

Patterns of development of national power: historical experience of the world states

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Abstract

The article is of interest to specialists, both in the economic and defense spheres, who are engaged in research on the issues of meeting the military and economic needs of states, both in peacetime and in wartime. The aim of the article is to study the dependencies in the development of economic potential of states and increase their military power, on the example of the historical development of Germany and Japan in the second half of the 19th century and early 20th century. The article examines and identifies trends in socio-economic and political development of the two countries, as well as their impact on the formation of military power of states. The analysis of the sources shows that the issue of developing the military and economic power of the states is given a lot of attention, especially the interest in this issue began to grow with the beginning of the war in Syria and Ukraine. The vast majority of countries in the world are gradually increasing their defense budgets, thus increasing global military power and tension. The issue of military power is increasingly receiving the attention of the top political leadership of the advanced states of the world, which cannot but arouse the interest of scientists. Research on historical analogies, identical to past events, can help identify patterns and predict scenarios for future events, which will help states better prepare for the future.

Key words: economic potential, military potential, military-economic potential, national power, economic power, military power.

Introduction

If we consider the environment of economic functioning and the formation of military power of the state, then it should be understood that in each state it operates with its own characteristics. This situation is related to the historical development of the state, its geographical location, national culture, historical development of economic sectors, development of science and technology, development of neighboring countries, i.e. the set of principles or philosophy by which relationships are formed in society.

In economics, there are two concepts of methodological individualism and methodological holism. These concepts are interesting for a qualitative study of the power of the state as a

phenomenon. According to these concepts, the economic development of countries takes place according to two models – “individualism” (English economic tradition) and “holism” (German economic tradition).

It is interesting to study the stages of socio-economic development of Germany and Japan on the basis of these concepts. To do this, it is necessary to study the historical experience of the two countries and existing research in this area. This approach will help to find certain patterns in the development of the economic system and society, and in the future and their impact on the formation of military power.

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Material and methods

The aim of the article is to identify patterns in the socio-economic development of Germany and Japan in the late 19th and early 20th centuries. To ensure the achievement of the purpose of the article, it is recommended to explain the purpose of scientific research and describe each stage of research:

first, to consider the state of socio-economic development of countries;

secondly, to explore the preconditions that contributed to the “economic miracle” in these countries;

third, to consider the stages of industrialization and the transition of the economy to a new technological way;

fourth, to study the impact of accelerated economic development on the growth of military power and foreign policy activity of the two states.

The following research methods were used in the study: analysis, synthesis, induction, deduction, historical analogy, formation of conclusions and assumptions.

Results and discussion

In economics, there are two concepts of methodological individualism and methodological holism. The English economic tradition considered the economic interest of the individual, and the German prioritized the interests of society. Accordingly, these concepts further influenced the formation of economic models around the world. Conventionally, the world can be divided into two parts – the first chose the path of development through individualism (countries of Western culture), and the second holism (collectivism).

Individualism says that the center is man, his rights and freedoms, where society consists only of people and their actions, and above them there are no supra-individual entities (Kincaid H. 1998). Proponents of holism say that the whole (society) is something greater than the sum of its components, according to Hegel, “only the whole matters”, for the good of society can be sacrificed by individuals or individual components of the system.

Scholars such as F. Hayek, B. Bratskus, and K. Popper associate ontological holism (collectivism) with a certain ideological position – hostility to economic and political liberalism, adherence to the theory of socio-economic development planning and authoritarianism.

One of the radical individualists was Max Weber, who argued that individuals create collective organs, they are the atoms of the social world. Weber was interested in the actions of individuals – social or important actions, and unconscious actions or automatic (Aron R. 1993).

John Locke in his work “Two Treatises of Government” (Lock. J. 1998) developed a theory of the origin of the state, which is based on a social contract concluded by all citizens, and in violation of the contract citizens had the right to demand its revision because they are the supreme power.

The Austrian economist Friedrich Hayek called individualism “innovative”, characterized by the power of belief in the individual mind. Everything created is the result of conscious design of the human mind, which is associated with the concept of social contract and the design of social institutions (Hayek F. 2000). Hayek wrote – “Only the existence of general rules allows peaceful coexistence of people in society” (Friedrich A., Hayek F. 1976). That is, he argued that only law can balance the interests of all players in economic and social relations. In turn, the law comes from the will of the legislator, who rationally examines social problems and creates laws that create a stable social order.

