

Russian invasion of **Ukraine** and digital assets

War in Ukraine has shown the
interconnectivity of crypto
and traditional financial
markets

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2 Executive summary

The main world event in late February and March 2022 was undoubtedly the Russian invasion of Ukraine. The possibility of a Russian invasion had been speculated about for weeks, so it was not a bolt from the blue, but rather a re-escalation of the 2014 conflict. The course of events following the Russian invasion is rather surprising in at least three respects.

First, Russia did not fulfil its ambition to quickly seize cities and key communication nodes in Ukraine. Instead of a short operation, the conflict quickly settled into the exhausting form of a linear conflict. Second, there was an unusually swift, unusually strong and highly coordinated sanctions response by the EU, the US, the UK and Canada, joined by many other countries and private actors. Third, there has been a shift from sanctions against individuals to systemic sanctions, making it much harder for Russia to function in the international economy.

The impact of these macro-political and macro-economic events on the cryptocurrency markets has so far been more indirect. The main impact will be the acceleration of regulation related to sanctions evasion. Ukrainian politicians made headlines by calling for the freezing of Russian assets in the cryptocurrency sector, as is the case with other types of assets. On the other hand, digital assets have also played a positive role as a financial channel, allowing for the rapid transfer of funds to embattled Ukraine.

The cryptocurrency market is not large enough to effectively circumvent sanctions in any significant way. And even within it, much of the total supply is held by long-term holders and others with verified identities. One option would be so-called privacy coins, which focus on protecting the privacy of their holders. But the market for these was worth a total of \$10 billion at the time of the investment.

3 Past invasions and their impact on markets

As the past Russian military incursions into countries neighbouring Russia over the last 25 years, namely Chechnya in 1999, Georgia in 2008 and the annexation of Crimea in 2014, show, there is not significant influence on global (investment) markets. Especially in the first two cases (Chechnya and Georgia), this is due to the fact that, from a global perspective, these were regional conflicts in places that do not have significant natural resources or trade routes going through them.

The impact of such events on the price of cryptocurrencies can only be analyzed using the example of the Russian annexation of Crimea in 2014. The chart that tracks the impact of the Russian annexation of Crimea on US stock indices and bitcoin shows that it was not very significant. There can be no question of the impact on bitcoin because it was not sufficiently entrenched in the traditional financial world at the time and its price was driven by things other than global politics. In the case of S&P 500 index, we also observe almost no impact.

In the 8 years since the annexation of Crimea, however, bitcoin has moved more into the mainstream of the financial world and there has been growing correlation with traditional investment markets, particularly US equities in early 2022. Most often, bitcoin is compared to the S&P 500 stock index.

Following the announcement of Russia's military invasion of Ukraine, both bitcoin and the S&P 500 index saw a momentary decline. But they ended the week on similar levels as they have started it. The S&P 500 index has seen a persistent downward trend this year, but this is more related to the expected Fed interest rate hike than the Russian invasion of Ukraine.

Of course, the current conflict is larger than previous ones and its impact on global markets could be greater. There are risks to the global economy, particularly in the areas of energy prices, as Russia is a major exporter of oil and gas, and food prices, as 30% of the world's wheat is grown in Russia and Ukraine.¹ However, the situation on the energy markets could have a positive effect on the profitability of US companies listed in the S&P 500 index. 21 of them are counted in the energy sector and their shares should rise if energy prices increase.

1 <https://www.politico.com/news/2022/03/12/ukraine-grain-food-supply-00016764>

4 Pre-war crypto regulation

Prior to the outbreak of war, lawmakers in both Russia and Ukraine were grappling with the regulation of the crypto sector. While in Ukraine this was the culmination of a longer-term process, in Russia more of a clash of the regulators was taking place.

