

United States House of Representatives
Committee on Financial Services
2129 Rayburn House Office Building
Washington, D.C. 20515

September 15, 2022

Memorandum

To: Members, Committee on Financial Services
From: FSC Majority Staff
Subject: September 20, 2022, National Security, International Development, and Monetary Policy Subcommittee Hearing entitled, “Under the Radar: Alternative Payment Systems and the National Security Impacts of Their Growth”

The Subcommittee on National Security, International Development, and Monetary Policy will hold a hybrid hearing entitled “Under the Radar: Alternative Payment Systems and the National Security Impacts of Their Growth” on Tuesday, September 20, 2022, at 10:00 AM E.T. in Room 2128 of the Rayburn House Office Building and on Cisco Webex. There will be one panel with the following witnesses:

- **Scott Dueweke**, Global Fellow, Science and Technology Innovation, the Wilson Center
- **Emily Jin**, Research Assistant for the Energy, Economics and Security Program, the Center for a New American Security
- **Dr. Carla Norrlöf**, Nonresident Senior Fellow, Economic Statecraft Initiative, GeoEconomics Center, the Atlantic Council
- **Ari Redbord**, Head of Legal and Government Affairs, TRM Labs
- **Jonathan Levin**, Co-founder and Chief Strategy Officer, Chainalysis

Background

Alternative payment systems are systems that transfer financial messaging instructions, those that settle and clear cross-border payments in foreign currencies, and mobile payment applications, but unlike payment rails and mobile payment applications commonly used in the U.S. (e.g. Visa or Cash App), alternative payment systems can operate independent of, and may never interact with, traditional financial institutions like banks. Whether owned and operated privately, or by another country’s government, some of these alternative payment systems have grown to become important players in the global financial system. In particular, alternative payment systems that are owned by, or based in, countries like Russia and China, raise key questions about the impact on national security, such as the efficacy of traditional regulatory and financial integrity tools, including U.S. economic and trade sanctions, as well as the impact on the strength of the U.S. dollar.

How Alternative Payment Systems Can Render Sanctions Ineffective

The dollar’s role as the world’s reserve currency allows U.S. policymakers to leverage coercive economic measures against individuals, entities, and regimes that threaten the national security, foreign policy, or economy of the U.S.¹ For example, following Russia’s unprovoked invasion of Ukraine in February 2022, the U.S. and many of its allies took sweeping actions to isolate Russia and limit its access to U.S. dollars, thus denying Russia access to goods and services that are typically procured with dollars. This included a prohibition enacted by the Biden-Administration against U.S. persons from transacting with the Central Bank of Russia, the freezing of assets of the Russian Central Bank that were held in the

¹ CNAS, Elizabeth Rosenberg, Peter Harrell, and Ashley Feng, [A New Arsenal for Competition: Coercive Economic Measures in the U.S.-China Relationship](#), Apr. 24, 2020.

U.S., and restrictions on Russia's access to its international reserves.² Similarly, on February 26, 2022, the European Commission also announced that several key Russian financial institutions would be removed from the SWIFT messaging network, limiting the Russian Federation's ability to send and receive cross-border transactions and further isolating Russia from the international community.³ As a result of these actions, in March 2022, Visa and Mastercard announced that cards issued by Russian banks would no longer work at retail locations, ATMs, or for international payments.⁴ Due to these extensive sanctions and dislocation from international payment tools, Russia's domestic currency lost significant value, leading financial analysts to predict that the Russian economy will contract by 6% in 2022.⁵

Alternative payment systems can be state-sponsored or may operate with government influence, making them tools of their home government's domestic and international economic and national security objectives. Before Russia's invasion of Ukraine in 2022, for example, the Russian government had taken steps to insulate its economy from the threat of economic and trade sanctions. Beginning in 2014, after Russia's invasion and annexation of the Crimean Peninsula, the U.S. and several allies imposed coordinated sanctions on Russian officials and commercial sectors.⁶ To defend its economy against further sanctions – including possible expulsion from the SWIFT network – Russia began developing its own domestic financial messaging system.⁷ In 2017, Russia created the System for Transfer of Financial Messages (SPFS), a Russian ruble-based system that enables Russian-based banks to send and receive financial messages, similar to the SWIFT protocol.⁸ In combination with the launch of the Central Bank of Russia's Mir card system to process domestic payments,⁹ these payment systems allow Russia's economy to process transactions through payment rails that may be outside of the scope of U.S. financial transparency and sanctions tools, though their options for cross-border payments and access to U.S. dollars are still severely limited.¹⁰

