of the bubble on PCEs outside goods production. Specifically, the following four areas; food services (eating out and deliveries), luxury goods, housing and health care. But even here, the outlook has faded. Already the US sales outlook for 2020 has been halved to 2.2%. https://www.cnbc.com/2020/02/27/coronavirus-outbreak-could-cause-more-pain-if-it-hits-american-wallets.html

Discussion.

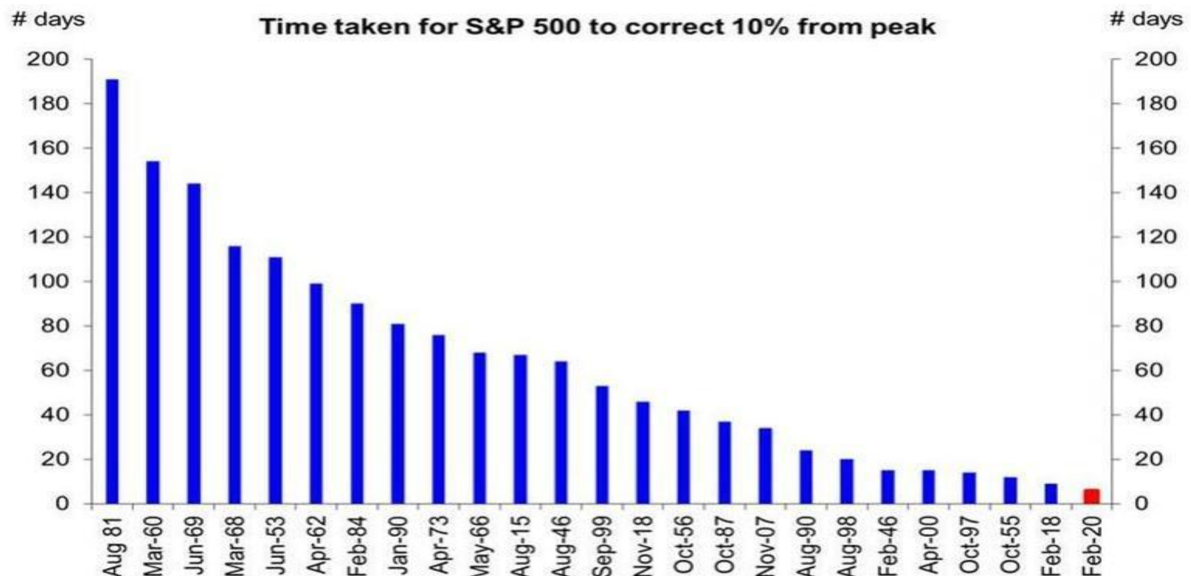
After the brief fillip in 2018, now known as the Trump Bump, when trickle up economics briefly perked up the employers, the trend has since been down. The US economy has consistently weakened. The CASS report shows an accelerated fall in freight movements in January before the corona virus hit home. More ominously, the malaise is spreading to the service sector which hitherto allegedly buoyed up the economy. "*Flash U.S. Composite Output Index at 49.6 (53.3 in January). 76-month low.*" *https://www.markiteconomics.com/Public/Home/PressRelease/2ea84928c5d74262bbe387ec2b19d337* Further, the rate of decline was the fastest since 2009.

Most of my research covers the US and China. China is the centre for global industry, and the US is the centre for fictious capital. It share-market and bond-market make up 40% of the global total. The key question regarding the corona virus was not whether or not it would lead to an industrial contraction, but whether this contraction would be intensified by a financial crash.

Financial markets reacted sharply to the virus this week thanks to the algorithms. The fall is the sharpest and deepest since the financial crash of 2008, eclipsing the falls in 2016 and 2018. On Thursday the Dow Jones experienced its biggest daily points drop in its history.

Graph 4.

Fastest correction in the S&P500 on record



The rapidity of the fall suggests this was a delayed reaction. For months now, or at least since October when the FED joined the other major central banks pumping money into the markets, investors have ignored economic fundamentals. They have been comforted by the holy money sprinkled over them by the central banks.

All the virus has done is force them back to reality. To face the horror of a virus knocking on a door which is falling off its hinges, a fact they had tended to ignore. Thus, the virus is no more than a reality check. If it appears the markets are over-reacting it is only because they are playing catch-up.

Will the central banks make a concerted attempt to intervene to put a floor under this fall? To begin with the central banks will see this correction as a positive. Wiping the froth off an over-extended market. There were two corrections in 2018 but none in 2019. *"Between 1983 and 2011, more than half of all quarters had a correction. That averages out to 2.27 per year."* It is therefore quite unusual not to have had a correction in 2019. A correction was overdue.

