Russia-Ukraine Report

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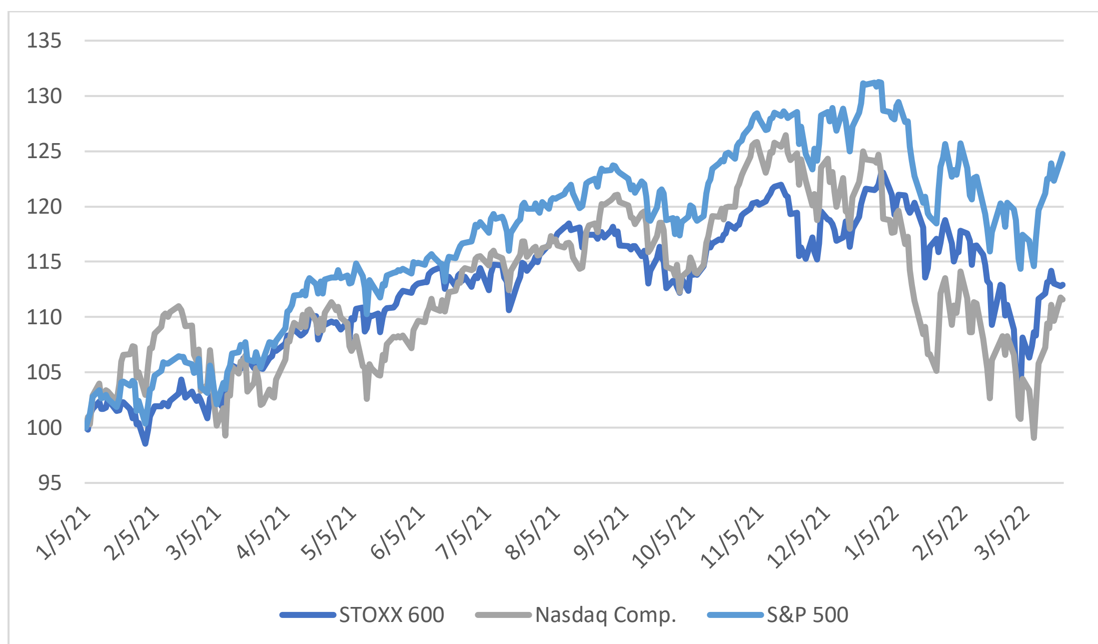
War Invasion – Equities

Intro

In an already uncertain prospect for stock markets upon entering the year, characterized by inflationary concerns, interest rate hikes, and decelerating economic growth; the current geopolitical situation has further fuelled market volatility (Jackson and Curry, 2022). Following Russia's military invasion in Ukraine in late February, equity investors saw severe downturns on market-wide indices, as the STOXX 600 and S&P 500 tumbled into a correction territory[1] (Figure 1). Although broader indices are generating losses, history provides reasons for optimism as merely 5 of 24 market corrections have fallen into a bear market, a negative trend which tends to last 15 months (Chen, 2022). On the other hand, the current geopolitical tensions officially sent the tech-denominated Nasdaq Composite into bear-market territory[2], and may be a signal of investors 'risk-off' sentiment. The current invasion is expected to have long-term global implications as Putin's actions has already "wiped out 15 years of Russian economic growth" with anticipated spill-over effects on Western economies, hence posing a direct threat to financial markets (Gongloff, 2022).

Figure 1: Index performance 01/2021-03/2022



Source: Yahoo Finance (2022).

[1] -17.5% and -13.8% from its' peak, respectively.
[2] -24.4% from its peak.

Despite ongoing concerns surrounding Russia-Ukraine tensions and macroeconomic developments, equities have recovered to "pre-invasion" levels, supporting the notion that historical invasion events have provided valuable purchasing opportunities (Fitzgerald, 2022). However, analysts argue that the prevailing stock market is "different" from recent market crashes, as the Federal Reserve will not act in favour of equity holders (Savitz, 2022). Consequently, the only certainty in uncertain times is market volatility and according to Bank of America, "there is a decent chance that things could get worse from here" (Imbert, 2022).

