

Mechanism of State Regulation of Regional Economy Competitiveness



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Abstract Globalization has fostered many development opportunities to developing countries, including Vietnam. One of those possibilities is that countries will be able to cultivate their competitive edge in international economic relations if they show initiative, flexibility, and creativity in integration. This implies that regional policy has also significantly evolved, with competitive capacity emerging as a more significant objective, prompted by concerns that regional policy is facing challenges with the gap in implementation. Therefore, the objective of this chapter is to develop a state regulation of the regional economic competitiveness in Vietnam, taking into account the effectiveness of policies. By synthesizing the scientific literature on competitiveness, regional policy, and statistics, the results indicated three main problems that hinder economic development and an increase in regional competitiveness capacity. Firstly, the apparent spatial disparity in Vietnam's regional competitiveness could be the result of long-term socio-economic processes (such as economic growth and investment attraction), and the quality of the business environment depends on the operating capacity of the authorities (via PCI Rank Up). Secondly, the mechanism of innovation and scientific development is incomplete. Finally, there are some potential "weaknesses" of industrial clustering.

Keywords Regional competitiveness · State support · Policies

1 Introduction

Globalization is the process of facilitating the more dynamic movement of production factors between countries in order to create a borderless open world economy. Information, knowledge, and technology are the source of efficiency and productivity. As a result, groups of countries with corresponding comparative advantages

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will be divided to complement each other and promote cooperation and development. This emphasizes robust opportunities for development in developing countries like Vietnam. Therefore, improving the country's competitiveness as a factor of economic development in modern conditions is of particular interest to policy makers.

This concern has been and is being driven by the distribution of policy making powers from national, regional to local levels in search of budget balance (Diaz-Serrano & Rodriguez-Pose, 2015), investment attraction (Cui et al., 2020), economic recovery during the COVID pandemic (Phan & Buyanova, 2021a), development of clusters and innovation systems (Kogut-Jaworska & Ociepa-Kicińska, 2020), as well as develop a smart and sustainable specialization strategy (Palinchak et al., 2021). However, on the one hand successful policy implementation depends on creating strategies that are broad enough to have a significant impact but are tailored to specific contextual issues (Khan, 2016), on the other hand this depends on good linkages between levels of government and stakeholders (Teng & Gu, 2007), hence any shortfall would lead to an "implementation gap". Accordingly, without effective policies, there is a risk of regional unrest. Rich regions are more likely to incorporate production factors into the economy and concentrate productive activities, thereby creating economic growth points, while poor regions are not immune to reduced investment in production, population decline, desertification, and ultimately economic and social crises.

Seeking to address this gap, the purpose of this chapter is to develop a mechanism of the state regulation on Vietnam's regional economic competitiveness, taking into account the effectiveness of the implementation policies. This includes the disclosure of the concept of competitiveness, the relationship between regional economic development and policies (Sect. 2). For the development of the state regulatory mechanism of regional economic competitiveness in Vietnam, Sect. 3 has applied a combination of methods including methods of descriptive statistics, analysis and synthesis, and quantitative comparative. It deals with the availability of relevant data, including scientific articles, monographs and periodicals of domestic and foreign economists, documents and analysis reports of the World Economic Forum (WEF), World Intellectual Property Organization (WIPO), World Bank (WB), General Statistics Office of Vietnam, Ministry of Planning and Investment, Vietnam Chamber of Commerce and Industry (VCCI) provincial competitiveness data. To begin with, define the goals, tasks, and priorities for the development of the region. Subsequently is an assessment of the state's policies in the field of enhancing regional economic competitiveness. Finally, the conclusions that can be drawn from the chapter outlined in Sect. 4. The results of the analysis can be used in the development and implementation of policies to improve national and regional competitiveness in modern circumstances.

2 Competitiveness and Policies of the Regional Economy

Competitiveness is a frequently used but widely controversial term in economic policy debates. The concept of competitiveness first appeared in the 1980s as a solution to the economic crisis in the USA (Bristow, 2010a) and became famous in

the early 1990s, when Japan emerged to challenge the economic dominance of the USA (Porter, 1990). Agreeing with Porter's point of view, Krugman (1994) affirms productivity as an ultimate measure of competitiveness. This is also consistent with economic theory, which considers productivity growth as the basis for economic growth and therefore, productivity is seen as a determinant of a high and increasing standard of living for the citizens of a country.

