

MANAGEMENT OF CONSTRUCTION ENTERPRISES IN THE LEADING COUNTRIES OF THE WORLD: MACROLEVEL

Vasyl Dmitrenko¹, Yury Prav²

¹Ph.D. (Economics), Professor, Cherkasy Institute of Fire Safety named after the Heroes of Chernobyl, Cherkasy, Ukraine, dmytrenkovi@ukr.net, ORCID: <https://orcid.org/0000-0003-1860-418X>

²Ph.D. (Economics), Associate Professor of the Public Administration Department of the Educational and Scientific Institute of International Relations and Social Sciences, Interregional Academy of Personnel Management, Kyiv, Ukraine, e-mail: vsega_prav@ukr.net

Citation:

Dmitrenko, V., & Prav, Y. (2020). Management of construction enterprises in the leading countries of the world: macrolevel. *Economics, Finance and Management Review*, (1), 99–108. <https://doi.org/10.36690/2674-5208-2020-1-98-108>

Received: January 13, 2020

Approved: March 23, 2020

Published: March 25, 2020



This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY-NC 4.0\) license](https://creativecommons.org/licenses/by-nc/4.0/)



Abstract. The article identifies the peculiarities of managing the activity of enterprises of the construction industry at the macro level in the leading countries of the world, such as: USA, Canada, Great Britain, Germany, France and other EU countries. The main directions of macro-regulation of activity of the enterprises of the construction industry are the bodies of state regulation of activity of the enterprises of the construction industry; legal support (licensing of construction activities; documenting the start of construction works; commissioning of a construction site, etc.), as well as technical regulation (requirements for the construction process, qualification requirements for workers, requirements for technical supervision, etc.). The common features, which are characteristic of most countries of the world regarding the macro-regulation of the activity of the construction industry enterprises are established: stable balance of economic and social interests of the participants of the construction market; refusal of the state from the established historical monopoly on the technical regulation of the construction market and the gradual transition to a system of technical self-regulation; high degree of economic and creative freedom of the objects of regulation; developed social and economic institutes of the construction industry; deep integration of the institutions of the construction industry of a particular state into a single world socio-economic system due to the harmonization of the principles of technical regulation, with the diversity of forms of implementation of these principles, taking into account national peculiarities; high level of building culture. The main differences in the macro-regulation of the activity of construction industry enterprises are identified, which are the technical regulation and legal support in different countries of the world, which depend on the individual conditions of development and activity of each individual state.

Keywords: enterprises of the construction industry, macro level, management, state regulation, legal support, technical regulation.

JEL Classification: H49, H70, L70, L74

Formulas: 0; **fig.:** 0; **tabl.:** 1; **bibl.:** 6

Introduction. State policy plays a crucial role in the development of construction around the world, because it is the state that controls the main and most limited resource without which construction is impossible - land. The experience of developed countries shows that effective performance of the state by its state gives a powerful impetus to the development of construction. At the same time, the state is often criticized for creating various barriers to its development. Administrative barriers, bureaucratic red tape, corruption, and transparency in the performance of major government functions directly affect the volume of the construction market and the cost of properties, as developers shift all the costs of overcoming state barriers to the end-buyer. Recently, overseas attention has been given to the issues of construction industry management as one of the important sectors of the economy. Experts believe, and it is confirmed in practice, that the costs of improving management ultimately pay for themselves repeatedly.

Literature review. Peculiarities of managing the activity of enterprises of the construction industry at the macro level were researched by: Ofori, G. (2006) in “Challenges of construction industries in developing countries: lessons from various countries” and “Research on construction industry development at the crossroads”; Drewer S. (1990) in “The international construction system”; Loraine R. K. (1992) in “Construction management in developing countries”; Mark A. Hall and David M. Jaggar in “Should construction enterprises, working internationally, take account of cultural differences in culture?”; Bourdeau L. (1999) in “Sustainable development and the future of construction: a comparison of visions from various countries” and other authors.

Aims. Aims is to establish the features of managing the activity of construction industry enterprises at the macro level in the leading countries of the world.

