



# Impact of SWIFT Sanction on Global Economy

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**Abstract.** The ongoing Russia-Ukraine war has brought the SWIFT payment system into the spotlight, with the US and European countries having taken steps to remove Russia from the financial system. This could end up being a lethal catastrophe for Russian banks, particularly the smaller ones. International money transfer using SWIFT banking system was established many years ago. SWIFT has developed to play a critical part in the progression of global business since its beginning in 1973. It facilitates the exchange of funds between monetary institutions that are members of SWIFT. Streamlining and accelerating bank correspondence is at the core of SWIFT's underlying plan objective. Transferring money across borders specifically. This system was evolved over the years and maintained its reputation. Almost all international transactions became reliable on SWIFT systems. Due to the Russian ban on SWIFT system, it can be disruptive on global economy. This study aims to determine the impact of the sanction of SWIFT system that has caused in the supply chain and provides a better insight about the current situations and its impact in the global economy as well as Russian economy .

**Keywords:** SWIFT Systems · SWIFT Sanction · Global Economy

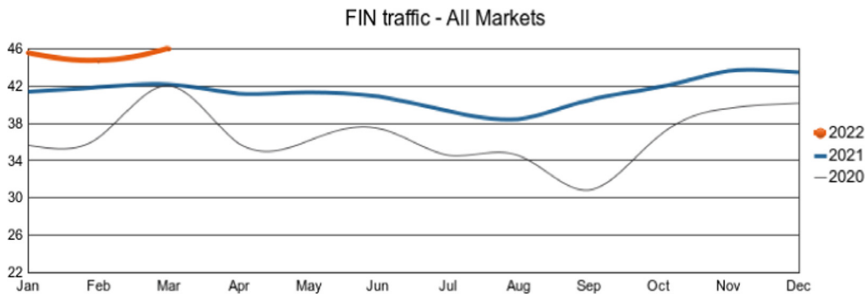
## 1 Introduction

In the era of Industrial Revolution 4.0, global commerce is playing an important role. Countries have looked for more secure and safer ways of transferring funds between banks in different countries. Organizations and delegates are frequently expected to guarantee worldwide transactions which should perform fast and smoothly. The trading of products has forever been available throughout the entire existence of humanity and is a principal part of the economy. With the appearance of banks and savings banks as custodians of resources, the need to ensure the safe movement of cash between accounts has emerged. At first, these financial movements were recorded physically, bringing about delays, transcription blunders, and fraud. With the coming of transmit-based broadcast communications, the time related with the handling of this sort of exchange which was called “Telegraphic Transfers”, regularly took somewhere in the range of two and three work days to be handled, particularly in asset transfers between monetary organizations situated in various areas of the world (international transfers), was upgraded. These times in interbank tasks were limited with the development of media communications organizations, without the need to physically exchange money

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**Fig. 1.** SWIFT Fin Traffic - All Market (source - <https://www.swift.com/about-us/discover-swift/fin-traffic-figures>)

and utilizing just electronic records, a cycle called “electronic assets move” or EFT. At first, interbank exchanges were overseen straightforwardly between the two substances associated with the transaction (sender and receiver). Nonetheless, given the quantity of financial substances on the planet, the administration of coordinated exchanges turned into a very difficult task, whose main solution was the utilization of an intermediary entity acting as a concentrator or “hub” for the directing of transfers. Because of this need, the Society for Worldwide Interbank Financial Telecommunication (SWIFT) was established in 1973 in Belgium, a cooperative entity made at that break of 240 banks in 15 distinct nations, whose goal was to act as a delegate for the execution of monetary exchanges between banking entities. SWIFT stands for The Society for Worldwide Interbank Financial Telecommunication. It is a global messaging system that runs on a network of financial institutions. SWIFT Banking System is the name of the organization that works with worldwide interbank financial communications. With the introduction of SWIFT, banks have sent and received cash easily and safely among themselves. In simple words, SWIFT is just a messaging system between banks. SWIFT is a cooperative organization which means it is not controlled by any country. It is governed by a 25-person board of directors and overseen by the G-10 country central banks. These banks are Bank of Canada, Deutsche Bundesbank, European Central Bank, Banque de France, Banca d’Italia, Bank of Japan, De Nederlandsche Bank, Sveriges Riksbank, Swiss National Bank, Bank of England, USA Federal Reserve System, the European Central Bank, and the National Bank of Belgium.

