

MTMSD 2022**I International Conference «Modern Trends in Governance and Sustainable Development of Socio-economic Systems: from Regional Development to Global Economic Growth»****SOVEREIGN ISSUE AS A TOOL FOR INCREASING THE
WELFARE OF CITIZENS**

Evgeniy Vyacheslavovich Kostyrin (a)*

*Corresponding author

(a) Department of Finance, Bauman Moscow State Technical University, Moscow, Russia,
mauntain76@mail.ru**Abstract**

The most important tasks of the development of any state, including Russia, are to improve the demography and increase the welfare of its citizens. A significant increase in the birth rate in Russia is hampered by the low incomes of working family members and the lack of opportunities to improve housing conditions on an acceptable basis. The purpose of the article is to show how using a sovereign issue (loan money secured by goods, works, services) it is possible to solve the housing problem, increase the population of Russia, dramatically increase the incomes of working citizens, social and tax revenues. The research methods in the work are continuous sampling methods, analysis of open sources, legislation and literature on research issues, economic and mathematical modeling, including nonlinear programming, structural system analysis and design. The research material is the key parameters of the implementation of the National Project “Housing and urban Environment” and the main indicators of import substitution of goods for calculating the volume of sovereign emissions and achieving the goals set by the Decree of the President of the Russian Federation.

2421-826X © 2024 Published by European Publisher.

Keywords: Affordable housing, import substitution, labor incentives, national projects, Sovereign emission

1. Introduction

The purpose of the article is to show how using a sovereign issue (loan money secured by goods, works, services) it is possible to solve the housing problem, increase the population of Russia, dramatically increase the incomes of working citizens, social and tax revenues.

Sovereign issue refers to the issue of money in circulation sent in the form of loans to enterprises that produce import-substituting products or products for which demand is guaranteed.

In this article, using the example of enterprises producing construction equipment and enterprises implementing the national project "Housing and Urban Environment", an approach has been developed that allows using sovereign emission to significantly improve the demography (population growth) and incomes of Russian citizens.

The sovereign issue (credit money secured by goods) allows solving the demographic problem, the problem of import substitution and providing citizens with affordable housing.

It should be emphasized that the sovereign issue helps to reduce price growth (inflation), since the cost of goods, works and services decreases by the amount of bank interest, since enterprises and citizens receive mortgages at a zero rate. In accordance with the Decree of the President of the Russian Federation dated July 21, 2020 No. 474 "On the National development Goals of the Russian Federation for the period up to 2030" (Decree of the President of the Russian Federation No. 474, 2020) within the framework of the national goal "A comfortable and safe environment for life", the following targets have been set that characterize the achievement of national goals by 2030: improvement of housing conditions is not less than 5 million families annually and an increase in the volume of housing construction to at least 120 million m² per year. To achieve these goals, a National project "Housing and Urban Environment" has been proposed, which can be found on the official Internet resource of the National projects of Russia (2022).

2. Purpose of the Study

The purpose of the article is to show how using a sovereign issue (loan money secured by goods, works, services) it is possible to solve the housing problem, increase the population of Russia, dramatically increase the incomes of working citizens, social and tax revenues.

3. Research Methods

The research methods in the work are continuous sampling methods, analysis of open sources, legislation and literature on research issues, economic and mathematical modeling, including nonlinear programming, structural system analysis and design.

4. Research Material

The research material is the key parameters of the implementation of the National Project "Housing and Urban Environment" and the main indicators of import substitution of goods necessary for

calculating the volume of sovereign emissions and achieving the goals set by the Decree of the President of the Russian Federation are presented in Table 1.