Methods. The author used the methods of static and logical comparison, systematization and generalization, which made it possible to achieve the goal of the study.

Results. Most authors in their works usually identify two groups of countries by the degree of development of state regulation of the economy:

- countries with developed mechanism of state regulation of economy - Western European countries (Germany, France, Netherlands, Scandinavian countries, Austria), as well as developing countries of Asia (Japan, South Korea, China) use macroeconomic planning mechanism in the medium term. Moreover, the states of Western Europe use a comprehensive approach to state regulation, including state programming, which is related to their orientation to the so-called normal socialism (Swedish, Austrian), given the strong positions and great influence of the social-democratic parties of these states;

- countries with less developed mechanism of state intervention in the economy (Canada, Australia, USA), with developed corporate capital, the size and capabilities of which often exceed the state ones. However, in these countries, the role of the state is very important, especially in times of worsening economic conditions, rising inflation and unemployment. Most countries do not have a single building management system, and regulation is based on numerous building codes approved by state, state, county, county, department, or local governments [1-6].

United States. In the US construction industry, the role of the statewide regulatory body is primarily created in 1965 by the Department of Housing and Urban Development, whose task is to coordinate the construction of federal-funded facilities as well as the construction of privately-funded residential homes. budget. The Civil Engineer Corps, building associations and societies such as the Association of American General Contractors, the Association of American Subcontractors, the Association of American Architects, and the American Society of Civil Engineers play a major role in regulating the construction industry. These associations exist at the expense of deductions from construction firms. They develop and issue regulatory documents,

instructions and regulations, promote best practices, organize seminars, symposia and conferences, schools and refresher courses, act as government consultants, and issue special journals [1-6].

Canada. The leading role in the state regulation of construction in Canada is played by the Federal Ministry of State Construction, the Central Corporation for Real Estate, Buildings and Construction, the Construction Industry Development Board, the Canadian State Council for Specifications, the Standards and Design Council, and more. Local governments in the provinces of the country have, in addition, local agencies specializing in safety, environmental protection while conducting construction work, etc. A key role in the development of scientific and technological progress in construction is played by the National Center for Construction Research. An integral part of the progress development network in construction is the vocational training system, as well as academic institutions, universities [1-6].

Japan. Currently, there are more than 500,000 construction firms and enterprises in Japan, led by the Ministry of Construction. The function of the Ministry is the development of projects, laws and regulations in capital construction, licensing. Japan's construction firms are part of two of the largest construction associations. The first of these - Atkenren - coordinates the activities of small and medium-sized companies representing various construction organizations and enterprises of the country, the second association - Zenken - unites construction firms that conduct the construction of urban and municipal facilities. An extremely important role in the governing hierarchy of Japan at the intersection of interests of public institutions and private business is played by the Federation of Economic Organizations, established in 1946. The Federation is the advisory body on the most important economic problems for government agencies and coordinating - for private business. Contractors and other construction firms in Japan are characterized by constant work to find new technical and organizational solutions. A significant role in the development of scientific and technological progress in the construction industry in Japan belongs to the system of construction societies and associations, headed by the Japan Federation of Construction Contractors (Japan Federation of Construction Constructors). Among the professional agencies and associations that are part of the public construction sector, the largest association is the Japanese Society of Civil Engineers, which, like a similar American society, is engaged in the development of construction science, promoting its recent achievements, developing various standards, standards used by most public sector organizations [1-6].

Japan's construction law has a strong tradition, built on regulations and acts of the 40's. However, they define only the general line of construction legislation. Practical work is largely confirmed by the impact of recommendations developed by influential professional associations and organizations in Japan.

Great Britain. The UK's Construction Authority is the Ministry of Construction and Public Works. The main functions of the Ministry are to regulate the activities of construction firms and to issue government-financed budget orders. Construction associations and federations have a major influence on the development of the construction industry, among which the largest are:

- Federation of Civil Contractors representing the interests of construction firms engaged in the construction of ground structures;
- National Federation of Entrepreneurs in Construction, representing the interests of firms engaged in the construction of ground structures;
- Federation of foreign construction, which unites construction companies that conduct construction abroad;
- Federation of Builders, bringing together mainly small-scale construction firms engaged in land-based construction, including repair and reconstruction work.

