

Over the last week, the Russian invasion of Ukraine has intensified and international sanctions have been levied against Russia as a result. What does this mean for the global economy and markets? We sat down with Sarah Riopelle to get her view and how she is positioning her portfolios in the current environment.

Markets have been reacting strongly to Russia's actions over Ukraine. What's your view on recent events and their impact on the global economy and markets?

The conflict escalated rapidly over the past week and international markets reacted with a risk-off stance, meaning equity markets sold off and bond yields fell. Volatility in global equities spiked and most major indexes entered correction territory, falling at least 10% from their peaks. At the same time, government bond prices rallied as investors sought safe havens, with the U.S. 10-year yield falling from just over 2.0% to as low as 1.70% earlier this week. So bonds are acting as ballast in a diversified portfolio.

It is difficult to determine whether the recent sell-off is completely attributable to the Russia/Ukraine crisis given the current environment of high inflation and hawkish central banks. In the near-term, Russia's invasion of Ukraine likely means higher energy and commodity prices, risk-off sentiment, and potentially more stringent economic sanctions on Russia than we've seen over the past week. Longer-term, it could also mean higher defense spending, prioritizing energy security over climate change, and economic decoupling from Russia.

The situation also complicates an already-challenging policy environment for central banks. Our view was that inflation would begin to drop back to more normal levels in the second half of the year. That may not be the case anymore. But it's hard not to think that Fed and ECB actions will be a bit more constrained and that additional pathways to negative outcomes have opened up. The degree to which the outlook for inflation is altered by surging energy and other commodity prices, or that consumer and business confidence wanes during a period of already-tightening financial conditions, are now front of mind for central bankers and investors.

We now expect global GDP growth of 3.6% in both 2022 and in 2023. Although the risk of recession has increased as monetary conditions tighten and geopolitical risks rise, we expect the expansion to continue through the next 12 months at least, albeit at a slower pace. Inflation remains among the biggest threats to the expansion. We continue to look for a peak toward the middle of 2022 as pandemic-related distortions ease, although we now have our eye on the impact of energy and other commodity shocks related to the invasion.

## How have markets responded in the past to these "acts of war"?

Historically, military engagements such as these have had a limited impact on financial markets, except in rare cases where the event ultimately changed the course of the economy. Over the years, we have tracked the impact of various events on markets and how these types of acts of war have affected markets.

On the equity side, the median experience was a decline over 5 days of 2.7% and full recovery within 12 days. On the bond side, we see a similar risk-off pattern for these events where bond yields declined over a fairly short period and then recover rather quickly.

While the median experience for markets during acts of war has been relatively benign, it's important to recognize that some of the worst and most significant outcomes are included in these stats. What matters is if the event alters the course for the economy and in such cases we observe severe and long-lasting hits to markets. Although there are pathways to a very negative outcome for markets resulting from Russia's invasion, at this time we think these represent a low probability. Markets will likely remain volatile as the crisis evolves. It is important for investors to keep in mind that periods of heightened uncertainty are common during times of geopolitical tension, but that does not mean that they should abandon their long-term investment plans.

Equity Market Response to Acts of War Impact on Dow Jones Industrial Average Index (USD)