Corrections occur eight times more frequently than do bear markets. "*Bear markets, defined as a period where the stock market goes down 20% or more, from the highest point to subsequent lowest point, happen frequently. From 1900 – 2014, there were 32 bear markets. Statistically, they occur about **1 out of every 3.5 years** and last an average of 367 days."* *https://www.thebalance.com/u-s-stock-bear-markets-and-their-subsequent-recoveries-2388520*

It is likely that central banks will intervene only when this correction turns into a bear market. At the time of writing a number of FED governors have indicated the FED will act soon, with Sunday pencilled in. These pronouncements temporarily buoyed the market, which recovered 60% of their initial falls. This represented a draw but no more. This is ominous for the FED. But what did Powell expect. His choice of words could not have been more inappropriate, and, the market knew that: *"The*

fundamentals of the U.S. economy remain strong," No, Mr Powell they are not was the markets response. Their fear, that as long as he believes this nonsense, the FED will under-deliver.

Will a co-ordinated central bank intervention work? Objectively there is very little left in their armoury or the bank vault. What has been lost this week is the mythology banks rely on, the simple belief in the power of the FED. Now that markets are focusing on fundamentals, they will also be assessing realistically what central banks are able to do. The immediate problem facing the FED is that the markets have already enjoyed a substantial interest rate cut. The all-important-ten-year bond is trading between 1.1 and 1.2% down from over 1.4% earlier in the week. This is equal to multiple rate cuts

As the article from "*thebalance"* cited above reveals, the average length of a bear market is around a calendar year. At the time of writing on Friday afternoon, the S&P 500 is down 15% from its high on the 19th February or midway between a correction and a bear market. It is looking increasingly likely that a financial crash is underway.

Will the contagion spread to the corporate bond sector particularly junk bonds, leveraged bonds and BBB bonds? It is too early to comment. There is very little coming out, but it has to be the focus over the next few weeks. Two areas In particular, the oil patch, home to 10% of leveraged bonds and where the oil price has fallen into a bear market, as well as highly leveraged hedge funds.

The market crash is likely to have two steps down, with the current virus-related plunge being the first and smaller step. Recent soft surveys out over the last few days, covering the pre-February 19 period, shows the optimism resulting from the trade truce was still in effect. For example, the current UMich sentiment index popped to its highest level since 2004. Ah the Share Market euphoria induced somnambulance that preceded this crash. But here lies the rub. This survey and other soft surveys reveal how dependent the economy is on capital gains, that is the upward movement in markets.

This keys us into the second step. Capital gains are the last lump of coal in the boiler producing economic steam. The top 10% of earners spend as much as the bottom 80% of society. Over 90% of shares and non-residential bonds are owned by the top 10% whose average wealth amounts to $4 million. Their spending habits depend on capital gains. Just as in the aftermath of 2008, they will reign in their spending when markets fall. When that happens, the last prop supporting the economy will have been kicked away. Without PCE spending there is no longer any economic driver. When it becomes clear that a sluggish economy is now a recessionary economy, then the second leg of the financial crash will take place. This time there will be little central banks can do.

In addition, this market crash will sink Trump and propel Sanders to the White House. He is another worry for the markets. When Sanders arrives, he will likely need to implement a Roosevelt "New Deal" to rescue an economy in distress. Here lies the irony. The markets favour Trump and fear Sanders. But Trump, the angel of debt would never be able to introduce a New Deal to rescue the economy. Instead Trump is talking tax cuts in an economy where his previous tax cuts has resulted in a $1.2 trillion deficit already. It seems that as capitalism becomes senile it selects clowns as politicians.

The reason I have focused on consumer spending and its demographics is because it is the driver of the economy. We are in the process of the contradiction between an industry in recession while consumer spending remains buoyant, being resolved convulsively. I support Hussman's assessment that the long-term perspective is one of the bleakest in the history of capitalism, with future returns as low as those experienced during the great depression. When that recognition becomes common currency then an economic extinction event could very well take place. I predicted the Crash of 2019. It seems I was two months out, though it must be admitted, there was a little viral help.

I would like to conclude by turning to Britain. Yesterday the UK government, in the form of Michael Gove, announced it would pull out of the Brexit negotiations in June if insufficient progress had been made. Now mark, this announcement was made amidst collapsing stock markets. How dumb can you be? Populist dumb. In addition, the UK government is facing a £55 billion black hole in its finances. We can therefore sum up the behaviour of the UK government as; Boris the ship captain, having cut the EU anchor is now sailing into the storm with no gas in the tank and with a compulsive pilot at the helm. It appears to be a ship looking for an iceberg, provided of course, it has enough fuel.

Brian Green, 28th February 2020.

Addendum.

For comparison purposes.