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研究課題名（和文）ロシアのキャッシュレス・エコノミーに関する研究

研究課題名（英文）Cashless Economy in Russia: Trends and Development Prospects

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研究成果の概要（和文）：本研究では、ロシア経済のキャッシュレス化に焦点を当て、その動向、浸透度合いおよびメカニズムを分析することを通じて、国家主導経済システムの下で形成されたキャッシュレス・エコノミーの実像に接近した。国際決済銀行（BIS）やロシア中央銀行の統計を用いて、ロシアのキャッシュレス化比率を計算し、ロシア経済・社会においてキャッシュレス比率はJカーブ型の成長を示しており、国内キャッシュレス決済比率の成長率は他の新興国を上回る水準となっていることが明らかとなった。キャッシュレス化が浸透した理由および背景を分析し、市場経済と国家主導経済におけるキャッシュレス化を推進する政策を考える上での、政策的含意を示した。

研究成果の学術的意義や社会的意義

本研究の学術的意義は2つある。第一に、ロシアにおけるキャッシュレス化を促進する要因を特定する上で、内部環境と外部環境の要因分析を行った点である。第二に、政府、民間部門（市場）、社会といったデジタル化を推進または需要するアクターの観点から、ロシアにおけるキャッシュレス決済を検証した点である。本研究の社会的意義は、政策立案者に、(1)キャッシュレス・エコノミーを設計する際に、国家主導型と市場主導型の2つの異なるアプローチが存在すること、(2)ロシアを含む新興国では、国家主導でキャッシュレス化が推進されていること、(3)それにより、市場競争が歪む可能性があることなどの示唆を与えることである。

研究成果の概要（英文）：In this research, we examined the factors accountable for high cashless payment ratio in Russia and identified the key characteristics of Russia's state-driven cashless economy. Using the statistical data of the Bank of International Settlements (BIS) and the Bank of Russia, we calculated the ratio of cashless payment in Russia and found that it has been demonstrating J-curve exponential growth, and that the growth rate of domestic cashless payments is higher than that of other developed or emerging countries. We distinguished the peculiar features in the promotion of cashless payment that are peculiar to Russia and highlighted the fact that Russia's national payment system was formed to address rising national security and geopolitical risks. Our finding suggest that cashless payment is centralised and administered by the Bank of Russia, in order to digitalise the financial sector and the government, with the goal of driving the digital economy.

研究分野：比較経済学、新興国経済論

キーワード：ロシア キャッシュレス・エコノミー デジタル・エコノミー デジタル・ループル キャッシュレス化比率 国家主導経済システム

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1 . 研究開始当初の背景

Digitalisation is one of the most prominent features of the world economy at the beginning of the twenty-first century, particularly in the fintech industry. Financial digitalisation triggers technological transformations in retail and wholesale finance, promotes the use of digital cash, smart contracts, and open banking and facilitates the development of entirely new financial products, such as cryptocurrency, stablecoins, and central bank digital currencies (Gorshkov, 2022). In particular, the new phenomenon of a **cashless economy** or a **cashless society** has been of high interest to scholars, businesspeople and policy-makers worldwide.

There is no universal definition of a cashless economy, but most scholars agree that this is an economy which has highly-developed cashless payment instruments which are convenient for the users such as government, business, and society. Transition to a cashless economy does not necessarily imply the complete elimination of cash, but rather moving to a less-cash society which provides the users options to utilise diverse cashless payment instruments.

Various international statistical data confirm that both **the volume and value of cashless transactions in the global digital payment market has been rapidly increasing, particularly in emerging markets.** In addition, emerging and developing markets are less resistant to change and have higher adaptability to new technologies. For this reason, emerging economies are labelled ‘**digitalising emerging economies**’ in recent academic literature (Ito, 2020).

Russia has had among the highest growth rates in cashless payment among emerging economies in recent years, despite the generally low trust of Russian citizens towards the financial system and the problem of bad assets (Gorshkov, 2020). For instance, in 2008–2019, the ratio of cashless payment in final consumption increased from 9.0 to 48.6 percent according to the data of the largest state-owned bank Sberbank. As of 2023, the share of cashless payments in retail turnover in Russia increased to 83.4 percent and reached one of the highest rates among emerging and developed economies.

This research projects aims to reveal the factors accountable for the rapid promotion of cashless payments in Russia and to understand the features of Russia’s state-driven cashless society.