| Event         Date         Median Experience Decime         Reaction Period* Plays           ACTS OF WAR (all)         5         -2.7         12           U.S. Aggressor         5         -2.2         12           Atomic bombing of Hiroshima         Aug 6, 1945         5         -2.2         12           Abomic bombing of Hiroshima         Aug 6, 1945         6         -3.0         22           Gulf of Tonkin Incident (Vietnam)         Aug 4, 1964         3         -2.0         11           U.S. bombs Cambodia         Apr 30, 1970         21         -14.1         67           Failed attempt to free hostages in Iran         Apr 28, 1980         No decline         V.S. invades Grenada         Oct 25, 1983         10         -2.7         14           U.S. invades Grenada         Oct 25, 1983         10         -2.7         14           U.S. bombs Libya         Apr 15, 1986         No decline         V.S. decline           U.S. invades Panama         Dec 18, 1989         3         -1.9         10           Coalition bombing of Iraq         Jan 17, 1991         No decline         V.S. Target         2         -2.7         4           Japan bombs Pearl Harbor         Dec 8, 1941         12         -8.2         240   | Impact on Dow Jones Industrial Average Index (USD) |              |    |            |     |  |
|---|--|--------------|----|------------|-----|--|
| Event   Date   Days   %   Days   ACTS OF WAR (all)   5   -2.7   12  |  |              |    |            | •   |  |
| ACTS OF WAR (all)   | Event  | Data         | _  |            | _   |  |
| No. Aggressor   |  | Date         |    |            |     |  |
| Atomic bombing of Hiroshima Bay of Pigs invasion announced (Cuba) Apr 17, 1961 6 -3.0 22 Gulf of Tonkin Incident (Vietnam) Aug 4, 1964 3 -2.0 11 U.S. bombs Cambodia Apr 30, 1970 21 -14.1 67 Failed attempt to free hostages in Iran U.S. invades Grenada Apr 28, 1980 No decline U.S. invades Grenada Apr 15, 1986 No decline U.S. invades Panama Dec 18, 1989 3 -1.9 10 Coalition bombing of Iraq Dec 18, 1989 3 -1.9 10 Coalition invasion of Afghanistan Coalition invasion of Afghanistan Oct 5, 2001 3 -0.1 5 Coalition invasion of Iraq Mar 19, 2003 9 -2.5 13  U.S. Target Japan bombs Pearl Harbor Dec 8, 1941 12 -8.2 240 Soviet Union shoots down U.S. spy plane Cuban Missile Crisis begins Oct 23, 1962 1 -1.9 2 Terrorists kill U.S. marines in Lebanon China captures U.S. spy plane Apr 2, 2001 2 -4.0 4  Other N. Korea invades S.Korea Jun 26, 1950 14 -12.0 59 Soviet Union invades Afghanistan Dec 26, 1979 7 -2.2 10 Iraq invades Kuwait Aug 2, 1990 51 -18.4 138 Russia invades Georgia Russia invades Crimea, Ukraine Feb 28, 2014 1 -0.9 2  Terrorism Seizure of American Embassy in Iran Nov 5, 1979 3 -2.7 6 World Trade Centre (WTC) Bombing Oklahoma City Bombing Apr 19, 1995 No decline U.S. Embassy Bombings in E. Africa Sep 21, 2001 5 -4.2 12 WTC and Pentagon Attacks Sep 11, 2001 5 -14.3 42 Madrid Train Bombings Mar 10, 2004 11 -3.9 18 |  |              |    |            |     |  |
| Bay of Pigs invasion announced (Cuba)   |  | 4 0. 4045    |    |            |     |  |
| Gulf of Tonkin Incident (Vietnam)         Aug 4, 1964         3         -2.0         11           U.S. bombs Cambodia         Apr 30, 1970         21         -14.1         67           Failed attempt to free hostages in Iran         Apr 28, 1980         No decline           U.S. invades Grenada         Oct 25, 1983         10         -2.7         14           U.S. bombs Libya         Apr 15, 1986         No decline         No decline           U.S. invades Panama         Dec 18, 1989         3         -1.9         10           Coalition bombing of Iraq         Jan 17, 1991         No decline         Dec 18, 1989         3         -1.9         10           Coalition invasion of Afghanistan         Oct 5, 2001         3         -0.1         5         5           Coalition invasion of Iraq         Mar 19, 2003         9         -2.5         13         13           U.S. Target         2         -2.7         4  | _  |              |    |            | -   |  |
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| Coalition bombing of Iraq         Jan 17, 1991         No decline           Coalition invasion of Afghanistan         Oct 5, 2001         3         -0.1         5           Coalition invasion of Iraq         Mar 19, 2003         9         -2.5         13           U.S. Target         2         -2.7         4           Japan bombs Pearl Harbor         Dec 8, 1941         12         -8.2         240           Soviet Union shoots down U.S. spy plane         May 9, 1960         2         -0.5         4           Cuban Missile Crisis begins         Oct 23, 1962         1         -1.9         2           Terrorists kill U.S. marines in Lebanon         Oct 24, 1983         11         -2.7         15           China captures U.S. spy plane         Apr 2, 2001         2         -4.0         4           Other         11         -7.1         35           N.Korea invades S.Korea         Jun 26, 1950         14         -12.0         59           Soviet Union invades Afghanistan         Dec 26, 1979         7         -2.2         10           Iraq invades Kuwait         Aug 2, 1990         51         -18.4         138           Russia invades Georgia         Aug 7, 2008         No decline           Russi   | U.S. bombs Libya                                   | Apr 15, 1986 |    | No decline |     |  |
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| U.S. Target   | Coalition invasion of Afghanistan                  | Oct 5, 2001  | 3  | -0.1       | 5   |  |
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| Cuban Missile Crisis begins         Oct 23, 1962         1         -1.9         2           Terrorists kill U.S. marines in Lebanon         Oct 24, 1983         11         -2.7         15           China captures U.S. spy plane         Apr 2, 2001         2         -4.0         4           Other         11         -7.1         35           N.Korea invades S.Korea         Jun 26, 1950         14         -12.0         59           Soviet Union invades Afghanistan         Dec 26, 1979         7         -2.2         10           Iraq invades Kuwait         Aug 2, 1990         51         -18.4         138           Russia invades Georgia         Aug 7, 2008         No decline           Russia invades Crimea, Ukraine         Feb 28, 2014         1         -0.9         2           Terrorism         5         -4.1         15           Seizure of American Embassy in Iran         Nov 5, 1979         3         -2.7         6           World Trade Centre (WTC) Bombing         Feb 26, 1993         2         -0.3         3           Oklahoma City Bombing         Apr 19, 1995         No decline           U.S. Embassy Bombings in E. Africa         Sep 23, 1998         18         -11.8         62  | Japan bombs Pearl Harbor                           | Dec 8, 1941  | 12 | -8.2       | 240 |  |