The invasion

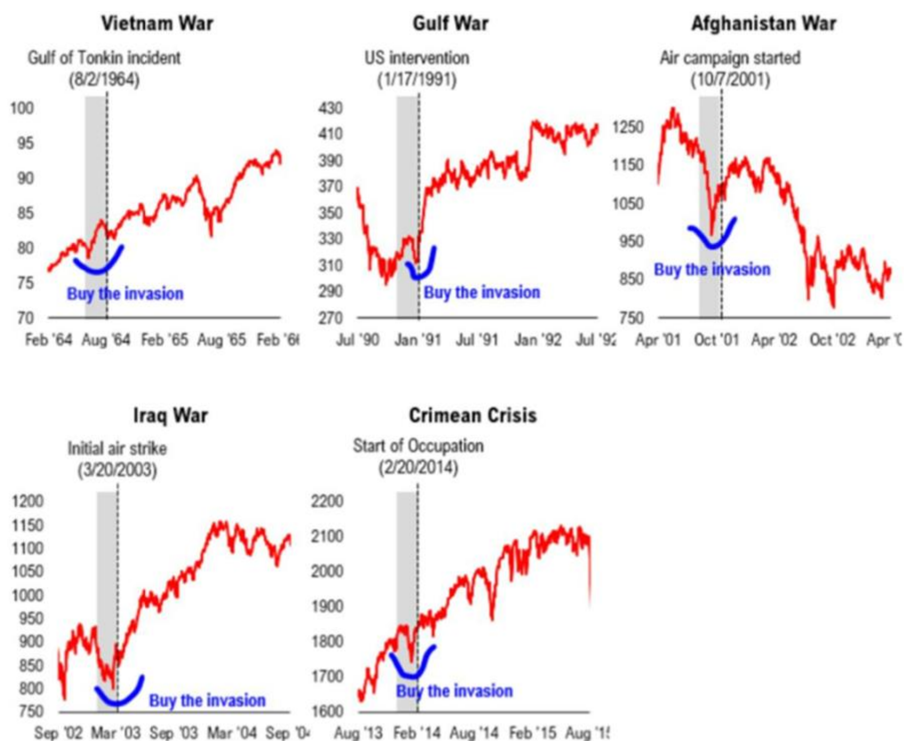
Following escalating political tensions between Russia and Ukraine, Russian president Vladimir Putin launched a deadly invasion on February 24th with explosions and missile strikes targeted at several Ukrainian cities. The military assaults represent the largest European ground war since World War II and consequently, caused market-wide volatility and triggered a sharp sell-off in equities (Santora and Ives, 2022). In response, Western countries imposed sanctions targeted at Putin and associated oligarchs, ultimately triggering a Russian financial crisis as the Moscow stock exchange (MOEX) plunged an unprecedented 45% intra-day and the Russian ruble has lost 40% of its value relative to the U.S. dollar (Nelson, 2022).

Despite the ongoing invasion, the primary concern on Wall Street is not tied to Putin, rather to the actions of Federal Reserve. The imposed sanctions have caused inflation expectations to rise even higher following substantially increased prices on energy commodities and agricultural products, occurring at a time when investors were already contending with high inflation and the anticipation of interest rate hikes. As a result, stock markets have experienced significant outflows, with European equities recording an unprecedented weekly outflow of $6.7 billion (Msika, 2022). Given the geographical proximity to the conflict zone and a deeper trade relationship with Russia, European markets have suffered relatively more than American counterparts. Hence, Morgan Stanley lowered their target for the STOXX 600 index and expects inferior performance relative to U.S. stocks this year (Slimmon, 2022).

