Ukraine War Will Affect Global Supply Chains

The Russian invasion of Ukraine has rattled global supply chains that are still in disarray from the COVID pandemic. This is adding to already surging costs, prolonged deliveries and other challenges for companies trying to move goods around the world.

The clash in Ukraine, a geographically large country at the centre of Europe and Asia, has caused flights to be cancelled or re-routed, putting pressure on cargo capacity and raising concerns about further supply chain disruptions. It is putting at risk global supplies of products like platinum, aluminum, and steel, whilst shutting down factories in Europe, Ukraine and Russia. The conflict has also sent energy prices soaring, further raising already inflated shipping costs.

Additionally, the conflict is also setting off a scramble among global companies as they cut off trade with Russia to comply with the most far-reaching sanctions imposed on a major economic power since the end of the Cold War. The new challenges follow more than two years of disruptions, delays and higher prices for beleaguered companies that use global supply chains to move products

Percent of ethnic Russians by province (in 2001)

Where Tymoshenko won vote majority in 2010

Yanukovych won in 2010.

RUSSIA

POLAND

Mykolaiv

Zaporizhia

Kherson

Odessa

Crimea

Sevastopol O

Source: State Statistics Service of Ukraine, Ukrainian Census 2001

C. Inton, 24/04/2014

around the world. And while the economic implications of the war and sweeping sanctions on Russia are not yet clear, many industries are bracing for a bad situation to get worse. "Global supply chains are already hurting and stressed because of the pandemic," said Laura Rabinowitz, a trade lawyer at Greenberg Traurig. She said the effects would vary for specific industries and depend on the length of the invasion, but the impacts would be magnified because of an already-vulnerable supply chain. "There is still tremendous port congestion in the United States. Freight costs are very high. Factory closures in Asia are still an issue," she said.

Companies with complex global supply chains, like automakers, are already feeling the effects. Volkswagen said Tuesday that shortages of parts would force it to slow production at its main factory in Wolfsburg and several other German plants, while BMW said it would curtail production at facilities in Germany, Austria and Britain. Automakers could see shortages of other key materials. Ukraine and Russia are both substantial sources for palladium and platinum, used in catalytic converters, as well as aluminum, steel and chrome. Semiconductor manufacturers are warily eyeing global stocks of neon, xenon and palladium, necessary to manufacture their





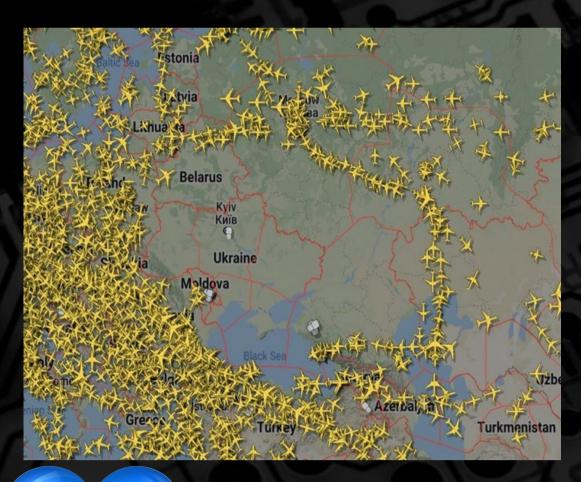
products. "The war just makes the worldwide situation for commodities more dire," said Christopher F. Graham, a partner at White and Williams. Jennifer McKeown, the head of global economics service at Capital Economics, said the global economy appeared relatively insulated from the conflict. But she said shortages of materials like palladium and xenon, used in semiconductor and auto production, could add to current difficulties for those industries. Semiconductor shortages have halted production at car plants and other facilities, fueling price increases and weighing on sales. "That could add to the shortages that we're already seeing, exacerbate those shortages, and end up causing further damage to global growth," she said. The Biden administration said the technology restrictions alone would stop about a fifth of Russian imports. But the impact on trade from the financial curbs is likely to be even larger, cutting off Russia's imports from and exports



to nearly all of its major trading partners, said Eswar Prasad, a professor of trade policy at Cornell University. "Even when trade flows may take place directly between Russia and its trading partners, the reality is that payments often have to go through a Western-dominated financial system, and usually have to go through a Western currency," he said.

In a statement on Saturday, the president of the European Commission, Ursula von der Leyen, said that Europe and its allies were "resolved to continue imposing massive costs on Russia" and that disconnecting Russian banks from SWIFT would also halt Russian trade. "Cutting banks off will stop them from conducting most of their financial transactions worldwide and effectively block Russian exports and imports," she said. The economic consequences of these moves are not yet entirely clear. Russia accounts for less than 2 percent of global domestic product, so the implications for other countries may be somewhat limited. Shipping ports around the Black Sea have closed, halting dozens of cargo vessels. But the more immediate effects are likely to be felt in air shipments between Asia and Europe, which now have to divert around Russian airspace, said Eytan Buchman, the chief marketing officer of the Freightos Group, a digital freight booking platform. Western Europe and Russia have imposed reciprocal flight bans, bringing travel between the two regions to a halt. On Monday, Jen Psaki, the White House press secretary, said a U.S. ban on Russian flights was "not off the table."





