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CONSIDERATION OF CHINA'S EXPERIENCE IN IMPLEMENTING A SOCIAL RATING

The object of research is the social rating system in China. The paper considers the experience of introducing the public policy tool «Social Rating» in China. The paper analyzes the norms for regulating the life of members of society in order to effectively use the funds allocated by the state to the sphere of the country's social policy.

The study used various research methods to understand the existing problems and identify areas of social policy risk management in the context of the implementation of social ratings in China. The study used a systematic approach to a comprehensive study of social ratings as an instrument of China's state policy. The political science analysis made it possible to generalize and interpret the results of the introduction of the social rating.

The state program is considered in the part devoted to the fight against fraud and financial fraud in business. The experience of the People's Republic of China regarding the creation of «black lists» of organizations that violate contracts and do not pay taxes is studied. The point system «Social rating» depending on the region of the country is considered. The project of analysis of the socio-political behavior of individuals, companies and other organizations to determine their «social reputation», on the basis of which an encouraging or sanctions policy of regulation is carried out, has been studied. The demographic situation in the People's Republic of China (PRC) has been studied. Scenarios of China's demographic policy are considered. The current risks and problems of the social rating in China are also highlighted, the priority tasks of its reform are shown. adopted in 2021 at the legislative level of the PRC, the innovative program «Social Rating» to manage social risks, such as unemployment, population decline, low incomes, and which has become a tool for comprehensive control over people through the collection and processing of personal data. The introduction of a social rating program, with the help of which it is planned to build a fully regulated Chinese society, is analyzed.

Keywords: social policy, regulatory policy, demographic situation, black lists, social reputation.

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1. Introduction

The level of economic development of the country largely depends on the social status of all members of society. Creating a material base for improving living conditions is the goal of the labor activity of most people. The study of factors influencing the formation of a person's lifestyle to take them into account in the development and implementation of the state social policy scenario is a topical issue for many countries in the 21st century, including the People's Republic of China.

The People's Republic of China has chosen its own way of dealing with the risks of social policy, including through the introduction of a social rating program.

Elements of the social rating system are used in many countries, for example, in the countries of the European Union and the USA. For example, European insurance companies calculate the payout ratio based on information received from social networks. In Germany, banks calculate the solvency of citizens and interest rates for them based on information from a private credit bureau [1]. Algorithm for predicting connections in social networks [2], Joint access control system for social networks [3] are the elements of social rating, studied by scientists from Great Britain, Egypt, etc.

A detailed description of the features of economic activity in the People's Republic of China can be used and adapted in Ukraine [4, 5].

The way of rating citizens, chosen by the second country in the world in terms of GDP, caused both condemnation and approving assessment of international experts in the relevant industries.

Therefore, the choice of a social policy scenario is relevant, because the economic stability and success of each state depends on what instruments will be chosen for its development. Income inequality, uneven distribution of benefits, different opportunities for access to education, health care affect the choice of tools to minimize social risks. Thus, the system of social rating in China was chosen as *the object of research*.

The aim of research is to analyze and systematize the essential components of the «social rating» as an instrument of China's state policy in order to study the experience of social policy risk management.

2. Research methodology

The systematic approach made it possible to comprehensively study such an instrument of China's state policy as social rating.

The study is based on political science analysis, containing the historical method, systemic, comparative, institutional analysis, as well as generalization and interpretation of practical data.

The use of various research methods made it possible to understand the existing problems and determine the direction of social policy risk management in the context of the introduction of social rating in China.

3. Research results and discussion

China is the world's largest country in terms of population, the second in terms of economic influence, and the third in terms of area. Since 1949, the country has been under the control of the Communist Party. According to the constitution of the PRC, it is a socialist republic (the state controls strategic enterprises and industries, there is a planned system, a command and administrative system under the control of the communist party) [6].

China is one of the most densely populated countries in the world. The population of the country in 2021 was about 1.5 billion people. 63.9 % of the population lives in cities in China, 36.1 % in rural areas. Of these, men 51.24 %, women 48.76 %. According to the State Bureau of Statistics of the PRC, in 2021 the number of men exceeded the number of women by 34.9 million people [4].