Buy the invasion

During past invasions, "buying the invasion" has been a successful strategy for investors as stocks have historically reached a bottom prior to the event (Fitzgerald, 2022). The chart below depicts how equity markets have bottomed in the six months preceding all five historical invasions (Figure 2).

Figure 2: Historical invasion performance



Source: Fundstrat (Fitzgerald, 2022).

On the 25th February (one day after the invasion), Fundstrat's Tom Lee claimed that a handful of factors point to markets already having bottomed out. He argued that the market low had already been reached and expected stocks to enter "risk-on rally mode", setting new all-time highs during the year 2022 (Fitzgerald, 2022). One month later, equities have regained the losses incurred since Putin's invasion, as the STOXX 600 and S&P 500 registered their largest weekly advances since November 2020 (Rovnick et al., 2022).

Despite the fact that market-wide indices remain in negative territory year-to-date, equities have rallied from the bottom registered during the invasion (Figure 3). Thus, in hindsight it appears that markets once again offered a "buy the invasion" opportunity. Macro strategist at CPR Asset Management attributes the advancements to "investors starting to trade on fundamentals again" after seeing panic outflows. Notably, the tech-heavy growth index, Nasdaq Composite, has recorded the highest gains since the bottom. Hence, the rebound in tech stocks signals a potential reversal of market sentiment as other "risk-on" assets have also experienced positive gains such as cryptocurrencies and 'hyper-growth' stocks.

Figure 3: Recent index performance

	STOXX 600	Nasdaq Composite	S&P 500
Since invasion (%)	3.32%	5.16%	6.02%
Since bottom (%)	9.29%	12.62%	9.09%
YTD (%)	-7.44%	-10.51%	-5.29%

Source: Yahoo Finance (2022).

Thus far, it appears that Tom Lee's predictions remain intact, upon the assumptions that inflation flattens out and the Fed pursues anticipated interest rate hikes of 0.25-0.5 bps. However, a protracted Russia-Ukraine conflict poses a threat to the assumptions as an unexpectedly tightened monetary policy could be required to grapple with persistently increasing inflation following the invasion (J.P. Morgan, 2022). Therefore, it remains uncertain whether the long-term market development will continue the positive trend or whether this was a temporary bounce, similar to that succeeding the Afghanistan War (Figure 2).

Current sentiment

Market sentiment is often driven by two counterpart emotions, fear and greed. Sustained losses in financial markets can cause fear among investors, often resulting in irrational behaviour and market instability. Three common measures applied to empirically analyse the markets' fear are the VIX (CBOE Volatility Index i.e., Fear index), SKEW (CBOE Skew Index), and CNN Money Fear & Greed Index (Caporale et al., 2018)

The most popular measure is the VIX, derived from the prices of S&P 500 options and measures the expected annualized change in the index over the coming 30 days. Thus, it is an implied volatility index: a lower level reflects lower demand from investors to buy protection against risk, hence a lower level of market fear (alternatively, higher market greed). The VIX tends to move between a measure of 10-20 during "normal" markets and accelerates into the 30-40 range upon periods of distress (Lamont, 2022). The VIX has become increasingly elevated over the past month, topping at a yearly high of 37.5 upon the invasion. However, has declined recently as the current measure of 20.81 suggests anticipated volatility but decreasing fear.

The SKEW can be best described as a cousin to the VIX. Similar to VIX, it is an index based on option pricing for the S&P 500. Whilst the VIX measures at-the-money options, the SKEW

focuses on options out-of-the-money. In particular, the SKEW compares sell- and buy-options and measures how ‘skewed’ the relationship relative to a normal state. The measure is constructed in a range between 100-150 with an average reading of 120. The current SKEW of 140.26 suggests a heightened risk for the occurrence of a larger downturn. The contrasting VIX and SKEW indications can be interpreted as investors not being concerned about a market decline in the very short-term yet are afraid that the long-lasting bull-run can face an abrupt end. Hence, they are willing to pay more than usual to purchase sell-options for insurance against a market crash (Blomgren, 2021).

