

Is it easy to hide money in the crypto economy? The case of Russia



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In 2021, the Bank of Russia was set on strictly regulating crypto activities, maybe even close to all-out banning them from Russian territory in an attempt to protect investors and to close down on criminal activities. Since the invasion of Ukraine, this has clearly changed, even drastically so. Russia is now considering permitting crypto mining, investment and also payment to some extent. To shed light on possible reasons for this paradigm change, our study examines the potential for sanction evasion through the crypto economy. We show examples of countries that have already developed methods of using the crypto economy to circumvent sanctions more or less successfully. In our work, we distinguish between wealth preservation and the search for alternative payment channels for trade as two central motivations for the circumvention of sanctions, taking a deeper look into the EU sanctions regime as well as crypto market liquidity. Based on real world examples, we derive three hypothetical methods for circumventing sanctions through the crypto economy, i.e. the direct peer-to-peer system, the intermediary model and the escrow model. All these methods have major weaknesses though, and especially in light of low crypto market liquidity, we come to the conclusion that, for the time being, the crypto economy does not seem to offer sufficient potential to governments or major oligarchs for circumventing sanctions on a large scale.

Globally, Russian users move around USD 16.8 billion worth of crypto assets per year. In an environment of notoriously low trust in Russian banks and institutions, this may explain why Russia consistently leads the Global Crypto Adoption Index. There have been strong efforts, though, especially by the Central Bank of Russia (CBR), to follow China's example and largely ban the crypto economy in Russia. A sudden turn-around in this policy and corresponding new Russian "digital currency" bill drafts correlate with the Ukraine invasion. This caught our interest and brought up the (hypothetical) question if this could be motivated by attempts to create ways to circumvent the applicable sanctions regime (Allinger et al., 2022; Chainalysis, 2020).

In a first step, it seems sensible to examine the current EU sanctions regime and evaluate its effectiveness considering crypto markets. All EU companies operating in the crypto economy are addressed by sanctions regulations, whereas independent companies and subsidiaries being registered in Russia may not necessarily be subject to the EU sanctions regime. Looking at the three levels of sanctions, namely personal, sectoral and geographical sanctions, especially sectoral financial and economic sanctions address crypto service or wallet providers. Financial sectoral sanctions severely restrict access to the EU capital market and thereby limit Russian deposits with European credit institutions. Additionally, these sanctions prohibit the provision of crypto assets services to Russian nationals and companies. Economic sectoral sanctions, in turn, limit exports from and imports to Russia and mostly address probable payment functions in crypto systems. Personal sanctions against individuals are insofar of relevance as they aim at freezing all assets (including crypto assets) of high net worth individuals, colloquially known as oligarchs. All in all, our examination of the EU sanctions regime leads to the conclusion that, by now, sanctions measures have clear effects on the crypto economy and prohibit any crypto asset wallet, account or custody services to Russian nationals or Russian legal entities or bodies (OeNB, 2022).

Having analyzed that there are no easy ways to legally evade sanctions, we looked into possible ways and methods for circumvention. Existing examples and popular services were helpful to get a solid picture on probable models but also possible motivations for evading sanctions are an important dimension to such a question. And motivations are twofold: firstly, individual wealth preservation and, secondly, preservation of sectoral trade by governmental parties. Both are vital enough for energizing circumvention activities. With probable motives also established and after crosschecking with existing known circumvention examples, we identified three models for sanction evasion.

Direct peer-to-peer system

Direct peer-to-peer transactions are the most immediate and direct form of trade. The concept of one wallet sending crypto assets to another wallet is as simple as it is sufficient for most regular economic activities. It can also be a viable business model for operations where discretion is of utmost importance.

The direct peer-to-peer system is the simplest basis for circumvention in that it may suffice for single or small bundle transactions even if bigger crypto volumes are involved. For systematic, ongoing or automatable trade and business, larger-scale models would be required in our opinion. These might incorporate parts of a peer-to-peer system but would need to be more reliable for large economies and trade. In this regard, we perceive the next two models to be more fitting on a government level.

