Markets in War Time

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Introduction: A history lesson.

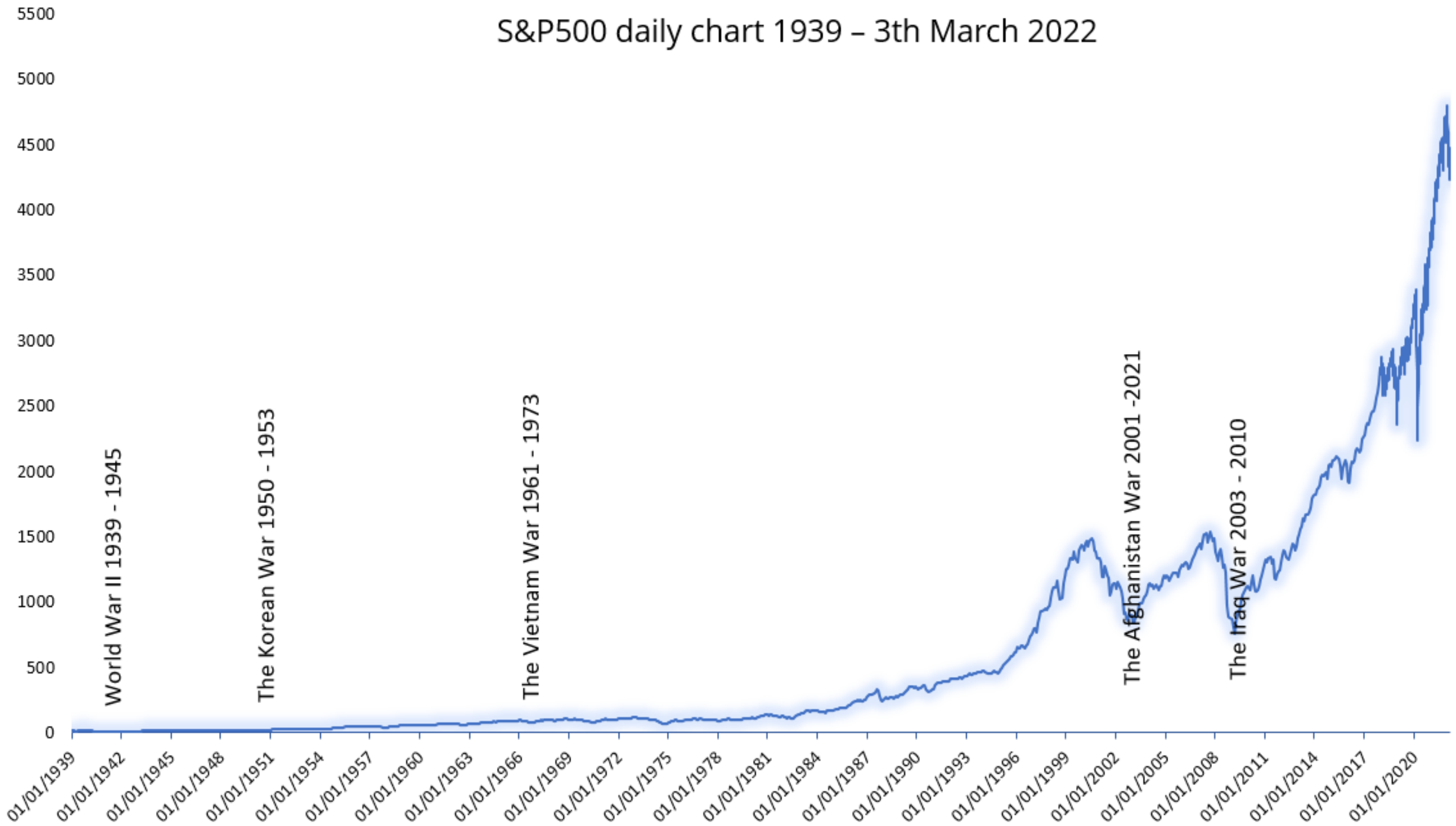
In the early hours of Thursday 24th February 2022, the president of Russia, Vladimir Putin, ordered the Russian army to begin a 'military exercise' across the Ukrainian border and a full-scale invasion of the independent nation began. It sparked the start of a war between both countries and generated a surge in volatility across all financial markets as the news broke. Additional sanctions applied by the West on Russia with the intent to cripple the Russian economy followed, whilst supply chains experienced considerable disruption, leading to a jump in energy and food prices. The invasion of Ukraine by Russia led to a lot of questions for investors. One of those questions was, in times of war how do financial markets behave? That's the question this report is going to explore.

Since the end of World War II there has been numerous conflicts across the world, most of which spun off from the Cold War between the USA and USSR. For the purpose of this report we will analyse the 5 most prominent wars over the past century and look at how financial markets reacted to these events.

