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Exploration of the Inner Laws of Urbanization Economic Operation and Application Analysis

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Abstract

Exploring the inner law of the economic operation of urbanization can understand the regulation mechanism of the optimal distribution of urban resource allocation. In this regard, we propose to explore and analyze the inner law of urbanization economic operation and its application. The study found that the urbanization economy originated from the urban agglomeration effect, which includes the agglomeration economic operation mechanism and spillover effect operation mechanism, based on which three kinds of inner laws of urbanization economic operation are explored, combined with the economic operation law, the non-equilibrium state of the declining cities are regulated and applied, and the results show that the analysis of the inner laws of urbanization economic operation has a direct significance in guiding the real economic process.

Keywords

Economy, Urbanization, Laws, Operational Mechanisms

1. Introduction

The inner law of the operation of urbanization economy is still a brand-new proposition, urbanization is a qualitative stage of economic development that human society must undergo, but until the 1960s, people had not formed an initial systematic understanding of the logic of economics about the inevitability of this stage, economic, social, historical and so on, even though this understanding is very important for guiding the economic development of a country [1]. Although there are already many foreign works on urban economics, there are not many works that explore the mechanism of urbanization economic operation, development mechanism, and regulation mechanism as well as the resulting trend of urbanization development by exploring the inner laws of urbanization

economic operation. Secondly, in the development across the century, governments at all levels have successively determined the development strategy aiming at urbanization driven by the reality of the productive forces, which indicates that there are inherent forces in the economic operation of urbanization that directly influence the demand and supply of urbanization [2]. What makes the process of urbanization sustainable? This is the question of the power mechanism of urbanization, and also the question of people's behavioral motivation for urbanization according to the principle of choice of interests determined by the level of productivity [3]. This paper first discusses the economic origins of urbanization and the operation of the mechanism, these mechanisms, as the analysis of urbanization economic operation of the intrinsic law of the premise, and then explores the intrinsic law of the operation of the urbanization economy is located in the comprehensive adjustment of the operation of the intrinsic law of the section of the decline and transition category of the city of the non-equilibrium state.

2. Economic Origins and Mechanisms of Urbanization

2.1. Urbanized Economies Stem from Cities and Urbanization

The combination of cities and urbanization constitutes the economy of urbanization, which is a problem of the process of economic functioning caused by the phenomenon of urbanization and which has a special concept. First of all, the economy of urbanization originates from cities. Without cities, there is no urbanization and no urbanization economy. The city here does not mean the general city in history; the urbanization economy originates from cities with certain socio-economic functions. Small towns that do not have urban functions will not have an urbanized economy, even though some small towns have the administrative title of "city" or "town". An urbanized economy stems from urbanization. Without urbanization, there is no urbanized economy [4]. The key social foundation of an urbanized economy is the process of "urbanization". This "urbanization" generally refers to a change in people's way of life from rural to urban. Such a change requires, first, a certain social and material basis—the social existence of the city and its functions; and, second, the willingness and economic capacity to enter the city or to participate in urban life—*i.e.*, a strong willingness to change from a rural to an urban way of life, and the ability to pay the costs of entering the city in monetary terms [5]. Thus, the essence of the urbanization economy is not the general construction of cities and population into the city, but the process of people voluntarily and universally pursuing the socio-economic functions of the city and strongly requesting to enter the city and the construction of the city, and it is the process of economic agglomeration and population agglomeration caused by the socio-economic functions of the city, and at the same time, it is also manifested in the spatial agglomeration of these urban socio-economic functions and the general diffusion of the process. It can be seen that this "ization" is the process of the spatial development of cities with certain

functions from scratch and from small to large, caused by the functionalization of cities as required by the urban economy [6].