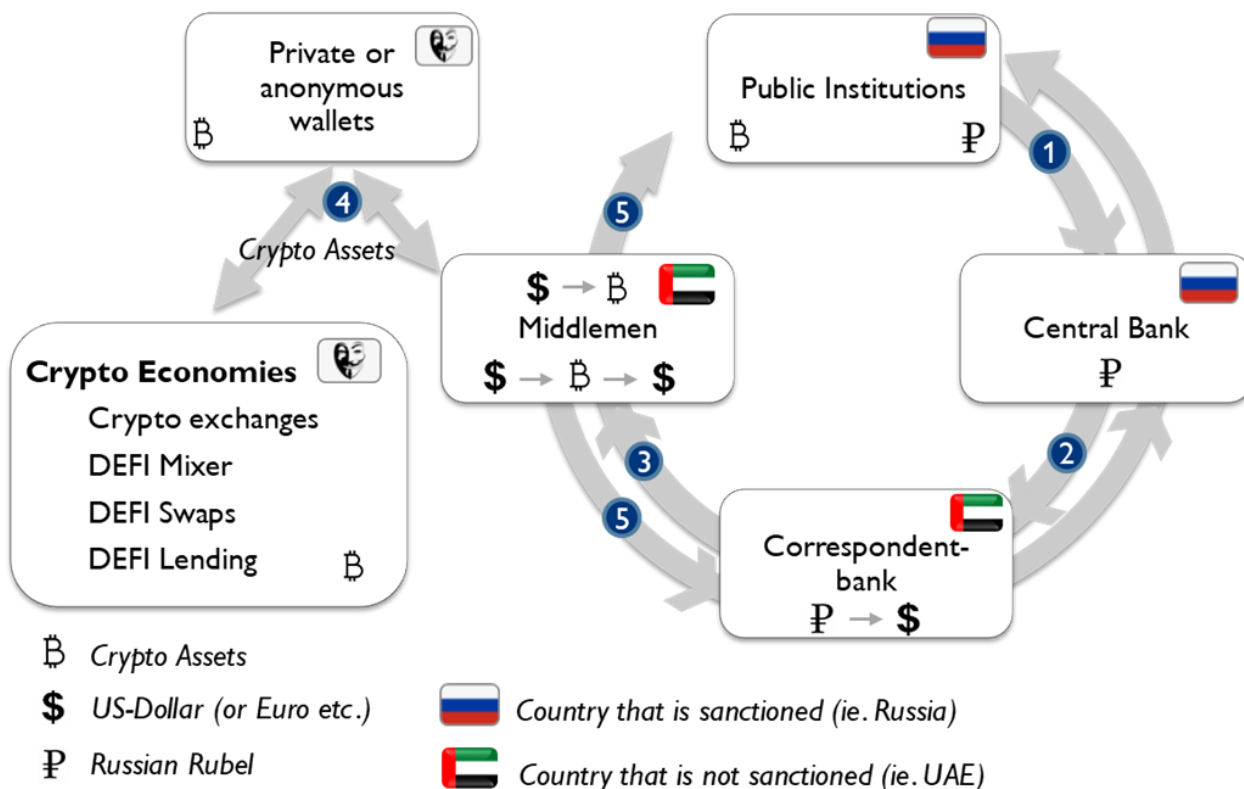
Intermediary model

The intermediary model rests on the idea that crypto assets will be bought, disguised, invested, further traded and sold via a network of business contacts like inconspicuous businesspeople, companies, crypto exchanges and public institutions (BAE Systems and SWIFT, 2020).

If we focus on the obfuscation of transactions, one of the most important components of this model is a complicit partner. Countries like the United Arab Emirates (UAE), which do not seem likely to participate in sanctions against Russia for the time being, could, for instance, qualify for such a partnership. Shortly after the invasion of Ukraine, Russian wealth, including impressive crypto portfolios amounting to billions of USD, were shifted from sanctioned areas into other Russian-friendly countries without trouble. For instance, UAE-based crypto exchanges have been fast facilitators for Russian and Belarusian clients to relocate, rearrange or liquidate crypto stocks for further disposal, lately (Alkousaa et al., 2022).

The intermediary model combines layers of middlemen that are used to cover large-scale Russian crypto activities. Looking at the process step by step, we begin in the sanctioned country, where state and state-related actors usually hold a sizable volume of assets in local currency (e.g. Ruble in the case of Russia). State-related banks or central banks are then instructed to forward these funds to correspondent banks in a non-sanctioned, Russian-friendly country (e.g. the UAE). The correspondent bank exchanges the sanctioned country’s local currency into USD or EUR, for example, and forwards these funds to intermediaries, i.e. individuals in reputable or inconspicuous enterprises, in non-sanctioned third countries. The middlemen layer changes the funds into crypto assets and moves them across multiple wallet addresses to disguise the origin of the funds and effectively tries to anonymize it. Then, the crypto asset flowback is either reconverted into fiat money (e.g. US dollar) and returned to the state bank via correspondent banks or left in the crypto economy for other purposes (e.g. crypto lending, peer-to-peer transactions or wallets of state actors for further investments).