4.1 Ukraine

Digital friendly Ukraine

In 2019, Ukraine established the Ministry of Digital Transformation, a signal that it wants to become a digital-friendly country. A law to legalize cryptocurrencies was first proposed in 2020. It was passed in September 2021.² However, President Zelensky refused to sign the law because it would have created a new crypto-only regulator, which he felt would be too expensive.

According to the 2021 Global Crypto Adoption Index³ by blockchain intelligence company Chainalysis, Ukraine ranks sixth in the world in terms of the total volume of crypto sent to the country. According to the New York Times, the daily volume of cryptocurrency transactions was higher than that of the national currency.

February 18, 2022: Crypto becomes legal in Ukraine⁴

In the new version of the law, the authority to supervise the crypto market has been transferred to the Securities Commission and there was no longer an obstacle to its adoption. Thus, the Ukrainian Parliament supported the proposal to make virtual currencies a legal asset class in the final reading. The Securities Commission will also grant licenses to crypto service providers. This meant creating a legal framework for crypto exchanges as well.



2 <https://www.cnbc.com/2021/09/08/ukraine-legalizes-bitcoin-and-cryptocurrencies.html>

3 <https://blog.chainalysis.com/reports/2021-global-crypto-adoption-index/>

4 <https://fortune.com/2022/02/18/ukraine-legalizes-cryptocurrency-bitcoin-russia-digital-assets/>

4.2 Russia

January 20, 2022: The Russian Central Bank plans a ban⁵

The Russian Central Bank has issued a report supporting a ban on crypto mining, the creation of new cryptocurrencies and trading in them. It also wanted to prevent financial institutions from creating instruments that would allow exposure to cryptos. The proliferation of the cryptocurrency market was reportedly threatening the Russian financial system and the stability of the ruble. The ban was not intended to apply to the ownership of cryptocurrencies by ordinary citizens.

February 18, 2022: Putin wants to regulate crypto⁶

President Vladimir Putin disagreed with the ban on cryptocurrencies, instead seeing an opportunity in the continued mining of bitcoin. However, this would now only be carried out by regulated entities in areas with surplus energy.

Putin asked the Finance Ministry and the Central Bank to have a first draft of the regulation ready by 18 February. The head of the National Bank, Elvira Nabiullina, insisted that she does not agree with the legalization of cryptocurrencies.

Despite this, the Ministry of Finance continued to work on the draft regulation. Its first draft required that only fully verified users could trade and hold crypto, either within the regulated banking system or through licensed intermediaries. Transactions over 600,000 rubles would be subject to reporting requirements.

February 22, 2022: The latest developments in before invasion⁷

Just 2 days before the invasion began, further details of the Russian crypto regulation were leaked. It would require citizens to take an online test before being allowed to buy cryptocurrency. It would test whether citizens were aware of the risks involved in trading. Those who passed would have been able to buy 600,000 rubles (\$7,500) worth of crypto annually, while others could only buy 5,000 rubles (\$630).

This would be a condition over and above KYC compliance and the requirement for exchanges to hold customer lists and personal data. Exchanges would have to be properly licensed and follow standards usual in the finance industry: risk management, governance model, internal audits. The regulation includes commissions for mining taxation. The ministry wants to legislate crypto as an investment instrument, not as a form of payment.

5 <https://www.forbes.com/sites/lcarrel/2022/01/20/bank-of-russia-proposes-banning-mining-and-trading-of-cryptos/?sh=7d92ab393cef>

6 <https://www.reuters.com/markets/europe/russian-authorities-propose-conflicting-plans-crypto-regulation-2022-02-18/>

7 <https://www.theblockcrypto.com/linked/134903/proposed-russian-crypto-regulations-to-require-online-exams-for-investors>

5 Beginning of the Invasion

February 24, 2022.

Vladimir Putin announced a „special military operation“ to Ukraine.⁸ Bombing raids have begun on 12 cities, including Kiev. Ukrainian President Volodymyr Zelensky declared martial law.

