State monopolies in China: history and modern experience

Abstract. The aim of the research is to identify the patterns and role of state monopoly policies in the development of Chinese state and society. It provides a comparative analysis of the Chinese government’s policy in the field of monopolies in history and at the present stage. State monopolies have played an important role and have had significant political and economic influence throughout history in China. One of the China’s monopolies which has a great influence on the high-tech production market is the monopoly on rare earth metals (REM). Control over this market increases the dependence of other countries on China and allows the use of this dependence in foreign policy processes. The second monopoly, Panda monopoly, is also used as an instrument of foreign policy to express friendly intentions and willingness to cooperate. Along with this, a number of monopolies are undergoing transformational processes in China. For example, one of the oldest monopolies in the world - the monopoly of China on salt - was dismantled in 2017, the Chinese government is preparing to abolish the state monopoly on oil and gas mining and production in 2020. The Internet market trends discussed in the article indicate the presence of monopolies in the Internet space and the need to build new antitrust policy in the digital sphere.

Keywords: Monopoly; China; Monopoly on Rare Earth Metals; REM; Panda Diplomacy; Salt Monopoly; Mining of Oil And Gas; Digital Monopoly; Antitrust Policy.

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1. Introduction
State monopolies which are based on the regalia right to carry out certain activities are a powerful economic and political tool. At different stages of historical development, monopolies influenced not only domestic economic processes but also determined and reflected foreign economic policy. China is the most striking example in the manifestation of the role of monopoly. It is considered to be one of the strongest countries in the world today. The monopoly on China’s rare earth metals will allow it to keep under control entire sectors of global manufacturing and technology. Separate types of monopolies allowed the country to maintain its identity and define a national strategy in individual sectors (tea, salt monopolies, Panda monopoly, etc.).

2. Brief Literature Review
Researches on the state policy in the field of monopolies have a large place in the history of economics and economic theory. However, this topic has not been systematically studied either in Russia or in foreign countries. Scientists, describing the history of the formation of a particular monopoly or state policy in this area, as a rule, have characterized individual effects of monopolies in certain areas (social, economic, etc.). Such approach can be found in the works of W. Theobald, A. Hoogvelt, E. Ringmar, E. A. Cole, L. Tsusen, F. Huang and others.
In Russia the history of monopolies is the subject of economic theory in general, and only partially - the history of state and law (Larina & Emelyanov, 2018).

3. The Purpose of the paper is to conduct a comprehensive comparative study of the state policy in the field of monopoly in China from the economic and legal perspectives at the historical and modern stages.

4. Results

Monopoly on rare earth metals
The production of high-tech products ensures China’s leadership in the world market and contributes to its competitiveness. The era of high technologies not only allows countries to increase the pace of socio-economic development, improve the level and quality of life, but also rebuilds the entire economic world order. The increase in production of high-tech products is associated with the search and processing of resources and materials. One of the characteristics of national industry is the percentage of use of rare earth elements (REE) in production. There are about 17 elements in this list, most of which are mined in China, Russia; the USA, India, Australia, Canada, etc. One should note that the structure of stocks is uneven (Figure 1).
Figure 1 shows that most of stocks (55%) are concentrated in China. The shares of rare-earth metals are also quite high in Russia (21%), Canada (5.8%) and Greenland (5.1%). Most of REE (97%) are «light» rare earth elements (LREE). «Heavy» rare earth elements (HREE) comprise only 7%.

There exist three interrelated processes in the global supply chain of rare earth metals: upstream (exploration and production), middlestream (processing), and downstream (high-tech production) (Samsonov, 2018).

The distribution of countries at these stages of the global supply chain is uneven (Figure 2 and Figure 3), since not all deposits are equally profitable.

Currently, the leader in the extraction and processing of rare earth metals is China; it is mining REM in nine provinces (Figure 4).

