

Research on the Policy Changes of Installing Elevators in Old Residential Communities

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ABSTRACT

This article analyzes the change process of the policy of installing elevators in old residential communities in China, and based on the theoretical analysis framework of the Advocacy Coalition, it analyzes the reasons for the changes in the policy of installing elevators in old residential communities from three aspects: conflicts and collisions of policy propositions among different alliances, boosting of external events and policy learning.

Keywords: Old residential communities, Elevator installation policies, Changes.

1. INTRODUCTION

With the acceleration of urban development and residential renewal, the call for installing elevators in old residential communities has become increasingly strong. In response to the demands of the people, the central government has introduced relevant policies for the installation of elevators in old residential communities in a timely manner to guide, standardize and promote the installation of elevators in old residential communities in various places.

2. RELATED CONCEPTS

2.1 Old Residential Community

The old residential community refers to the community built before 2000 excluding the year 2000 and has a service life of more than 15 years, including non-commercial residential communities and commercial housing communities funded and constructed by the government and units.

Geographically, most of the old residential communities are located in relatively central areas of cities and counties (county towns). In terms of public facilities, due to the earlier construction, the existing facilities are relatively backward, which cannot meet the basic living needs of current residents. In the aspect of facility maintenance and equipment, the perennial lack of property role has

caused the community to lose its maintenance and management, which has a greater impact on the basic life of residents. The residential owners of the community have a strong willingness to renovate their houses.

2.2 Reconstruction of Old Residential Communities

The key targets for the reconstruction of old residential communities are residential communities with relatively poor basic environment built before the end of 2000, however, they do not include the shanty towns that have been included in the urban shanty town renovation policy and are planned to be rebuilt through demolition and new construction (reconstruction, expansion, and renovation).

According to the goals and achievement levels of the reconstruction, the reconstruction of the old residential community is divided into three categories: the category of basic security — the main purpose is to further meet and protect the basic needs of residents through the improvement of public infrastructure and the improvement of the internal environment of the community; the category of the improvement of items — the main purpose is to provide residents with a better living environment. The installation of elevators in old residential communities belongs to this type of renovation project; the category of quality

improvement — the purpose is mainly to improve the quality of life of the owners in communities from the service supply of communities.

3. THE PROCESS OF POLICY CHANGES OF INSTALLING ELEVATORS IN OLD RESIDENTIAL COMMUNITIES

This article takes the policies related to the installation of elevators in old residential communities issued by the Ministry of Housing and Urban-Rural Development, the Ministry of Finance, the General Office of the State Council and other central government departments as the object of analysis. According to the content changes of the detailed rules and regulations of policies, the development of the policy of installing elevators in old residential communities is divided into three stages.

3.1 The First Stage: 2015 to 2016

China has implemented the family planning policy since 1978, and it was written into the Constitution in 1982 as China's "basic state policy". In 2015, China fully implements the two-child policy, and in 2021, it implements the policy that a couple can have three children. The change in the childbearing policy reflects the reality of the imbalanced population development in China and the gradual deepening of the aging population.

In order to improve the convenience of the elderly population, the Ministry of Housing and Urban-Rural Development issued the "Notice on Further Utilizing the Supporting Role of Special

Residential Maintenance Funds in the Reconstruction of Old Residential Communities and Elevators" in 2015, and for the first time, it is proposed that after two-thirds of the owners agree, housing maintenance funds can be used to install elevators in old residential communities, so as to reduce the burden on the owners of old residential communities to install elevators from the source of funds.

Beginning in the second half of 2016, the Ministry of Housing and Urban-Rural Development has introduced a series of measures around the "barrier-free reconstruction of old residential communities and families of elderly population". Among them, the release of three guiding documents of the "Notice on Printing and Distributing the Work Plan for the Design and Preparation of National Building Standards in 2016" (Ministry of Housing and Urban-Rural Development), "Technical Specifications for Functional Renovation of Existing Residential Buildings" (Ministry of Housing and Urban-Rural Development), and "Several Opinions of the General Office of the State Council on Opening the Elderly Care Service Market and Improving the Quality of Elderly Care" (General Office of the State Council), on the one hand, standardizes the industry standards for installing elevators, so that old residential communities have rules to follow when installing elevators; and on the other hand, the source of funds for installing elevators in old residential communities has changed from a single housing maintenance fund to multiple channels such as government subsidies and owner crowdfunding.