Figure 1: The Intermediary model - Follow the money and cryptos



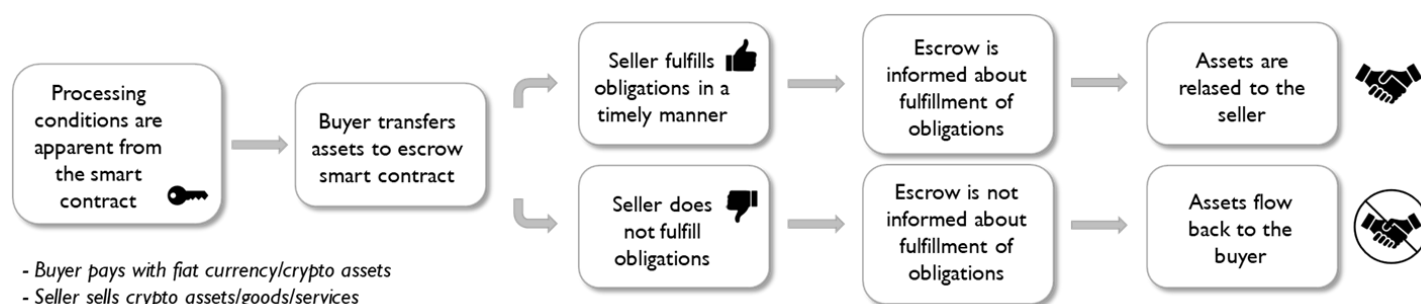
From the perspective of a sanctioned country, the advantage of the intermediary model lies in the versatility of business opportunities and in its hypothetical potential for indirectly acquiring stable foreign cash reserves. We also see this model as the only one that is theoretically sufficiently powerful for state-level import-export requirements (with North Korea as a prominent practitioner).

However, the disadvantages for those seeking to evade sanctions include the barrier of KYC regimes put in place in third countries to identify sanctioned actors, the potentially high complexity of such business networks and their inherent instability due to middlemen who may end up being sanctioned themselves at any time. Although the intermediary model is freely scalable, its actual capacities depend on freely available crypto assets. If, for instance, the availability of crypto tokens on crypto exchanges is insufficient, the amount of goods that can be bought or sold is limited as well.

Escrow model

This model is derived from already existing online services that enjoy great popularity in Russia and are very advanced in their capabilities. The escrow model is established as a platform and can be seen as a partly automated, anonymized and smaller-scale variant of the intermediary model. It features an automated facilitation level and often involves trusted business partners for reputability. The model works with providers of cryptos, products or services who can place offers and, in turn, interested parties who may accept these offers. In that sense it is a marketplace that matches buyers and sellers, while escrows act as third-party intermediaries and help facilitate each trade.

Figure 2: The escrow model – Reasonably safe payments in trustless environments



The essential components of this model are anonymous buyers and sellers, and at least one internet trustee, the escrow, that acts as an intermediary in-between. Terms and conditions for the transaction process are predefined by coded script or smart contract. Trading of goods and services can easily be automated. In order to complete a transaction, the predefined conditions must be met by both contracting parties, the buyer and the seller. The escrow holds the assets of the involved parties until all contracting parties fulfill their obligation (Hu et al., 2004). Escrow services are already widely used in the real estate industry: For example, Russian Sberbank offers (classic) escrow accounts through which the purchase of real estate is processed (Mendentseva and Tokmakov, 2017; Confidus Solutions, 2022). This system could also be applied to the crypto economy and the exchange of service or goods for crypto assets.

Similar to the intermediary model, the escrow model is also versatile but less complex and easy to automate since it is based on smart contracts. KYC necessities depend on national regulation and could, for example, be flexible in the case of Russia. However, at the time of writing, we had the impression that volumes which are traded seem to be small-scale. The model could probably also have potential for larger-scale trade, but without existing examples to point to, we can only speculate. The findings presented in the next subsection regarding inferior crypto market liquidity also have major implications for the viability of this model.

But is there even enough liquidity in crypto markets?