The essence of competitiveness is not only a macroeconomic issue. From this spatial perspective, the main contribution of scientists is understanding at the micro level when it comes to the presence of conditions that allow businesses to compete in their chosen markets and based on the value these enterprises create, with a focus on regional competitiveness (Porter, 2000; Huggins et al., 2014; Sadki et al., 2020). Regional competitiveness differs from concepts at the national level in two main respects: firstly, a local "specific advantage" depends crucially on its ability to provide favorable business, institutional, social, technological, and infrastructural facilities with which local businesses could maintain a long-term competitive advantage as they are difficult to imitate by other regions (Storpper, 1997; Camagni, 2002); secondly is the important role of interrelationships between businesses, entrepreneurship, local organizations, and spatial linkages with other regions (Fujita & Thisse, 2002; Martin, 2000). Therefore, competitiveness can vary depending on geographic spatiality, depending on the growth drivers of regions developing at different rates (Audretsch & Keilbach, 2004).

In general, the region determines the economic situation of the country, the state of the market for services, resources, goods and currencies, the structure of expenditures, the price levels and welfare, the costs, and the technological structure. Each region will adapt to major development trends, structural changes in the national economic system, roughly reflecting its positive and negative fluctuations. This indicates that there are significant regional variations in the rates of strategic and opportunity change, the degree of adaptive change, the mechanisms for finding ways out of economic distress, and also the extent to which degree risk could be controlled.

The logical implication of applying the concept of regional competitiveness is a policy system that focuses on regional economic development. As Martin (2005) has demonstrated, concerns about competitive capacity have been filtered down to the regional, city and provincial levels, particularly the role of regional policy interventions in enhancing competitive capacity. Regional policy, by definition, is territorially focused on interventions targeted at regions or sub regions, with varying degrees of selectivity (Bachtler et al., 2014, p. 42). The subject of regional research is very diverse that not only the factors of economic and regional growth, economic stability, convergence, and divergence at the regional level, but also the determinants regarding industrial location and the impact of regional situation on the number of local companies (Chrobocińska, 2020). Regional competitiveness is one of the pillars of European Union (EU) regional policy. It is systematically monitored and regularly surveyed for this using the Regional Competitiveness Index (RCI). The design of the RCI was inspired by the World Economic Forum's Global Competitiveness Index (see Annoni & Dijkstra, 2019). The RCI is an excellent tool for the EU regions to develop a heterogeneous set of policies with regard to potential impacts on regional

competitiveness, including science, innovation, education, infrastructure, competition, regulatory, and environmental policy. Meanwhile in Vietnam, policies related to competitiveness are mainly explored in the provincial space (Phan & Buyanova, 2021b; Tinh & Ha, 2021) focused on addressing issues in improving a favorable business environment as an endogenous factor of long-term socio-economic growth. The issue of enhancing regional competitiveness has not been adequately developed and needs to be improved. Therefore, the development of a state regulatory mechanism to improve regional competitiveness in Vietnam is presented in the next section.

3 The State's Regulatory Mechanism on the Competitiveness Capacity of the Regional Economy

3.1 Identify Goals, Tasks, and Targets for Regional Development

The current socio-economic development orientations of the region and Vietnam are dominated by economic integration trends and 4.0 industrial revolution in the era of globalization. The result of these processes is the strengthening division of territories in terms of socio-economic development levels due to the unequal distribution of production and income factors. Under such circumstances, the ability of a territory to attract economic resources and factors of production plays a decisive role in determining the competitiveness of that territory. This depends mainly on the position of that region in the international and inter-regional division of the labor system, as well as on the attractiveness of the conditions created on its territory. These are complex and long-term tasks that must be systematically addressed through the formulation and implementation of regional economic policy (Fig. 1).

Vietnam is an economy that successfully transitioned to a market-oriented economy as a result of the gradual economic reform starting in the mid-1980s. Market institutions have prepared for the transition in a careful and orderly manner. As a result, Vietnam has entered the group of the leading economic growth and high-performing countries in recent decades (Nguyen, 2021). However, with the globalization of the world economic process, Vietnam is facing many challenges in maintaining sustainable economic growth. These include the economic downturn, credit boom, the rise of protectionism around the world, and the risks from market opening (Nguyen et al., 2018). They have exacerbated the internal problems of the national economy, forcing the search for new formats of relations between the state, region, province/city, and business.