Table 1. Key parameters of the implementation of the National Project "Housing and Urban Environment" and the main indicators of import substitution of goods for calculating the volume of sovereign emissions and achieving the goals set by the Decree of the President of the Russian Federation

Option number	Year	Potential aggregate demand for housing, provided that 25-30% of income is allocated to a mortgage, trillion rubles	Average annual incomes of the entire working population of the Russian Federation, trillion rubles	Average mortgage payment, rubles/month	The balance of the mortgage loan debt, million rubles
1	2022	8.140	29.600	10,094.25	4,363
2	2023	12.453	45.285	15,443.02	4,242
3	2024	17.666	64.239	21,906.96	4,057
4	2025	23.959	87.122	29,710.46	3,794
5	2026	31.549	114.722	39,122.85	3,438
6	2027	32.715	118.963	40,568.96	2,968
7	2028	33.916	123.331	42,058.45	2,481
8	2029	35.153	127.829	43,592.62	1,977
9	2030	36.427	132.463	45,172.83	1,453

According to Federal State Statistic Service data for the period January-November 2021, the volume of housing commissioned in the primary market was 81,678 thousands of square meters (Federal State Statistics Service, 2023b).

Column 1 of Table 1 shows the option number corresponding to the year of implementation of the National Project "Housing and Urban Environment" (column 2 of Table 1). Thus, the first (basic) option corresponds to 2022, the second option is in 2023, etc. until 2030. Thus, 9 years are allocated for the implementation of the National Project. The volume of imports for housing construction for five years (from 2022 to 2026) is 3,025 trillion rubles, since the author believes that during this period of time domestic production is able to completely replace imports with domestic goods in the field of housing construction. As follows from the commodity structure of imports in the field of housing construction for the period from January to October 2021, according to the Federal Customs Service (2022) of the Russian Federation (customs.gov.ru), the volume of Russian imports of goods necessary for the implementation of the goals of the National Project "Housing and Urban Environment" for the period from January to October 2021 amounted to 33,548.70 million \$, which at the rate of the Central Bank of the Russian Federation (Central Bank of the Russian Federation, 2023) on the settlement date (January 11, 2021) is equivalent to 33,548.70 million $\$75.13 \text{ rubles}/\$ = 2,520,513.83$ million rubles. So, in annual terms, the volume of imports is $2,520,513.83 \text{ million rubles} \cdot 12 \text{ (number of months in a year)} / 10 \text{ (number of months for the period from January to October)} = 3,024,616.60$ million rubles.

The annual volume of housing construction in the Russian Federation in accordance with the target indicators characterizing the achievement of the national goals "A comfortable and safe environment for life" by 2030 is set at 120 millions of square meters (Sternik, 2019). According to the order of the Ministry of Construction and Housing and Communal Services of the Russian Federation (Ministry of

Construction of Russia) dated December 17, 2021 No. 955/pr "On the standard of the cost of one square meter of the total area of residential premises in the Russian Federation for the first half of 2022 and indicators of the average market value of one square meter of the total area of residential premises in the subjects of the Russian Federation for the first quarter of 2022" (Order of the Ministry of Construction and Housing and Communal Services of the Russian Federation No. 955, 2021) the standard of the cost of one square meter of the total area of residential premises in the Russian Federation for the first half of 2022 approved in the amount of 69,261 rubles. According to Federal State Statistic Service (Federal State Statistics Service, 2023b) for the period January – November 2021 the volume of housing in the primary market amounted to 81,678 thousand of square meters. Accordingly, in annual terms, the volume of housing will be $81,678 \cdot 12 / 10 = 98,010$ thousands of square meters. Therefore, in order to reach the figure of 120 millions of square meters, it is necessary to increase the volume of housing by $120,000 - 98,010 = 21,990$ thousand of square meters. In value terms, this will require 69,261 rubles (the cost of one thousand square meter of housing) $21,990 \text{ thousands of square meters} = 1,523,049,390$ thousand rubles. In the proposed approach, it is generally assumed that the sovereign issue allocated in 2022 for housing construction will amount to this amount – 1,523,049,390 thousand rubles. Average annual supply on the housing construction market under the national project "Housing and Urban Environment" is 8,311,320 million rubles = 120.0 millions of square meters 69,261 rubles.