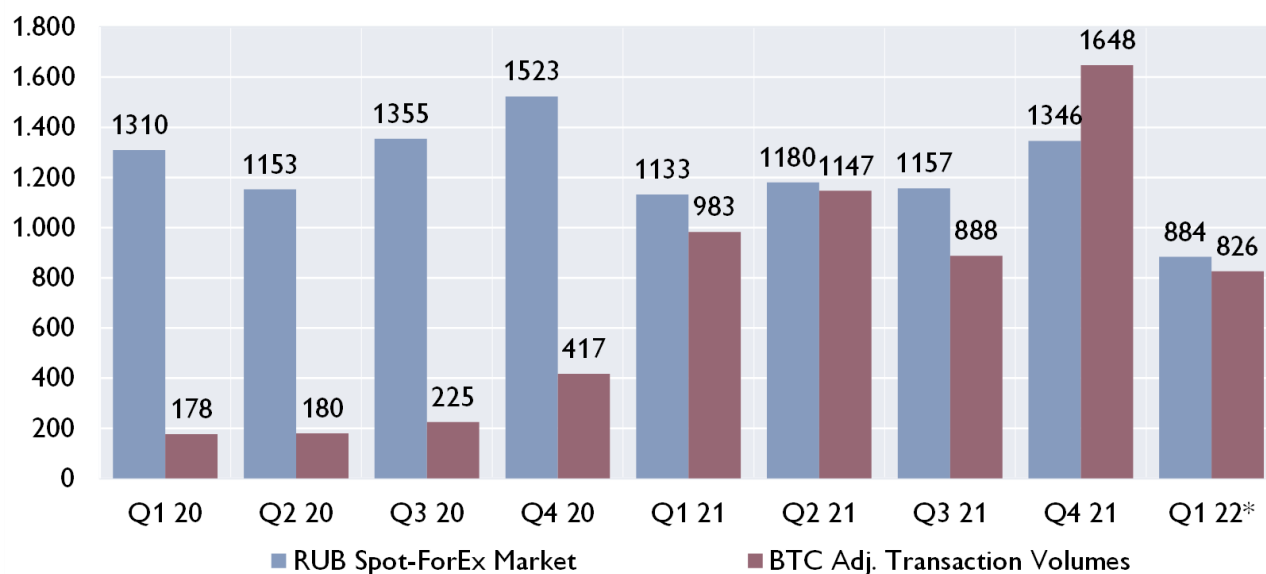
Ether and Bitcoin as the most dominant crypto assets have gained significant market capitalization in the last two years, whereas the next-biggest crypto assets show nowhere near the same level of capitalization. Using data from Coin Metrics and the Central bank of Russia, the top seven crypto assets would raise the free-floating crypto capital to somewhere between 130% to 170% relative to ruble forex volumes, which also indicates a rise in volatility brought in by less dominant crypto assets. Because of the currently high uncertainty in crypto markets and uncertain Russian trade perspectives, we refrain from making any predictions with such loosely aggregated figures, though.

According to the Bloomberg Billionaires Index, the 15 wealthiest sanctioned oligarchs have a net worth of USD 190 billion, with USD 83 billion in cash. Even though the net worth of these individuals may theoretically fit into global quarterly crypto transaction volumes, if they all shifted their assets to the crypto economy, this would have significant effects on prices. Therefore, we conclude that even the liquidity of dominant crypto assets like bitcoin does not seem vast enough for subtly and systematically preserving wealth for major individuals. However, liquidity would probably be sufficient for minor oligarchs (Bloomberg, 2022).

Figure 3: Ruble Spot-Exchange Market vs. Bitcoin Transaction Volume - How much cryptos would be enough?

Ruble Spot-Exchange Market vs. Bitcoin Transaction Volume

in Billion USD



Source: Central Bank of Russia and Coinmetrics.

*Q1 22 only Jan. and Feb.

We conclude that if crypto liquidity is not nearly sufficient to provide enough crypto assets for Russian foreign exchange, it most certainly is insufficient for sanction evasion on any larger scale. If used in “smaller doses” and only for selected parts of sectors or selected portfolios, there is also the problem that relevant transactions are generally sent over a transparent, public blockchain. Whether for payment purposes or asset preservation, such transactions would still be widely identifiable due to the significant sizes of value involved. Authorities could almost conveniently observe and analyze such transactions in real time (Jiang et al., 2021). Such transactions could even help countries seeking to impose sanctions to identify intermediary model-style networks and business partners for further action.

In the months following the invasion of Ukraine crypto prices and crypto market capitalization have dropped significantly, which further strengthens our point that, even with the most liquid crypto assets, widespread evasion of sanctions via the crypto economy is not feasible. ■

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