Under these circumstances, in an idealized form, Vietnam needs to develop strategies for the development and economic integration of its regions as active and meaningful participants in the system of production, commodity, financial, scientific, technological, and cultural processes. This will allow the country and regions

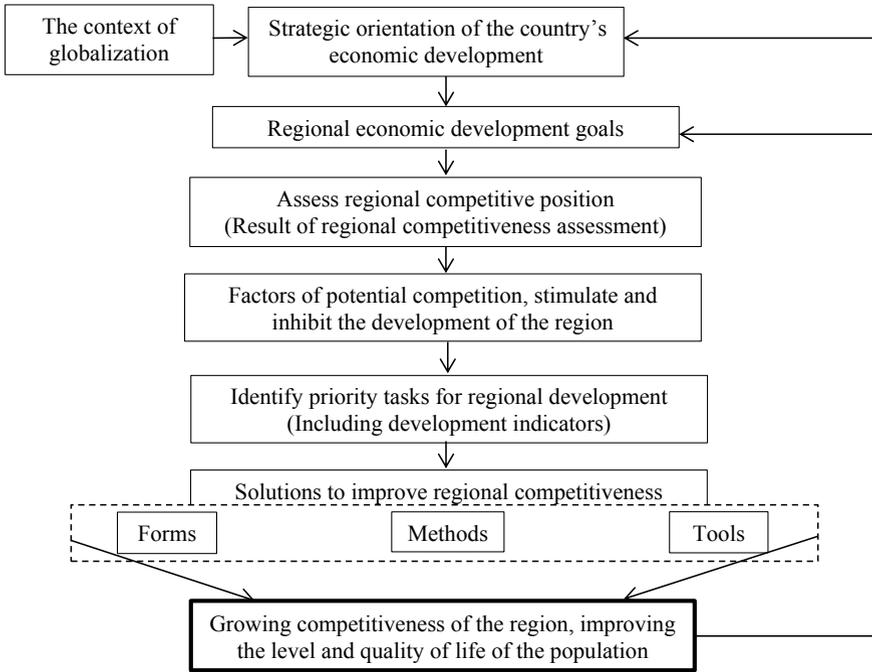


Fig. 1 Regional competitiveness enhancement mechanism. Source Developed by the authors

to successfully integrate into the international division of labor, while securing an important position within the domestic and foreign economic system.

Creating favorable conditions for the market to develop dynamically, forming competitive capacity is a key element of national and regional priorities in any country, and is the most important function of the state regulating the economy (Shibarshina, 2017). Therefore, Resolution 05-NQ/TW dated November 1, 2016, of the 12th Central Executive Committee of Vietnam is considered the first and most comprehensive resolution on economic competitiveness, clearly expressing the point of view, “Renovating the growth model, improving the quality of growth, labor productivity and competitiveness of the economy are fundamental, important and decisive tasks for the realization of rapid and sustainable development goal of the country in the current period”. The resolution has set forth the specific objective of narrowing the gap in national competitiveness with the leading ASEAN-4 countries. Based on how this goal is determined, the country’s competitiveness can be examined according to the criteria of the World Economic Forum’s Global Competitiveness Index report and the business environment report of the World Bank.

Subsequently, the state’s stance on competitiveness, especially in the two most recent congresses, are the foundational basis for the creation of a series of state policies and mechanisms in improving national competitiveness, such as the National Assembly promulgated the 2013 Constitution, Enterprise Law, 2014 Investment Law,

Land Law 2013, Bidding Law 2013, and Law on SME Support 2017. The government promulgates decrees, resolutions, and circulars to realize the goal of improving the competitiveness of the economy, especially Resolutions No. 19/NQ-CP from 2014 to 2018 and recently converted into Resolution No. 02/NQ-CP from 2019 to 2022 of the Vietnamese Government on the main tasks and solutions to improve the business environment and enhance national competitiveness.

Success in competition is primarily associated with the development of those countries whose regions as socio-economic and cultural entities are built on the basis of common external social and economic life outside administrative boundaries. Thus, each region forms its own strategic objectives under the positive influence of external and internal challenges. The basis for planning six socio-economic regions is based on similarities in geographical location, natural, and social conditions in 63 provinces, including the Red River Delta, the Northern Midlands and Mountains, the North Central and Central Coast, the Central Highlands, the Southeast and the Mekong River Delta. This is clearly stated in Decree No. 92/2006/NĐ-CP of the government dated September 7, 2006.