To sum up, the economy of urbanization comes from cities with urban functions and the process of urban "ization", and both urban functions and urban "ization" come from industrialization, so it can be deduced that the economy of urbanization comes from the economy of industrialization and is a product of the economy of industrialization, which has steadily changed, increased and expanded urban functions and technologically supported the industrialization of urban functions from the beginning and up to the present time. Industrialization, from its inception and development to the present, has steadily, consistently, and continuously changed, increased, and expanded urban functions, and technically supported the industrialization of urban functions [7]. Once the urbanization economy is formed, it strongly pushes the development of industrialization, and the urban function creates the common and necessary social conditions in terms of infrastructure and public services for the industrialization of industry and various industries. It can be seen that the industrialized economy and the urbanized economy in the social productive forces to promote the formation of a mutually reinforcing pattern of development. Perhaps we have discovered a prominent feature of modern economic development: industrial functions and urban functions are mutually causative and mutually reinforcing in social "integration", constantly promoting the deepening of the urbanized economy.

2.2. Cluster Economies

The agglomeration effect of urbanization economy refers to the spatial agglomeration of different industries, which brings about inter-industry knowledge gain and urban economies of scale, resulting in the formation of urbanization and the promotion of division of labour and complementarity among industries, attracting different talents, promoting the dissemination of knowledge and technology and the formation of innovation capacity and innovation culture, realizing the transformation of the city's economy, and becoming a phenomenon to support the sustainable development of the city, and is referred to as the agglomeration effect of the urbanization economy. Agglomeration occurs when, within a given geographical area (city), the cost of production for individual firms falls as the number of firms entering the area or the residential population increases, and the firms gain additional revenue, while the mode of production, the level of technology, and the market price remain unchanged; or when the national output of the entire area (city) rises as the number of firms entering the area or the residential population increases, and the average per capita or average per total output investment in the city falls. An agglomeration economy occurs when all inputs, either on a per capita basis or on a total output basis, fall. Agglomeration economies are an externality based on spatial centripetal forces caused by a variety of factors. When agglomeration is moderate, there is a positive externality, *i.e.*, agglomeration economies occur; when agglomeration is not

moderate, there is a negative externality, *i.e.*, agglomeration economies occur. There are various ways to measure the economy of agglomeration, but as far as its connotation is concerned, there can be two manifestations in theory, one is manifested in the increase of marginal returns of the city, and the other is manifested in the increase of scale returns of the city [8]. Examination of the city's marginal gains increase, you can rely on the city production function, set Y for the city's total output, P for the city's total population, at $Y = f(P)$, if $dY/dP > 0$, at this stage on the size of the population, will produce agglomeration of the economy, of course, this agglomeration of the economy has a process from the big to the small, and the examination of the city's scale of the increase in the gains can be made with the help of the city and other output curves, set E for the city of enterprises, P for the city's total population, the two are the dominant urban agglomeration and the city's scale gains. The two are the dominant factors of urban agglomeration. The graphs, ABC in **Figure 1** reflect the increasing, constant, and decreasing returns to the urban scale of enterprises and population respectively.

The equivalent output line of the city A grows from 10 to 30 units by uniformly adding businesses and population to the city, *i.e.*, the returns to scale are constant; the equivalent output line of the city B grows from 10 to 30 units by adding fewer businesses and population, and thus the returns to scale are increasing; and the equivalent output line of the city C grows from 10 to 30 units by adding more (at a rate that exceeds the rate of output) firms and population, and hence diminishing returns to scale. This process generates economies of agglomeration, albeit with different degrees of returns. Differences in the degree of returns depend on differences in the economies of scale of firms and industries, partial substitution of inputs with different economies of scale, and various locational conditions for production.

2.3. Spillover Effects

The agglomeration effect and spillover effect of urbanization economy refer to the diversity of industries, including the diversity of industrial structure, the diversity of population and employment structure, the diversity of culture, and the diversity of urban spatial layout and internal functions. The externalities brought by these diversities include the city scale effect brought by diversified industrial agglomeration, the division of labor, complementarity and competition effect among industries, and the ideological collision and innovation brought by various

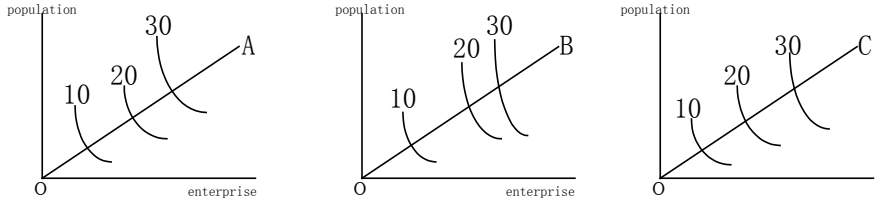

Figure 1. City-size gains for firms and population in different scenarios.