The average life expectancy for men in China is 72.7 years, for women - 76.9 years. The total working-age population aged 16 to 59 is 894.38 million people in 2020, which is 63.35 % of the total. In 2018, this figure was 64.3 % [4].

Table 1 show that the trend towards a decrease in the population can be traced in the age structure of 0-14 years. In 2020, compared to 2010, it decreased by 3.7 %. And the age structure of 15–59 years is the opposite: it shows an upward trend. In 2020, compared to 2010, it increased from 67.7 % to 70.2 %, that is, by 2.5 %. The age structure of 65 and older years with a tendency to increase in 2020 compared to 2010 increased from 5.8 % to 70.0 %, i. e. by 1.2 % [7].

Taking into account the change in the age structure and the increase in the proportion of the elderly in it, there was a gradual increase in mortality – up to 7.3 % by 2020 and 9.4 % in the first third of the next millennium according to UN forecast estimates (Table 2) [7].

In the People's Republic of China, in 2021, the innovative Social Rating program was officially adopted at the legislative level, the tool of which is comprehensive control over people through the collection and processing of their personal data.

As part of the implementation of the program, an analysis of the socio-political behavior of individuals, companies and other organizations is proposed to determine their social reputation, on the basis of which an encouraging or sanctions policy of regulation will be carried out.

Table 1

Age structure of the PRC population

Year	Age structure of the PRC population, %		
	0—14 years	15–59 years	65 years and over
1980	37.70	57.20	5.10
1990	33.60	61.50	4.90
2010	26.50	67.70	5.80
2020	22.80	70.20	7

Dynamics of the death rate in China

Note: built on the basis of data [7]

Table 2

Years	Death rate, %
1950	18.00
1960	12.28
1970	25.43
1980	9.50
1990	7.60
2000	7.32
2010	6.34
2015	6.57
2010	6.59
2015	6.6
2020	7.3

Note: built on the basis of data [7]

The social rating of a Chinese citizen regulates access to the following features/services:

- education with state funding;
- public service;
- travel in/out of the country;
- insurance payments;
- social services, for example, medical;
- lending terms;
- access to the Internet.

The final score of the social rating consists of a list of factors: from shopping habits and respect of parents to the timeliness of payment for housing and communal services.

There are many factors influencing a person's social rating, and sometimes they affect quite private spheres of life. For example, an online accounting system regulates which users a person contacts or what information is copied, and a public control system can take into account virtue in learning.

Another component of the program is the use of street cameras that can recognize the face of every Chinese. It is assumed that such a system will track the behavior of a person and will automatically add/write off points. Now in some provinces they can already be fined if you do not give up your seat in transport to a person with a disability or encourage volunteering.

It is known about unsuccessful experiments in managing the behavioral risks of citizens in the framework of the social rating program. For example, in one region of China, a mobile application was created that made it possible to indicate the location of «unreliable» people according to the rating program.

How does the social rating system work?

State accounting takes into account the following indicators:

- payment of taxes;
- repayment of loans;
- payment of bills by credit card;
- payment of bills for housing and communal services;
 payments under court orders.

Public accounting complements the system for generat-

- ing rating points for citizens in terms of:
 - compliance with the rules of the road;
 - compliance with birth standards;
 - payment for public transport;
 - virtue in education;
 - social activity;
 - respect for parents;
 - judgment.

Online accounting is the third component of the developed algorithm for calculating points and provides for the analysis of such information about citizens:

- interaction with Internet users;

 reliability of information posted or copied on the Internet;

– purchasing habits.

As a result of the calculation, citizens have or lose access to certain public goods or bonuses:

- the amount of the insurance premium;
- availability of medical services;
- the amount and rate of the loan;
- Internet accessibility;
- admission to public service vacancies;
- permission to use aircraft;
- availability of educational services and scholarships;
 trips abroad;
- admission to a luxury hotel, etc.

One of the components of the social rating is blacklists, which are already in force and include citizens who are recognized as unreliable. Such people are forbidden to use many social benefits (loans, travel, and much more) and it is quite difficult to «get out» from such a list. At least, the current practice indicates that millions are credited there, and thousands are deleted.