Modern sociological science pays much attention to explaining the behavior of “economic man”. This approach proposes to study the social foundations of economic action in the framework of economic sociology. That is, economic action depends on social relations, institutions and structures. The sociological approach considers economic action as a social action.

The first to separate economic theory and sociology was V. Pareto. Accordingly, economics considers logical actions, and sociology interprets illogical (Aron R. 1993). According to J. Dussebury,

all economic theory is about how people make choices, and all sociology is about why people have no choice (Duesenberry J. 1985). If we consider the economic and sociological man as

antipodes, the first is an independent person, selfish, competent, rational, and the second – obeys customs and norms, irrational, inconsistent, uninformed and useless (Table 1).

Table 1 – Man is economic and sociological

Measurement	The man is economical	Sociological man
Subject	Individual	Group, community (individual as a member of the group)
Motivation	Personal interest	Values (traditions, solidarity, freedom, equality, faith)
Evaluation criteria	Rationality, calculation (balance of profits - losses)	A large number of rationalities, normative irrationality and irrationality (good versus bad)
Principles of action	Free choice, strict restrictions	Limitations in action (soft), others act, actions have different meanings, the strength of customs
Space of action	Market, private sphere	Society (market as a social institution), public sphere
Principles of organization of social space	Interaction of individuals for mutual benefit	Influence of politics (government) in accordance with the criteria of social justice
Objectives of the analysis	Foresight	Description, interpretation, research
Methods	Mathematical, formal	Empirical, high quality
Methodology	Reductionism, individualism	Holism
Intellectual tradition	Keynes, Marshall, Smith, Samuelson	Marx, Durkheim, Weber, Parsons

(Kmorawski W. 2001) (June 22, 2020)

Methodological holism is the opposite of methodological individualism. Holists view the individual as part of a whole. Social institutions (for example, the state) are accepted as primary, not the individual, and the characteristic of the individual is derived from the existence of institutions. According to this theory, it is the institutions that determine the logic of economic development.

Holism as a philosophical trend was founded by J. Haldane, and as a concept by the scientist K. Smets in 1925. In economic theory, holism is based on the unity of economic, social, cultural spheres in which there is an economic agent. An individual exists in close contact with other individuals who directly influence his behavior.

German thinkers and scholars have traditionally been the philosophical justification

for the existence of holism. F. Hegel argued that society is formed through the manifestation of the spirit of the people, and the state is a system-forming element.

The further development of the discourse of holism was due to American institutionalism, which allows for analysis by comparing studies of socio-economic systems. Institutionalism is characterized by an interdisciplinary approach and the introduction of a new unit of economic analysis – the institute.

Dutch scholars Charles Turner and Alfons Trompernaars, using an institutional approach, found differences in the models of capitalism based on the industrialization strategies implemented in some countries. Thus, they defined two strategies of industrialization “innovative” and “catching up” (Table 2).

Table 2 – Alignment of national strategies of industrialization

	Great Britain, USA	Germany, Japan
Time factors	Early industrialization	Late industrialization
Development strategy	Innovations cover a wide range of entrepreneurship and management	Selection of the most priority technological sectors
The historical role of government	Do not focus on new phenomena in business. Post-factum intervenes to reform wealthy creators, business acts as a reform adviser	Know the strengths of the world's leading economies, cooperate from the beginning, encourage industrialization, play a constructive role
Education	Very broad, with an emphasis on the natural sciences	Concentration of inefficient technologies and applied science in key areas
Economy	Divided between macroeconomics and microeconomics	Organized around the mesoeconomy (development of certain sectors of the economy and industries)
Social policy	Lagged behind in comparison with innovative development. The government is able to impose social obligations that hinder business	Built in according to the challenges of industrialization. The government views social benefits as a basis for public support
Labor relations	Usually tense in terms of labor costs, there are constant efforts to reduce wages in labor	Usually good, because development begins with a low level of wages, which gradually increases, as I lead the country
Philosophy of development	Libertarianism, free trade	Controlled competition, early protectionism, and theology are the logic of the goals already achieved by leading economies. Key niches and teacher selection
Transition from feudalism	Gradual, finished. Industry is built on the basis of the middle class, individualism and personal gain.	Fast and partial is not finished. Industry is built on the basis of collective feudal notions of duty and reciprocity
Industry financing concept	Adherence to an unstable short-term stock market and risk-averse individuals seeking quick profits, limited knowledge, short-term relationships	Dominance of short-term bank financing and focus on less risky institutions, deeper knowledge, less uncertainty, closer relationships