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| Other         11         -7.1         35           N.Korea invades S.Korea         Jun 26, 1950         14         -12.0         59           Soviet Union invades Afghanistan         Dec 26, 1979         7         -2.2         10           Iraq invades Kuwait         Aug 2, 1990         51         -18.4         138           Russia invades Georgia         Aug 7, 2008         No decline           Russia invades Crimea, Ukraine         Feb 28, 2014         1         -0.9         2           Terrorism         5         -4.1         15           Seizure of American Embassy in Iran         Nov 5, 1979         3         -2.7         6           World Trade Centre (WTC) Bombing         Feb 26, 1993         2         -0.3         3           Oklahoma City Bombing         Apr 19, 1995         No decline           U.S. Embassy Bombings in E. Africa         Sep 23, 1998         18         -11.8         62           Bombing of USS Cole         Oct 12, 2000         5         -4.2         12           WTC and Pentagon Attacks         Sep 11, 2001         5         -14.3         42           Madrid Train Bombings         Mar 10, 2004         11         -3.9         18   | China captures U.S. spy plane                      | Apr 2, 2001  | 2  | -4.0       | 4   |  |
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| Iraq invades Kuwait         Aug 2, 1990         51         -18.4         138           Russia invades Georgia         Aug 7, 2008         No decline           Russia invades Crimea, Ukraine         Feb 28, 2014         1         -0.9         2           Terrorism         5         -4.1         15           Seizure of American Embassy in Iran         Nov 5, 1979         3         -2.7         6           World Trade Centre (WTC) Bombing         Feb 26, 1993         2         -0.3         3           Oklahoma City Bombing         Apr 19, 1995         No decline           U.S. Embassy Bombings in E. Africa         Sep 23, 1998         18         -11.8         62           Bombing of USS Cole         Oct 12, 2000         5         -4.2         12           WTC and Pentagon Attacks         Sep 11, 2001         5         -14.3         42           Madrid Train Bombings         Mar 10, 2004         11         -3.9         18   | N.Korea invades S.Korea                            | Jun 26, 1950 | 14 | -12.0      | 59  |  |
| Iraq invades Kuwait         Aug 2, 1990         51         -18.4         138           Russia invades Georgia         Aug 7, 2008         No decline           Russia invades Crimea, Ukraine         Feb 28, 2014         1         -0.9         2           Terrorism         5         -4.1         15           Seizure of American Embassy in Iran         Nov 5, 1979         3         -2.7         6           World Trade Centre (WTC) Bombing         Feb 26, 1993         2         -0.3         3           Oklahoma City Bombing         Apr 19, 1995         No decline           U.S. Embassy Bombings in E. Africa         Sep 23, 1998         18         -11.8         62           Bombing of USS Cole         Oct 12, 2000         5         -4.2         12           WTC and Pentagon Attacks         Sep 11, 2001         5         -14.3         42           Madrid Train Bombings         Mar 10, 2004         11         -3.9         18   | Soviet Union invades Afghanistan                   | Dec 26, 1979 | 7  | -2.2       | 10  |  |
| Russia invades Georgia         Aug 7, 2008         No decline           Russia invades Crimea, Ukraine         Feb 28, 2014         1         -0.9         2           Terrorism         5         -4.1         15           Seizure of American Embassy in Iran         Nov 5, 1979         3         -2.7         6           World Trade Centre (WTC) Bombing         Feb 26, 1993         2         -0.3         3           Oklahoma City Bombing         Apr 19, 1995         No decline           U.S. Embassy Bombings in E. Africa         Sep 23, 1998         18         -11.8         62           Bombing of USS Cole         Oct 12, 2000         5         -4.2         12           WTC and Pentagon Attacks         Sep 11, 2001         5         -14.3         42           Madrid Train Bombings         Mar 10, 2004         11         -3.9         18  |  |              | 51 | -18.4      | 138 |  |
| Russia invades Crimea, Ukraine         Feb 28, 2014         1         -0.9         2           Terrorism         5         -4.1         15           Seizure of American Embassy in Iran         Nov 5, 1979         3         -2.7         6           World Trade Centre (WTC) Bombing         Feb 26, 1993         2         -0.3         3           Oklahoma City Bombing         Apr 19, 1995         No decline           U.S. Embassy Bombings in E. Africa         Sep 23, 1998         18         -11.8         62           Bombing of USS Cole         Oct 12, 2000         5         -4.2         12           WTC and Pentagon Attacks         Sep 11, 2001         5         -14.3         42           Madrid Train Bombings         Mar 10, 2004         11         -3.9         18  | -  |              |    | No decline |     |  |
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| World Trade Centre (WTC) Bombing       Feb 26, 1993       2       -0.3       3         Oklahoma City Bombing       Apr 19, 1995       No decline         U.S. Embassy Bombings in E. Africa       Sep 23, 1998       18       -11.8       62         Bombing of USS Cole       Oct 12, 2000       5       -4.2       12         WTC and Pentagon Attacks       Sep 11, 2001       5       -14.3       42         Madrid Train Bombings       Mar 10, 2004       11       -3.9       18  |  |              |    | -4.1       |     |  |
| Oklahoma City Bombing         Apr 19, 1995         No decline           U.S. Embassy Bombings in E. Africa         Sep 23, 1998         18         -11.8         62           Bombing of USS Cole         Oct 12, 2000         5         -4.2         12           WTC and Pentagon Attacks         Sep 11, 2001         5         -14.3         42           Madrid Train Bombings         Mar 10, 2004         11         -3.9         18   | Seizure of American Embassy in Iran                | Nov 5, 1979  | 3  | -2.7       | 6   |  |
| U.S. Embassy Bombings in E. Africa       Sep 23, 1998       18       -11.8       62         Bombing of USS Cole       Oct 12, 2000       5       -4.2       12         WTC and Pentagon Attacks       Sep 11, 2001       5       -14.3       42         Madrid Train Bombings       Mar 10, 2004       11       -3.9       18   | World Trade Centre (WTC) Bombing                   | Feb 26, 1993 | 2  | -0.3       | 3   |  |
| Bombing of USS Cole       Oct 12, 2000       5       -4.2       12         WTC and Pentagon Attacks       Sep 11, 2001       5       -14.3       42         Madrid Train Bombings       Mar 10, 2004       11       -3.9       18   | Oklahoma City Bombing                              | Apr 19, 1995 |    | No decline |     |  |
| WTC and Pentagon Attacks Sep 11, 2001 5 -14.3 42 Madrid Train Bombings Mar 10, 2004 11 -3.9 18  | U.S. Embassy Bombings in E. Africa                 | Sep 23, 1998 | 18 | -11.8      | 62  |  |
| Madrid Train Bombings Mar 10, 2004 11 -3.9 18   | Bombing of USS Cole                                | Oct 12, 2000 | 5  | -4.2       | 12  |  |
|   | WTC and Pentagon Attacks                           | Sep 11, 2001 | 5  | -14.3      | 42  |  |
| London Train Bombings Jul 6, 2005 No decline  | Madrid Train Bombings                              | Mar 10, 2004 | 11 | -3.9       | 18  |  |
|   | London Train Bombings                              | Jul 6, 2005  |    | No decline |     |  |