On the basis of a common assessment on the mutual influence of these many factors, regions independently regulate the processes of economic and social development taking place within, defining tasks and formulating criteria for assessing the extent to which strategic goals have been achieved (Piven, 2014). Vietnam's regions have had socio-economic development strategies approved since 2001. Most strategies cover a period of 8–10 years, although some of them are designed for as long as 20 years. In the process of implementing the regional development strategy, the general development direction for six socio-economic regions was issued by the Politburo's Resolutions and then the Conclusions were drawn for each region. On that basis, the socio-economic development master plans of six regions in the next period are established to orient the development of branches, fields, territories, and organize the implementation.

In 2022, implementing the state's policy on enhancing competitiveness in the new context, regional governments have rebuilt their socio-economic development strategies on the basis of organizing conferences to review the implementation of the socio-economic development strategy, ensuring national security, and defense of the regions for the period 2010–2020.

As a result, the government issued Resolution No. 78-NQ/CP dated June 18, 2022, on the Action Program to on the implementation of Politburo Resolution No. 13-NQ/TW of April 2, 2022, on socio-economic development direction and securing the defense of the Mekong Delta by 2030 and security, and a vision to 2045. The Red River Delta Regions; Northern Midlands and Mountains; the North Central and Central Coast; the Central Highlands and Southeast are in the process of being built.

Taking into account the approaches described above, the following priorities and objectives are currently identified within the framework of Viet Nam's regional development strategies: (i) improving the quality of life of the population in the region, creating conditions for human capital development; (ii) implementing an institutional policy in the region, to ensure the formation of competitive advantages in the region; (iii) achieving sustainable high growth rates of the region's

economic indicators; (iv) creating conditions to produce potential for formation and development of clusters; (v) developing inter-regional and international cooperation; (vi) completing the regional socio-economic development strategic planning; (vii) improving the efficiency of regional development management, optimizing the power structure, and governing body. Clearly, not all of the prioritized fields will ensure the region's competitiveness capacity as described above; nevertheless the main fields are highlighted.

Therefore, in order to comprehensively assess the current status and development of regions, a comprehensive view of competitiveness and a system of indicators are determined.

- The framework for assessing the implementation of socio-economic development goals in regions and provinces was promulgated in Decision No. 288/QĐ-TTg of the prime minister dated February 28, 2022. In which, the indicators on socio-economic development have an impact on the competitiveness of the region and the province: (1) population; (2) gross regional domestic product (GRDP); (3) economic growth; (4) average GRDP per capita; (5) average income per capita; (6) export turnover; (7) budget revenue; (8) investment; and (9) science and technology.
- Provinces/cities have issued a master plan to implement Resolution No. 02/NQ-CP dated January 10, 2022, of the Vietnamese Government on key tasks and solutions to improve the business environment, as well as enhance regional and national competitiveness in 2022. In order to achieve this, the provinces have developed solutions to improve the scores and rankings of the provincial competitiveness index, related to ten components: (1) market entry; (2) access to land; (3) transparency; (4) time costs; (5) informal expenses; (6) fair competition; (7) the dynamism of the provincial government; (8) business support services; (9) labor training; and (10) legal institutions and security.

3.2 Evaluation of the State's Policies in Enhancing Competitiveness of the Regional Economy

In the context of globalization, enhancing competitive capacity is a top leading and clear policy objective at all levels (enterprise, local, regional, and national) of countries around the world, including Vietnam. State policies aimed at increasing the competitive capacity of the regional economy often involve creating the conditions under which economic activities can prosper (Bristow, 2010b). The success of a local or regional economy is determined by the socio-economic system and entrepreneurial capacity; local and institutional factors of production; mutual relations between local actors, creating favorable conditions for the absorption of accumulated knowledge; decision-making capabilities enable local social and economic actors to lead development and innovation processes (Huggins, 2016; Pietrzak et al., 2017).

Outlining and implementing state policies to enhance competitiveness in this context is a complex, dynamic, and imperative innovative process, with the main reason being that there is no sole and optimal policy system (Magro & Nauwe-laers, 2015). An effective competitive strategy involves the ability of governments in the region to inquire from the impacts of the economic policy, especially through methods based on regional and international comparisons (Huggins, 2010). Therefore, benchmarking and comparative measures of socio-economic performance in the region have become a particularly common tool for regional economic policymaking in recent years.

The context of regional development is placed in the general context of the whole country in the period 2011–2020 with optimism for an early economic recovery. However, in the early years of implementing the 2011–2020 strategy, our country faced many difficulties and challenges during the global economic fluctuations, the COVID pandemic, along with the internal weaknesses of the economy.