5.1 Immediate reaction

February 25, 2022: US sanctions

US President Joe Biden has imposed new sanctions on Russian banks and state-owned companies.⁹ They also make it harder for Russia to trade in some of the world’s currencies. Russian markets began to fall massively, the ruble also fell, the Moscow Stock Exchange halted trading on Friday the 25th.

February 27, 2022: The reaction of the global Northwest.

The international financial response has included commitments from the US, Canada, the UK and the EU to prevent Russian banks from continuing to use SWIFT.

The EU has drawn up a list of banks to be excluded from SWIFT. These are 7 Russian banks: VTB Bank, Bank Otkritie, Novikombank, Promsvyazbank, Rossiya Bank, Sovcombank and the Russian development bank VEB.¹⁰ Sberbank and Gazprombank are missing from the list because most oil and gas payments are made through them. This means that EU countries will still be able to buy Russian oil and gas. The sector accounts for a third of Russia’s state budget revenues. Alternatives to SWIFT are Russia’s SPFS, China’s CIPS or India’s SFMS. 50% of Russian banks use SWIFT, the rest mainly SPFS.

The reserves of the Russian Central Bank held outside Russian territory in the EU, the US, the UK and Canada will be frozen.¹¹ Of the total reserves of \$640 billion, about 23% are held in gold at the Russian central bank and 14% at the People’s Bank of China. About \$400 billion is therefore affected by the freeze.

5.2 Compliance with sanctions

Many regulators have become concerned that cryptocurrencies will be used to circumvent sanctions imposed on Russia. The problem is often lack of awareness. When cryptocurrencies are traded in a regulated environment, it is difficult to circumvent sanctions because all investors have to go through a KYC process, where the identity of the person who wants to make a transaction is verified and everything is recorded according to the rules of international regulation. Financial flows can then be traced on the blockchain back to the point of asset creation.

Larger transactions are then subject to the so-called travel rule. This is a recommendation from the international regulatory body FATF, which states that any transaction above a certain volume must be reported to the regulator by the intermediary of that transaction. This includes the name, account number and location of both the sender and recipient. The threshold is \$10,000 in the US and €10,000 in the EU. In order to comply with the Travel Rule, US crypto firms have set up TRUST, a platform where they will share the necessary information with each other.¹²

The size of the crypto market, which currently stands at around \$1.8 trillion, is not enough to take the amount of money the Russian oligarchs need out of the country through this channel. For comparison, the assets of Russian banks are worth \$1.4 trillion. \$.¹³ It should also be noted that a large part of the cryptocurrency market is inactive. In the case of bitcoin, it is less than 40% over the last 3 years.

Russian oligarchs have long used offshore accounts, real estate purchased under false identities, and companies with complicated ownership structures to hide and conceal their wealth structures.¹⁴

8 https://en.wikipedia.org/wiki/Timeline_of_the_2022_Russian_invasion_of_Ukraine

9 <https://www.reuters.com/world/europe/biden-unveil-new-sanctions-russia-after-it-invades-ukraine-2022-02-24/>

10 <https://www.bloomberg.com/news/articles/2022-03-01/eu-seeks-to-block-seven-russian-banks-from-swift-including-vtb>

11 <https://www.bbc.com/news/world-60542433>

12 <https://finance.yahoo.com/news/coinbase-robinhood-others-launch-trust-000106146.html>

13 <https://www.theguardian.com/business/2022/mar/01/could-putin-be-exploring-cryptocurrencies-to-bypass-western-sanctions-russia-ukraine-invasion>

14 <https://qz.com/2136067/where-are-russias-oligarchs-hiding-their-wealth/>

5.3 USA

March 2, 2022: Sanctions list

The US Treasury Department's Office of Foreign Assets Control (OFAC) was tasked with enforcing last year's executive order to prevent certain individuals and entities from acquiring US assets. These sanctions were tightened and the sanctions list expanded. It added new rules for doing business with selected Russian partners. There is a list that explicitly lists the people and entities that US entities couldn't do business with. And if so, only with the permission of the regulator. These prohibitions also apply to cryptocurrency trading for entities registered in the US.