Table 1. Summary of relevant policies for installing elevators in old residential communities issued by central government departments

Time	Promulgator	Name of policy	Relevant content
2015.01	Ministry of Housing and Urban-Rural Development Ministry of Finance	"Notice on Further Utilizing the Supporting Role of Special Residential Maintenance Funds in the Reconstruction of Old Residential Communities and Elevators"	Old residential communities without elevators can use maintenance funds to install elevators with the consent of the owners whose exclusive part occupies more than two-thirds of the total building area and more than two-thirds of the total number of owners.
2016.05	Ministry of Housing and Urban-Rural Development	"Notice on Printing and Distributing the Work Plan for the Design and Preparation of National Building Standards in 2016"	Reformation design for adding elevators to existing buildings
2016.12	Ministry of Housing and Urban-Rural Development	"Technical Specifications for Functional Renovation of Existing Residential Buildings"	Formulate technical standards for the content, design, construction and inspection and acceptance of the functional transformation of existing residential buildings

Time	Promulgator	Name of policy	Relevant content
2016.12	General Office of the State Council	"Several Opinions of the General Office of the State Council on Opening the Elderly Care Service Market and Improving the Quality of Elderly Care"	Organize and carry out the installation of multi-storey old residential elevators
2018.02	General Office of the State Council	"Opinions on Strengthening the Quality and Safety of Elevators"	Formulate relevant policies for the transformation and renovation of old residential elevators, establish a safety assessment mechanism, and promote the transformation and renovation of old residential elevators
2018.09	Ministry of Housing and Urban-Rural Development	"Notice on Further Doing a Good Job in the Retention, Utilization, Transformation and Renovation of Existing Buildings in the City"	Support to improve the applicability, practicality and comfort of existing buildings by expanding underground space, installing elevators, and optimizing building structures
2019.01	National Development and Reform Commission Ministry of Industry and Information Technology of the People's Republic of China 10 ministries and commissions	"Implementation Plan for Further Optimizing Supply, Promoting the Steady Growth of Consumption and Promoting the Formation of a Strong Domestic Market"	Speed up the transformation of old elevators and aged families; places where conditions permit can install elevators in old residential communities.
2019.02	Ministry of Housing and Urban-Rural Development	"Guiding Opinions on Launching Activities to Create a Beautiful Environment and Happy Life in the Construction and Improvement of Urban and Rural Human Settlement"	In urban communities, problems such as installing elevators, adding parking facilities, and building energy-saving renovations in old residential communities can be solved on the basis of the ongoing renovation of old residential communities and the classification of household waste.
2019.04	Ministry of Housing and Urban-Rural Development National Development and Reform Commission Ministry of Finance	"Notice on Doing a Good Job in the Reconstruction of Old Residential Communities in 2019"	Comprehensively promote the transformation of old residential communities in cities and towns, mainly completing the thorough research of basic conditions of the old residential communities in cities and towns across the country, and reasonably determining the transformation plan for 2019, etc.
2020.01	National Development and Reform Commission Ministry of Finance	"Work Program for Expanding Domestic Demand and Promoting Consumption in the Near Future"	Accelerate the implementation of support for residents in old residential communities in cities and towns to withdraw provident funds to pay for the installation of elevators, etc. The personal payment department encourages the installation of elevators in conditional buildings in old residential communities in cities and towns Accelerate the implementation of measures to support residents in old residential areas in urban areas to withdraw their provident fund for payment and installation of elevators in their buildings
2020.07	General Office of the State Council	"Guiding Opinions on Comprehensively Promoting the Reconstruction of Old Residential Communities in Cities and Towns"	Install elevators on conditional buildings