More than 11,000 institutions all over the 200 countries and territories are connected with the SWIFT. (Team, 2022) In more than 11,000 SWIFT member institutions, it has been recorded that over 35 million transaction messages were sent per day through the network in 2020. The organization recorded an average of 42.5 million messages per day on a year-to-date (YTD) basis in March 2021. Traffic grew by 9.8% compared to the same period of the previous year. (SETH, 2021) (Fig. 1).

Financial institutions depend on SWIFT. This assistance was at first made to permit full versatility. Along with the banks, SWIFT can likewise be found in trading firms, asset management firms, stock exchanges, foreign exchange houses, and treasure markets.

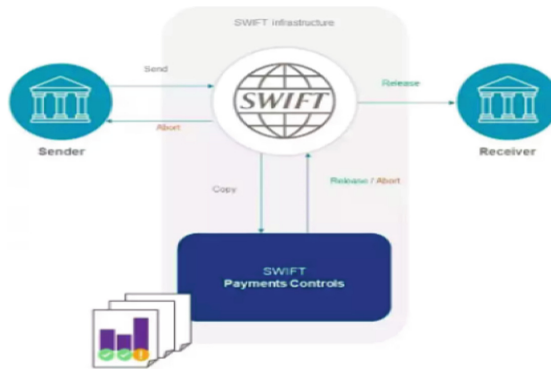


Fig. 2. SWIFT Payment Flow

## 2 SWIFT Banking System

SWIFT was intended to assist and manage an account quicker, more safely and effectively in its unique structure. Particularly in transferring funds internationally. SWIFT goes about as a messenger between banks. It is through this message that guidelines are transmitted to the receiving bank on how to process the payment. In light of the underlying network of Nostro and Vostro accounts, all banks associated with SWIFT transfers will move funds starting with one account to the other. It alludes to accounts between banks that are exclusively utilized for SWIFT exchanges. Because the two banks keeping records, they make two sets of ledgers, Nostro and Vostro, for the same account. Regarding Nostro and Vostro, Nostro is an account for holding money, while Vostro is a record that a bank opens in their books to get money. The two banks can make SWIFT exchanges immediately and promptly when the two banks manage the Nostro and Vostro accounts. SWIFT needs to decide how to pass messages when banks don't have this relationship. SWIFT transaction can start when a correspondent bank for the two organizations is observed that has a commercial connection between them. It will be charged more to send payment when more delegate banks are involved. As well as taking more time to send, more parties are involved, so the risk is higher. (Goshwami, Swift Banking System – What is it and How it Works?, 2022a) (Fig. 2).

## 3 Reasons of Being Successful

In the beginning, the Society for Worldwide Interbank Financial Telecommunication (SWIFT) was founded on three support points. These are solid and dependable communication protocols, a set of message standards, and ceaseless new administrations lining up with its members' requirements. These support points stay similarly relevant for 48 years after the fact. It is currently considerably more than a “cross-border payments network”. The dominant figure in the payments space has been a numbers game for SWIFT. Although SWIFT is famous from the beginning, its simplicity makes it popular. Due to its constant innovation and user-friendliness, SWIFT is an excellent payment instruction system today. SWIFT sent off the Customer Security Program, a