March 9, 2022: Crypto legislation at the federal level

President Joe Biden's Executive Order Ensuring Responsible Development of Digital Assets was the first indication of an effort to regulate the crypto industry at the federal level. It explicitly states that it is in the national interest to promote digital innovation. The President has commissioned industry studies that will form the basis of legislation. Topics include consumer protection, financial stability, national security and climate change. The price of bitcoin spiked following the release of the order, which is seen as friendly to the crypto sector. However, it quickly returned to its original level.

Clarifying the role of the cryptocurrencies in sanctions evasion

Four US Senators (Elizabeth Warren, Mark Warner, Sherrod Brown and Jack Reed) have asked Treasury Secretary Janet Yellen to issue a report on what her department is doing to ensure that crypto is not used to evade sanctions.¹⁵ They focus in particular on the DeFi space and ask how OFAC can enforce sanctions there.

To give US Senators an opportunity to learn more, the Banking Committee convened a hearing on 17 March. The hearing is entitled Understanding the Role of Digital Assets in Illicit Finance. Senators were briefed on how transactions can be tracked on the blockchain, how cryptocurrency crime can occur and how it can be prevented.

Fed chair Jerome Powell appeared before the U.S. House Committee on Financial Services of the House of Representatives, where he advocated for a legislative framework to prevent the use of cryptocurrencies for criminal activities.¹⁶

These conversations should bring crypto a little closer to becoming a fully regulated asset class.

Use of crypto forensic tools

Various US government agencies have long used the services of Chainalysis, a company that tracks asset flows on the blockchain. Tracking tools on the blockchain can log where and from where the funds are going and what amounts are transferred. This requires users to be registered. However, some transactions are not recorded directly on the blockchain. These may be those that take place within a single wallet, or in the so-called second layer of the blockchain, and are recorded on the blockchain in larger groups or as the aggregate result of transactions within a single payment channel. The first case mostly applies to transactions within crypto exchanges, which are not recorded on the blockchain. They are only recorded in the case of cryptocurrency transactions to and from the exchange. Assets are always in a large exchange wallet and are only mirrored to individual user accounts. Therefore, blockchain tracking tools are not effective to monitor asset flows with exchange, but rather regulations known from the traditional financial world.

The New York Department of Financial Services (NYDFS) announced that it was looking for such tools to enforce sanctions more effectively.¹⁷ It wanted to track crypto flows between companies operating virtual assets with entities on the sanctions list. New York State Governor Kathy Hochul said that they were now looking for the most appropriate analytical tools.

Blockchain forensics firm Chainalysis has created a new tool that is able to identify crypto wallets subject to US sanctions. It published an API that allowed the public to track all wallets subject to sanctions.¹⁸

15 <https://www.nytimes.com/2022/03/02/business/treasury-cryptocurrencies-russia-sanctions.html>

16 <https://financialservices.house.gov/events/eventsingle.aspx?EventID=409029>

17 https://www.dfs.ny.gov/reports_and_publications/press_releases/pr20220302

18 <https://go.chainalysis.com/chainalysis-oracle-docs.html>

5.4 EU

MiCA

According to Christine Lagarde, President of the European Central Bank, the EU should adopt a regulation to prevent Russia from using cryptocurrencies to evade sanctions.¹⁹ This should be helped by the adoption of a regulatory framework for crypto in the EU called MiCA (Markets in Crypto Assets).

The MiCa must first be approved by the European Parliament's ECON (Committee on Economic and Monetary Affairs). However, the vote was postponed due to disagreements over the Proof-of-Work (PoW) mining concession used by some cryptocurrencies (especially bitcoin). Some of the new MiCA passages have been interpreted as a ban on PoW, which has raised the ire of the crypto community and some MEPs. This would in effect mean a ban on bitcoin mining. Passages related to mining were reportedly removed from the text of the law and then reinstated in a more moderate form. On March 14, the law was rejected by ECON.