The final measure comprises seven indicators to capture the markets’ sentiment in a ‘Fear and Greed’ index produced by CNN Money (2022). The greater the discrepancies from the individual pillars’ average, the higher the measure on a scale from 0-100. Whereby 50 indicates neutrality, <25 and >75 suggest extreme fear and greed, respectively. The current level of 46 indicates slight fear, after bottoming at 23 upon Putin’s invasion of Ukraine.

Figure 4: Market sentiment indicators

	VIX	SKEW	Fear & Greed
Current	20.81	140.26	46.00
Normal	18.00	120.00	50.00
High	30 - 40		>75
Low	10 - 20		<25

Source: Yahoo Finance (2022) and CNN Money (2022).

The three indicators should not undermine investment decisions individually, however, provide insight regarding the markets’ current risk aversion when combined. Noteworthy, the VIX often tops simultaneously as Fear & Greed bottoms in periods of heightened fear (Lamont, 2022). Taken together, the VIX and Fear & Greed measures provided investors with a strong buy signal amidst the invasion, yet the increasing SKEW index indicates that a larger downturn may be on the horizon.

Although short-term sentiment may have shifted from bearish to bullish after the invasion, merely energy and basic materials sectors have produced positive returns year-to-date, two sectors which are generally anti-cyclical. Hence, the breadth of profitable stocks is limited and should signal cautiousness to investors as a positive market breadth tends to be a fundament for a bull market. Thus, it remains to be seen whether the markets experienced a temporary

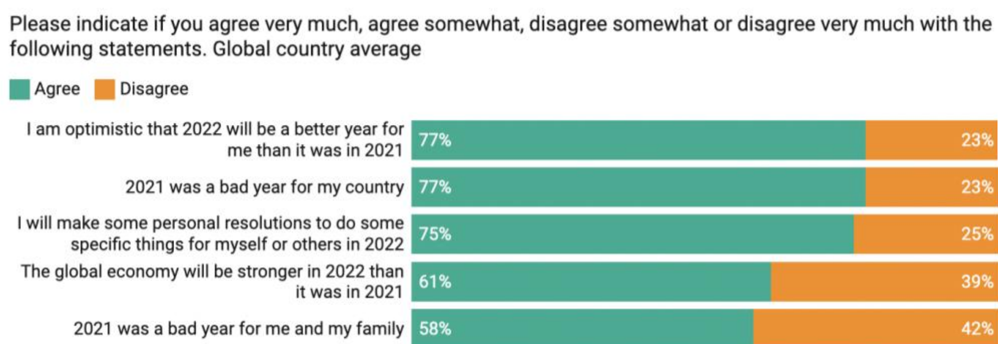
bounce or a continuation of the bull run. As investors are currently focussing on broader macroeconomic fundamentals, the Russia-Ukraine conflict poses an ongoing concern since central banks may have to act at an accelerated pace.

War Invasion – Global Markets / Macro

Intro

After a tumultuous 2021, where the world and society as we know it were radically disrupted due to the COVID-19 outbreak, societal optimism was widespread for 2022. In fact, according to a survey conducted in 33 countries by Ipsos' Global Advisor at the end of 2021, the outlook that people had for the global economy going forward was positive overall, with about 3/5 of the interviewee expecting positive changes compared to 2021 (Lopez, 2021). This is also shown in the main results of the survey, displayed below:

Figure 5: Outlook for 2022



Source: Lopez (2021).

As shown from the char above, in fact, it is clear that whereas for the majority of people 2021 was a rather negative year (even if better than 2020), there was still a lot of hope in terms of the prospects of 2022, with over three quarters of the people (row 1) believing that the latter would have been a year of positive change (Lopez, 2021).