China has also developed a system to settle and clear transactions involving the renminbi (RMB), called the Cross-Border Interbank Payment System (CIPS).¹¹ CIPS was created in 2015 to improve the efficiency of cross-border RMB payments and to expand the use of RMB in international markets.¹² CIPS differs from the SWIFT network in that CIPS settles and clears RMB transactions. CIPS relies on the SWIFT network to communicate cross-border transaction instructions. The CIPS network includes an estimated 1,300 financial institutions and processes approximately 13,000 daily transactions for an average daily transaction value of 388.8 billion yuan (\$61.3 billion).¹³

Some have cited the possibility that governments, including Russia and China, could combine their financial messaging and settlement systems, offering services for themselves and authoritarian

² U.S. Treasury Department, [Treasury Prohibits Transactions with Central Bank of Russia and Imposes Sanctions on Key Sources of Russia's Wealth](#), Feb. 28, 2022.

³ European Commission, [Joint Statement on further restrictive economic measures](#), Feb. 26, 2022.

⁴ BBC, [Visa and Mastercard suspend Russian operations](#), Mar. 6, 2022.

⁵ IMF, [World Economic Outlook: Gloomy and More Uncertain](#), July 2022.

⁶ Congressional Research Service, [U.S. Sanctions Rebecca M. Nelson and Russia's Economy](#), Feb. 17, 2017.

⁷ CNBC, [Russia's central bank governor touts Moscow alternative to SWIFT transfer system as protection from US sanctions](#), May 23, 2022.

⁸ *Id.*

⁹ Financial Times, [Planning highlights risk for western powers that sanctions reorder the international payments landscape](#), Apr. 20, 2022.

¹⁰ In recognition of this concern, on Sep. 15, 2022, the U.S. Department of the Treasury issued a Frequently Asked Question (FAQ) to warn non-US financial institutions that it is, "prepared to use these targeting authorities in response to supporters of Russia's sanctions evasion, including Russia's efforts to expand the use of NSPK or the MIR National Payment System outside of the territory of the Russian Federation." See OFAC, [Russian Harmful Foreign Activities Sanctions, #1082](#), Sep. 15, 2022.

¹¹ The Diplomat, [China's CIPS: A Potential Alternative in Global Financial Order](#), Apr. 25, 2022.

¹² Lawfare, [Why China's CIPS Matters \(and Not for the Reasons You Think\)](#), Apr. 5, 2022.

¹³ This is dwarfed by the SWIFT system which "which has more than 11,000 members and handles more than 42 million transactions a day." See Bloomberg, [Why China's Payment System Can't Easily Save Russian Banks Cut Off From Swift](#), Mar. 14, 2022.

governments, to create a larger, more effective ecosystem of cross-border payment options.¹⁴ Those that anticipate condemnation from the international community or financial penalties for their intended actions (e.g., plans to invade a sovereign nation) may seek to develop or expand cross-border financial options that reduce their economies', businesses', and citizens' dependence on the U.S. dollar.¹⁵ In April of 2022, the Russian Minister of Finance proposed that Brazil, Russia, India, China and South Africa integrate their payment systems to promote greater use of Mir and domestic currencies in cross-border financing, an effort to mitigate the impact of Ukraine-related economic and trade sanctions.¹⁶ Mir is successfully garnering some broader global acceptance, despite allied sanctions. For example, Egypt recently announced that it will accept Mir's ruble payments as an enticement directed at Russian tourism and trade that have been turned away from European markets.¹⁷

Several factors may preclude this scenario from being an imminent threat, including the dominance and expansive reach of the SWIFT network, the continued international demand for U.S. dollars, the volatility of the Russian ruble, and capital limitations imposed on the RMB by the Chinese government, such as strict limitations on inflows and outflows.¹⁸ However, some observers have recommended that U.S. authorities and likeminded governments should closely review the expansion of Russian and Chinese cross-border systems and monitor how these tools can resist international sanctions efforts, further China's goals of RMB internationalization, compel the adoption of alternative payment mechanisms that contend with traditional payment designs, and jeopardize the dollar's role as the world's reserve currency.¹⁹ Experts also suggest that the U.S. should expect these alternative payment systems to evolve in terms of adoption and volume, urging the U.S. to be prepared to adapt our strategies if traditional economic and trade sanctions strategies fail to achieve their goals.²⁰

How Alternative Payment Systems Can Shift the Volume of Transactions Using U.S. Dollars