2 . 研究の目的

In this research, **we focus on cashless payments in the Russian economy and analyse their scope, depth and mechanism of their rapid market penetration in order to better understand the peculiar features of the state-driven cashless economy.** In particular, we identify and summarise the factors that promote cashless payment in Russia’s economy by analysing both internal (domestic) and external (international) environments. In addition, we evaluate the role of the government, corporate sector (business), and society in the promotion of cashless payment. Overall, the **research outcomes aim to depict the peculiar features of the state-driven cashless society** that will help better understand the dynamics of cashless payments in other emerging and developed economies.

The particular **research tasks** of this project included the following:

- 1) To analyse the scope, depth, and dynamics of cashless payments in Russia’s market by volume, value, and type of cashless payment instruments
- 2) To examine the factors of internal and external environments accountable for the rapid promotion of the cashless payments
- 3) To depict the mechanism of cashless payments instruments and identify the main features of the state-driven cashless payment system
- 4) To compare Russia’s cashless society to the experiences of other emerging and developed countries

3 . 研究の方法

A combination of quantitative, descriptive, analytical, explanatory, and survey research methods has been applied in this research project.

In order to analyse the scope, depth and dynamics of cashless payments in Russia’s market, we calculated the cashless payment ratio based on the statistical data of the Bank of International Settlements (BIS) and the Bank of Russia. We also employed a simple regression analysis to confirm the negative correlation between the amount of cash in circulation in the gross domestic product (GDP) and the value of cashless transactions as a share of GDP.

The factors of internal and external environment, the role of actors in the promotion of cashless payments, and the features of a state-driven cashless society have been mainly examined through descriptive, analytical, and explanatory research methods.

The questionnaire survey of the Russian population utilising cashless payments had been initially planned at the initial stage of this research. However, due to the COVID-19 pandemic and the geopolitical situation between Russia and Ukraine, this survey had not been implemented and a secondary data were

instead utilised.

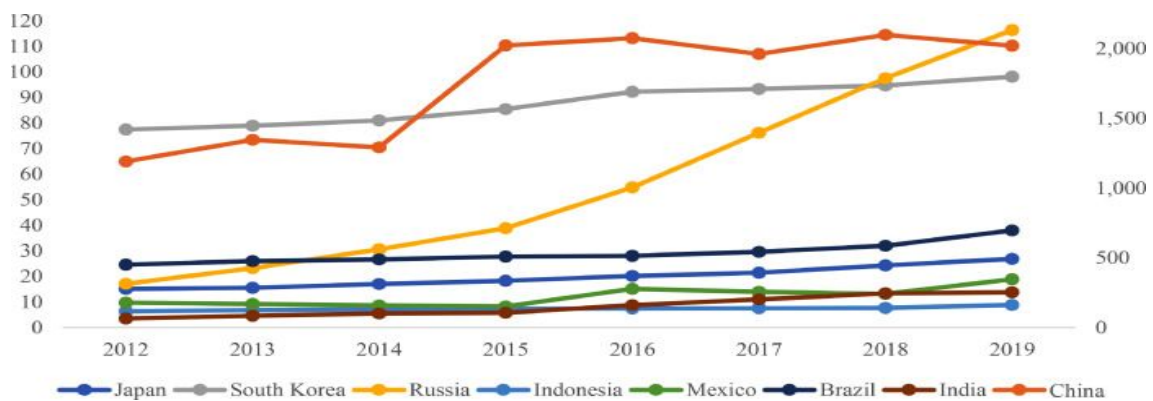
In addition, the field survey to Russia to examine the differences between large cities and small cities in the introduction of cashless payments, had to be modified due to the increased travel costs. Secondary open-source data from the largest state-owned bank Sberbank were utilised to analyse cashless dynamics in the regions of Russia.

4 . 研究成果

4.1. The Dynamics of Cashless Payments in Russia

The dynamics of cashless payments in Russia were analysed by calculating cashless payment ratios, the share of cashless transactions in GDP, and the share of cashless payment in retail turnovers. The results of our calculations show that cashless payment ratio in 2012–2019, measured as the cashless transaction value in final household consumption in Russia takes the shape of the J-curve exponential growth (Figure 1). In the respective period, Russia’s cashless ratio increased sevenfold - from 17.1 percent to 116.3 percent. Russia also has the second-highest proportion of the value of cashless transactions in GDP (current prices) among emerging economies (59.1 percent), and its cash in circulation as a share of GDP is currently 9.6 percent. In addition, the share of cashless payments in the retail turnover has also increased from 13.5 percent in 2013 to 70.3 percent in 2020 (Gorshkov, 2022).

Figure 1. Cashless ratios for selected economies in 2012–2019, in percentage.



Note: The data for China are measured on the righthand axis.

Debit cards prevail in Russia and other emerging economies because of the insufficient development of financial markets and difficulty in nurturing market trust and credibility in the financial system (Figure 2). However, e-money payment also contributes to the J-shaped exponential growth.