EU sanctions against Russia and Belarus also applied to crypto. It fell under the category of transferable securities.²⁰

Anti-Money Laundering Authority (AMLA)

The EU is in the process of setting up a new EU anti-money laundering agency. 6 member states already want to include cryptocurrencies in its remit.

5.5 United Kingdom

The UK's financial regulators, the Bank of England, HM Treasury and the FCA, have issued a joint statement on the crypto market and sanctions against Russia.²¹ They emphasize their commitment to monitoring the transactions of sanctioned entities and reiterate the obligations of regulated entities. They remind us that circumventing sanctions through crypto is just as criminal as circumventing sanctions through other means.

Transparency and Enforcement Bill

The British government fast-tracked the Transparency and Enforcement Bill to effectively prevent foreigners from buying property with money of unclear origin because of the crisis in Ukraine. Oligarchs were also at risk of getting an Unexplained Wealth Order (UWO), which allows the authorities to ask them to explain the origin of their assets. Companies House, where companies register in the UK, got new powers to seize crypto assets.

5.6 United Arab Emirates

March 5, 2022: Against the current

The United Arab Emirates is on the FATF grey list this month.²² This is because the country is allegedly not doing enough to fight financial crime.

Crypto companies in Dubai are now facing a large number of liquidation requests, especially from Russians who could be hit by sanctions.²³ Some are buying property, while others are trying to exchange cryptocurrencies for cash. The UAE has so far remained neutral in the Russia-Ukraine conflict. But the same problem could affect any other assets in countries that do not recognise the West's anti-Russian sanctions.

19 <https://www.bloombergquint.com/onweb/ecb-urges-haste-on-crypto-regulation-amid-russian-sanctions>

20 <https://www.politico.eu/article/eu-makes-it-clear-crypto-is-covered-in-sanctions-against-russia-belarus/>

21 <https://www.bankofengland.co.uk/news/2022/march/joint-statement-from-uk-financial-regulation-authorities-on-sanctions-and-the-cryptoasset-sector>

22 <https://www.cnn.com/2022/03/05/uae-is-placed-on-money-laundering-watchdogs-gray-list.html>

23 <https://www.reuters.com/business/exclusive-russians-liquidating-crypto-uae-see-safe-havens-2022-03-11/>

6 Private sector response

The traditional financial sector is increasingly intertwined with the crypto sector. Users send money from their bank accounts to crypto exchanges, many banks offer crypto products, banks may soon become issuers of stablecoins...

In addition to the moral reservations some companies have about the Russian invasion, there are also practical reasons. For payment systems, the problem may be that they do not support cards issued by banks that are not part of the international SWIFT system.