population movements and agglomeration. Spillovers, in the context of an urbanized economy, have two meanings: 1) the social impact of cities on areas outside the city; and 2) the phenomenon of increasing returns to scale based on the endogenous growth of technological spillovers. The two are integrated, the former is the form of urban spillovers, and the latter is the content of urban spillovers [9]. Spillovers are thus the broader impact on the city itself, the urban area, and society as a whole of the new factors of development exhibited by the endogenous growth mechanism of cities based on increasing returns to scale. Although Smith's theorem encounters a dilemma on the compatibility between the evolution of division of labor and competitive industrial structure, the theory of "technical progress is the source of increasing returns" introduced by Smith's theory of division of labor shows strong vitality. Technical progress is the result of the deepening of the division of labor, which is an endogenous variable of the economic system", and one of the most important forms of the division of labor is the roundabout mode of production, and the main characteristic of the economy of increasing remuneration is the strengthening of the degree of the roundabout mode of production it adopts, and the industrial chain between the initial factors of production and the final consumption is getting longer and longer, with more and more tools, semi-finished products, and semi-finished products, and more and more tools, semi-finished products, and more and more tools, semi-finished products. More and more tools and semi-finished products are added to the production process [10]. Thus technological progress depends on the deepening of the division of labor, and the inter-industrial division of labor is the medium of increasing returns. Based on the two meanings of spillovers, the concrete manifestations of urban spillovers can be loosely compared to the "campus economy" and the "incubator process".

1) The campus economy depicts the spillover effect of cities in terms of a focus on knowledge acquisition, which has both a narrow and a broader meaning: in the narrow sense, it means that cities produce the externalities of education in the production of human capital, thereby "spilling over" into the productive and developmental capacities of people beyond the value of the investment in human capital. In a broader sense, a city is like a large campus, which enables everyone who enters the city to gain a variety of profound impacts, the value of knowledge, and self-development capacity far beyond the value of "tuition fees". This campus economy is manifested in the huge external economic effects of human capital and knowledge created through the concentration of talent in non-material factors. In contrast to the initial agglomeration of product and material capital (both competitive and non-competitive) that leads to agglomeration externalities in the economic process of urbanization, the process of educational production constituted by the agglomeration of human capital leads to the creation of "spillover effects".

2) The "incubator process" depicts urban spillovers in terms of focusing on the benefits of knowledge aggregation. An "incubator" is a specific place, a specific environment, and a specific production process in which a new product or

industry can be produced through innovation. The "incubator" principle is based on the fact that both the incubation environment and the incubation content need to be dependent on agglomeration to realize the process of change and innovation of the product or industry, while the agglomeration of the incubation environment is based on the localized economy, and the agglomeration of the incubation content is based on the agglomeration of knowledge and information. The development of industries in the non-agricultural sector often initially benefits from some kind of incidental demand for non-agricultural products. The initial contingent demand attracts the attention of suppliers, who then look for places with the production conditions to meet this demand for research and trial production. Since the scale and prospects of the demand are unpredictable and the production process is unstable, similar suppliers cluster together in places with the production infrastructure to interact with each other to achieve successful trials, which are known as clusters of firms. Firms in the cluster supply a complete and abundant supply of intermediate inputs and create a nurturing environment in which firms in an immature industry can be "incubated" to engage in the development of new products and production processes.

3. Analysis of the Inherent Laws of Urbanization and Economic Operation

The law of economic operation of urbanization develops along the multidimensional space of time and space vertical and horizontal. Grasping the intrinsic sequential nature of this law of economic operation can reveal the inner mechanism of the operation of the urbanization economy in terms of its basic manifestations. The operation of the urbanization economy along the time development of the intrinsic mechanism has two aspects: the output industry and from specialization to the development of integrated, the performance of these developments is mainly the continuation of the development of the "city"; the operation of the urbanization economy along the spatial growth of the intrinsic mechanism also has two aspects: from the single-center city to multi-center city and the formation of urban contiguous body of the Urbanized areas, the performance of these developments is mainly a continuation of the development of the "city". In the continuation of the development of "city", the output industry is the basic growth mechanism of the urbanization of economic operation, from specialization to integration is the structural transformation mechanism of the urbanization of economic operation; and in the continuation of the development of "city", from the monocentric to the polycentric is the basic mechanism of the expansion of the internal space of the city, the urban contiguous body and even the urbanization area is the basic mechanism of the external expansion of the city. In the continuation of "city" development, from single center to multi-center is the basic mechanism of internal spatial expansion of the city, and urban contiguous body and even urbanized area is the basic mechanism of external expansion of the city.