Throughout this strategic period was the mission to restructure the economy and renew the growth model. In addition to the three central focuses identified in the first phase, which includes the restructuring of investment, financial-banking system, enterprise, tasks, as well as building and developing an appropriate regional economic structure is also mentioned as one of the main orientations of the economic restructuring process. Regarding the results of restructuring the economic region during this period, Resolution No. 24/2016/QH14 dated November 8, 2016, of the National Assembly of Vietnam stated, *“The restructuring of the economic region has not been paid enough attention, the development space is still divided by administrative boundaries, there is a lack of institutions to create links between localities in the region and between regions”*. In order to overcome this situation, the resolution has set out a number of orientations to modernize the regional economic structure, focusing on planning, building outstanding institutions for a number of regions to play a leading role in development, strengthening regional linkages and perfecting the urban economic development model. Furthermore, policy makers in Vietnam have sought to improve the general business environment that affects all businesses. This occurs through regional development policies such as macroeconomic stability, tax policies that encourage savings, investment in basic research and development (R&D), institutional development, public support for colleges and universities in human resource training, infrastructure investment, and antitrust regulations.

The results of socio-economic analysis of the regions as well as regional competitiveness based on the provincial competitiveness index indicate the positive impact of the above policies in the field of improving the competitiveness of the regional economy. This task is very significant in analyzing potential growth areas, determining the location and role of the region in the whole country, this is clearly demonstrated by some examples below:

Firstly, regions across the country have had positive developments. The average GRDP growth rate of the six regions is approximately the same as the gross domestic product (GDP) growth rate of the entire economy. The Red River Delta region is considered as a region with high competitive attractiveness in terms of economic factors due to the level of economic development. The three out of eight indicators

ranked as first are population, GRDP growth, and investment capital. The remaining indexes are ranked two out of six regions. In which, the average GRDP per capita is VND 81.30 million, just behind the Southeast region (see Tables 1 and 2).

On the contrary, according to five out of eight economic growth indicators ranked six out of six regions, the Central Highlands region has lower competitiveness than other regions. These are accessed in terms of population, GRDP, export turnover, budget revenue, and investment capital. This could be due to several reasons: firstly, the Central Highlands has a total population of 5.87 million people (accounting for 6.1% of the country's population), of which ethnic minorities have 2.2 million (accounting for 37.7%)—have different living and production habits such as primarily self-sufficient; heavy on natural exploitation, weak economic potential, low level of education and labor (Vu et al., 2020); secondly, the region has many advantages for agricultural development, however, due to climate change, epidemics, pests, diseases, and the decline in prices of some agricultural products during the period 2015–2018 have strongly impacted the production and export system of agricultural products in the region.

Table 1 Statistics of some socio-economic indicators of regions in 2018

Regions	Population (whole country: million persons. region: %)	GRDP (whole country: trillion dong. region: %)	GRDP growth (%)	GRDP per capita (million dong)	Income per capita (million dong)	Export Turnover (whole country: billion USD. Region: %)	Budget revenue (whole country: trillion dong. region: %)	Investment capital (Billion dong)
The whole country	94.67	5542.332	7.02	68.18	46.51	283.383	1424.914	1,857,061.0
Red river delta	21.57	31.63	10.23	81.30	58.01	33.41	37.84	834,891.2
Northern Midlands and Mountains	12.29	9.69	7.53	43.72	29.46	16.11	3.60	241,020.2
North Central and Central Coast	20.06	17.37	9.47	48.01	36.18	4.82	11.96	481,974.4
Central Highlands	5.87	4.91	7.87	46.43	34.75	1.27	1.42	93,201.1
The South East	17.07	39.55	8.23	128.4	68.51	37.23	39.01	713,755.8
Mekong River Delta	17.81	14.85	8.69	46.23	43.06	7.20	6.14	279,856.6

Source Calculated by the authors based on the socio-economic data of 63 provinces in 2020 (GSO, 2020)

Table 2 Ranking of regions by some basic indicators in 2018

Regions	Population	GRDP	GRDP growth	GRDP per capita	Income per capita	Export turnover	Budget revenue	Investment capital
Red river delta	1	2	1	2	2	2	2	1
Northern Midlands and Mountains	5	5	6	6	6	3	5	5
North Central and Central Coast	2	3	2	3	4	5	3	3
Central Highlands	6	6	5	4	5	6	6	6
The South East	4	1	4	1	1	1	1	2
Mekong River Delta	3	4	3	5	3	4	4	4