The 5 wars this report analyses are the following:

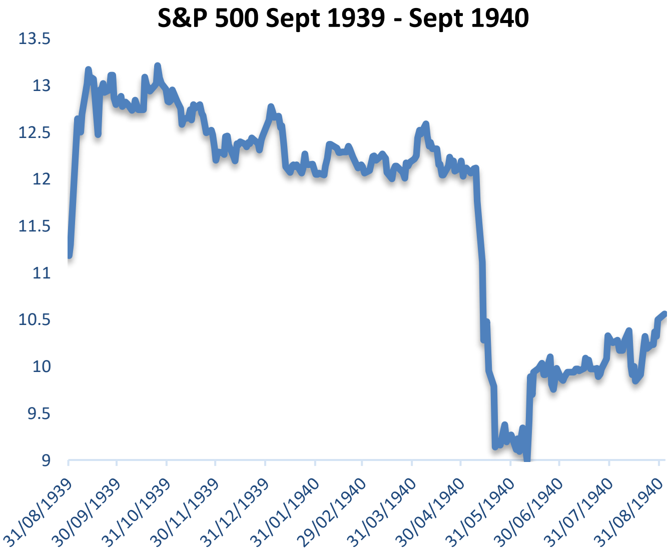
1. World War II (1939 – 1945)
2. The Korean War (1950 – 1953)
3. The Vietnam War (1961 – 1973)
4. The Afghanistan War (2001 – 2021)
5. The Iraq War (2003 – 2010)

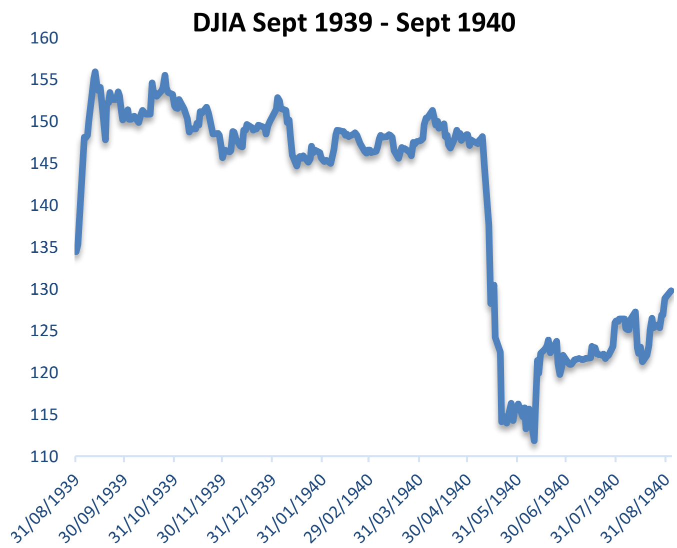
In order to keep the report accurate, as there are different timelines for each war, I will analyse the financial market performance during the first year of each conflict. Where data is available, this report will analyse the performance of the S&P 500, Dow Jones Industrial Average, Nikkei 250, gold spot prices, oil prices, and inflation during each time period. All data is noted and recorded in US Dollars. The report will conclude with an overall outlook of financial markets during war time. If similarities occur between asset movements, it will be noted but ultimately this report has been designed to give investors an insight to movements in markets. The report is not designed to offer speculative investment advice based on past performance.



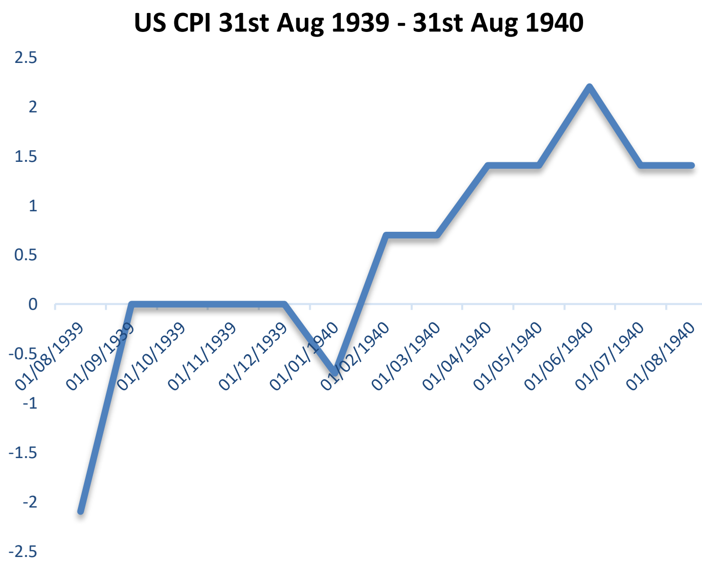
World War II (1939 – 1945)

World War II started in September 1939 when Adolf Hitler's Nazi Germany invaded Poland. The war all but ended in August 1945 when the US army dropped two atomic bombs on the Japanese cities of Hiroshima and Nagasaki. Data available at the time showed that the initial invasion of Poland saw the S&P 500 rally from 1st September to 2nd October 1939, up 14.0%. However, by the start of September 1940, one full year after the beginning of the invasion of Poland the S&P 500 was down 6.1%.