As shipping planes divert around Russian airspace, they will take longer and spend more on fuel, and they may opt for smaller and lighter loads as a result, Mr. Buchman said. "Especially on the air cargo side, it will have a big impact."

Already, flights along major trade routes have slowed somewhat, according to an analysis by Flexport, a logistics company. Flights between New Delhi and London, for example, were about 8 percent longer on average between Wednesday and Sunday than similar flights three months prior, data from Flightradar24, an aviation tracking firm, showed.

Longer trip times could create cascading delays and backlogs for industries that depend on airfreight, including electronics, semiconductors and finished products.

So far, though, the effects of the flight bans have been limited. For passenger airlines, there were already relatively few tourists traveling between Europe and Asia, where many countries have strict coronavirus policies.

Cargo carriers are nimble, said John Grant, a senior consultant with OAG, an aviation advisory and data firm. "They can move with demand, so I suspect there will be limited immediate impact."

















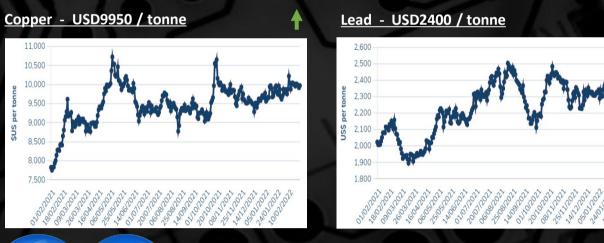
















The Financial Cost of War



35% drop in the value of Russian **Ruble almost** immediately the invasion started

RUB versus USD - USD 0.0085 vs. RUB 1.0000



HAPPY 1ST BIRTHDAY TO OUR HEAD OF SECURITY – POPPY LONGBOTTOM TURNS 1!!!





This Month in Tech History...

<u>March 28, 1954</u> – The first color television sets using the NTSC standard are offered for sale to the general public. NTSC is the standard used in most of North and South America, Japan, and a few other places in the world.

March 4, 1956 – An Wang sells his patent for magnetic core memory to IBM for \$500,000. One of the most important inventions in computer history, core memory was the principal method of random access storage used in digital computers from the mid-1950s until the mid-1970s. The US Patent Office awarded Wang a patent, for what he called a pulse transfer controlling device and which formed part of the solution to using core memory practically, in 1955. It was MIT's Jay Forrester who ultimately perfected core memory, initially used in the 1951 Whirlwind computer.

March 1, 1966 – The unmanned Soviet space probe Venera 3 crashes into the night side of Venus, becoming the first spacecraft to land on another planet.

March 1, 1976 – Steve Wozniak completes the basic design for the circuit board of a (relatively) easy-to-use personal computer. The next day he shows it to the Homebrew Computer Club, which Steve Jobs attends. Jobs realizes the potential and convinces Wozniak not to give away the schematics but instead produce printed circuit boards to sell. The two Steves form a company, which they name Apple, and Wozniak's design becomes the basis of the Apple I computer. The rest, as they say, is history.

March 26, 1991 - Tim Berners-Lee introduces WorldWideWeb, the first web browser and WYSIWYG HTML editor.

<u>March 25, 1992</u> – Microsoft Corporation releases its Excel 4.0 spreadsheet program. Excel was one in a long line of practical applications that Microsoft and other companies developed for personal computers, making them more appealing to home and office users. The earliest commercial computerized spreadsheet was VisiCalc, written by Ed Frankston and Dan Bricklin and released for the Apple II personal computer in 1979.

March 21, 2006 – The origins of Twitter came out of a brainstorming session at the podcasting company Odeo. The initial concept was to share short messages via SMS text messaging with a small group. Jack Dorsey was the primary designer of what was then code-named "twttr" and sent the first message at 9:50am on March 21st, 2006 - "just setting up my twttr." Twitter would be released to the public that July and found its first major success at the South by Southwest Interactive conference in 2007, shortly after it had been spun-off as its own company, Twitter, Inc.

March 1, 2008 – America Online discontinues the Netscape web browser. Netscape was the first commercial web browser, largely responsible for helping popularize the Internet in the mid-1990's. Netscape eventually was overtaken by Microsoft's Internet Explorer, as Microsoft included it for free with every copy of Windows. However, the computer code for Netscape lives on as the basis of the Mozilla Firefox browser project, which continues to gain popularity to this day.





CHINA HOLIDAYS 2022

Dragon Boat Festival



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