According to Article 7 of Federal Law No. 283-FZ of December 30, 2012 "On Social guarantees to Employees of Certain Federal Executive Authorities and Amendments to Certain Legislative Acts of the Russian Federation" (Federal Law No. 283-FZ, 2012) the norm for granting the area of residential premises to property or under a social lease agreement is: 1) 33 square meters of the total area of the living space – for one person; 2) 42 square meters of the total area of the living space – for a family of two people; 3) 18 square meters of total living space for each family member – for a family of three or more people. According to the review of housing, housing construction and mortgage markets prepared by the Analytical center DOM.RF (2020), the family composition of the mortgage borrower of the Russian Federation, i.e. those who primarily need to improve housing conditions, is as follows: 3-4 people (spouse, 1-2 children). Thus, the average rate of providing the area of residential premises in the property (the average area of the apartment) for such families should be $3.5 \text{ people} \cdot 18 \text{ square meters} = 63$ square meters. According to Federal State Statistics (Federal State Statistics Service, 2023c) half of the population of the Russian Federation needs to improve housing conditions. This means that the total need for housing of the population of the Russian Federation ($146,171$ thousand people according to Federal State Statistic Service (Federal State Statistics Service, 2023a), taking into account the above family composition, is equal to $146,171$ thousand people (estimate of the permanent population of the Russian Federation as of January 1, 2021) $1/2$ (the share of the population of the Russian Federation in need of improved housing conditions) $/ 3.5$ (average family composition, since housing is purchased for a family) 63 square meters (average apartment area) = $1,315,539$ thousands of square meters or in value terms $1,315,539$ thousands of square meters $69,261$ rubles/square meter (the cost of one square meter of housing by order of the Ministry of Construction of Russia (Order of the Ministry of Construction and Housing and Communal Services of the Russian Federation No. 955, 2021)) = $91,115,546,679$ thousand rubles. Thus, with an average annual supply on the housing construction market under the national project

"Housing and Urban Environment" in the amount of 8,311,320 million rubles, the need for housing can be eliminated within 91,115,546,679 thousand rubles / 8,311,320 million rubles = 10.96 years. Consequently, the annual volume of housing construction in the Russian Federation in the amount of 120 millions square meters established within the framework of the National Project "Housing and Urban Environment" (Decree of the President of the Russian Federation No. 474, 2020; National projects of Russia, 2022) will not allow covering the need to improve the housing conditions of the population of the Russian Federation for the period from 2022 to 2030 (9 years). The average annual demand for housing with an even distribution for 9 years (the period of the national project "Housing and urban environment" from 2022 to 2030) will be 1,315,539 thousand of square meters / 9 years = 146,171 thousand of square meters or in value terms 91,115,546,679 thousand rubles / 9 years = 10,123,949,631 thousand rubles.

According to the data of the Analytical Portal of the Federal Tax Service (Analytical portal of the Federal tax service, 2022), the amount of income of the employed population for the period from December 1, 2020 to December 1, 2021 amounted to 29.6 trillion rubles (see row 1 of Table 1). This means that the average monthly income of one working citizen of Russia is equal to 29.6 trillion. rub. / 67.2 million people / 12 months a year = 36,706.35 rubles. With the sovereign issue, a gradual (by about 20% per year) replacement of imported goods with domestic ones in the field of housing construction is expected for five years from 2022 to 2026, which means the same increase in the revenue of enterprises producing import-substituting products.

According to the survey of housing, housing construction and mortgage markets prepared by the Analytical center «DOM.RF» (Analytical center «DOM.RF», 2020), the share of mortgage payments in family income varies between 25-30%, the average value is 27.5%. It turns out that the potential aggregate demand for housing in the basic version of the simulation (2022), provided that 27.5% of family income is allocated to mortgage lending, is equal to 29.6 trillion rubles. $0.275 \cdot 29.6 = 8.14$ trillion rubles. (see the first row of Table 1).

It is assumed that in five years from 2022 to 2026, domestic production is able to completely replace imports with domestic goods in the field of housing construction, therefore, the revenue growth rate of enterprises working in the field of import substitution due to sovereign emission will amount to 20% per year. After this period, i.e. starting from 2027, the revenue growth rate is 3% per year. In proportion to the revenue (in order to motivate employees), wages should also grow at the same rate. With the growth of revenue, the cost price automatically decreases due to the reduction of conditionally fixed costs per unit of production. By reducing the cost of production, wages should be additionally increased, which will serve as a good motivation for labor productivity growth and solving the most important task of the welfare state – the growth of citizens' incomes.