The regulatory role in construction is played by a system of so-called Codes of Practice developed by the British Standards Institute. The codes of practice contain requirements for different types of activity in construction design, construction work, etc. In 1981, the Civil Engineering Standards Board prepared a standard, known as the "Standards Standards".

Germany. The system of state construction management in Germany has a centralized structure, which includes, in addition to the federal authorities, also the bodies of land, local self-government, which, along with other problems and issues of construction. The federal bodies involved in the regulation of construction include the Interagency Committee on Construction in Lands, the Ministry of Construction, Planning, Housing and Urban Affairs.

Most firms in Germany are members of voluntary manufacturing and trade associations. The main functions of such associations are to protect the interests of the company and to promote the manufactured products market, to exchange technologies, to prepare standards for building materials and their advertising, to develop methods of examinations of building materials, to provide information to the industry. An important role is played by business associations, closely linked to government agencies, and representing the interests of entrepreneurs. In the construction of such unions there are several dozen. The leading union of the Wiesbaden Construction Industry Union is a leading player, which has a major impact on public policy making in the construction sector. The recommendations of business associations are the basis for developing a strategy for private business in the construction sector. The control over the observance of the technical norms in construction is entrusted to the construction authorities of the lands, acting in a general respect of the norms and standards [1-6].

France. The main government body in France that manages the development of the construction industry is the Ministry of Construction, Transport and Tourism. It studies the situation, develops forecasts, consults local authorities, subsidizes and credits firms with the aim of implementing

construction programs. The active role of the Ministry in the development, planning and regulation of construction production, well-established statistical accounting make it possible to solve problems that are impossible and unprofitable for monopolies. Firms belonging to the National Federation of Public Works and the National Building Federation have a major influence on the development of the construction industry. Construction companies in France, mostly large, have the opportunity to obtain profitable contracts through a system of well-established contacts with government agencies. These operations are jointly managed by research, information and other institutions [1-6].

Finland. The positions of the state and municipalities in Finland are very strong as they make the main distribution of finances. Compliance with building codes, laws and regulations is controlled by the apparatus. The main focus of construction planning is the formation of the urban environment. The law provides for drawing up regional, city plans, development plans, detailed city plans, plans for the construction of rural settlements and plans for the coastal strip (resorts). The Ministry of the Environment, on behalf of the state, issues national directives for regional planning, formulated in the national development plan for 5 years. Regional development plans are developed by the Regional Planning Association at the provincial level [1-6].

Poland. The experience of the Republic of Poland testifies to the obligation of active participation of the public in the process of urban planning. The most commonly used forms of involving residents in discussing town planning documents (including the master plan) and building individual sites in Poland are informing and discussing with residents plans for future construction and draft regulations. This does not mean that there are no urban conflicts in Poland. However, all disputes are resolved through a court order by applying the local community to an administrative court. According to the research, the Ukrainian model of coordination with the public of construction projects is quite different from the Polish one. Unfortunately, such legal mechanisms are rarely used by Ukrainian citizens to protect their legitimate interests [1-6].

According to the results of the study, a comparative analysis of the impact of management at the macro level on the activities of construction industry enterprises in different countries, including in the neighboring countries of Ukraine, was performed, which allowed to establish common and distinct features of such regulation, their advantages and disadvantages (Table 1).

The legal framework of all countries in the world contains restrictions of a different nature regarding construction activities. The main source of such differences is technical regulation and their legal support in different countries of the world. The peculiarities of such technical regulation are the product of the individual conditions of development and activity of each individual state.