3.1. Growth Mechanisms for the Functioning of the Urbanized Economy

The demand for urban labor comes from two types of activities. The first is the basic sector, which produces export commodities for demand from outside the city (outside the national and international markets); the second is the local sector, which satisfies the city's own needs, *i.e.*, the various levels of productive demand derived from the productive activities of the exporting industries, and the consequent demand for the means of subsistence and services of the city's inhabitants, and can be called the nonbasic sector. The local industry, which can be called the nonbasic sector, is the oldest and the most important sector of the city. "This is the oldest, most common, and simplest model". "This simple dichotomy can only be a tool for analyzing the mechanisms of urban growth if it stands only on the view of what is bringing about urban growth". That is to say, in the relationship between exporting industries and local industries, it is the former that is the driving force behind the operation of the urbanized economy and makes its continued growth possible, and it is the latter that supports the former and reacts passively to it. In this sense, the former are referred to as basic economic activities (the basic economy or the backbone of the city), while the latter are referred to as non-basic economic activities (non-backbone industries). However, whether certain industries are counted as output or local industries varies according to the characteristics of each city. Aquatic products and aquatic processed products of a fishing city are exported commodities, and local specialties and their services sold in a tourist city are also exported commodities, but their output portion must be larger than the portion consumed by the city itself, and the commodities whose output is larger than the self-sale may be more than one in a city, reflecting the capacity of the city's industrial space, and the exported commodities of the same city are different in each different period, reflecting the structure of the city's industry changes. Although the dichotomy is not absolute in reality, it is still the growth mechanism we recognize for the operation of an urbanized economy.

The American scholar Quixote says: "If it is a city, that city has an output industry." But at the same time she added: "It is not enough to have only output products. The city grows by diversifying its economy from the city's earliest output industries and supply industries (local industries) oriented to the output industries, and by making it grow through a process of derivation." She started from the earliest export product flour in Detroit in the 1820s and 1930s, and formed the ship export industry through the parts of flour mill-flour mill-ship engine parts-ship engine-ship. The subsequent specialization promoted Detroit as the export base of marine engines; the next industrial link is machine parts processing, smelting and copper. Later, the ore dried up, but on the basis of a certain scale of coatings, steam engines, pumps, medicines and furniture products, many export products were formed, thus making up for the decline of copper smelting industry and accumulating surplus funds. In the end, cars be-

came Detroit's largest export industry. It can be seen that the growth mechanism of the urbanization economy operates on the basis of the output base of the city, including the income base and the employment base. The development of internal urbanization has undergone such a growth process, and therefore there is such an economic growth mechanism for the operation of the urbanization economy.

3.2. Mechanisms of Spatial Expansion of the Economic Functioning of Urbanization

Urbanized economies operate with a focus on the downtown area, with manufacturers oriented to the exit intersections of the downtown area, offices oriented to the central market, retailers oriented to the trolley system, and households oriented to the employment and shopping opportunities of the central core. The decisions on the economic behavior of these agents are made by measuring the benefits of agglomeration and the level of urban land rents, and the specific quantitative relationships are expressed in the fact that they have their different bid-rent functions, respectively. The bidding rent function is an economic relationship that indicates that each economic subject in the city is willing to pay a certain amount of money for each unit of land occupied by different production plants (manufacturers), residential addresses (residents), or other addresses in the city. The general pattern of the bid-rent function and land use of the various economic agents within a single-center city is shown centrally in Figure 2.

With the development of urban productivity, the continuous expansion of urban areas reflects the process of urbanization and economic operation with urban centers as the point of convergence, a process that has two prominent basic patterns, as shown in Figure 3.