Source: Gorshkov (2022).

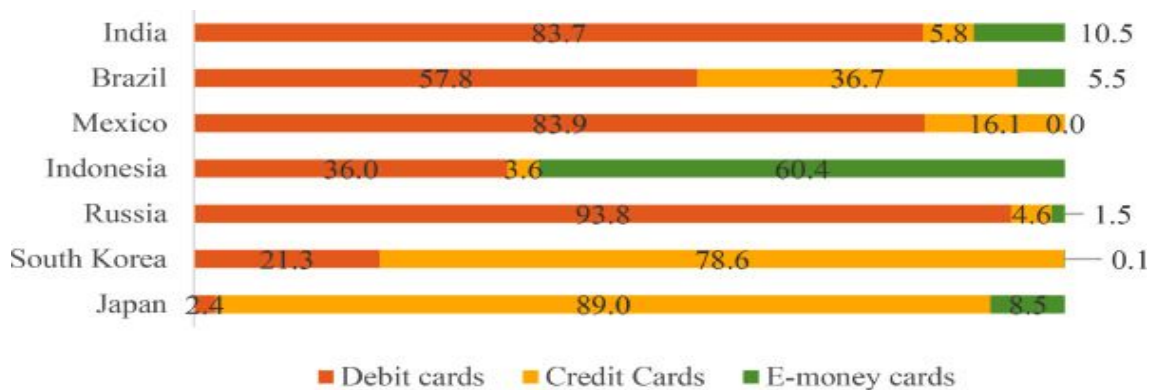


Figure 2. The share of cashless payments by instrument in 2019, in percentage.

Note: Calculated as a share of each instrument in the total value of cashless payment.

Source: Gorshkov (2022)

Overall, our analysis confirmed that Russia has been rapidly promoting cashless payments in comparison to other emerging and developed economies.

4.2. Factors accountable for the rapid promotion of cashless payment in Russia

Our analysis has shown that **internal** and **external factors** both account for the J-curve exponential growth in cashless payment, but the impact of the latter is significantly larger (Figure 3).

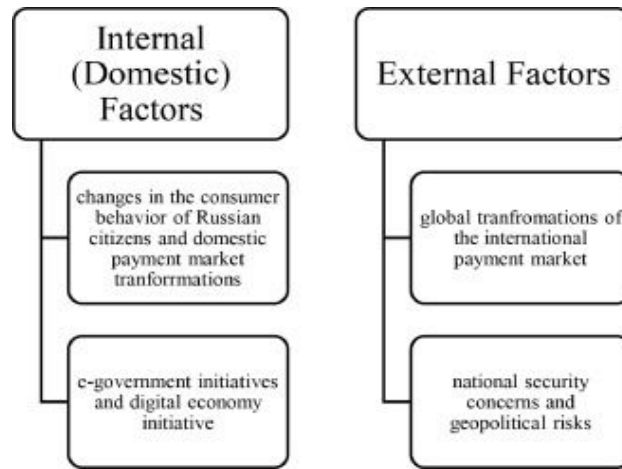


Figure 3. Factors that account for the rapid growth in cashless payment in Russia
 Source: Gorshkov (2022)

Internal factors include the changes in the consumer behaviour of Russian citizens and domestic payment market transformations and well as domestic policies of the government to promote e-government and digital economy. External factors are comprised of global transformations of the international payment market and raising national security concerns and geopolitical risks. In particular, national security concerns and geopolitical risks triggered Russia's government to design state-driven national payment system. Conditions in March-April 2022 confirm that Russia's concerns over SWIFT and international payment systems were founded, thus, providing evidence that the construction of the National Payment System (NPS) administered by the Bank of Russia was a reaction to perceived serious geopolitical and national security risks in 2014. The COVID-19 pandemic and a new round of international sanctions in 2022 are among the external factors, as they drove further expansion of domestic cashless payment and replace of international card brands with the National Payment Card System (NPCS) *MIR* (Gorshkov, 2022).

4.3. Major features of the state-driven cashless payment system

The core elements of Russia's state driven cashless payment system include: 1) National Payment System (NPS); 2) National Payment Card System (NPCS) *MIR*; 3) Quick Payment System (*Systema Bystryh Platezhej*, QPS); 4) digital rouble.

All of these core elements are designed and managed directly by the Bank of Russia and has assured the fast penetration of cashless payment into the Russian economy and society. For instance, in 2023, plastic cards *MIR* accounted for 52.5 percent of the total card transaction value and had a share of 51.6 percent in the total amount of domestically issued cards. For public employees and pensioners, *MIR* cards became mandatory. As for the QPS (mobile payments, QR-code payments, money transfers), according to the Bank of Russia 50 percent of Russian citizens utilise it for money transfer and 25 percent for the payments of goods and services.