Table 1. Common and distinguishing features of managing the activity of construction enterprises at the macro level

Countries	Common features	Excellent features
United States	The Ministry of Housing and Urban Development coordinates the construction of facilities funded by the federal budget, as well as the construction of private homes that are credited with this budget	Transfer of part of the state's powers to self-regulatory organizations, which develop and issue various regulatory documents, instructions and regulations, as well as carry out training and licensing in construction specialties
Canada	The Federal Ministry of State Construction exercises only general control	The National Center for Research in Construction plays a key role in the development of scientific and technological progress in construction
Japan	Ministry of Construction develops projects, laws and regulations in capital construction, conducts licensed work	Associations of building societies and associations providing guidance on construction play a leading role
Great Britain	Ministry of Construction and Public Works. carries out regulation of activity of construction firms and issuance of state orders financed from the budget	Building associations and federations have a major influence on the development of the construction industry. The system of so-called codes of practice plays a regulatory role in construction
Germany	The system of state construction management has a centralized structure, which includes, in addition to the federal authorities, the land authorities	Entrepreneurial unions influence the formation of state policy in the construction sphere
France	The Ministry of Construction, Transport and Tourism studies the situation, develops forecasts, consults local authorities, subsidizes and lends to companies to implement construction programs	Only large construction firms get government contracts
Finland	General management in the field of construction is exercised by the state and the municipalities	The Ministry of the Environment issues national directives for regional planning of territories on behalf of the state
Poland	Public administration in the field of construction is carried out by the relevant ministry	The obligation of public participation in the process of urban planning

Source: developed by author base on [1-6]

A study of the national technical regulation system in the context of these conditions helps to understand why the national technical regulation system of a country has taken some form.

Thus, the ability to perform construction work is inextricably linked to existing requirements for the implementation of this type of work. Such requirements are usually clearly regulated by the requirements of the applicable law of the country where the construction work will be carried out. World practice does not have common approaches and requirements for construction and licensing, which is why it is difficult to make comparisons and sometimes impossible.

Discussion. To date, the most ambitious and ambitious is the European Union's program to create a single market on the European continent, which would allow harmonization of the national construction legislation of the Member States of the European Union. More than 30 years of requirements for the creation of uniform building codes for the European Union have been implemented in the development of Eurocodes, a set of model standards for construction applications that are intended to replace the national rules of the Member States of the Union.

In general, for all developed countries, parts of Europe and Southeast Asia that are developing are characterized by a number of features that may be relevant to the economy in general and the construction industry in particular:

- stable balance of economic and social interests of participants in the construction market, which is achieved through technical and licensing regulation;
- refusal of the state from the established historical monopoly on technical regulation of the construction market and gradual transition to the system of technical self-regulation;
- a high degree of economic and creative freedom, which is underpinned by a high degree of social awareness of the objects of regulation and favorable conditions that encourage the observance of professional ethics;
- developed social and economic institutes of the construction industry;
- deep integration of the institutions of the construction industry of a particular state into a single world socio-economic system due to the harmonization of the principles of technical regulation with the diversity of forms of implementation of these principles, taking into account national peculiarities;
- a high level of building culture, which is manifested in the presence of a viable and effective system of technical regulation, availability of safe and high-quality material resources and qualified human resources;
- the efficiency and effectiveness of mechanisms to ensure the high quality and safety of construction products and construction sites for living beings and the environment.

A significant factor in the effective development of the construction industry in economically developed countries is the close cooperation of public authorities and private sector professionals. Namely, construction sector reforms are usually initiated from the bottom - by construction market professionals, and carried out - by public authorities, with the direct

involvement of all interested public bodies, businesses and private sector organizations representing the professional and consumer interests of the construction industry.

Any tools and mechanisms for certification, accreditation and licensing of construction business entities have a dual purpose. That is, all these tools allow you to ensure the quality and safety of construction sites, without the need to create unnecessary barriers to activity in the construction market. That is, all countries in the world are trying to find a balance that would ensure the adequate quality and safety of operation of construction sites, and at the same time, they would not be an additional source of obstacles for the subjects of the construction market.

Quality assurance of construction work in most countries of the world is achieved through licensing and / or registration of specialists in the specified field - architects, engineers and builders, who allow to perform professional activities, including: examination of educational level, completion of internships, identification of the level of theoretical and practical knowledge on the basis of the agreed programs of continuous education and self-training in order to support and enhance professional qualification during the professional activity of a specialist.