Figure 3 shows that as the economy of urban agglomeration increases, people concentrate in urban centers, increasing the population density of urban centers, and when the cost of agglomeration in urban centers exceeds the benefits of agglomeration, people begin to spread outward using the urban centers as the agglomeration point, as well as the influx of people into urban centers as the urban lifestyle influences the spatial scale of the city. This process can be called centralized urbanization for the former and diffuse urbanization for the latter. The development of productivity and agglomeration economy will not destroy the city center, but will transfer some economic functions of the city center. With the development of urban traffic, there will be many sub-centers in the city. Some American scholars have proved that the largest urban area in the United States includes at least 20 sub-center zones. Half to more than two-thirds of jobs are in areas outside the city center; As a result, the functions of manufacturing, shopping and living in the city center have weakened. However, with the emergence of urban multi-centers, the functions of transaction and office in the central business district have been greatly developed. To some extent, these functions are irreplaceable, indicating that the operation of urbanization economy has certain spatial expansibility.

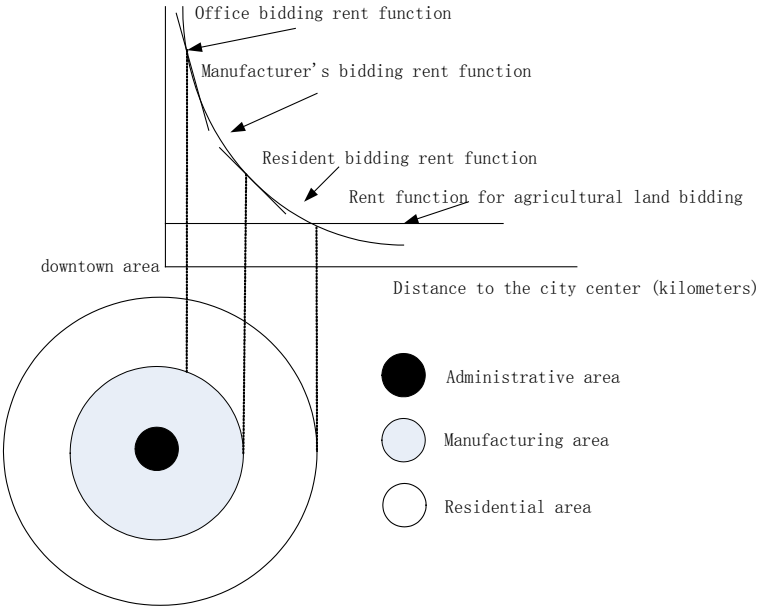

Figure 2. Bid rent function and land use in Urban Centers.

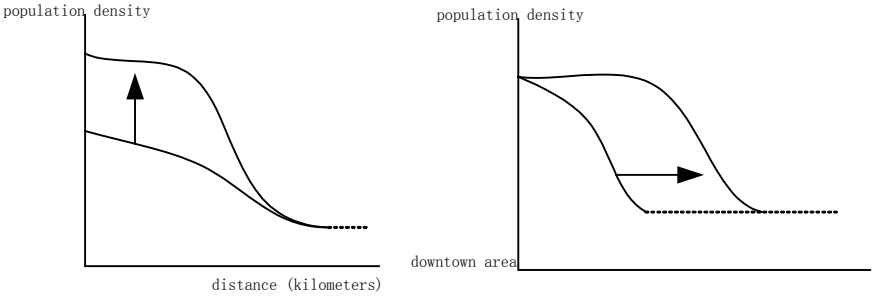

Figure 3. Two models of the process of urban conversation economy in the city center.

3.3. Mechanisms of Regionalization of the Economic Functioning of Urbanization

While the old city has expanded in size from monocentric to polycentric, many small cities (some of which are satellite towns) have arisen around it, thus forming an urban system and an urbanized economy on a larger scale. This kind of urban system has its own internal rules. From the urban layout, there is a mega-city around, clustered with small and medium-sized cities of varying sizes; there are two or three large cities across the river, across the road, or the vast area and the formation of the "Twin Cities" or tripod model, and clustered around many small and medium-sized cities; there are also coastal along the river to form a strip of urban belt or there are also strips or clusters of cities along the coasts and rivers. These cities form a huge city world, in the theory of urbanization, the principle of sales area and the theory of intermediate position can explain the regionalization mechanism of urbanization economic operation.