Source Calculated by the authors

Based on the ranking of eight basic indicators, the North Central and Central Coast regions are considered to be quite attractive, with a growth rate of GRDP of 9.23% (ranked two out of six regions). This area continues to be successful thanks to the operation of businesses and investment in the industry–construction sector. This is the region with the third largest contribution to the overall growth of the country after the Southeast region and the Red River Delta. There are projects with great momentum in the region, promoting economic growth and restructuring, as well as increasing revenue for the local budget: Dung Quat oil refinery, Chu Lai complex–Truong Hai manufactures cars, Formosa steel factory, etc.

Secondly, the economic structure of the region has shifted positively toward exploiting the potentials, strengths, comparative advantages, enhancing competitiveness, and improving socio-economic efficiency. The Red River Delta, the Northern Midlands and Mountains, the North Central Coast and the Central Coast focus on developing construction industries; the Southeast region focuses on developing service sectors; The Mekong Delta and Central Highlands regions focus on developing agricultural and processing industries. Each region has its own characteristics, advantages and in recent years, these regions have made efforts to utilize the potential of the region for economic development.

Third, industrial and construction development was the main driver for growth of most regions in 2018 and except for the Southeast region (Table 3). The economic

Table 3 Economic structure by sector industry–construction of regions compared to the whole country

Regions	2010	2015	2018
Red river delta	24.76	27.99	28.79
Northern Midlands and Mountains	4.84	7.50	8.54
North Central and Central Coast	11.87	13.66	13.41
Highlands	1.67	2.01	2.01
South East	48.69	41.26	38.96
Mekong Delta	8.17	7.57	8.29
The whole country	100.00	100.00	100.00

Source Calculated by the authors based on the socio-economic data of 63 provinces in 2020 (GSO, 2020)

structure of the region tends to shift strongly between two industrial sectors—construction and services. The proportion of the service industry increased rapidly from 36.6% in 2010 to 47% in 2018; the proportion of industry–construction decreased to 48% in 2018; the share of agriculture remained stable in the range of 5–5.5% in the period 2010–2018.

In addition, policies to develop economic space in Vietnam, especially industrial clusters, have been concretized into major guidelines, policies and orientations of the state. Resolution 23-NQ/TW dated March 22, 2018, of the Politburo on the directions of the national industrial development policies to 2030 and the vision to 2045 emphasized the formation of industrial zones, clusters, parks, production networks, and industrial value chains, in which industrial clusters are the central focus. The government issued Decision No. 32/QĐ-TTg on January 13, 2015, approving a synchronization program to develop and upgrade clusters, as well as value chains of competitively manufactured products including: electronics and information technology; textiles; food processing, agricultural machinery; tourism and related services. Currently, some regions and localities have formed a number of clusters in priority areas to promote competition (Nguyen, 2015), such as

- Electronic industry cluster: In the Red River Delta region including Hanoi, Bac Ninh, Thai Nguyen, Hai Phong, Vinh Phuc, Hai Duong, Hung Yen, Bac Giang, Binh Duong with core multinational companies such as Canon, Samsung, Nokia, LG, Panasonic, and many satellite businesses. Multinational companies play the role of centers to create spillover effects, forming clusters of the electronics industry.
- High-tech industry clusters, especially microchips and electronic technology in Ho Chi Minh and neighboring provinces with Intel play a leading role.
- Clusters of automobile and motorcycle assembly and manufacturing industries in Ha Noi, Hai Duong, Bac Ninh, Hung Yen, Vinh Phuc, Hai Phong, Quang Ninh). This cluster contains many multinational companies assembling automobiles and

- motorcycles such as Toyota, Honda, Ford, Yamaha, Vinaxuki, 3–2 Automobiles, and supporting industrial enterprises for the automobile and motorcycle industry.
- The textile and garment industry cluster in the Red River Delta, especially in Hung Yen, Nam Dinh, the suburbs of Ha Noi, Hai Duong, and in the Southern key economic region including Dong Nai, Ho Chi Minh City, Binh Duong, Long An, Tien Giang.