The performance of the Dow Jones Industrial Average (DJIA) is very similar. For comparison, one month after the invasion of Poland the index rose 11.7% but by the end of the 1-year period the index closed 4.1% lower from its September 1939 opening. The fall between May and June of 1940 can be attributed to German occupation of France.

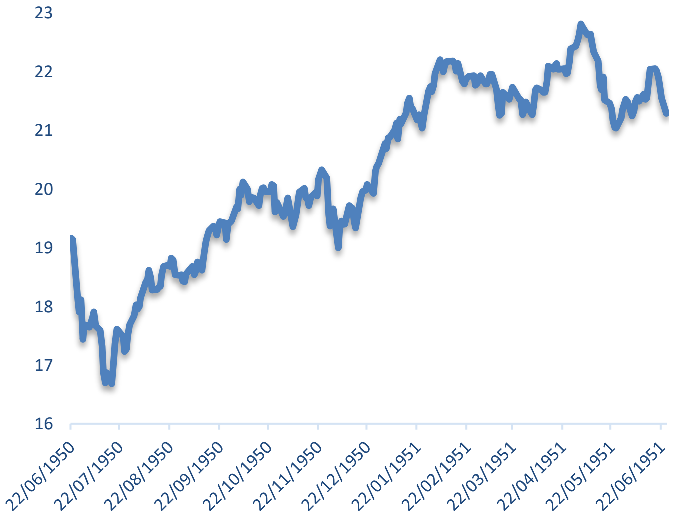


Gold is traditionally seen as a "safe-haven asset" in times of market uncertainty, and during World War II volatility was noticed in markets. However, what's interesting in this scenario is that the value of gold fell during the first year of the war. Over the first 12 months of the conflict gold spot prices fell by 1.7%. Throughout the entire duration of the war, from September 1939 to August 1945, gold spot prices increased by a very modest 0.8%. This data illustrates that markets ultimately retracted at the start of WW II while inflation rose. At the end of August 1939 US inflation stood at -2.1% but by the end of August 1940 it had increased 3.5%. The steep rise in inflation in the USA could be attributed to the panic buying by households that would have occurred in the USA even though the country was not involved in the war. On an interesting side note, when Germany invaded the Soviet Union in June 1941, inflation in the USA at the time stood at 4.3%. In May 1942, less than 1 year later, US inflation stood at 13.2% compared to 12 months earlier. As the US prepared for war, there was a psychological and commercial shift as businesses started producing military products, ultimately leading to slow down in supply of consumer goods. This conversion process was called 'preparedness'. For example, in the auto industry, there was an increased focus of the production of aircraft engines and other military specific applications over traditional vehicles.

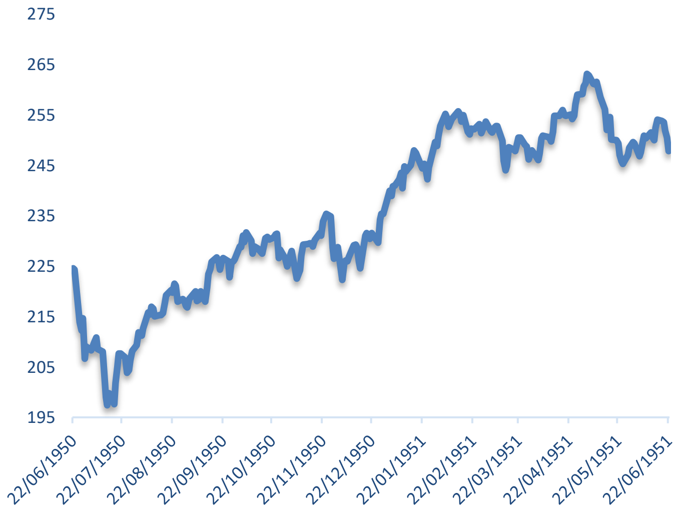
The Korean War (1950 – 1953)

After World War II, there was a geopolitical power struggle between the USA and USSR over varied political beliefs, leading to the birth of the cold war. Essentially it was a battle between communism and democracy. Those differing political beliefs engulfed a war between north and south Korea, whereby communism was favored by the north and capitalism by the south. The US entered the conflict on the 27th June 1950. The civil war lasted 3 years but is still technically ongoing to this day. From June 1950 to June 1951, the S&P 500 and DJIA rallied. The S&P 500 rose 11.1% whilst the DJIA increased by 10.4%. At this time, prosperity in the USA was high, with economic growth rising off the back of WWII and strong policy adjustments such as the GI Bill helping to fuel a booming economy. The GI bill was introduced into the US economy in 1944 to support veterans returning from WWII. It supported soldiers who were seeking further education and training to help them integrate back into the workforce.