3.3.1. Principles of the Sales Area

If per capita demand changes, the relative effects on changes in trip costs and

economies of scale are: Trip costs fall, and if demand is sufficiently elastic, per capita demand will increase so that each firm will need a smaller territory to sell a certain amount of goods; whereas increased economies of scale, with social costs falling and per capita demand increasing, will also create pressure to shrink the sales area. If the demand for goods is inelastic, it reduces the pressure to shrink the sales area. This is the demand effect of economies of scale and trip costs [11]. Taken together, the size of the sales area depends on the relative strength of the supply and demand effects and the strength of the elasticity of demand for the commodity. Whereas a decrease in population density leads to the expansion of individual sales zones, a rise in population density leads to the shrinkage of individual sales zones. To summarize, sales area is inversely proportional to population density. In the case of a certain per capita demand, the sales area changes in the same direction as the economies of scale and in the opposite direction as the trip cost, while in the case of a change in per capita demand following the Demand Theorem, it depends on the relative strength of its supply and demand effects and the strength of the elasticity of demand for the commodity.

3.3.2. Theory of Intermediate Positions

For the urbanized economic operating system, it has been found that the relationship between city size and economy is equal to a constant, *i.e.*: city economic class size = constant, which is known as the economic class-size rule. The cities that make up the economic operating system of urbanization are not in reality spatially independent of each other as depicted by the central location model, but due to changes in economies of scale, shopping externality, per capita demand, trip or transportation costs, and other factors that cause cities to form an interactive development of cities that are close to each other, and ultimately form a composite city or composite city-region **Figure 4**, which is a composite city-region. This kind of composite urban area has different names due to the different sizes of the cities involved in the composite. If a city and several small towns into a composite urban area can be called an urbanized areas; if a large city and several small cities into a composite urban area, can be called a large city area; if a large city and several urbanized areas into a composite urban area, can be called a large city statistical area: if several large cities into a composite urban area, can be called a large city joint statistical area.

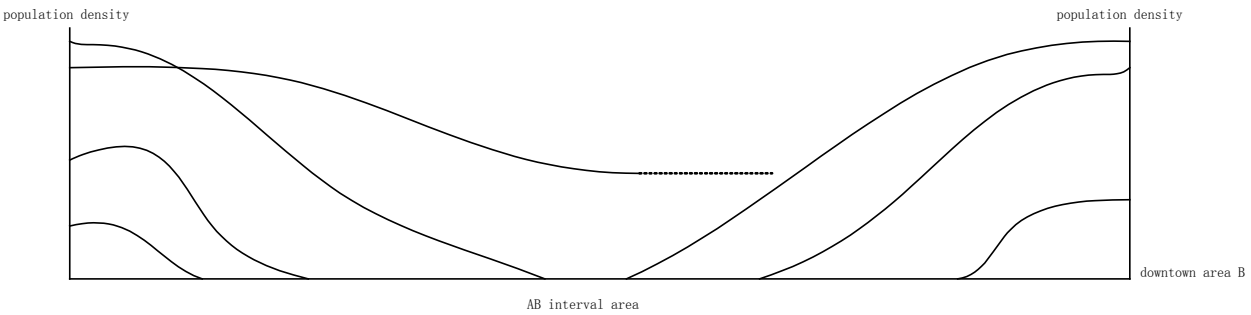

Figure 4. Schematic diagram of urban area formation.

Modern urban areas are moving towards a natural "urban-centered regionalization" by the forces of economic autonomy (economic integration or community of all kinds), and geographic proximity, which allows people to gather together, form a direct bond of connection and mutual understanding, and accelerate the flow of people, labor, goods and capital, which breaks down trade barriers, and whose enormous energy is concentrated or dispersed at home and abroad, and throughout the world, energy clusters or disperses at home and abroad and throughout the world. At the same time, the newest product of urbanized economic operations is talent, and thus it can meet the challenges, its skills and vision dictate that it can be in the new fast-moving global economy, with a solid infrastructure, employability, and the ability to avoid social volatility and large-scale costs of importing people.