Time	Promulgator	Name of policy	Relevant content
2020.08	Ministry of Housing and Urban-Rural Development, Ministry of Education, Ministry of Public Security	"Opinions on Carrying out Actions to Make Up for Shortcomings in the Construction of Urban Residential Communities"	The market supervision department implements supervision, inspection and registration of use of elevators installed in residential buildings in accordance with the law

3.2 The Second Stage: 2017 to 2019

In 2017, the installation of elevators in old residential communities made its debut on the stage of Two Sessions in China. NPC members proposed that the government introduce relevant encouragement policies and guidance on the installation of elevators in old residential communities. 11 months later, the General Office of the State Council issued the "Opinions on Strengthening the Quality and Safety of Elevators", proposing to formulate relevant policies for the renovation and overhaul of old residential elevators, and at the same time establish a safety assessment mechanism to unblock the withdrawal of funds. The promulgation of the "Opinions" provides a system guarantee for the installation of elevators in old residential communities.

In 2018, the installation of elevators appeared in the government work report. For the first time, it linked the reconstruction of old residential communities with new-type urbanization, encouraged the installation of elevators if conditions permitted, and promoted the construction of "villages in cities" in an orderly manner through technical supporting facilities. In September of the same year, the Ministry of Housing and Urban-Rural Development issued the "Notice on Further Doing a Good Job in the Retention, Utilization, Transformation and Renovation of Existing Buildings in the City" to support the transformation of old residential communities from a policy perspective. At the same time, the three-year shanty town renovation policy was officially launched, and the demolition of old and dilapidated residential buildings in cities and towns and the renovation and renewal of old residential communities were carried out simultaneously.

In 2019, the Ministry of Housing and Urban-Rural Development issued supporting policy documents for four consecutive months, clarifying the relationship between the installation of elevators and the pension industry, laying a material foundation for community support for the

elderly and home-based care for the aged and embarking on a long-term development layout suitable for aging.

3.3 The Third Stage: 2020 to Present

2020 was the ending year of the three-year shanty town renovation policy. In January, the National Development and Reform Commission and the Ministry of Finance jointly completed the "Work Program for Expanding Domestic Demand and Promoting Consumption in the Near Future", the main content of which was to expand the source of funds for housing renovation to provident funds, encourage the retrofitting of elevators based on the old levels of old residential communities, and further refine and clarify the policies for installing elevators.

Soon afterwards, the COVID-19 pandemic broke out during the Spring Festival, which had a greater impact on the Chinese economy. In April, the executive meeting of the State Council linked the renovation of old residential communities with the expansion of domestic demand, paid attention to the huge potential of the consumption capacity and consumption demand of the elderly population, and proposed to promote the installation of elevators and other old community renovation projects to drive investment growth, stimulate consumption and increase employment opportunities.

In May, the installation of elevators was once again come up with on the Two Sessions of China. Unlike 2017, the policy of installing elevators in 2020 was more formal, comprehensive and intuitive. It was mentioned in the Two Sessions that 39,000 renovation sites were newly started. This was the first nationwide renovation carried out from the central level after the pilot scheme in various regions. In August, the Ministry of Housing and Urban-Rural Development, the Ministry of Education, and the Ministry of Public Security jointly issued the "Opinions on Carrying out Actions to Make Up for Shortcomings in the Construction of Urban Residential Communities",

which pointed out that the market supervision and management department shall implement supervision, inspection and use registration for the installation of elevators in accordance with the law.

4. ANALYSIS OF THE CHANGING MOTIVES IN THE POLICY OF INSTALLING ELEVATORS IN OLD RESIDENTIAL COMMUNITIES

According to the Theory of Advocacy Coalition, the conflicts of policy propositions among different alliances, the boosting of external events, and policy learning are the main reasons of policy changes [1].

4.1 Conflicts and Collisions Between Different Alliances Induce Policy Changes

The policy belief system is the fundamental point that distinguishes different advocacy alliances. Different advocacy alliances can be divided based on the differences in the policy support for installing elevators in old residential communities.