S&P 500 June 1950 - June 1951

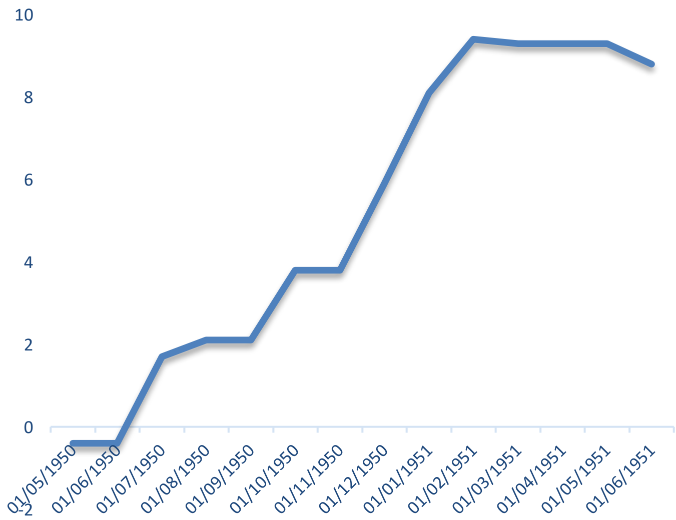


DJIA June 1950 - June 1951



During this same time-frame inflation drastically increased in the USA as middle-class families had excess wealth thanks to the rapid growth of the US economy. In a similar situation to the beginning of the Covid-19 pandemic, families had access to money at low and favorable rates which ultimately drove prices up. At the beginning of June 1950 inflation stood at -0.4% but within 12 months it rose to 8.8%. The largest 12 month increase in Inflation peaked at 9.4% in February 1951. Families were still mindful of the impact WWII had on food shortages which pushed an increase in buying of essential products at the beginning of the Korean war. As the war dragged on, inflation began to stabilize and return to normal.