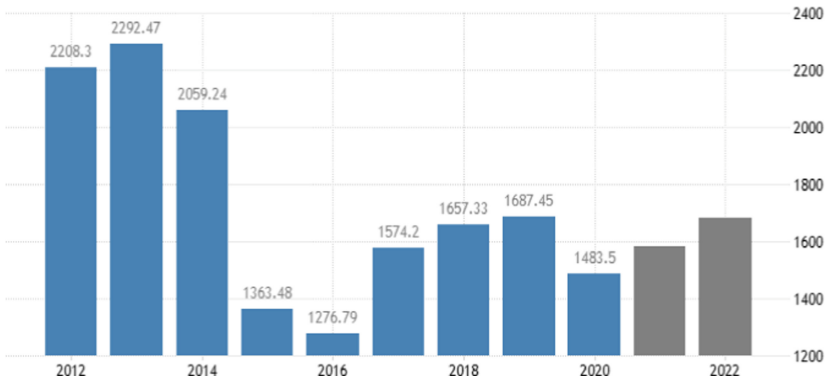
bunch of 27 security controls, driving every part to totally reconsider its foundation, in this manner, getting the general organization. Inside the principal year, 91% of SWIFT individuals (covering more than the vast majority of volume) had affirmed their consistency with the controls. This shows the impact the SWIFT association has created throughout the years to guarantee consistency in an ordinarily sluggish paced industry. The SWIFT global payment innovation (SWIFT gpi) was launched in 2017 with a goal to convey cross-border payments quicker, less expensive, and with full transparency and traceability. Following an effective mass reception of SWIFT gpi, more than 90% of wire exchanges were credited in the span of 24 h, including 40% credited in 30 min or less. Quick gpi is currently stretching out its capacities to diminish the quantity of rejected transactions through pre-approval and to convey worth to enterprises searching for straightforwardness of expenses and better traceability on inbound and outbound depository payments. With the sent off of SWIFT-Go, the foundation piece for constant cross-border payments, the gpi model is additionally applied to low-esteem payments. In the last 5 years alone, SWIFT has sent off a few new services and finished numerous evidences of-idea, ranging from sending off the main ongoing cross-border payment to surveying the utilization of blockchain technology as a feature of the SWIFT organization while executing Financial Crimes and data analytics services. (Tarazi 2022) Various payment messaging systems are available in the market today, like Fedwire, CHIPS, and Ripple. But none of this is as popular as SWIFT nowadays.

#### 4 Impact of Swift Sanction on Global Economy

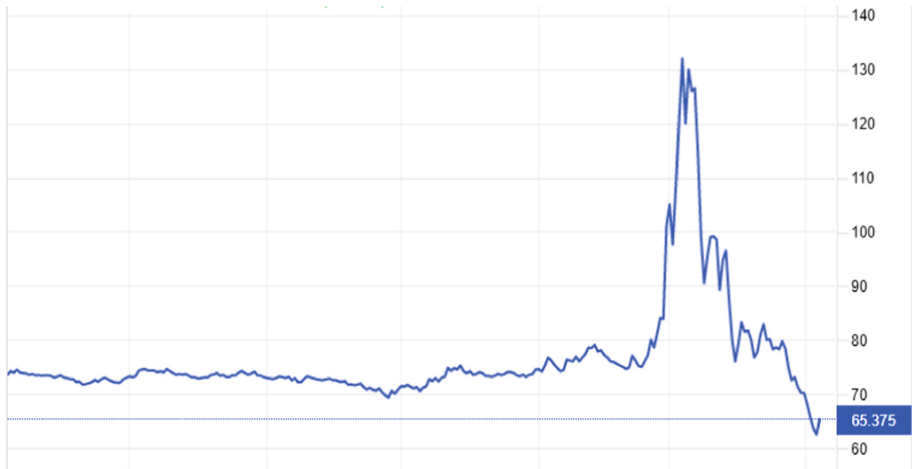
The biggest financial deterrent which could be forced on Russia is removing the country from the SWIFT banking system. It has been predicted that being cut off from SWIFT will harm Russia's economy to a great extent promptly for quite a while, and the nation will go into a gigantic financial crisis. Russia will be booted from the SWIFT banking system with an appropriate constitutional methodology.

With the rapid escalation of Russia's invasion of Ukraine, the EU, U.S., Canada, and the UK, among others, agreed on February 26th, 2022, to ban select Russian banks from SWIFT international payment messaging. Seven Russian banks were taken out from SWIFT, successfully denying them access to international markets. Seven Russian banks were eliminated from SWIFT, denying them access to international business sectors. On the other hand, the rundown of those designated bank did exclude Sberbank or Gazprombank. It is the two of Russia's biggest banks by resources. The choice to impose a selective ban is fundamentally because of Europe's proceeded with dependence on Russia for energy, and worries that eliminating all Russian banks would make further turmoil in worldwide energy markets. (TERESHCHENKO, 2022) Sberbank reported its final quarter and fiscal 2021 outcomes. The financial institution posted a net benefit of 1.2 billion rubles (\$10.4 million) for fiscal 2021. Sberbank said its branches were all working normally, and that its corporate retail clients had actually approached their assets in full. However, sanctions on Russia's national bank would tighten Sberbank's liquidity elsewhere. (HAWSER 2022) (Fig. 3).