The prospects for blacklisted people may turn out to be far from rosy: tied to a certain territory, without access to well-paid work, they can become a cheap labor force.

In this project, the government is actively using the resources of private companies, using the entire arsenal of influence. Citizen data collected by IT companies, ordered by the government, is used in social credit score calculations. China's search engine giant Baudi is the main developer of the platform. Alibaba and Tencent are also involved in the development of the rating system.

Social rating, or the system of social trust in China, is an automated system of norms, rules and restrictions (according to the laws of the state, moral, ethical, etc.). The social ranking program relies on Chinese law, regulations, technology and BigData.

A country with 1.5 billion people requires the use of such risk management tools that take into account the specifics of the development of Chinese society [8, 9]. The level of technological development in the 21st century in the PRC has opened up opportunities for the application of innovative data processing programs, which have become the basis of the architecture of the social rating program. But in the course of the pilot project of the rating program for citizens, the government of the PRC identified problems that hinder innovation. For example, the unification of the criteria for assessing a citizen, which differ in the provinces and do not have a «common denominator». Also, the lack of standards for the disclosure of private information is an obstacle to the rapid scaling of innovation [10, 11]. The problems of the program include the existing contradictions between the work of the social rating system and Chinese law. An important unresolved issue is the restoration of the reputation of persons who are included in the list of unreliable, including erroneously. Finally, the establishment of information security standards against data leakage.

The declared result of the implementation of the social rating program should be a fully regulated society, guided by established norms and rules. But like every project, including the government one, the social rating has its positive and negative sides.

To effectively use the experience of the PRC, it is possible to know that the social rating system should have:

- official rules and regulatory standards;
- clear evaluation criteria;
- certain sources of obtaining information about citizens;
- set of incentives and restrictions;
- protection of the rights of citizens;
- system development plan;
- regulation of the responsibility of the institutions of the system [11].

4. Conclusions

In the course of the study, the components and advantages of the social rating of the PRC population were analyzed in order to use experience in building similar systems in other countries. As a result of the study, the shortcomings of this system were identified, which, due to their imperfection, create obstacles for the successful implementation of the project and discomfort for both the population and regulatory institutions.

References

- Plastun, M. (2021). Sotcialnyi reiting grazhdan: diktat gosudarstva ili shans na spravedlivost? *LigaBlogi*. Available at: https:// blog.liga.net/user/mplastun/article/38939
- Ali-Eldin, A. M. T. (2018). Trust prediction in online social rating networks. *Ain Shams Engineering Journal*, 9 (4), 3103–3112. doi: http://doi.org/10.1016/j.asej.2018.03.005
- Bliss, C. A., Frank, M. R., Danforth, C. M., Dodds, P. S. (2014). An evolutionary algorithm approach to link prediction in dynamic social networks. *Journal of Computational Science*, 5 (5), 750–764. doi: http://doi.org/10.1016/j.jocs.2014.01.003
- Bazhenova, Ye. S., Östrovskyi, O. V. (2020). Naselennia Kytaiu. Kyiv: Znannia, 219.
- 5. Devianosto, A., Martyrosian, M. (2015). Kytaiskyi proryv i urok dlia Ukrainy. Kyiv: Znannia, 395.
- 6. Butov, V. I. (2015). Demohrafiia. Zhytomyr: Ruta, 592.
- 7. Statistical Performance Indicators (SPI). *The World Bank Group*. Available at: https://www.worldbank.org/en/programs/statistical-performance-indicators
- 8. Malevych, I. A. (2019). Uvaha Kytai. Kyiv: Znannia, 320.
- Selyshchev, A. S., Selyshchev, N. A. (2020). Kytaiska ekonomika v 21 stolitti. Kyiv: Vyshcha shkola, 240.
- Salitskii, A. I. (2019). Vzaiemodiia KNR zi svitovym hospodarstvom. Kyiv: Znannia, 2587.
- 11. Tszishen, L., Kazirinova, O. V. (2019). Ekonomichni reformy v Kytai. Kyiv: Znannia, 311.

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