By the time this report is being written, it is obvious that such expectations have drastically worsened, mainly due to the the escalation of the conflict between Russia and Ukraine, which culminated with a full blown Russian invasion of Ukraine on February 24. Since then, major changes have occurred not only in Russia, but on overall global markets: apart from the Russian Ruble plummeting and oil & gas price soaring to all time highs (with oil surpassing $130 per

barrel), actions were taken among countries worldwide, in a coordinated fashion, in order to hijack Russia's plans. Amongst the latter, 1) sanctions were imposed by the E.U. together with the U.S., Switzerland, Japan, Taiwan, Australia, the U.K., and Canada, 2) bans on oil, gas, and coal imports as well as on additional russian energy investments were implemented in the U.S. and 3) plans were made to reduce the UK and EU's dependency on Russia' energy supplies going forward ("The Russia-Ukraine Crisis", 2022).

Hence, it is undeniable that Russia's invasion of Ukraine has had a significant impact on global markets, and will continue to do so in the future. Nevertheless, the extent of this future impact remains unclear, especially given that the major global players will be affected in significantly different ways. Hence, whereas the previous section on Equities was mostly centered on what has happened and what is happening, this section will instead be rather forward-looking, trying to shed some light on what is to be expected for the global economy going forward. To achieve this end, the section will be divided according to the outlook that is forecasted for each major regional market of interest, namely the U.S., Europe, Asia, CEEMA, CE3, and Latin America ("Russia-Ukraine", 2022).

Before delving into a region-by-region analysis, however, it is necessary to provide a schematic overview of what is to be expected, focusing on growth and inflation:

Figure 6: GDP and CPI forecasts 2022-2023

	Real GDP (%)		CPI (%)	
	2022E	2023E	Q4 2022E	Q4 2023E
Global	4.6	3.9	4.4	2.8
U.S.	4.5	3.7	4.4	2.1*
Euro Area	3.0	2.3	5.3	2.3
Japan	2.3	1.4	1.7	1.2
China	5.3	4.7	1.9	2.2

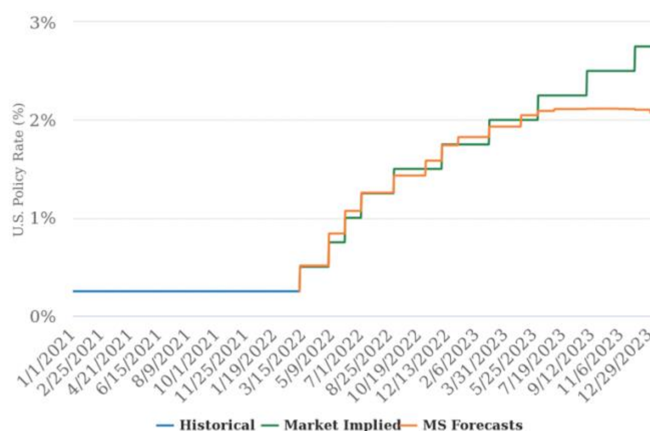
Source: "Russia-Ukraine" (2022).

As such, whereas growth, globally, is forecasted to be relatively strong throughout 2022, inflation is nevertheless expected to surge going forward. Still, as shown by the chart, the forecasts for growth and inflation are better investigated on a regional basis due to their seemingly varying nature based upon where one is focusing on. Hence, the following sections will work towards this goal ("Russia-Ukraine", 2022).