4.1.1 The Advocacy and Support Alliance for the Policy of Installing Elevators in Old Residential Communities

The advocacy and support alliance for the policy of installing elevators in old residential communities believes that it is a must and it is necessary to install elevators in old residential communities.

The elderly population is an important part of the support alliance, and the main group is the elderly owners living in the old residential communities. For the elderly, climbing stairs can put pressure on the joints, and if they have cardiovascular problems, it can easily induce diseases. Installing elevators in old residential communities to make travel safer and more convenient is the most basic requirement of the elderly population. The elderly owners in the old residential communities have become the strongest supporters of the policy of installing elevators in the old residential communities.

Some scholars support the installation of elevators. They believe that the current housing prices in many cities in China have risen too fast and too high, and the continued implementation of

the original shanty town renovation policy will further aggravate the rise in housing prices. Renovating the existing old houses not only improves the overall living environment, but also helps to alleviate the pressure of rising housing prices, and it also fits the concept of sustainable development [2].

The support alliance also includes some NPC members and the public. On the Two Sessions in 2017, NPC members proposed that the government introduce relevant encouragement policies and guidance on the installation of elevators in old residential communities. The public also recognizes that it is the responsibility of society to install elevators in old residential communities to improve the convenience of life for the elderly.

4.1.2 The Opposition Alliance for the Policy of Installing Elevators in Old Residential Communities

The opposition alliance for the policy of installing elevators in old residential communities believes that the installation of elevators in old residential communities has many problems such as infringement of public space, potential safety hazards, and difficulty in cost allocation. Therefore, this alliance is opposed to installing elevators.

The main group members of the opposition alliance are the owners of low floors in old residential communities. First of all, due to floor reasons, low-rise houses have relatively poor daylighting conditions, and the indoor daylighting level will further decline after the installation of elevators; secondly, noise will be generated during elevator installation and later operation, and the life of low-rise owners will be affected to a certain extent; at the same time, the floor advantage of houses after the installation of elevators will also decline, and the house assets will depreciate relatively; in addition, the installation of elevators will encroach on public space, making the interior of the community even more cramped, affecting daily travel; the elevator utilization rate of low-rise owners is generally lower than that of high-rise owners, and it is difficult to coordinate how to allocate the elevator usage fee; finally, the total cost of installing an elevator is 500,000-600,000 yuan on average. Although there are government subsidies, the owners themselves have to bear part of the cost. Therefore, low-rise owners are opposed to installing elevators.

Some scholars and certain government departments also oppose the installation of elevators. Scholars who oppose the installation of elevators believe that the installation of elevators in old residential communities involves complicated content, high professional requirements, and potential safety hazards [3]. In addition, the fund is highly dependent on the outside world, increasing uncertainties or leading to practical problems such as the increase in construction time, the increase in costs, and the impact on the life of the owners. Certain government departments, such as the fire department and the land and urban construction department, have also expressed concerns about the subsequent risk of installing elevators, and raised objections to the installation of elevators.

4.2 External Events Fuel Policy Changes

External events such as the deepening of the aging of Chinese society, the change from the shanty town renovation policy to the renovation policy of the dilapidated, the change in governance concepts, and changes in the economic situation have promoted changes in the policy of installing elevators in old residential communities.

4.2.1 The Degree of Aging Is Gradually Deepening and the Demand for Elderly Care Is Increasing

From the family planning of "best having one child" to the full liberalization of the "second child" policy, and to the policy that a couple can have three children, the change in the childbearing policy reflects the reality that the aging of the population is gradually deepening.