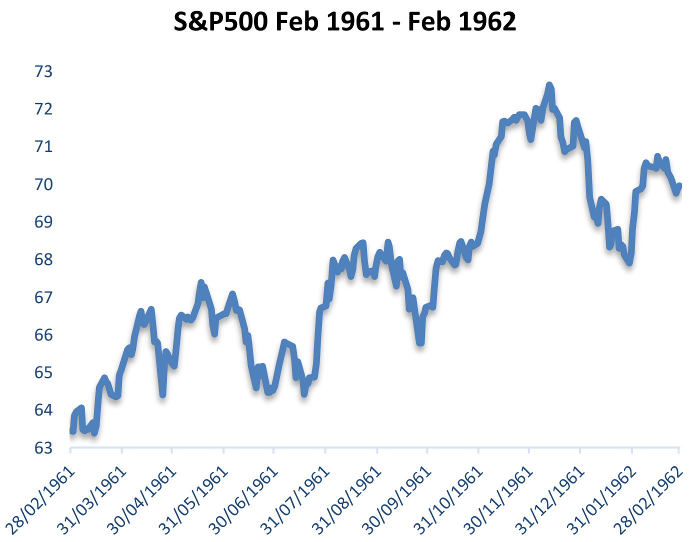
US CPI June 1950 - June 1951

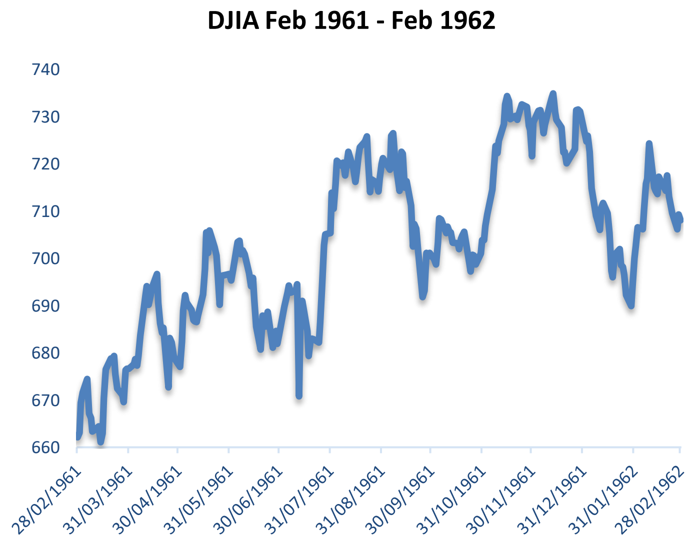


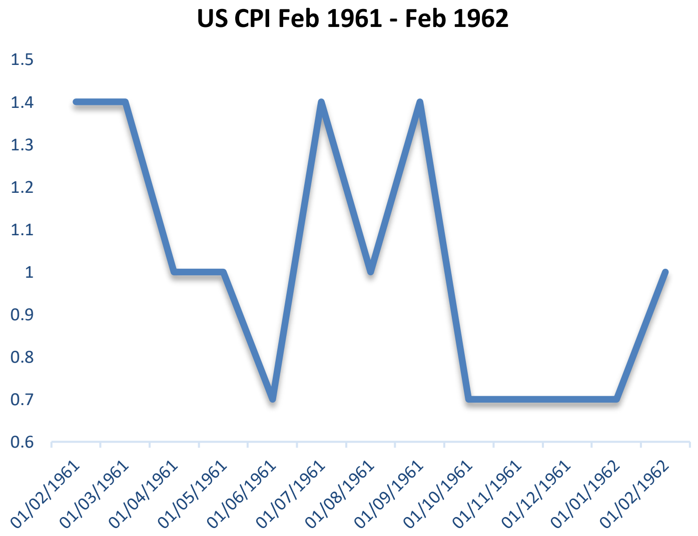
When analysing the Korean war, it's difficult to say whether it had any material impact on financial markets in the USA. I think there is further evidence of this lack of material impact when you look at the spot price of gold during the first year of the Korean war. It stayed at around $34.7 for the entire duration of the first 12 months of the conflict. Interestingly for the full length of the conflict the price of gold only rose by 0.35%. However, what does become clear is how households reacted to the news of war. Inflation drastically shot up in the USA at the beginning of both WWII and the Korean war as initial panic encouraged households to stock up on essential goods.

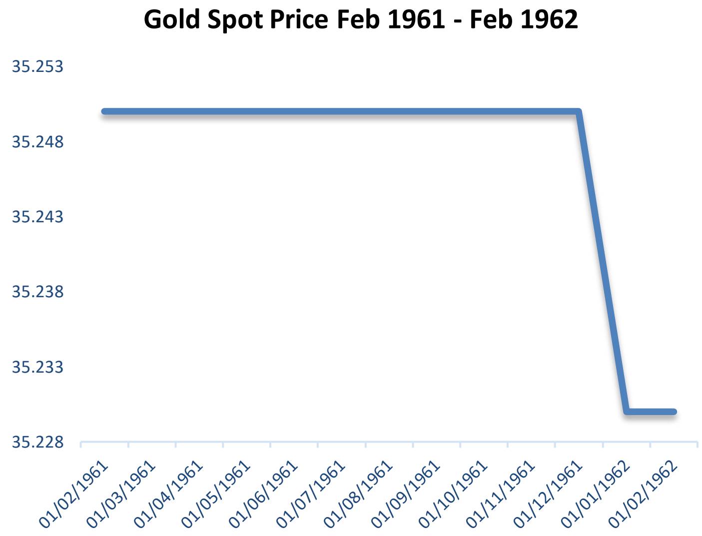
The Vietnam War (1961 – 1973)

The most famous war within the cold war era came in Vietnam and followed the exact same ideology as the Korean war. The communist north against the American backed democratic south. The war lasted far longer than in Korea and required a lot more manpower by the USA, which was ultimately deemed a failure by the time the last American troops left the region in March 1973. Initially the war started in 1955 but the USA only got involved at the end of February 1961. From February 1961 to February 1962 both the S&P 500 and DJIA gained 10.3% and 6.9% respectively.







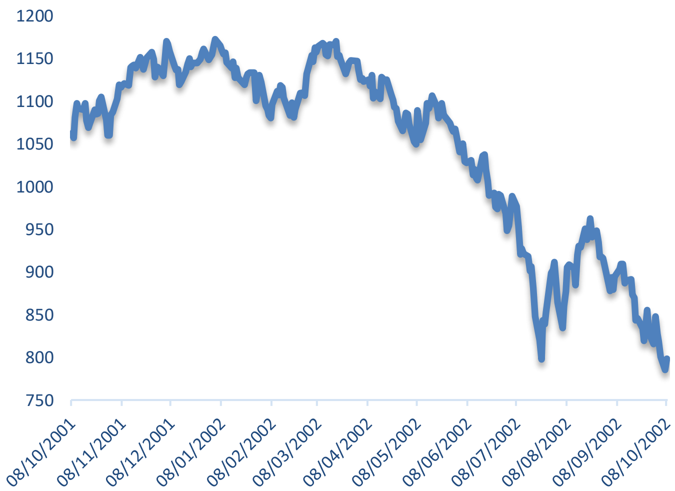


In a similar fashion to WWII and the Korean war, inflation increased in the USA during the first year of the war in Vietnam. In February 1961 inflation in the USA stood at 1.4% and a year later it was 1% higher. Although inflaton was increaseing in the USA during this time, the above graph shows that it was increasing at a decreasing rate. The constant rise in inflation can be seen throughout most war periods, and no doubt in today's market environment the same is true. However Covid-19 and the disruption caused to supply chains has most likely magnified the extent of inflation today. Globalisation has allowed economies to become more reliant on one another to produce certain goods and services. In that respect, lockdown measures from Covid-19 on certain economies has disrupted supply chains greatly. On the flipside, the value of gold decreased albeit by a very modest 0.06% during the first year of the war in Vietnam. For comparison, during the first month of the Vietnam war, gold spot prices stayed constant at $35.2. So far since the start of the war in Ukraine, gold prices have risen by 1.9% from the 24th February to the 24th March.