According to the experts’ estimations, China controls about 95% of the market: if rare-earth metals are mined in a number of countries, processing is almost completely carried out in China. Since the 1980s, China has begun a policy to develop facilities for the extraction and processing of rare earth metals. The low cost of processing is due to the effect of scale of production, the availability of cheap labour and weak environmental regulation of production processes in China. China’s significant share of the rare earth metals market makes it possible to influence the market and determine
favourable terms of cooperation for China. This increases the dependence of countries on their imports and allows China to use this advantage in the world market. The unrest over China’s monopoly on rare earths arose in 2009-2010 as a result of the introduction of quotas for the export of rare earth metals and a significant increase in their prices. For some items, prices have increased 5 times. In 2010, in response to an incident with Chinese fishing vessels in the waters of the Senkaku Islands, China restricted the export of rare earth metals to Japan. Only the WTO intervention

Figure 3:
Import of rare earth metals in 2013
Source: Mining Industry (2014)

Figure 4:
Import of rare earth metals in 2013
Source: Mining Industry (2014)
allowed resolving the situation. The abolition of quotas has stabilized the market situation and led to the fact that many countries resumed research related to the reuse of rare earth metals. Thus, in Japan, three Japanese companies are currently engaged in such processing: Hitachi, Showa Denko KK, and Mitsubishi Materials (Malinina, 2018). Rare earth material mining and recycling operations are also carried out in the United States and Australia.

As Tim Worstall (2016) noted, China’s rare-earth metals monopoly is a contested monopoly, which means that if Beijing dictates prices too high, other countries will start rare earth metals mining and China’s monopoly will be destroyed.

**Monopoly on salt**

In China the salt monopoly is the world’s oldest state monopoly. It existed for more than 2,000 years (from the 7th century B.C. to 2017).

Initially, in China, salt was extracted from sea water, and then drilling technology replaced it. Dark salt has been valued above white for a long time in China, and taxes on it were higher. The punishment for salt smuggling was the death penalty in China in the early times. In order to combat violations in this area, the Chinese government divided the country into two parts (in one they sold salt in cubes, in the other - in balls). It was strictly forbidden to transport and sell it. The ban continued in the 19th century, when China was divided into 13 salt districts. The sale of salt throughout the history of China has been tightly controlled by the state, despite the change of power and regimes of government.

In the last decade (from 2008 to 2018), the salt production market has remained stable in China (Figure 5). In 2015, there were about 300 salt producing companies and more than 4,000 distributors in China (Troyan, 2016).

It is worth noting that the salt market includes the use of salt in the food and chemical industries, as well as the salt produced in China is technical. China imports bulk edible salt (Kulikov, 2016). Thus, China is both the main producer (along with India and the USA) and consumer of salt (25% of global demand).

The decision of China to abolish the monopoly on salt since 2017 was made in connection with the reduction of the role of the salt sector in the Chinese economy (Nevelsky, 2014). The share of revenue from the salt industry in China is not significant, and bureaucratic procedures created during the monopoly’s existence (the need for quotas, excessive regulation of the industry) have led to a decrease in the profitability of companies and the lack of innovation in the industry (Chinese companies have 4-8 times lower productivity than the foreign ones).

After the abolition of the monopoly, salt prices have remained the same in the country, but companies still experience difficulties associated with over-regulation of this market in China.

As can be seen from Figure 6, salt production grew in the world from 1975 to 2017. According to the analysts, in the coming years, salt consumption will continue to grow in the world. This is due to the projected population growth and increased urbanization.

Another monopoly of China, soon to be terminated is the state monopoly on oil and gas production since May 01, 2020. Xinhua has announced the removal of restrictions on the work of foreign companies in this market (Regnum, 2020).

![Figure 5: Production of salt in China in 2008-2018](Source: Statista (2019))
Panda Monopoly

All pandas are owned and leased by China in the world. The transfer of pandas by China to another state symbolizes warm relations between countries and is used in foreign policy. Panda Diplomacy has existed since ancient times. The first pandas were presented by Empress Wu Zetian to the Japanese emperor during the Tang Dynasty in 685 as a sign of mutual understanding. Panda Diplomacy has been successfully used to express China’s political orientation at the present time (in May 2019, two pandas were transported from China to Russia). Today, pandas are kept in 26 zoos in 20 countries around the world (TASS, 2019).

According to research by The Washington Post (Swanson & Ehrenfreund, 2015), zoos spend significant amounts of money on pandas. Only the rent for one panda per year is USD 1,000,000. Additionally, the costs of maintenance, care and research are paid. The rental period is 10-15 years. All cubs born during the rental period also belong to China and are payable in the amount of USD 1,000,000.