It should be noted that in EU countries there are no approvals for land allotment, approval of projects for construction and reconstruction, permits for commissioning of new and reconstructed objects.

In addition, the EU applies a directive on Integrated Issuance of Permit Documents, which includes environmental impact assessments prior to the process of obtaining a permit for the construction of an object whose construction requires such an assessment. The European Union proposes to issue one permit at one permit center instead of separate permits. According to EU regulations, building permits are compulsory for both residential and non-residential buildings [6]. The permits must be issued by the regional authorities, which coordinate the process of processing individual specialized certificates for environmental protection and human health.

There are also countries where construction activities are not licensed. In particular, in Germany, there is a requirement for individuals who carry out construction work to be members of professional non-governmental organizations certifying their qualifications. And for the construction of particularly complex objects, construction companies must join the associations of industrial builders and have the necessary technology, which is certified by a state certificate.

Countries with a very liberalized attitude to construction activities include Georgia, where there is virtually no control by state authorities over market actors. The peculiarity of the construction activity in Georgia is that this type of activity has the right to carry out any economic entities that have been registered by the state authorities in accordance with the general rules.

In most developed countries, in order to reduce administrative barriers, or eliminate them altogether, for certain types of entrepreneurial activity, part of the non-state functions was transferred to the competitive environment. This process should be carried out only after a detailed analysis of the possible risks in the area of interests of both individual consumers and the state as a whole. It is precisely the number and level of risks identified that should determine the degree of government involvement in such regulation.

The licensing of construction activities carried out by state authorities as an element of market regulation addresses the question of the possibility of carrying out entrepreneurial activity by separate entities of admission on the selected market. This type of regulation allows to identify organizations that will perform the types of construction work envisaged by the licensing conditions, with acceptable levels of risk of property damage, life, human health, and the environment.

Conclusion. A detailed analysis of the construction activity in selected countries of the world revealed the organizational methods of state regulation of construction activities, including those related to licensing, which can be carried out in several directions:

- creation of conditions for access of business entities to the market (registration, licensing);
- technical regulation;
- admission to the product market of the enterprise (confirmation of conformity, certification, accreditation);
- control over the activity of business entities and turnover of products.

The main task of this set of organizational methods of state regulation, in a market economy, is to create prerequisites for construction, which, on the one hand, would ensure minimal state intervention in the conduct of business activities, and on the other - would help meet the requirements of the state-represented society. In our opinion, the basic requirements put forward by society for construction products should include the prevention of harm to the life or health of citizens, their property and the environment.

In our opinion, the formation of organizational levers of influence on the process of licensing in construction should be based on the following basic principles:

- expediency of regulation;
- transparency of permitting procedures and qualification requirements;
- overcoming the maximum number of administrative barriers to construction activities;
- promoting self-regulation of construction activities, in particular through self-regulatory organizations;
- interaction of public authorities with entrepreneurs and their associations;
- compliance with the requirements of the public regarding the quality and safety of the construction process and its results;
- optimization of the permit system.

References:

1. Ofori, G. (2006) Challenges of construction industries in developing countries: lessons from various countries. doi=10.1.1.198.2916.
2. Drewer, S. (1990) The international construction system, Habitat International, 14, 2-3.
3. Loraine, R. K. (1992) Construction management in developing countries, Thomas Telford.
4. Hall, Mark A. & Jaggar, David M. Should construction enterprises, working internationally, take account of cultural differences in culture? Retrieved from: http://www.arcom.ac.uk/-docs/proceedings/ar1997-001-010_Hall_and_Jaggar.pdf
5. Bourdeau, L. (1999). Sustainable development and the future of construction: a comparison of visions from various countries. *Building Research and Information*, 2(6): 355–367.
6. Ofori, G. (2006) Research on construction industry development at the crossroads. Retrieved from: <https://www.tandfonline.com/doi/ref/10.1080/01446199300000017?scroll=top>