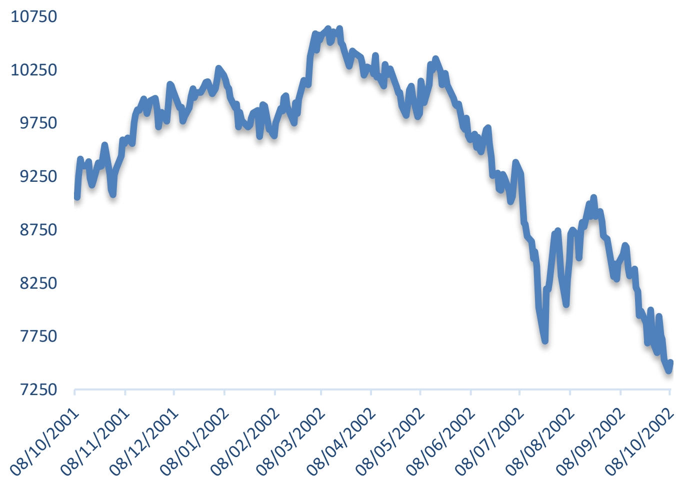
The Afghanistan War (2001 – 2021)

Shortly after the 9/11 attacks, the USA invaded Afghanistan. President Bush Junior announced that the US would attack the terrorist groups of the Taliban and Al Qaeda and attempt to overthrow the dictatorships in the country. That was the plan. However 20 years later the US eventually left the region and since then the Taliban has re-taken control of the country. The war started in early October 2001 and ended on the 30th of August 2021. During the first year of the conflict the S&P 500 dropped 24.8% whilst the DJIA fell by 17.3%. It's also worth noting that this was during the time of the dot com bubble. In Asia the Nikkei 250 fell by 17.4%, as stock markets ultimately sold off at the beginning of the war.

S&P 500 Oct 2001 - Oct 2002

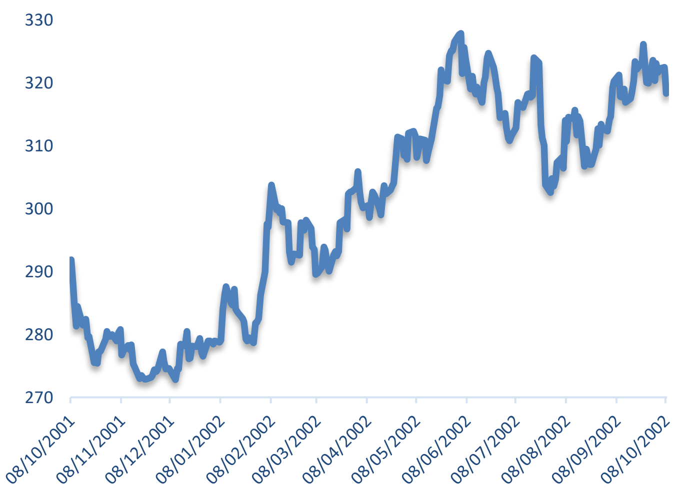


DJIA Oct 2001 - Oct 2002

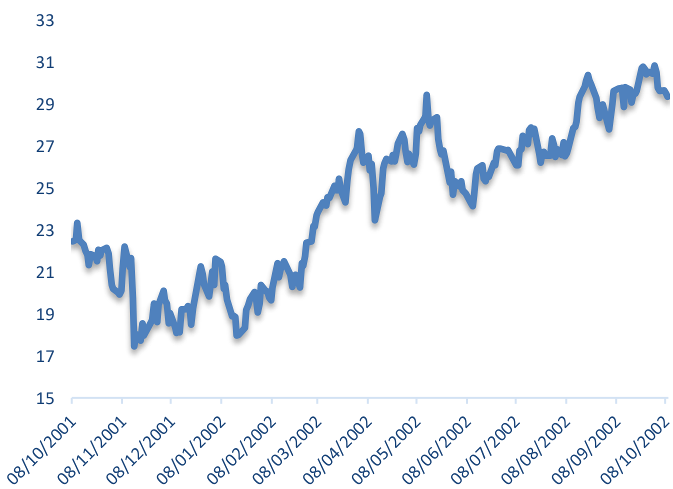


In commodity markets, the opposite results came through. At the beginning of the invasion gold prices rose considerably as there was a high level of uncertainty in markets after the 9/11 attacks. Investors looked for safer assets. Spot prices for the precious metal increased by 9.0% during the first year of the conflict. Oil markets also had a very strong rise. WTI Crude oil increased by 31.3% during the first 12 months. Interestingly, oil prices retracted shortly after the 9/11 attacks but began to rally as the invasion of Afghanistan commenced. Although Afghanistan is not in the Middle East, its location to major oil exporters such as the UAE, sent fears of instability in the wider region once the war broke out.