United States

Inflationary pressures were a concern for the United States' economy and its citizens already during the last quarter of 2021. Indeed, the worry that American consumers had in terms of rising prices is perfectly represented via a poll by Country Financial that was brought forward in October 2021: here, not only did the majority of the respondents (88%) indicate their worries for rising prices, but also a significant part of the population indicated their plans to cut back on their spending in terms of meal, technology devices, clothing, travelling, and driving. This fear was of course not uncalled for, given the CPI reaching highs that went over its 30-year record in the same month, with 6.2% year-over-year change (Konish, 2021). As such, the invasion of Ukraine represented a further predicament in this regard, as the Federal Open Market Committee was then confronted with the tough decision of going for reduced inflation vs. Supporting economic growth. According to Ellen Zetner, Chief U.S. Economist at Morgan Stanley, "… the Fed will prioritize growth over inflation, but to stay the course for now on its intent to begin the hiking cycle in March" ("Russia-Ukraine", 2022), leading analysts at the firm to maintain their 25 basis points rate hike forecast baseline (150 basis points in 2022, and 100 basis points in 2023), whilst adjusting their real GDP growth forecasts (down to 4.5% expected for 2022) and their CPI inflation estimates (forecasting an increase of 40 basis points leading to a surge of 4.4%), as displayed on the following page ("Russia-Ukraine", 2022):

Figure 7: Forecasts for U.S. rate 2022-2023



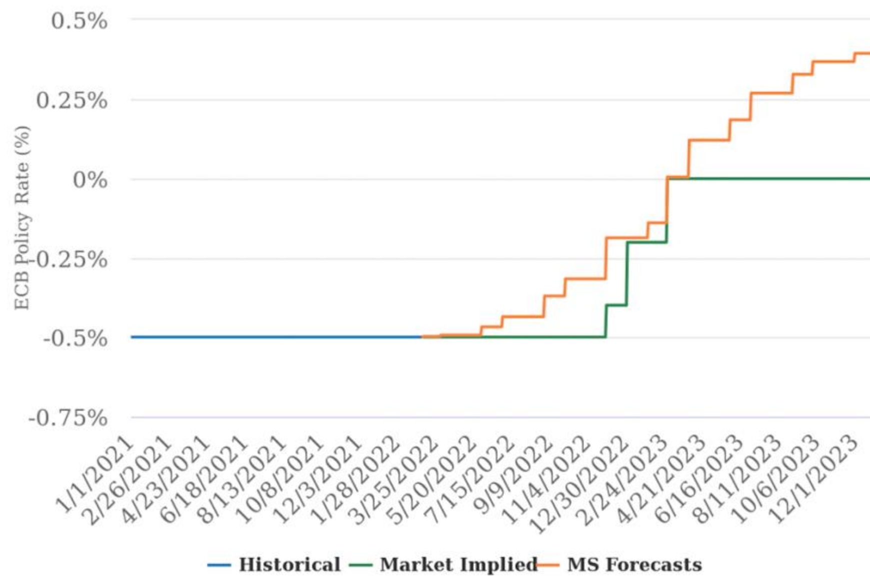
Source: "Russia-Ukraine" (2022).

Europe

Whereas the situation is rather pressing in the United States, Europe is undeniably one of the regions that are the most impacted by the invasion, namely due its constituent regions' dependence on both Russian and Ukrainian imports (gas and oil from the former, corn and wheat from the latter). Hence, it is easy to understand why analyst such as those at Morgan Stanley Research had to update their CPI and GDP forecast for the near to medium term. As such, they now estimate CPI inflation of 5.3% for the rest of 2022, subsequently lowering it to 2.3% for the year 2023. In terms of growth, the 'sanction war' that many European countries are undergoing is having negative effects on both sides, especially for countries such as Germany and Italy ("Russia-Ukraine", 2022). For example, Italy has joined the other EU nations, and the U.S. in condemning Russia's actions not only verbally but practically, via sanctions. However, as mentioned by Italy's Prime Minister Mario Draghi, Italy is a country that imports over 95% of its gas, and about 40% of such imports come exactly from Russia. Hence, given Italy's dependence on the same country it is currently 'attacking', it is reasonable to expect that its short-term growth prospects will be negatively affected, especially given the lack of ready substitutes (due to tumultuous conditions Libya and Nigeria, the current alternatives) (Coratella, 2022).