In accordance with the growth of the average monthly nominal accrued wages, taking into account the progressive labor incentive system (when wage growth outstrips revenue growth), the average annual incomes of the entire working population of the Russian Federation increase. So, for the second row of Table 1, the value is 45,284,547,338,145 rubles = 67,200 thousand people (number of employees) · 56,156.43 rubles (the amount of wages) · 12 (the number of months in a year), for the third row of Table 1 value 64,239,170,809,570 rubles = 67,200 thousand people (number of employees) 79,661,67 rubles (the amount of wages) · 12 (the number of months in a year), etc. for the remaining rows of Table 1.

5. Results and Discussion

With a sovereign issue, the mortgage loan rate is reduced from the current 7-8% (Analytical center «DOM.RF», 2020) to 0% (interest-free loans). The average mortgage payment (IAO) is determined by the formula (Sokolov et al., 2008) $IAO = D / (12 \cdot n)$, where n is the loan term, years; D is the amount of debt, rubles.

According to the survey of housing, housing construction and mortgage markets prepared by the Analytical center «DOM.RF» (Analytical center «DOM.RF», 2020), the weighted average term of mortgage lending is 18.4 years, the loan amount will be 69,261 rubles/square meter \cdot 63 square meters (the average area of the apartment, see the explanations above) = 4,363,443 rubles, so the average mortgage payment at zero interest rate is 4,363,443 rubles / (12 \cdot 18.4 years) = 19,761.97 rubles. However, such a monthly payment is 53.84% of the average monthly nominal accrued salary in 2022 (19,761.97 rubles / 36,706.35 \cdot 100% = 53.84%), which is significantly higher than the average share of mortgage payments in family income (27.5%). Therefore, it is proposed to establish differentiated mortgage payments in the amount of 27.5% of the average monthly nominal accrued salary in the corresponding year (see Table 1). In Table 1 indicates the balance of the mortgage loan debt at the beginning of the corresponding year. Thus, the balance of debt at the beginning of 2023 will amount to 4,363,443 rubles. (the balance of debt at the beginning of 2022) - 12 (the number of months in the year) \cdot 36,706.35 rubles (the average monthly nominal accrued salary in 2022) \cdot 0.275 (the share of payment in the mortgage) = 4,242,312.05 rubles (see row 2 of Table 1), the balance of the debt at the beginning of 2024 will amount to 4,242,312.05 rubles (the balance of the debt at the beginning of 2023) – 12 (number of months per year) \cdot 56,156.43 rubles (the average monthly nominal accrued salary in 2023) \cdot 0.275 (the share of payment in the mortgage) = 4,056,995.82 rubles (see row 3 of Table 1) etc. The remaining debt at the beginning of 2030 will amount to 1,453,472.28 rubles (see the last row of Table 1). The mortgage loan will be fully repaid in 12 years, in 2033, which is 6 years earlier than the currently existing weighted average mortgage term according to the Analytical center «DOM.RF» (Analytical center «DOM.RF», 2020) (18.4 years).

It is worth noting that the average size of a mortgage loan in our country as of 2020 is 2.3 million rubles. At the cost of one square meter of housing in the amount of 69,261 rubles such a mortgage loan is able to ensure the purchase of 33 square meters of housing (2.3 million rubles / 69,261 rubles / square meter = 33 square meters), which, according to Article 7 of Federal Law No. 283-FZ of December 30, 2012 (Federal Law No. 283-FZ, 2012), is the norm for providing the area of residential premises to property or under a social lease agreement for only one person. In such conditions, it is not necessary to talk about an increase in the birth rate, and even more so about a demographic boom (Kostyrin & Sokolov, 2022; Sokolov et al., 2021).