Gold Spot Price Oct 2001 - Oct 2002



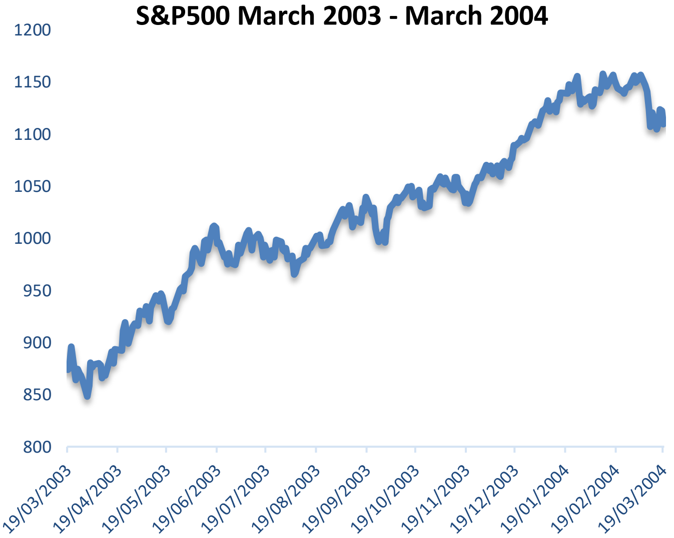
WTI Crude Oil Spot Price Oct 2001 - Oct 2002

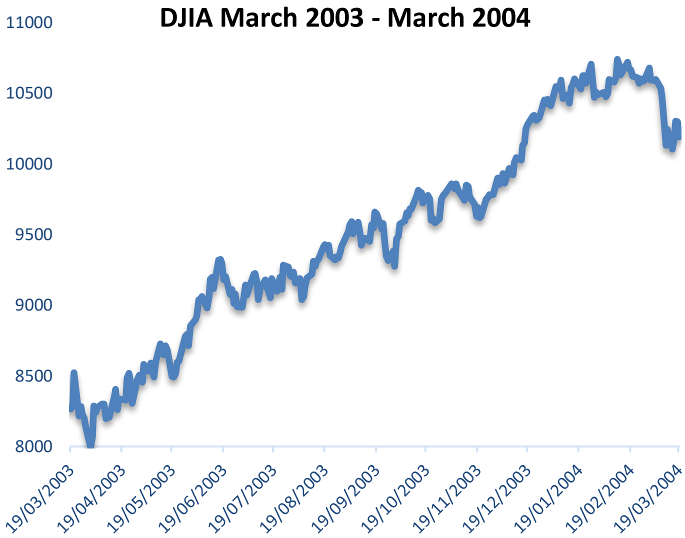


When looking at inflation data over the period, it's no surprise that with the rise in oil prices, inflation also increased. From October 2001 to the end of October 2002, inflation in the USA rose by 2.0% year on year. In a similar fashion to today's market environment, we can clearly see the impact oil prices have on inflation.

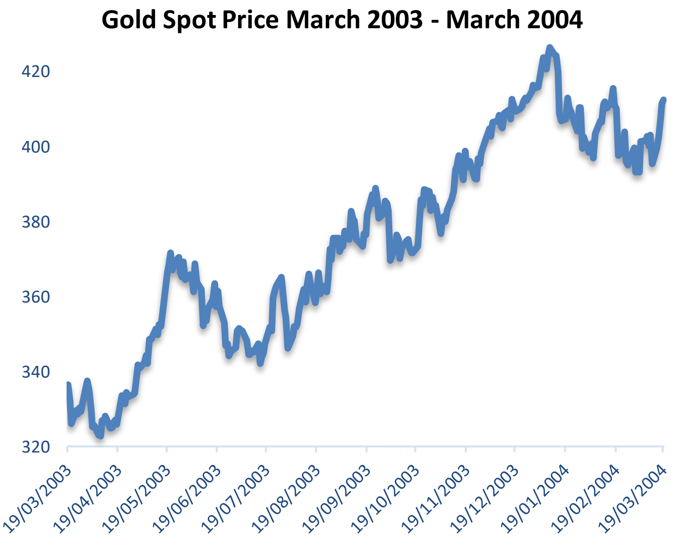
The Iraq War (2003 – 2011)