(Turner C., Trompenaars A. 1993)

Germany and Japan have a "catch-up" strategy that is carefully planned and balanced. It is based on existing experience, on the path traveled by innovative countries. This strategy is beneficial with clearly planned actions, the maximum possible repetition of an already successful strategy, and therefore it requires more centralized management and constant monitoring. The advantages of such a strategy are that it uses an already proven case, the risks in its implementation are many times less, i.e. the

sustainable development of the country is achieved and the losses are acceptable. But the disadvantage is that, as a rule, such countries can very rarely make revolutionary discoveries and changes on their own, without external influence.

This approach is also related to the traditions of these nations and their mentality. Germany is a traditional continental country, which until recently was highly fragmented and focused mainly on wars in continental Europe, almost without going beyond its borders. It was not until

the second half of the 19th century, when Germany was reunited, that it began its colonial expansion, but by then most of the world's territory was already occupied by other European countries.

The negative factor that prevented Germany from moving to the capitalist system was its political fragmentation, where each state built its own policy and isolation from world trade routes.

The creation of a customs union in 1833 between the German states allowed to expand the national market and accelerate economic development. Significant changes have taken place in light industry, namely in cotton and silk – in Saxony, cloth – in the Rhineland and Prussia. Between 1834 and 1838, 45 new factories were built, and between 1833 and 1846, 8 cotton and 128 flax spinning mills were built in Silesia (June 23, 2020).

The mining industry also developed in the middle of the XIX century. 3 million tons of coal were mined, 200 tons of pig iron were smelted. The most developed industrial area was the Rhine-Westphalia, which housed about 25% of industrial workers. The first 12 km long railway appeared in 1835, and in 1848 the length of the railway increased to 2.5 thousand km.

Due to the fact that Germany was in significant political fragmentation, which hindered the development of the capitalist market and at the same time there was an increase in the production of goods, this led to overproduction and the economic crisis in 1847. It was the economic crisis that was the last impetus for the revolution of 1848-1849. The aim of the revolution was to unite Germany into one state, to abolish the feudal order, to introduce general parliamentary elections, a constitution and freedom of the press. The driving force of the revolution was the broad masses of the people under the leadership of the liberal bourgeoisie. The revolution never achieved its goal, the liberal bourgeoisie was defeated, but there was also a positive moment – the abolition of serfdom. This event is significant because the peasants began to transform into workers, which increased labor potential and accelerated industrialization.

In 1871, Germany was united into an empire

led by the Kingdom of Prussia, which had a positive effect on its economic rise. The borders between the German states disappeared and space for the movement of goods and labor opened up, and a single currency was created. In 1850-70's banking developed, in Prussia during this time there were 20 joint-stock banks. The contribution that France had to pay to Germany after the defeat of the war of 1870-1871 provided capital for construction and railway construction projects.

In terms of economic development, Germany still lagged behind Britain and France, but continued to catch up. By 1900, Germany was equal in economic power to Britain. Coal production in 1880 accounted for 30% of British production, but by 1913 its production had increased sixfold, and was equal to British production. Steel production has increased tenfold and exceeded the British. By 1914, Germany produced half of the world's electrical equipment and became one of the most powerful industrial giants (June 12, 2020).

Economic successes also affected Germany's military power and colonial ambitions. One of the defining conditions for Germany's successful colonial policy was the need for a strong navy. The greatest supporter of the development of the navy was Emperor Wilhelm II, so in 1897 he appointed Rear Admiral A. von Tirpitz to the post of Secretary of State for Naval Affairs. It was Tirpitz who substantiated the strategic concept of Germany's struggle against Great Britain for world domination. In 1900, the Reichstag approved a new naval program which provided for the doubling of the navy. The navy was to become the most powerful after Britain by 1915, with 38 battleships, 14 battleships and 38 light cruisers (Alafuzov V. 1956). This confirmed that Germany was embarking on a path of colonial expansion far beyond its borders.