That in order to improve the demography, housing mortgages should first of all be provided to young citizens aged 18 to 35 years. According to the data of the joint research «DOM.RF» and All-Russian Center for the Study of Public Opinion (Analytical center «DOM.RF», 2020) young people aged 18 to 35 in Russia make up 31.7 million people. According to the study (Analytical center «DOM.RF», 2020), more than half of Russians under 35 (57%) are ready to take out a mortgage to purchase a home,

and every fifth respondent under the age of 25 is thinking about renting a home. Thus, the total need of young people aged 25 to 35 years in their own housing is 31.7 million. person 0.57 (the share of those willing to take out a mortgage to purchase housing) · 63 square meters (the average area of the apartment, see the justification above) · 69,261 rubles (the cost of one square meter of housing) / 2 people (housing, as a rule, is purchased by young people together to create a family) = 39,421,525,783.50 thousand rubles.

6. Conclusion

With an average annual supply on the housing construction market under the national project "Housing and Urban Environment" in the amount of 8,311,320 million rubles, the need for housing for young people aged 18 to 35 years can be eliminated within 39,421,525,783,5 thousand rubles / 8,311,320 million rubles = 4.74 years. Thanks to the sovereign issue, the revenue of import-substituting enterprises and enterprises building housing has been growing for the first five years (from 2022 to 2025) by 20% annually.

References

- Analytical center DOM.RF. (2020). *Overview of housing, housing construction and mortgage markets*. <https://xn--d1aqf.xn--p1ai/analytics/>
- Analytical portal of the Federal tax service. (2022). *Financing of shared-equity construction*. <https://analytic.nalog.ru>
- Central Bank of the Russian Federation. (2023). *Financing of shared-equity construction*. https://www.cbr.ru/banking_sector/equity_const_financing/
- Decree of the President of the Russian Federation No. 474. (2020, July 21). *On national development goals of the Russian Federation for the period up to 2030*. <http://publication.pravo.gov.ru/Document/View/0001202007210012>
- Federal Customs Service. (2022). *Commodity structure of import*. <https://customs.gov.ru/folder/521>
- Federal Law No. 283-FZ. (2012). *On social guarantees to employees of certain Federal Executive Authorities and Amendments to Certain Legislative Acts of the Russian Federation*. http://www.consultant.ru/document/cons_doc_LAW_140178/
- Federal State Statistics Service. (2023a). *Population of the Russian Federation*. https://rosstat.gov.ru/storage/mediabank/Bul_chislen_nasel-pv_01-01-2021.pdf
- Federal State Statistics Service. (2023b). *Construction*. <https://rosstat.gov.ru/folder/14458>
- Federal State Statistics Service. (2023c). *Living conditions*. https://rosstat.gov.ru/statistics/zhilishhnye_usloviya
- Kostyrin, E. V., & Sokolov, E. V. (2022). Breakthrough Technologies for Socio-economic Development of Russia Based on Personalized Pension Accounts. *Lecture Notes in Networks and Systems*, 249-255. https://doi.org/10.1007/978-3-030-94245-8_34
- National projects of Russia. (2022). *Housing and Urban Environment*. <https://xn--80aapampemchfmo7a3c9ehj.xn--p1ai/projects/zhile-i-gorodskaya-sreda>
- Order of the Ministry of Construction and Housing and Communal Services of the Russian Federation No. 955. (2021, December 17). *On the standard of the cost of one square meter of the total area of residential premises in the Russian Federation for the first half of 2022 and indicators of the average market value of one square meter of the total area of residential premises in the subjects of the Russian Federation for the first quarter of 2022*. http://www.consultant.ru/document/cons_doc_LAW_404306/
- Sokolov, E. V., Fedorov, P. I., Protopopov, V. V., & Angolenko, N. I. (2008). *Fundamentals of economic assessment of investments: methodological guidelines for homework in the disciplines Economic assessment of investments and Investment activity of the enterprise*. Publishing House of Bauman

Moscow State Technical University.

<https://library.bmstu.ru/Catalog/Details/432258?ysclid=lg6opxdvu834151961>

Sokolov, E. V., Kostyrin, E. V., & Rudnev, K. V. (2021). Social financial technologies for the development of enterprises and the economy of Russia. *Soft Measurements and Calculations*, 9. <https://doi.org/10.36871/2618-9976.2021.09.004>

Sternik, S. G. (2019). Improvement of the Housing Conditions of the Population: Challenges of Achieving the National Goal. *Studies on Russian Economic Development*, 30(4), 434-441. <https://doi.org/10.1134/s1075700719040142>