Monopolies in the Internet industry market and new trends

In the development of monopolies current trends are associated with the Internet industry and represent a separate area of state regulation. Similar to the traditional market, in the digital environment of China, some segments are assigned to a small number of leading companies. Whether it is online streaming, chats, taxi services and so on, there are always market leaders who own 60-90% of all revenue in the segments.

Hence, while in the USA, according to the 2015 study, 67% of the search is done by Google, in China 70% of the search business is done by Baidu. Alibaba (80% of online purchases) has concentrated the largest revenues in the field of e-commerce; Wechat and QQ are used for chatting (60% of the total number) (Xinlei, 2015).

The development of monopolies in the Internet environment is associated with the following features.

Firstly, new users prefer to join sites where a large number of people are already registered. This is due to the fact that with the growth of the site’s popularity, the level of trust in the resource also increases, and accordingly the number of visitors increases every day, too. Thus, there is a situation in the market where only one winner is possible. There are such examples not only in China, but also in other countries (for example, the most popular taxi-hailing applications are Didi and Kuaidi in China, Yandex. Taxi - in Russia, Uber - in Europe).

Secondly, in the digital environment, likewise the traditional industries, works an effect of saving on the scale of production, in which the costs per unit of Internet giants are getting lower, while the profits are surging higher. Mergers and acquisitions of major players also contribute to the monopolization of the market (an example is the merger of the Chinese video-sharing sites Youku and Tudou).
The above factors compel the state to seek new tools for regulating monopolies in the digital environment, which, on the one hand, should not increase user costs, and on the other hand, contribute to healthy competition and lower barriers to entry into the e-commerce market for new companies.

Craig Allen, the sixth President of the United States-China Business Council (USCBC), believes that China’s monopolies occupy too much of the economy: 43 to 45% of China’s economy is closed to the foreign investment. The state controls telecommunications, the media, electricity, oil and gas, construction and other industries (cit. by Wu, 2015).

In a globalized economy, transnational companies are playing an increasingly important role, the budgets of which are comparable and sometimes exceed the budgets of the individual countries. If we analyze the TOP-10 companies according to the Forbes magazine (cit. by Kommersant, 2019), then five of them are Chinese corporations (Table 1).

In terms of the number of the world’s wealthiest people, China has overtaken the United States and has got a leading position (Credit Suisse Group AG, 2019).

The growth of China’s economy has been boosted by low customs duties (both on export and import) and the relatively low price of labour resources. The growth of China’s well-being and raising of living standards inside the country forces the state to look for other sources of economic growth, since the average wage in China over the past decade has increased one and a half times (All about China, 2019), while the GDP growth rate is reduced from 6.2% to 5-5.5% per year.

Experts note that in view of the prevailing conditions, China is very likely to fall into the trap of «middle income», therefore, modernizing economic policy and analyzing the experience of the European countries are indispensable conditions for building a new paradigm for China’s development.

### Table 1:
**Top 10 largest companies in the world according to the Forbes magazine in 2019**

| Rank | Company                      | Country   |
|------|------------------------------|-----------|
| 1    | ICBC                         | China     |
| 2    | JP Morgan Chase              | USA       |
| 3    | China Construction Bank      | China     |
| 4    | Agricultural Bank of China   | China     |
| 5    | Bank of America              | USA       |
| 6    | Apple                        | USA       |
| 7    | Ping An Insurance Group      | China     |
| 8    | Bank of China                | China     |
| 9    | Royal Dutch Shell            | Netherlands|
| 10   | Wells Fargo                  | USA       |

Source: Kommersant (2019)

### 5. Conclusions

Based on the study of the measures by the Chinese government to establish and abolish monopolies, it can be argued that monopolies were the most important socio-economic instrument that allowed China to create the world’s most powerful economy. State and legal support for certain types of monopolies was based on a clear strategy for maintaining identity and striving for a high level of economy.

Analysis of China’s policy in the field of monopoly regulation has shown that the Chinese government has recently been inclined to revise its antitrust policy. This is partially due to a change in the place of the Chinese economy in the world. The current economic system of China requires transformation for further development and transition to a new level of development.

Comparative historical analysis has made it possible to gradually assess the political, social, and economic role of certain types of monopolies in China.

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