At the same time, the German army grew in peacetime. In the 20 years since 1870, the number of ground forces has grown by 62% and has continued to grow steadily until the outbreak of World War I (Fig. 1). This situation was connected, including with the arms race and the rivalry for military power with France.

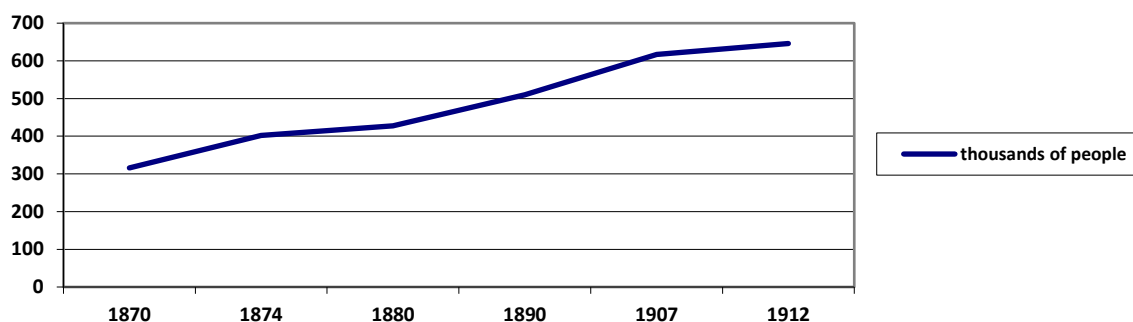


Fig. 1. The dynamics of growth in the army of the German Empire in the late XIX early XX century (June 14, 2020)

The growth of the German economy also affected its demographic situation. So, in 1900 in terms of population, it became the second in Europe, after the Russian Empire. Its population was 54.326 million people, and the natural increase per 1,000 people per year was 13.7 people (June 15, 2020).

Germany's economic growth influenced not only the growth of its political and military power, but also the rise of the people's spirit – there was more and more talk about the peculiarity of the German nation and its higher purpose. The combination of such factors allowed elites, through politics and military force, to expand their influence far beyond mainland Germany, thereby expanding the market for German goods and increasing access to resources.

Japan's path to market economy reform and development is interesting. Prior to the arrival of the Europeans, Japan was an isolated country with its own distinctive way of life. Until the middle of the XIX century it was a deeply feudal and fragmented state, which almost did not go beyond its island. The basis of its economy was agriculture, which employed 80% of the labor force.

At the beginning of the XVIII century in Japan, the official head of state was the Emperor, but in fact all the power was held by the shogun – the highest military leader of the state. It was the shogunate that was interested in preserving the existing socio-political system and in the power of feudal estates. Representatives of the shogunate did not recognize that the socio-political and socio-economic system in Japan is backward and needs radical reforms, and this was confirmed by

economic and social instability in the country.

Traditional Japanese society was considered to be peasants who did not have the right to own land, but ran farms in the areas allotted to them. The peasants were not allowed to leave the land and change their occupation, and were obliged to pay taxes.

The first sign of Japan's backwardness from other, already capitalist, countries was the fact that in 1854 a US military squadron entered a bay near the capital. The goal of the Americans was to demonstrate their military power and superiority over Japan and to obtain permission for US ships to enter Japanese ports. In 1854, such an agreement was reached and American ships were able to replenish their supplies in Japanese ports. England and the Russian Empire followed the same path. This showed the inability of the Japanese to resist in the power struggle of a more technologically and economically advanced enemy (June 18, 2020.).

Such events finally undermined the authority of the shogunate, because a certain part of the ruling elite saw the irreversible backwardness of Japan from European-type countries, which could later lead to its collapse. In 1866, Shogun Emoti died, and in 1866 Emperor Komei announced the need to reform the socio-political and socio-economic system in the country, which led to the revolution. The emperor's troops were already armed with European weapons at that time, so the shogunate's troops were defeated.

After the victory, the Emperor of Japan undertook rapid reforms using European and American experience. The emperor and his

government became the supreme power. During 1871–1888 the government carried out administrative and territorial reform, abolished the borders of the principalities and the state of privilege. Agrarian reform was carried out, feudal landholdings were abolished, and the land was transferred to private ownership without redemption by those who actually used it, i.e. the peasants. Thus, private property was legalized, the land market was opened, and former large landowners were given the opportunity to invest their money in finance and trade. Such reforms became the first preconditions for the emergence of capitalist production.