Hence, GDP growth prospects for the region have also been reduced by about 25%, going from 3.9% initial forecasts to current forecasts of 3.0%. In addition, given the uncertain nature of the conflict, it is now wise, and adviseable, to implement an additional scenario when trying to predict future growth and inflation prospects, one that considers the possibility of an outright stop of inflows of Russian oil and gas into the region since, according to Jens Eisenschmidt, Chief European Economist at Morgan Stanley, "the current situation is in many ways binary, with possible outcomes that are worlds apart" ("Russia-Ukraine", 2022). Nonetheless, in terms of expectations of ECB actions, withdrawals of fiscal support are forecasted for the second and third quarter of 2022, whereas the end of the year, and the beginning of 2023, are set to experience hikes in policy rates reaching over 40 basis points ("Russia-Ukraine", 2022):

Figure 8: ECB rate forecasts 2022-2023



Source: "Russia-Ukraine" (2022).

Asia

The overall picture in Asia seems to be better and more solid than its previously counterparts. As such, whereas prices in the U.S. are soaring at 7%, prices in Asia are only up 2%, which is notable given the tumultous global situation. This successful situation in Asia can be attributed to a variety of factors, such as overall macroeconomic solidity in the region, reduced inflationary pressures, and plenty of leeway to implement fiscal policies to counteract the negative effects of the Russian invasion. Hence, according to Chetan Ahya, Chief Asian Economist at Morgan Stanley, "The primary risk is that prolonged and heightened tensions curtail the capex cycle and weaken trade" ("Russia-Ukraine", 2022). Still, it is adviseable to look further into the two 'hottest' nations within the region at the moment, namely China and Japan. In terms of the former, whereas its direct trade impact with Russia is seen as stable and unconcerning, given that it merely represents 3% of Chinese imports and 2% of exports, current Omicron-related predicaments in Hong Kong, paired with a liquidty concerns in the property market and the possibility of a hike in equity risk premium seem to suggest the necessity to become more parsimonious with future forecasts for the country and region; however, in terms of the latter, given the ever-growing equity discount in the Japanese market, there seems to be hope for future growth ("Russia-Ukraine", 2022).

CEEMA & CE3

In overall CEEMA (Central & Eastern Europe, Middle East, and Africa) economics, and in Poland, Czech Republic, and Hungary (CE3), growth is expected to decrease and inflation is expected to rise, especially given 1) increasing prices of commodities (for the former) and 2) direct dependence on Russia and, hence, expectations of disruption in the supply chain (for the latter). Nevertheless, whereas inflation seems to be the main worry at the moment within these regions (with possible further hikes in the short term), analysts at Morgan Stanley believe that these problem will be tackled by Central Banks' actions centered around financial stability ("Russia-Ukraine", 2022).

Latin America

Lastly, the picture in Latin America is two-fold. Whereas in terms of inflation surges, it is expected that the region will be severely impacted due to the heavy commodity shocks (and, as a consequence, increases in policy rates are to be expected), the fact that the region mainly trades with China and the U.S. and does not heavily depend on Russia makes it promising for its overall growth, which is likely to be far less affected relative to the other regions ("Russia-Ukraine", 2022).

Sources

Blomgren, M. (2021). Ta tempen på börshumöret. Avanza. https://www.avanza.se/placera/redaktionellt/2021/09/07/ta-tempen-pa-borshumoret.html

Caporale, G. M., Gil-Alana, L., & Plastun, A. (2018). Is market fear persistent? A long-memory analysis. Finance Research Letters, 27, 140-147.