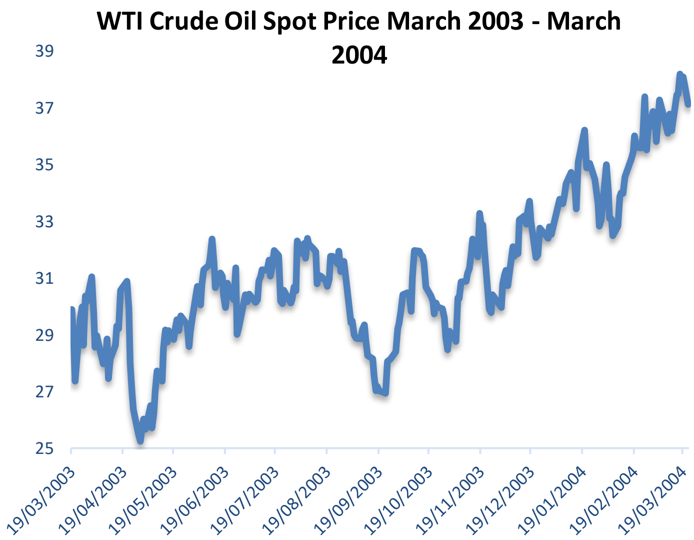
A US led coalition invaded Iraq in an attempt to overthrow the dictator Saddam Hussein in early 2003. The war started at the end of March 2003 and for the full 12 months through to March 2004, both commodity and equity markets rallied. In the US, the S&P 500 rose 26.7% for the year whilst the DJIA saw a rise of 21.5%. In Asia, stock markets also bounced as the Nikkei 250 rose 55.4%.





Gold and oil prices also rose considerably during the period. Gold spot prices had surged at the initial point of the invasion and overall closed out the first year of the conflict up 24.1%. Oil prices rose by 24.2% as fears around supply in Iraq would have played a vital part in the jump. Iraq contains some of the world's largest oil reserves and when the war broke out, it caused considerable disruption to oil production leading to a sharp rise in prices. Additionally, the overall rise in both commodity and stock markets was noted with regards to inflation. Inflation rose 1.7% from the beginning of June 2003 to June 2004. The price of oil was a key driver in this rise, in the same way it is today.





During the first 12 months of the Iraq war, gold behaved as we would expect it to. In the other wars, gold lost value or increased by a relatively small amount. Another trend that's also starting to emerge is the movement of equities during the initial war period. Excluding WWII and the Afghanistan war, equities have rallied during war time. Regarding the Afghanistan war, equity market performance in the first year of the conflict was heavily influenced by the dot com bubble.

Conclusion

The toll of war on the health and well-being of combatants, civilians, and societies is incalculable and long lasting. This analysis does not wish to demean that toll in any way, but instead provide some insight and perhaps comfort to investors in a time of acute uncertainty. If we breakdown each asset class referenced throughout, it can provide some good insights into investors' sentiment during war times. Starting off with equites, during the 5 major wars, 60% of the time stock markets rose during the first year of each conflict. The S&P 500 and DJIA performed extremely well during the Korean, Vietnam, and Iraq war. The same can be said regarding Asian equities whereby the Nikkei 250 rose by 55.5% during the first year of the Iraq war. However, during WW II and the Afghanistan war, stocks markets retracted during the initial first year of each battle. The Afghanistan war must be acknowledged separately as stock markets were highly influenced by the dot com bubble. But what we do see is that investing in stock markets during times of war is not necessarily a bad thing.

Oil prices are also very interesting to keep an eye on. Unfortunately, data available for oil prices does not go back as long as equities but during the Afghanistan and Iraq wars we saw prices soar. The same can be noted at the beginning of the Ukraine conflict this year. However, one could argue that the Middle East and Russia are the two biggest players in oil production, and wars in those regions would naturally cause prices to rise. Would the same rise in oil prices occur if there was a war in South America or Africa? It's difficult to say and ultimately would just be speculation. However, gold prices also paint an interesting picture. In the first 3 conflicts we saw little to no movement in gold prices however in the wars in Iraq and Afghanistan, gold prices jumped considerably. We have also seen gold prices rise at the beginning of the conflict in Ukraine.

In conclusion, markets have mixed results during times of war. It's difficult to say what assets investors should invest in, and ultimately an investors risk sentiment has to be considered. Gold and oil have shown to perform strongly over the last number of wars and are continuing that same trend at the beginning of the Ukraine conflict. Equity markets have also rallied over the first month since the war began, and on average, tend to offer positive returns in times of war.

There is no way of knowing just how long the conflict in Ukraine will last. However, over the longer-term equity markets are expected to provide mid-high single digit returns above inflation albeit volatility and drawdowns can be expected from different market shocks such as wars or pandemics. Moreover, when one looks at the chart on page 2, we can see that whilst wars have occurred, equities have continued their upward trend. For long term investors, this can offer a high level of comfort when analysing their portfolios.