<sup>\*</sup>Reaction period: Number of days that the market declined in response to an act of war and then took to recover to its level prior to the event. Source: RBC GAM, Ned Davis Research. An investment cannot be made directly into an index. The table does not reflect transaction costs, investment management fees or taxes. If such costs and fees were reflected, returns stated would be lower. Past performance is not a guarantee of future results.



## Have you made any adjustments to your portfolios to reflect this changing environment?

We have made several changes to our tactical asset mix over the past several weeks as the spike in market volatility provided us with an opportunity to re-deploy cash reserves that we had built up over the past few quarters. The recent rise in yields and decline in stock prices allowed us to add back to these positions at more attractive levels.

Specifically, we boosted our fixed income allocation by 0.5% in two trades in late January/early February. At the time, bond yields had risen and removed some of the valuation risk so we felt it prudent to narrow our degree of underweight. We also felt that a slightly higher bond allocation would provide additional cushion to portfolios in the event of a downturn in the economy or stocks. That said, we remain underweight fixed income, reflecting our view that bonds are likely to deliver low to even negative returns over our forecast horizon in our base case scenario.

Over the last week, we have also added 0.5% back to our equity position, sourced from cash. Although risks to capital markets have risen measurably over the past several months, the sell off so far this year has resulted in a significant adjustment to equity prices, reducing valuation risk and improving expected returns.

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