4. Regulating Disequilibrium in Declining Categories of Cities

The phenomenon of the urbanization disequilibrium state in the declining class of cities is the urbanization economy operating with demand less than supply, yet the reasons for its demand being less than supply are fundamentally different from those of the general economy operating with demand less than supply. Demand less than supply in general economic operation is often due to the lack of effective demand (the demander cannot pay for the final money), while demand less than supply in the urbanization economy is often because the supply of urbanization has brought the benefits of urbanization to the demander at the same time, but also brought the damages of urbanization, such as environmental pollution, resource depletion, congestion caused by the negative externality, and so on, and thus the benefits that people get from urbanization can not compensate for the damages, so people choose to urbanization. The benefits from urbanization cannot compensate for the damages, so people choose to leave the city. Therefore, the essence of regulating this economic imbalance is to regulate the economic imbalance of this type of urbanization, not by simply stimulating demand, but by adjusting the supply of urbanization, including the supply of "cities" and "municipalities". Since the urban characteristics of resource-based and specialized cities, as well as industrial cities with poor environments, differ from each other, the ways of regulating them also vary considerably. Overall, the regulation of the supply of declining types of urbanization can focus on the various policy measures described in Table 1. Of course, these measures are not only used in isolation but also in combination with each other.

For such declining cities, the general approach is to achieve "new-type industrialization", which is industrialization after the emergence of informatization at a certain stage of the development of industrialization, which is different from the historical conditions under which the industrialization of developed countries was accomplished in the pre-informatization period, and thus the economic characteristics of industrialization are very different. The main features of the latter are as follows: first, an industrialization that enhances the capacity for sustainable development. A series of global ecological and environmental problems

Table 1. Policy measures to regulate the supply of urbanization in the decline category.

Economic revitalization and adjustment strategies	Declining urban issues		
	Single resource	Professional decline	environmental pollution
Key regulatory targets	Adjust the total amount and structure of land use, with a focus on developing resource land, to keep urban land rent at a reasonable level.	Adjusting land price policies, focusing on land use structure, to enable specialized industries in cities to obtain lower priced urban land, in order to reverse the trend of industrial decline.	Conduct comprehensive urban environmental governance, formulate environmental total indicators and environmental permit trading guidelines based on national standards, and control people's environmental and economic behavior.

triggered by the industrialization process of the developed countries in the past had seriously threatened the survival and development of mankind. Thus, new industrialization cannot take the traditional path of industrialization characterized by massive consumption of resources (energy) and sloppy management but must implement a low-consumption, sustainable industrialization path, which is very important for the revitalization of old and declining cities. The key to the implementation of this new industrial development strategy is the establishment of a technological support system for sustainable development, *i.e.*, the vigorous development of high technology represented by information technology, biotechnology, new energy technology, new material technology, and advanced and applicable technology that is conducive to environmental protection and energy conservation in non-agricultural industrial practices, and the "transformation of traditional industries with high-tech and advanced and applicable technology", promote the social material production technology mode from the original traditional production process characterized by high consumption of material and energy, low output and emission of a large amount of waste to the ecological process of low consumption, high output and waste reduction and utilization, and then promote the transfer of the social production mode from the resource extraction type to the deep resource regeneration type, vigorously improve the utilization rate of energy and raw materials, and improve the quality and efficiency of economic growth, optimize the economic structure, the formation of a new eco-industry and eco-agriculture, in order to ensure that the "ecology, an economy, a social, three-dimensional composite system of the virtuous cycle, to take the road of ecological efficiency of economic growth; the second is the industrialization of the city's human resources to give full play to their advantages. From a worldwide perspective, the development of the social economy has gone through a factor-driven stage, capital-driven stage, and technology-driven stage. Today, the trend of economic and technological integration is becoming more and more obvious, and the contribution of scientific and technological progress and the quality of workers to economic growth has replaced the factor of capital and risen to the forefront of the city's development to take a "new road of industrialization in which the advantages of human re-