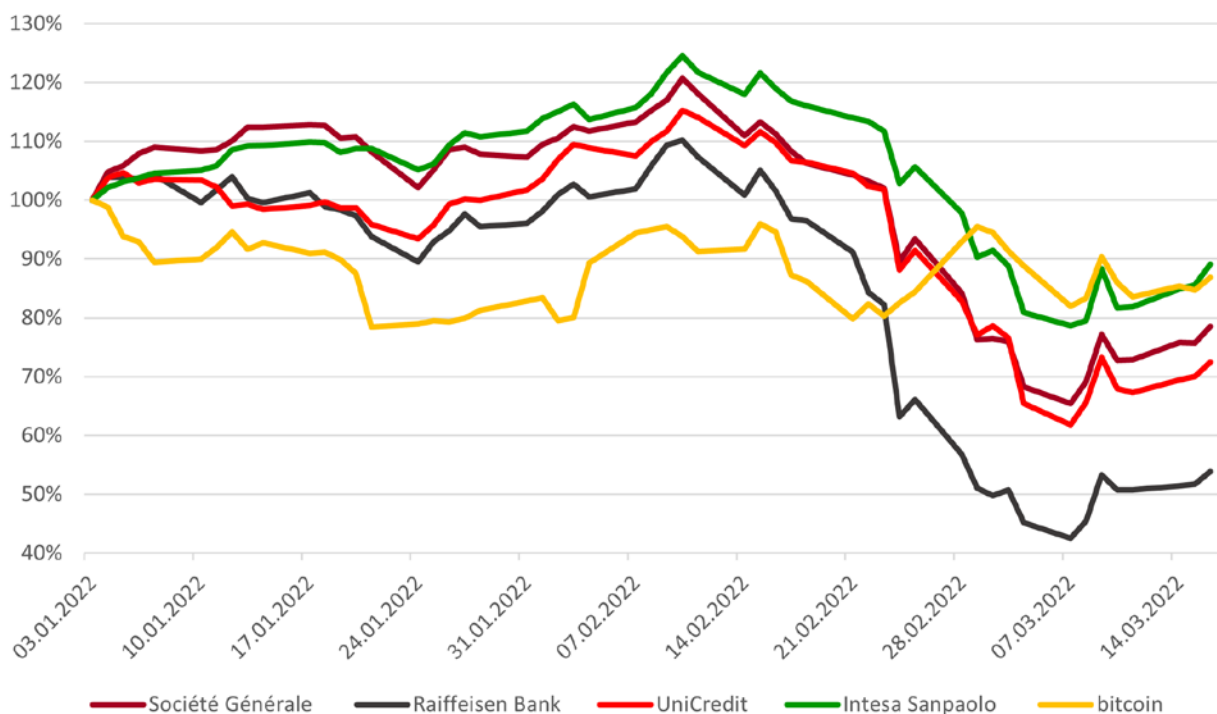
The problem may be the fall of the ruble. The ruble has fallen by a third since the invasion began, from \$0.013 to \$0.009. At one point it was as low as \$0.0072. As many banks have made loans in the Russian currency, they have seen a rapid depreciation of their investments.

6.1 Problems of international banking houses

The share prices of some banks fell shortly after the invasion because they had investments in Russia. The devaluation of the ruble also became a problem.²⁴ Raiffeisen Bank had €11.6 billion of loans in Russia, 80% of which were denominated in rubles. Its assets in Moscow amounted to €15.8 billion. In 2021, Russia accounted for a third of the Raiffeisen Group's total profit.

UniCredit Russia, a subsidiary of Italy's UniCredit Bank, provided loans of € 8 billion. Its total market exposure was €14.2 billion. Rosbank, a subsidiary of Société Générale, lent €10.5 billion in Russia, Banca Intesa Sanpaolo, the largest Italian banking institution, €5.6 billion.

Comparison of European banks' shares with notable investments in Russia with bitcoin



Deutsche Bank has also decided to cease its activities in Russia as of 11 March 2022.²⁵ As recently as Thursday 10th, its CFO James von Moltke defended staying in Russia. Deutsche bank's shares, in contrast to some of its competitors, rose by 8%. The Russia connection has long been a reputational risk for Deutsche Bank. In the past, it has been accused of money laundering on behalf of Russian oligarchs.²⁶

²⁴ <https://www.tydenikhrot.cz/clanek/sankce-pociti-i-evropske-banky-v-rusku-pujcily-miliardy-raiffeisen-rosbank>

²⁵ <https://www.cnbc.com/2022/03/14/deutsche-bank-to-wind-down-russia-operations-in-major-u-turn.html>

²⁶ <https://www.npr.org/2020/02/19/807191309/dark-towers-exposes-chaos-and-corruption-at-the-bank-that-holds-trump-s-secrets?t=1647364398682>

None of these banks has left the Russian market yet, the most speculated about is Raiffeisen Bank. The one that has already left Russia is one of the largest US banks, Goldman Sachs.²⁷ This is also because the total exposure of GS in Russia was not large, about \$940 million. That amounts to around 0.1% of its portfolio. But it will continue to trade Russian-linked bonds. They said they were doing this to comply with regulatory and licensing requirements.