State-driven cashless payment system proved to be extremely effective in mitigating the impact of economic and financial sanctions on the domestic payment market. However, utilisation of *MIR* cards for international payments has been restricted due to the risks of sanctions that can be potentially applied on Russia's counterparts.

4.4. Scientific and Social Contribution

The scientific contribution of this research is as follows. Firstly, this research analysed both internal (domestic market) and external environments in identifying the factors (forces) accountable for the high levels of cashless payment in Russia.

Second, this research focused on examining the cashless economy in Russia from the perspective of actors promoting or demanding digitalisation, such as the government, the corporate sector (market), and the society. Overall, we concluded that in emerging economies governments play a significant role in the spread of financial technologies such as cashless payment. The above-stated reasons distinguish this research from previous similar studies.

The social contribution of this research is that it gives policy-makers the implications on different approaches in designing the digital economies, namely, the **state-driven** and **market-driven approaches**. Emerging countries, such China and Russia, rely on the state-driven policies to design cashless (digital) payments which assure their swift penetration in the economy and society, whereas developed countries, where such technologies are introduced by the market forces, have difficulties in achieving similar results. The dominance of the state in the financial markets and in particular in payments markets raises concerns over the possibility of future market distortions, lack of competition, increased personal data and security

concerns in emerging markets.

The research outcomes of this research project have been widely presented to both the academic community in the field of comparative economic studies and the general public. The research papers were published in international peer-review journals (*Asia and the Global Economy*, *Regionalistica*), conference proceedings (Saint-Petersburg State University of Economics, Russia) and presented at both international (*The 16th European Association for Comparative Economic Studies*, *Asia Economic Community Forum*) and numerous domestic conferences and workshops. Related research outcomes (comparison of Russia with other emerging and developed economies (Japan) have been also widely presented in Japan, Russia, South Korea, the Philippines, and other countries.

During the research project I had established academic connections and promoted international scientific exchange with scholars at the Higher School of Economics (Russia), Saint-Petersburg State University (Russia), Saint-Petersburg State University of Economics (Russia), Saint-Petersburg Polytechnical University (Russia), The Central Bicol State University (Philippines), University of International Business and Economics (China) and Incheon National University (South Korea), Kyoto University (Japan), Soka University (Japan), Matsuyama University (Japan), and Ristumeikan University (Japan).

4.5. Limitations and Future Research Directions

Due to the COVID-19 and Russia-Ukraine geopolitical situation questionnaire surveys and the scheduled field trips had not been fully implemented during the research period and thus I had to revise the initial research plan due to these circumstances. The further research directions of this project might delve into examining cashless payment from the consumer's (society's) point of view. In addition, a thorough examination of the impact of digital ruble, launched in August 2023 for testing among the Bank of Russia and selective commercial banks, on the promotion of cashless payment in Russia can be undertaken.

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1. 発表者名 ゴルシコフ ビクトル
2. 発表標題 ロシア大手国有銀行「ズベルバンク」におけるコーポレートガバナンス
3. 学会等名 京都大学経済研究所共同利用・共同研究拠点プロジェクト成果報告会 (招待講演)
4. 発表年 2021年

1. 発表者名 ゴルシコフ ビクトル
2. 発表標題 ロシアのキャッシュレス決済と金融制裁
3. 学会等名 プロジェクト主催研究会 比較経済体制研究会、マクロ経済学・経済システム研究会と共催
4. 発表年 2021年

〔図書〕 計0件

〔産業財産権〕

〔その他〕

Researchmap https://researchmap.jp/masaruvictor 新潟県立大学の教員データベース https://www.unii.ac.jp/researcher/researcher/988/
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6. 研究組織

	氏名 (ローマ字氏名) (研究者番号)	所属研究機関・部局・職 (機関番号)	備考
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研究協力者	小林拓磨 (Kobayashi Takuma)	松山大学	

7. 科研費を使用して開催した国際研究集会

〔国際研究集会〕 計2件

国際研究集会 International Workshop on Cashless Payments in Emerging Economies (Central Bicol State University of Agriculture, Naga City, Philippines)	開催年 2022年～2022年
国際研究集会 UNP Research Webinar 『新興国経済諸国のキャッシュレス化の最新事情』比較経済体制研究会と共催)	開催年 2021年～2021年

8. 本研究に関連して実施した国際共同研究の実施状況

共同研究相手国	相手方研究機関