sources are brought into full play", and it is necessary to implement the strategy of human resources, to develop education and culture, to increase investment in human capital, and to promote the development of human resources. To take a "new industrialization path where the advantages of human resources are given full play", urban development must implement a talent strategy, develop education and cultural undertakings, increase investment in human capital, establish a diversified mechanism for the development of human resources, cultivate high-quality workers and professionals, vigorously enhance the productivity of the main body, optimize the structure of human resources, enhance the articulation and linkage between human resources gradients, and achieve the optimal allocation of various types of talents. At the same time, based on the basic national conditions of multi-level productivity level of cities and unbalanced regional economic development, we should combine the development of capital- and technology-intensive industries with labor-intensive industries in the process of industrialization, to promote the continuous optimization and upgrading of the industrial structure, and at the same time, not only to give full play to the advantages of the city's original abundant labor resources and relatively low cost, but also to lift the obstacles of labor force transfer in the condition of informationization, which is conducive to employment and labor force welfare, and to the employment of workers. obstacles, which are conducive to the increase of employment and workers' welfare; thirdly, industrialization should be built based on modern informationization. Information intelligence tools have greatly strengthened the performance of information processing in the practice of technological innovation, optimized the control of the modern production process, the material flow process, and the financial capital flow process, and thus greatly improved social labor productivity and realized the leapfrog development of productivity. These benefits are due to the high radiance, high multiplicity, and high driving force of modern information technology, which provides a brand-new development platform for the establishment of declining old cities to transform and upgrade traditional industries, especially the equipment manufacturing industry, and develop high-tech industries. Secondly, the supply of land in cities is more generous while the supply of capital is tighter, and the disequilibrium state of urbanization is manifested in the fact that the supply of "cities" is greater than the demand, while the supply of "towns" is less than the demand. Therefore, the principle of regulation for this kind of city should be to make full use of urban land and not to let the more abundant land supply lose its efficiency. Because of this kind of city's "towns" demand is very strong, strong "towns" demand is often easy to low level of use seems to be more relaxed is actually a scarcity of urban land. Therefore, the regulation of such cities should mainly focus on regulating the demand for the "city" and the supply of the "towns", and harmonize the two organically. Both cities and towns have a greater demand than supply, reflecting a stronger demand for urbanization. In the face of this greater demand for urbanization, should be from two aspects of regulation: actively increase supply and appropriate control of demand. And the respective

strength of these two aspects of regulatory measures depends on which stage of the S-curve urbanization growth, because at different stages of the S-curve, the costs and benefits of urbanization have different correspondences, and there will be different economic benefits of urbanization. This is due to the fact that the economic theorem of urbanization works in different structures, resulting in a variety of economic benefit points in the urbanization process.

5. Regulating the Relationship between Labor Supply and Urbanization in Natural Growth

The urbanization process of natural growth is the urbanization process promoted by the self-growth of the original population of the city. The supply of the original population of the city is the main aspect of the contradiction. The employment problem of labor force caused by this urbanization process is generally influenced by two institutional factors acting in different directions: first, under the national policy of family planning, the growth rate of urban population (non-agricultural population) and thus the number of labor force is not very fast, which leads to the natural growth of labor force is not very fast; In addition, the planned employment under the traditional system gives employees the power of "regular workers" to form the difficulty of efficient employment adjustment, so that the natural growth stock of the number of employed people remains unchanged. The combined effect of two institutional factors results in that the total number of urban natural employees does not increase very quickly.

6. Concluding Remarks

The operation of the urbanization economy is different from the general economic operation, it is "city" operation and "city" operation intertwined with the composite economic operation, this composite, its important features are the city of public and private products at the same time the balance of the process of urbanization in the region of the cross-composite economic operation of the "city cluster", and the dynamic composite operation process of the advanced urban industry. This composite, its important features are the simultaneous equilibrium process of urban public and private products, the cross-composite economic operation of "city cluster" in the urbanized area, and the dynamic composite operation process of the advanced urban industry. This paper explores the inner law of urbanization economic operation and regulates the non-equilibrium state of declining cities by studying the inner law. It is hoped that the results of the study will provide theoretical help for analyzing the operation objectives of the urbanization economy, exploring efficient and stable urbanization paths and regulating mechanisms, and optimizing the urbanization process.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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