Chen, J. (2022). Correction definition. Investopedia. https://www.investopedia.com/terms/c/correction.asp

CNN Money (2022). Fear & Greed Index – Investor Sentiment. https://money.cnn.com/data/fear-and-greed/

Coratella, T. (2022, March 9). Italy's challenging divorce from Russia. ECFR. Retrieved April 6, 2022, from https://ecfr.eu/article/italys-challenging-divorce-from-russia/

Fitzgerald, M. (2022). Markets may have bottomed as investors 'buy the invasion,' Fundstrat's Tom Lee says. CNBC Business. https://www.cnbc.com/2022/02/25/markets-may-have-bottomed-a-investors-buy-the-invasion-fundstrats-tom-lee-says.html

Gongloff, M. (2022). Putin's war to wipe out 15 years of Russian economic growth. Bloomberg. https://www.bloomberg.com/news/articles/2022-03-24/putin-s-war-seen-wiping-out-15-years-of-russian-economic-growth

Imbert, F. (2022). There's a 35% chance that the S&P 500 could fall into a bear market, Bank of America says. CNBC Business. https://www.cnbc.com/2022/03/12/theres-a-35percent-chance-that-the-sp-500-could-fall-into-a-bear-market-bank-of-america-says.html

Jackson, A. L. & Curry, B. (2022). March stock market outlook. Forbes. https://www.forbes.com/advisor/investing/stock-market-outlook-and-forecast/

J.P. Morgan. (2022). The Russia-Ukraine Crisis: What Does It Mean For Markets? J.P. Morgan Global Research. https://www.jpmorgan.com/insights/research/russia-ukraine-crisis-market-impact

Konish, L. (2021, November 18). 88% of Americans are worried about inflation. here's where they're planning to cut back. CNBC. Retrieved April 6, 2022, from https://www.cnbc.com/2021/11/18/inflation-has-88percent-of-americans-worried-heres-how-they-will-cut-back.html

Lamont, D. (2022). Ukraine crisis: how does the stock market perform when the Vix fear gauge surges? Schroders. https://www.schroders.com/en/hk/retail-investors/insights/managers-views/ukraine-crisis-how-does-the-stock-market-perform-when-the-vix-fear-gauge-surges/

Lopez, A. (2021). Global predictions for 2022 | ipsos. Ipsos. Retrieved April 6, 2022, from https://www.ipsos.com/en/global-predictions-2022

Msika, M. (2022). Europe Stocks See Biggest Ever Weekly Outflow as War Intensifies. Bloomberg. https://www.bloomberg.com/news/articles/2022-03-04/europe-stocks-see-biggest-ever-weekly-outflow-as-war-intensifies

Nelson, E. (2022). Russia’s ruble continues its slide as new curbs restrict access to foreign currency. The New York Times. https://www-nytimes-com.eur.idm.oclc.org/2022/03/09/business/russia-ruble-central-bank.html

Rovnick, N., Lockett, H., & Friday, F. (2022) European stocks erase all losses since Russia invaded Ukraine. Financial Times. https://www-ft-com.eur.idm.oclc.org/content/94aa3d14-c21d-4bce-b515-656b7dfb8d87

Russia-Ukraine: Mapping geopolitical uncertainty. Morgan Stanley Research Forecasts. (2022). Retrieved April 6, 2022, from https://www.morganstanley.com/ideas/ukraine-russia-conflict-global-economic-outlook

Savitz, E. J. (2022). Nasdaq Enters Bear Market Territory. Ukraine and Oil Worries Add to Rate Fears. Barron's. https://www.barrons.com/articles/nasdaq-composite-index-bear-market-tech-stocks-51646691212?tesla=y

Santora, M. & Ives, M. (2022). One Week After Russia's Invasion, Here's How the War Is Evolving. The New York Times. https://www-nytimes-com.eur.idm.oclc.org/2022/03/03/world/europe/russia-ukraine-war.html

Slimmon, A. (2022). Stock market outlook 2022. Morgan Stanley. https://www.morganstanley.com/ideas/stock-market-outlook-2022

The Russia-Ukraine crisis: What does it mean for markets? J.P. Morgan Research. (2022). Retrieved April 6, 2022, from https://www.jpmorgan.com/insights/research/russia-ukraine-crisis-market-impact

Yahoo! Finance (2022). Stock Market Live, Quotes, Business; Finance News. http://finance.yahoo.com/