An end to SWIFT from Russia would altogether affect the economy. Previous Russian Finance Minister Alexei Kudrin assessed the country's GDP would recoil by 5% without



**Fig. 3.** Russia's Economic growth 2010–2022



**Fig. 4.** Russia's currency fall to USD

SWIFT. Then, at that point, President Medvedev contrasted it with a statement of war as the U.S. considered sending Russia packing off the stage in 2014 for its addition of Crimea. Russia will likewise experience the ill effects of the move in the event that it depends on oil and gas trades for 40% of its income. Despite the fact that Russia and China have laid out alternative payment systems that Russia could use, the Atlantic Council notes they are altogether smaller than SWIFT and wouldn't adequately make up for being cut off. One senior chief has contrasted SWIFT's evacuation of Russia with "messaging everything up," with the move harming the EU's capacity to pay for the imports of Russian gas and oil that it depends on. (Swift Banking System, 2022) (Fig. 4).

Numerous specialists believe that despite the fact that time will tell at some point the way in which rapidly and how wide the entryways open for the Cross-Border Interbank Payment System (CIPS), a brainchild of China's national bank that has been supporting renminbi-based settlements beginning around 2014. CIPS tasks overall depend on Swift.

Wang Yongli, a previous Bank of China chief who filled in as China's first director on the Swift board of directors, told Sina Finance that CIPS utilizes the Swift message system to deal with cross-border capital flows. While CHIPS bargains in U.S. dollars, Shanghai-based CIPS works with renminbi exchanges as a component of the Chinese government's continuous mission to internationalize its cash and challenge the dollar's supremacy in worldwide trades. CIPS is likewise set up to help settlements attached to China's Belt and Road abroad exchange and infrastructure-building initiative. Around 40% of CIPS' members are Chinese, with significant state banks shaping the center's client base. Global members include HSBC, Standard Chartered, DBS, and Deutsche Bank. The most recent improvements in Russia could fundamentally affect CIPS' future, maybe at first through nearer collaboration with Russia's small version of Swift (around 400 individuals), called the System for Transfer of Financial Messages (SPFS). It was created by the Russian Federation's national bank after the nation confronted sanctions for its addition of Crimea in 2015, as a component of a work to lessen the force of assents. (JOHNSON, 2022).

Restricting Russian banks from SWIFT postures is a huge gamble for the world economy. As a matter of first fact, it gambles on disturbing the energy supply to Europe, and commodity to worldwide business sectors, setting off additional expansions in energy and food costs. Costs of oil, gas, and numerous different commodities are as of now raised because of supply deficiencies, unfavorable weather conditions, and production network disturbances. This substantially convolutes the occupation of the Federal Reserve and European Central Bank in bringing down expansion, which is as of now running at generally extremely significant levels. Default on Russian commitments abroad could have repercussions on unfamiliar leasers and achieve a liquidity shock to the U.S. or, on the other hand, European interbank market. Large American and European companies hurrying to sell their stakes in Russian tasks, as currently declared by oil goliaths BP and Shell, would cause further misfortunes on their possessions that may eventually must be discounted. Without a doubt, dollar deficiencies in the worldwide interbank market began to surface on Feb. 28, as Americans and other unfamiliar partners to designated Russian monetary organizations raced to cover their openings. Considering that the achievement and the productivity of an payment network relies upon the general reception and utilization of its administrations, the more serious gamble of utilizing the figurative "nuclear weapon" in the arsenal of financial sanctions is permanent damage to international financial integration.

North Korea and Iran have for quite some time been cut off from SWIFT, as has Venezuela beginning around 2019. Russia's economy is more sophisticated and modern than these nations, and the financial network is a more necessary piece of its operation, so the effect of prohibition from SWIFT could have a greater effect. But nations will quite often adjust and track down strategies for getting around sanctions. In any case, the short-term economic effect of even a fractional, however extendable, restriction from SWIFT on the targeted country, and the ability by nations forcing the sanctions to bear a few financial expenses, conveys a solid message that can have a sharp economic expense for Russia.