JP Morgan Chase, the largest US bank, also left the Russian market, but it had almost no investments there.²⁸

6.2 Payment services

VISA and Mastercard have suspended their activities in Russia.²⁹ It will not be possible to pay outside Russia with payment cards issued in Russia, and vice versa, cards issued abroad will not be able to pay in Russia. They have also excluded Russian financial institutions from the system.

PayPal has also suspended its services in Russia.³⁰ Russians can use the National Payment Card System as an alternative. This includes the MIR card system and an instant banking system called the Faster Payments System (FPS). Some Russian banks have said they will switch to Chinese credit card issuer UnionPay.

Russian customers have also been excluded from the GooglePay and ApplePay payment systems.

Neobank Revolut has halted transactions to Russia and Belarus starting 4 March. There has been speculation that Revolut itself is at risk of being hit by sanctions because its founder and CEO Nikolay Storonsky has family ties to Russia (as well as Ukraine). Another founder and CTO, Vlad Yatsenko, is also Ukrainian. Revolut is registered in Lithuania.

British payment service Wise and US payment service Remitly have stopped all transactions to Russia.³¹ This was in response to the exclusion of Russian banks from SWIFT, followed by remittance apps Zepz and TransferGo.³²

27 <https://www.cnn.com/2022/03/10/goldman-is-closing-down-its-russia-business-making-it-among-the-first-wall-street-banks-to-do-so.html>

28 <https://www.cnn.com/2022/03/10/jpmorgan-is-winding-down-its-russia-operations-amid-widening-business-exodus-over-ukraine-war.html>

29 <https://www.reuters.com/business/finance/visa-suspends-operations-russia-over-ukraine-invasion-2022-03-05/>

30 <https://www.reuters.com/business/paypal-shuts-down-its-services-russia-citing-ukraine-aggression-2022-03-05/>

31 <https://www.reuters.com/technology/payments-company-wise-suspends-money-transfer-business-russia-2022-02-28/>

32 https://www.theblockcrypto.com/linked/135875/more-fintechs-follow-wises-lead-in-suspending-transfers-to-russia?utm_source=feedly&utm_medium=rss

7 Impact on cryptocurrency markets

Cryptocurrencies were founded as an inherently non-discriminatory tool, and much of the crypto community insists that they should provide anonymity. This demand is at odds with the exclusion of a certain segment of people when the situation requires it, and with the regulatory practices that have been adopted in recent years.

February 27, 2020: Russian citizens can still use crypto exchanges

Ukrainian Deputy Prime Minister and Finance Minister Mykhailo Fedorov has called on crypto exchanges to freeze Russian and Belarusian crypto accounts.

The CEO of one of the largest exchanges, Kraken, Jesse Powell, said they had no legal basis for doing so. Changpeng Zhao, CEO of Binance, made similar comments. A day later, Fedorov said that Ukraine's Ministry of Digital Transformation would prepare legal documents to demand the freeze.

So far, none of the major crypto exchanges have banned Russian customers. But they are required to block people on the OFAC sanctions list. This should work as all the major exchanges, especially those operating in the US, have fairly sophisticated compliance tools.

Immediate market reaction

Uncertainty associated with a number of the macroeconomic and macro-political risks mentioned above has weakened short-term accumulation trends in cryptocurrency markets. The first two weeks of 2022 saw slightly increased sell-offs. However, this still cannot be interpreted as investors losing faith in the future growth of this segment of the financial markets on a macro scale.

As of March of 2022 there were currently more than 2.5 million bitcoin holders who were holding it short-term at an unrealized loss. Thus, there was still a risk that they may start to divest on a larger scale. However, long-term holding (HODLing) continues to dominate investor behavior and long-term accumulation trends are still a significantly positive signal.