The U.S. dollar has been the world's primary reserve currency since the conclusion of World War II.²¹ The U.S. economy's size, strength, and reliability drive the dollar's use and demand in foreign markets and enable the U.S. government to borrow money at low-interest rates. The dollar is also the most widely used currency in international transactions.²² Most of the world's global trade invoices, international banking, and debt are issued in dollars.²³ In 2021, the Society for Worldwide Interbank Financial Telecommunication (SWIFT),²⁴ the most widely used messaging system for cross-border payments between financial institutions, reported that the U.S. dollar was consistently used for about 40% of all international payments.²⁵

Alternative payment systems have changed the ecosystem of retail payments, e-commerce, and peer-to-peer payment options due to the convenience and range of options for consumers and businesses.²⁶ Mobile wallet applications have consistently made up more than 40% of global e-commerce value and are projected to account for more than half of all transactions by 2025.²⁷ The growth and expanding market

¹⁴ Tufts University Russia and Eurasia Program, [How U.S. Sanctions are Fostering Innovative Strategies for Resiliency in Russia](#), Oct. 1, 2018.

¹⁵ CSIS, [Sanctions, SWIFT, and China's Cross-Border Interbank Payments System](#), May 2022.

¹⁶ U.S. News & World Report, [Russia Calls for Integrating BRICS Payment Systems](#), Apr. 9, 2022.

¹⁷ Al Monitor, [Egypt to adopt Russian Mir payment system to encourage tourism, trade exchange](#), Sep. 8, 2022.

¹⁸ Lawfare, [Why China's CIPS Matters \(and Not for the Reasons You Think\)](#), Apr. 5, 2022.

¹⁹ *id.* (may need to substitute for a CRS link)

²⁰ CSIS, [Sanctions, SWIFT, and China's Cross-Border Interbank Payments System](#), May 2022.

²¹ Congressional Research Service, [The U.S. Dollar as the World's Dominant Reserve Currency](#), Dec. 18, 2020.

²² *Id.*

²³ Federal Reserve Board of Governor, [The International Role of the U.S. Dollar](#), Oct. 6, 2021.

²⁴ Marketplace, Janet Nguyen, [What exactly is the SWIFT banking system?](#), Mar. 3, 2022.

²⁵ Bloomberg, [Yuan's Popularity for Global Payments Hits Highest in Six Years](#), Jan. 19, 2022.

²⁶ Congressional Research Service, [U.S. Payment System Policy Issues: Faster Payments and Innovation](#), (September 23, 2019).

²⁷ FIS, [Global e-commerce Market Projected to Grow 55 Percent by 2025, FIS Study Finds](#), Mar. 2, 2022.

share of a handful of mobile wallet applications has sparked debate about the next wave of global competition among payment providers, protection and integrity of user data, potential integration with decentralized financial products, sanctions evasion, and U.S. national security capabilities.

This cross-cutting, border-traversing segment of the financial services industry is relevant to national security, especially given the expansion of mobile payment applications based in China and the Chinese government's goal to be a leader in international finance.²⁸ Third-party payment providers enable businesses to accept payments without opening an individual merchant account, which facilitates the transfer of electronic payment transactions.²⁹ The largest third-party payment providers based in China are Alipay and WeChat Pay, which collectively account for 95% of mobile transactions in China.³⁰ Alipay and WeChat Pay allow consumers to link their Chinese bank accounts to their mobile wallets found within each app, and funds can be used for in-app commercial purchases, online and offline retail payments, and peer-to-peer transactions.³¹

While initially only available to consumers with a Chinese bank account, both Alipay and WeChat Pay now allow foreign tourists visiting China to connect their credit cards to mobile wallets in order to complete transactions.³² Alipay is accepted in 110 countries and services 1.3 billion consumers; WeChat is accepted in 68 countries and services 900 million consumers.³³ WeChat and Alipay handled 294.6 trillion yuan (US\$45.6 trillion) in 827.3 billion transactions in 2020.³⁴ This adoption, matched with fast payments could lead to a sharp tipping point in cross-border use: "The potential convenience of the [Chinese central bank digital currency] could extend WeChat Pay and Alipay's reach as the digital yuan can be used to make transactions without an internet connection, through proximity reading only. This could prove to be the digital yuan's most attractive feature, as it gives it helps digital payments act more like cash," providing anonymity and opacity to those in the west seeking to detect or prevent financial crime.³⁵

Additional Policy Concerns

Data Privacy and Geopolitical Power Shifts

The spread of these and similar third-party payment options into foreign markets may present more than a simple commercial competition issue, posing potential challenges to U.S. interests. The growing presence of Chinese fintech applications in African and Southeast Asian countries, for example, may drive local consumers and businesses towards Chinese-currency-based banking services, credit products, and insurance, limiting participation of U.S. companies, restricting U.S. financial regulatory and law enforcement capacity, and furthering the Chinese government's ambitions to international financial markets.³⁶ The reduction of U.S. leadership in this area could provoke a geopolitical shift in which global financial standards favor censorship and surveillance rather than democratic values, consumer protection, and respect for international law.³⁷

Bifurcation of Global Finance

²⁸ Lawfare, [Why China's CIPS Matters \(and Not for the Reasons You Think\)](#), Apr. 5, 2022.