Russia's top banks are at present inclined to the full effect of the SWIFT ban, which has made their lives more troublesome and costly. In any case, the affected banks are

probably going to think of an alternative. It doesn't make any difference how we take a gander at these sanctions - There are unexpected cross-border implications and unanticipated unfortunate results for everybody that has been affected. Although the SWIFT ban might be the most serious financial penalty available, the drawn-out hindering impacts are turning out to be progressively clear as we can see financial impacts of it on Russia. We might see considerably more brutal approvals if they don't stop the conflict. This SWIFT boycott might have a momentary financial effect. In any case, different countries forcing sanctions are eager to bear a few related monetary expenses, sending a significant message that could have significant consequences for the Russian economy. However, countries will normally adjust and find workarounds to sanctions, such as utilizing alternatives or contingent upon other financial options. Only time will tell how negative these assents were to Russia and to which degree they impacted the worldwide economy.

## 5 SWIFT Reliability and Its Future

SWIFT has its prevailing position in the worldwide handling of value-based messages. It has as of late forayed into different regions, for example, offering detailing utilities and information for business insight, which shows its ability to stay innovative. In the short-to midterm, SWIFT appears to be ready to keep ruling the market. Although security-wise SWIFT is very secure but over the past years, there have been numerous cyber-attacks that happened on SWIFT systems. Most of the time, the attackers are getting away with a large amount of money. There have been numerous high-profile attacks on SWIFT systems over the recent years along with many low-profile attacks. All of them resulting in significant financial loss. The attack on Sonali Bank in Bangladesh in 2013, Tien Phong Bank in Vietnam in 2015, Banco Del Austro in Ecuador in 2015 and Bangladesh Bank in 2016 are worth mentioning here. Even with all these cyber-attacks, the use of SWIFT is still high. Over the next two years and beyond, SWIFT has plan to deliver on an exciting strategic roadmap for global community that will expand SWIFT capabilities beyond financial messaging to provide a platform for comprehensive transaction management services. SWIFT is what Piers depicts as the "Amazon parcel tracking service" of the monetary world. By presenting following and speed on a colossal scale, it has presented remarkable perceivability, decreased exchange times emphatically and raised the standard of service in cross-border payments. By presenting speed and visibility, SWIFT has raised both client expectations and the acknowledged principles for global payments. It has affected the whole business, past traditional financial services. SWIFT is additionally accessible for worldwide partnerships and non-banking payment associations like Currency Cloud. No matter what its drawn out potential, SWIFT is changing the idea of the monetary situation right now by smoothing out the way ahead for embedded finance. The transparency managed by SWIFT and the cross-functionality managed by embedded services open gigantic potential use cases. For example, it's conceivable that a small business owner could conduct cross-border payments through accounting software like QuickBooks. SWIFT isn't simply a cross-border payments system; it is the essence of payments around the world, and without admittance to it, any economy could undoubtedly implode. Because of recent global events, interest in SWIFT and its capabilities in monetary services has unquestionably developed. Banks and large

corporations have depended on SWIFT for secure messaging beginning around 1973; however, it doesn't frequently get public perceivability. By reliably conveying effective and secure payments, SWIFT has procured the trust of 11,000 + members. However long it keeps on paying attention to their necessities and teaming up and innovate to provide new value, SWIFT will proceed to develop and rule payments around the world.

## 6 Conclusion

With the present difficulties in the financial world, SWIFT has offered an unambiguous expression to change its business, prepared for the present advanced world and the challenges of the future. The aspirations of the stage approach won't just permit existing clients to work on their administrations and product offerings, yet additionally open ways to new market segments. The more extravagant information, all suitable on the stage, alongside pre-approval and tighter SLAs for low-value payments, will additionally further develop STP (Segmentation, Targeting, and Positioning) and lessen the expense of a transaction, which opens doors in the SME and customer space. The transition to forbid Russia from SWIFT will probably hurry into another period for worldwide money-related flows, one where the capacity to utilize SWIFT to force financial approvals with serious outcomes might be seriously diminished. A period where essentially Russia and China will have completely evolved and most likely interconnected their own alternative systems. In aggregate, a time where the possibility of one secure, universal messaging system will no longer be viable.

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