The changes did not take long and in a short period of time in Japan there was a real industrial revolution. Lacking their latest inventions and technologies, the Japanese began to borrow them from Europe and the United States. This approach gave the Japanese the opportunity to become one of the world's leading industrial and technological powers.

Japan's economic growth continued until 1890, when the economic crisis began, which was associated with overproduction and falling prices for light industry products, which together with food accounted for 90% of all industry. Rice prices rose in the same year due to low yields. The Japanese government decided to engage in economic expansion in the Korean and Chinese markets, which did not accept Japanese products, which later led to war.

During the first economic boom of 1870–1890, Japan was engaged in building military capabilities, its military expenditures were the largest in the world relative to the national budget and accounted for 36% of budget expenditures (Kuzminov Y.I. 1986). Increased military power was used in the war with Korea and China in 1894–1895. As a result, Japan received the rights to colonial exploitation of Korea, received its first colony, the island of Taiwan and contributions from China. In addition, as a result of the signing of the peace treaty, China undertook to allow Japanese citizens to open industrial enterprises on its territory.

After the war, a new economic boom began in Japan. The Japanese understood the strength of military and economic potential and the

opportunities it provides. Therefore, in 1895 the parliament adopted a 10-year program of economic development in order to reform and develop the armed forces, the creation of new branches of heavy and defense industries. It was planned to increase the fleet 4 times and the army 2 times. The Government of Japan has decided to direct 90% of all contributions to the development of heavy and defense industries. In 10 years, from 1893 to 1903, the number of workers in the defense industry increased 40 times. Military and merchant shipbuilding underwent special development. The quality of warships was at the level of world standards.

It can be concluded that before the so-called bourgeois revolution in 1868, Japan was a backward feudal country, lagging far behind economically and militarily from the then European countries. That is why it began to cede its sovereignty to stronger countries and make concessions to them (Britain, the United States, the Russian Empire). In addition, the economic situation did not suit the society, which aggressively perceived the existing socio-economic and socio-political order in the country. All this led to inevitable changes, as a result of which the emperor chose the European model of government and the economy for Japan. The Japanese were able to reform their economy, launch capitalist entrepreneurship and a market economy in a short time. For 27 years, the Japanese economy has increased its military power. The army and navy have been successfully reformed and completely re-equipped according to the latest world standards. As early as 1894, Japan started colonial wars, which was evidence of its economic and military power.

The patterns of development of the military and economic potential of Germany and Japan are extremely similar, both in phase and in chronology. Almost the same, at the beginning of the transformation, the state system and the degree of fragmentation of the state, the economic situation, the revolutionary mood of society, backwardness from developed countries (although in Japan this figure is brighter), the conflict of interest of the ruling elites. Extremely similar periods of industrialization of the two states, their pace, economic growth, growth of

military power and spiritual uplift of society and the formation of a single nation (Table 3).

Table 3 – Patterns of development of military power of Germany and Japan in the XIX and early XX centuries

Germany	Japan
Revolution, the unification of a fragmented state into a single political and economic space	
Borrowing experience and creating conditions for the functioning of democratic institutions (parliament, government, liberalized legislation)	
Capitalist economy and free market (private property, equality before the law, free enterprise, capital increase)	
Borrowing technologies, industrialization, development of education	
Discoveries in science and technology development	Use of technologies of developed countries
Accelerated economic growth (GDP growth and national wealth)	
Demographic boom (population growth and quality of life)	
Raising the national spirit and unity	
The growth of military power of the state. The growth of the defense budget, the size of the army and the development of the navy.	
The growth of political and economic influence in the world (capture of new lands to expand the resource base and markets)	
The struggle for the division of spheres of influence in the world with world powers	

Conclusions

The study shows that it is the social, political and economic transformations in Germany and Japan that have made them the world's leading countries in all respects. It should be noted that the key to successful transformation was the use of existing experience of Great Britain and the United States. Reforms, industrialization and the emergence of a market economy were the result of the social revolution and the formation of democratic institutions. Since these states are

historically closer to the collective than to the individual, the path of change had its own specifics. Following the existing experience has led to an "economic miracle", a demographic boom and a national upsurge. As a result, the military power of these states grew and the temptation of national elites to join the global division of spheres grew. Later, such sentiments became one of the causes of the two world wars.

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