²⁹ Forbes, [What Is A Third-Party Payment Processor?](#), (August 17, 2022).

³⁰ Atlantic Council, [Why China's digital currency threatens the country's tech giants](#), Jul. 15, 2021

³¹ Consultative Group to Assist the Poor, [China: A Digital Payments Revolution](#), Sep. 2019.

³² ZDNet, [WeChat Pay follows Alipay in allowing foreign visitors to make payments in China](#) Nov. 7, 2019.

³³ Fintech News, [AliPay is the most popular digital wallet in the world in 2022](#), Aug. 25, 2022.

³⁴ Pymnts, [China Widens Mobile Payments Antitrust Probe](#), Sep. 24, 2021.

³⁵ The Wilson Center, Scott Dueweke, [Black Swans and Green Fields: Exploring the Threat and Opportunity of the Alternative Payments Ecosystem to the West](#), Aug. 2022.

³⁶ Foreign Affairs, Nadia Schadow and Richard Kang, [Financial Technology Is China's Trojan Horse](#), Jan. 13, 2021.

³⁷ *id.*

Developments of alternative payment systems, mobile wallet applications, and digital money options could also complicate international monetary systems and global financial assimilation. Greater adoption of novel domestic and cross-border tools could divide the world's economies into fragmented blocs operating self-sustaining payment models.³⁸ IMF Managing Director Kristalina Georgieva argues that this could create “obstacles to the cross-border flow of capital, goods, services, ideas, and technologies.”³⁹ In March of 2022, President Biden signed an executive order that called for more research on digital assets, which included the objectives of ensuring U.S. leadership in the global financial system and promoting U.S. economic interests.⁴⁰ Alternative payment system experts contend that U.S. officials should implement this same approach to analyze how existing third-party and government-led payment instruments could facilitate broader connectivity, interoperability, and convertibility and contribute to further economic fragmentation among likeminded governments.⁴¹

Maintaining Financial Integrity

The escalating presence of alternative payment systems presents complications for anti-money laundering (AML) and know-your-customer (KYC) procedures,⁴² financial systems integrity, and the preservation of U.S. sanction capabilities. The U.S. Treasury Department's 2021 Sanctions Review report noted that technological transformations and alternative payment systems have the potential to diminish the effect of U.S. sanctions and empower adversarial regimes to construct financial systems that weaken the U.S. dollar's critical global role in international markets.⁴³ U.S. financial integrity laws, including the Bank Secrecy Act, strike an important balance between individual privacy and regulatory oversight, allowing law enforcement and national security officials to monitor suspicious activity without encroaching on consumers' Fourth Amendment right to privacy. This helps U.S. authorities appropriately monitor financial flows and apply targeted sanctions that prevent criminals and governments that violate international laws from accessing the U.S. financial system. As more transactions migrate to third-party payment systems and countries consider alternatives to the SWIFT network to facilitate cross-border payments, U.S. officials may lose financial oversight and regulatory capabilities as well as actionable law enforcement information.⁴⁴ Similarly, if international markets experience a decline in the demand for U.S. dollars, our conventional sanctions capability could be significantly limited, and forces that incite illegal conflict could have more ways to finance their efforts without fearing the extended reach of economic consequences imposed by the U.S. and our allies.⁴⁵

³⁸ See footnote no. 43.

³⁹ IMF, [Confronting Fragmentation: How to Modernize the International Payment System](#), May 10, 2022.

⁴⁰ White House, [Executive Order on Ensuring Responsible Development of Digital Assets](#), Mar. 9, 2022.

⁴¹ See footnote no. 43.

⁴² See footnote no. 43.

⁴³ U.S. Treasury Department, [The Treasury 2021 Sanctions Review](#), Oct. 2021.

⁴⁴ See footnote no. 43.

⁴⁵ U.S. Treasury Department, [The Treasury 2021 Sanctions Review](#), Oct. 2021.