Fourthly, the infrastructure system that connects the regions and inter-regions has developed a new step, creating conditions to promote exchanges and linkages between localities and regions. In which, it is worth mentioning that the Noi Bai–Lao Cai Expressway came into operation in 2014 has great significance for the Northern Midlands and Mountains, helping to connect the disadvantaged and underdeveloped economic regions of five localities along the route with dynamic economic regions. In the Red River Delta, the construction of important highways such as Hanoi–Hai Phong, Hoa Lac–Hoa Binh, and Ha Long–Van Don has been completed. In the Southeast region, Ho Chi Minh City–Long Thanh–Dau Giay Expressway has been put into operation. Ben Luc–Long Thanh Expressway is under construction.

The North Central Coast and Central Coast also have significant regional connection constructions such as Deo Ca road tunnel, on National Highway 1A connecting Khanh Hoa with Phu Yen; opened to traffic on the entire Da Nang–Quang Ngai Expressway (belonging to the North–South Expressway to the east). In the Central Highlands, Ho Chi Minh Road (National Highway 14) was completed and upgraded in 2015. The traffic infrastructure in the Mekong Delta region has also drawn interest for investment: completing the South Song Hau road (National Highway 91C), Co Chien Bridge, Nam Can Bridge, Dam Cung Bridge, My Loi Bridge, and Cao Lanh Bridge.

Fifthly, investment is a method to promote economic growth. Investment policy is one of the decisive factors in the process of economic restructuring in order to achieve rapid growth for regions. The localities in the economic zones have actively developed programs to attract investment capital in accordance with the proposed socio-economic development planning. The total realized investment capital of the whole society in 2018 of the Red River Delta region ranked one out of six regions, reaching 834.9 trillion VND, accounting for 44.95% of the total realized investment capital of the whole country. The Central Highlands region ranked six out of six regions, reaching only 93.2 thousand billion VND, accounting for 5.02% of the total realized investment capital of the whole country.

The policy of foreign direct investment (FDI) creates more favorable conditions for investors, the process of capital disbursement is promoted, and therefore, the realized foreign direct investment capital tends to increase over the years. The Southeast region is leading the country in attracting foreign direct investment with 159.25 billion USD, accounting for 41.47% of the country's FDI capital (Table 4). Ho Chi Minh City, Binh Duong, Ba Ria–Vung Tau, and Dong Nai are the provinces/cities with the largest total FDI in the country, contributing a large proportion in the region's FDI attraction. The main reason is that these localities have built up strategies to

Table 4 Total FDI capital (as of December 20, 2020) and ranking of FDI attraction by regions

Regions	Total registered capital (million USD)	Ranking
The whole country	384,044.21	
Red river delta	111,972.56	2
Northern Midlands and Mountains	20,132.89	5
North Central and Central Coast	60,024.77	3
Central Highlands	1087.83	6
The South East	159,253.39	1
Mekong Delta	28,804.08	4

Source Compiled and calculated by the authors based on data of Vietnam Foreign Investment Agency in 2021 (Department of Foreign & Investment, 2022)

attract investment selectively, targeting high-tech fields and service industries with great economic value and efficiency.

Competitiveness is also one of the advantages for economic regions to attract domestic and foreign investment. If we consider regions as a “locality”, the calculation results of the regional PCI show that the Red River Delta ranks first, followed by the Northern Midlands and Mountains. Table 5 also demonstrates that the business environment of some regions has improved markedly, changing the ranking position in 2021 compared to 2020 such as the Red River Delta and the Mekong Delta. Based on the analysis results of the PCI component indexes of the regions, the business environment of the regions has improved markedly thanks to the institutional reform efforts of local authorities in areas such as market entry costs, land access and tenure, informal charges, business support services, and law and order (Phan & Buyanova, 2022).

In the process of implementing state policies in the field of improving the competitive capacity of the regional economy, regions have shown an unstable and unequal dynamism, which is especially noticeable when comparing development indicators

Table 5 PCI rankings of regions in 2020 and 2021

Regions	PCI 2020	Ranking	PCI 2021	Ranking
Red River Delta	63.84	2	67.65	1
Northern Midlands and Mountains	62.71	6	62.89	6
North Central and Central Coast	63.67	3	64.46	4
Central Highlands	63.12	4	64.20	5
The South East	65.02	1	66.63	2
Mekong Delta	63.11	5	64.74	3

Source Calculated by the authors based on PCI data for the period 2020–2021 (VCCI, 2020, 2021)

across regions. Aside from positive results, a number of issues related to the implementation efficiency of these policies may hinder economic development and the region's competitive capacity. Specifically:

- The gap difference in living standards is increasingly wide between localities and regions, causing potential risks toward social instability.
- The speed of migration from poor and rural areas to big cities such as Hanoi and Ho Chi Minh City is increasing, while the infrastructure has not been invested in time, leading to the overloading of the urban infrastructure system and the decline in the quality of the living environment.
- The current cluster models only promote the advantage scale of geographical concentration, while the economic links as well as promoting participation in the value chain production network of the cluster are still weak. New clusters only exploit the advantages of location (connecting to the market) and infrastructure (seaport) to form in place of the factors that enhance business linkages (McCarty et al., 2005). The foundation to attract FDI enterprises and form these clusters is unsustainable when relying mainly on cheap labor. Moreover, FDI enterprises in the textile, garment, footwear, and electronics industries are not interested in training workers and only keep wages and working conditions to a minimum (Hoang, 2011).

The available statistics in Vietnam do not permit factor analysis of the region's competitive capacity in all areas of policy. According to international theory and experience, innovation is an unlimited driver of growth and is the key to helping some East Asian countries overcome the "middle-income trap". However, the economic growth of Vietnam and other regions has not relied much on knowledge, science and technology.

Therefore, besides analyzing the PCI index of regions, the authors use official reports of domestic and foreign organizations, scientific articles—research related to creative innovation, science and technology to identify the main problems hindering its development. On international rankings, Vietnam's technology and innovation are still low-ranking fields. Details are presented below:

- Analysis of WEF's Future Manufacturing Readiness Report (WEF and Kearney, 2018) can identify some more bottlenecks in Vietnam's innovation such as low rank (90/100) in terms of technology and innovation level, foundation technology (92th), innovation capacity (77th) with investment in research and development account for only 0.2% of GDP (84th). Therefore, the value of mid-to-high-end technology products in Vietnam only accounts for 30% of the total export value, while countries in the region account are 80%, as low as the Philippines also account for 50%.
- According to the assessment of WEF (Schwab, 2019), the overall ranking of Vietnam's Competitive Capacity 4.0 in 2019 is 67/141 (increased by 10 ranks compared to 2018), but only ranks 76th in innovation, in which multi-cooperation in innovation ranked 80th; scientific publication 59th. The growth of innovative companies is also ranked 68th.

- According to WIPO (2022), a number of innovation indicators in Vietnam are still low. For example, in 2021, ease of resolving insolvency (106/132); tertiary inbound mobility (102th); environmental performance (110th); investment (111th); knowledge-intensive employment (110th); ICT services imports (129th); intellectual property receipts (106th); and ICT services exports (115th).

4 Conclusion and Recommendations

Over the past several decades, the discourse on competitiveness in the analysis of territorial development has resonated particularly at the regional level, and today policymakers often claim to enhance competitiveness as a factor driving economic development. The range of policies related to regional competitiveness is very wide, on one hand marked by the determinants of the productivity of firms located within a territory, and on the other hand depends on linkages between levels of government and stakeholders.

Based on the information reviewed, a mechanism is presented as a way to influence the process of formation and development of regional competitiveness, which has a complex and effective structure, contributing to the achievement of goals and activating existing reserves. The essence of the state-regulated mechanism for regional competitiveness is the integration of objectives, purposes, principles, agents, objects, forms, methods, tools, and aggregative effects are reflected in the service quality development criteria, and the scope is determined by the management entities. The arrangement between levels of government is inevitable in the context of regional development characterized by complex interactions and incentives between national and local actors (Keating, 2003). Therefore, effective management of policy instruments implemented within administrative boundaries plays a significant role, especially on the basis of policy effectiveness. Moreover, to further broaden the regional competitiveness policy agenda to combine sectorial goals with multiple issues (administrative and legal, economic and financial, programmatic orientation, information news–communication) and this not only demonstrates the adequacy of regional development spending from national financial allocations but also provides additional impetus to ensure a consistent and effective system of policy implementation.

The most important directions for increasing regional and subsequent national competitiveness are to promote state support measures in addressing three fundamental issues: Firstly, the apparent spatial disparity in regional competitiveness in Vietnam could be the result of long-term socio-economic processes (such as economic growth and investment attraction), and the quality of the business environment depends on the operating capacity of the authorities (via PCI rank up). Secondly, the mechanism of innovation and scientific development is not perfect due to limited investment and awareness. Finally, there are some potential “weaknesses” of industrial clustering arising from the inherent structural constraints of Vietnamese

firms. In that context, in-depth studies play a crucial role in verifying and confirming the authors' empirical conclusions.

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