Due to the fall of the ruble, the volume of trading in the BTC/ruble pair on the Binance exchange grew rapidly. Before the invasion, the average was 11 million. In the first days after the invasion, it was \$35.8 million.³³ However, in terms of the amounts of money that would be relevant to Russian oligarchs, this is negligible. Rather, it suggests that buying crypto on the exchanges is more a way for ordinary Russians to protect themselves from the falling value of the ruble.

On Monday 28 February, the number of wallets with more than 1,000 bitcoins increased by 6.45% in one hour. This is the largest increase in this time frame in historical data of on-chain tracker Glassnode. The second largest increase historically occurred on 15 March 2014 and was 5.62%.

Other comparable increases in the number of wallets with more than 1,000 bitcoins have taken longer. On the aforementioned 15 March 2014 it took 2 hours, and on 29 December 2020 11 hours.

But on the basis of this data alone, it cannot be definitely said that Russian wallets are behind the entire increase.

33 <https://www.theblockcrypto.com/linked/135888/ruble-trading-pair-volumes-surge-on-binance-after-russias-invasion-of-ukraine>

8 Crypto aid

Cryptocurrencies appear to be a suitable means of global aid because they can bypass the limitations of the traditional banking system and the money is with the recipient within minutes. Cryptocurrencies can now also be used to send donations to various charities.

Bitcoin, Ethereum

Ukraine's official Twitter account has made several requests for crypto donations, in BTC, ETH and USDT.

Bitcoin and ether are also accepted by Ukraine's most prominent English-language newspaper, the Kiev Independent, to continue operations. Through cryptocurrencies it is possible to donate to a large number of charities.

Solana, Polkadot

In addition to bitcoin, ether and tether, people could also send donations using other cryptocurrencies.

To help, Everstake, a decentralized autonomous organization (DAO), was created on the Solana blockchain.³⁴ Together with the Ukrainian Ministry of Digital Transformation, it raised \$1.5 million in the first month of the war. Ethereum's other competitor Polkadot does not want to remain on the sidelines either. Its founder, Gavin Wood, has personally donated 298,367 DOT, equivalent to \$5.8 million. \$.

March 12, 2020: Ukraine has disclosed how crypto is helping.

Deputy Minister for Digital Transformation Alex Bornyakov has revealed what the money raised through the cryptos was used for.³⁵ It was for 5,500 bulletproof vests, 410,000 field lunches and 500 helmets. They have spent 15 million so far. \$15 million of the approximately \$100 million. \$100 they received through crypto donations.

³⁴ <https://thefintechtimes.com/how-the-fintech-community-shows-support-for-ukraine/>

³⁵ <https://www.theblockcrypto.com/linked/137552/ukraine-turns-crypto-donations-into-5550-bulletproof-vests-500-helmets-and-more>

9 List of abbreviations used

AMLA	Anti-Money Laundering Authority
API	Application Programming Interface
BTC	bitcoin
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIPS	Cross-Border Interbank Payment System
CSO	Chief Security Officer
CTO	Chief Technician Officer
DAO	Decentralized Autonomous Organization
DeFi	Decentralized Finance
DOT	polkadot
ECON	Committee on Economic and Monetary Affairs
ETH	ethereum
FATF	Financial Action Task Force
FCA	Financial Conduct Authority
FED	Federal Reserve System
FPS	Payments System
GS	Goldman Sachs
KYC	Know Your Customer
MiCA	Markets in Crypto Assets
NYDFS	New York Department of Financial Services
OFAC	Office of Foreign Assets Control
PoW	Proof-of-Work
S&P 500	Standard & Poor's 500 index
SFMS	Structured Financial Messaging System
SPFS	System for Transfer of Financial Messages
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UAE	United Arab Emirates
USDT	tether
UWO	Wealth Order
VEB	