With the gradual increase of the aging population, the demand for the pension industry is growing rapidly. Traditional nursing homes will not be able to meet the needs of all elderly people in the future. On the one hand, because of space constraints, the accommodation is limited; on the other hand, many elderly people themselves are unwilling to leave their familiar environment and familiar neighbors. The concepts of home-based care for the aged and community support for the elderly emerge [4]. The old residential communities carry a considerable number of elderly people, but they are generally not equipped with elevators, which causes great inconvenience to the travel of the elderly and reduces the quality of life of the elderly. The government responds to the demands of the elderly population in a timely manner, issues

some policies to encourage the installation of elevators in old residential communities, and continuously adjusts and refines the policy implementation terms.

4.2.2 The Renovation Policy of the Dilapidated Replaces the Shanty Town Renovation Policy, and the City Can Obtain a Sustainable Development

Behind the large-scale implementation of the shanty town renovation policy is the huge demand for purchasing house. Monetary resettlement has brought about problems such as rising housing prices, high demolition costs in urban centers, and difficulty in unified planning and utilization of scattered land; the physical resettlement has increased the pressure on the stock of real estate land. The existing shanty town renovation policy is difficult to continue.

The old residential community renovation policy is essentially a continuation of the core of the shanty town renovation policy. The transformation of shanty town has demolished dilapidated houses, illegal buildings, shanty towns, etc., and the remaining houses still have use value. And the continued use of demolition methods is essentially a waste of resources. Replacing the "renovation of shanty towns" with "renovation of the dilapidated" and the change from "demolition" to "addition" are transformations of the means of urban reconstruction, which can alleviate the pressure on the land stock in the city and alleviate the increase in housing prices in the city due to renovation and renewal [5].

4.2.3 Changing the Governing Concepts and Adhering to the People-centered Development Thinking

Since the 18th National Congress of the Communist Party of China, the Party Central Committee with Comrade Xi Jinping as its core has conformed to the people's yearning for a better life, taken the realization of people's happiness as the starting point and destination of all work, continuously enhanced people's sense of gain, and formed the development thinking of adhering to the people-centered position.

In order to make people's life more convenient, more comfortable and better, the government has proposed to vigorously transform and upgrade the old residential communities in cities and towns.

One of the important measures is to install elevators in the old residential communities. From 2015 to 2020, various departments of the central government have successively issued 12 policies related to the installation of elevators in old residential communities, from encouraging conditional installations, accelerating implementation to full progress, and included them in the government's work schedule in 2020.

4.2.4 The Troika Is Updated and the Economic Development Is Facing a Brand-new Situation

Since the reform and opening up, relying on the troika of investment, export and consumption, China has achieved an economic leap. However, with social development, investment growth has declined year by year. Since 2018, the United States has imposed additional tariffs on Chinese goods, which has also brought severe challenges to China's exports. The COVID-19 pandemic broke out in 2020, measures such as lockdown and quarantine have severely hit the real economy, the domestic consumption has been blocked, the investment has also fallen into a temporary stagnation, and exports have fallen sharply.

The traditional troika cannot cope with the new economic situation. The central government proposes to implement a new development idea of "domestic and international dual cycles, with a major domestic cycle as the mainstay". The executive meeting of the State Council linked the renovation of old residential communities with the expansion of domestic demand, paid attention to the huge potential of the consumption capacity and consumption demand of the elderly population, and proposed to promote the installation of elevators and other old community renovation projects to drive investment growth, stimulate consumption and increase employment opportunities.

4.3 Policy Learning Promotes Policy Changes

Policy learning is one of the factors of policy changes. Because of the competition between different belief systems, in order to better maintain their belief systems or values, alliance members have to absorb reasonable factors in their opponents' belief systems, learn from each other, and promote the policies to be increasingly perfect.

4.3.1 Policy Orientation Learning Within the Advocacy Alliances

Each alliance considers whether to install elevators in old residential communities based on the differences in its own situation. Within the same alliance, there will also be differences of opinion. For example, within the advocacy and support alliance, there are different opinions on the selection of specific implementation schemes for installing elevators and the selection of elevator installation objects.

China's first-tier cities, such as Shanghai, Beijing, Guangzhou and other cities, started the practice of installing elevators in old residential communities earlier, and issued corresponding guidelines. Among them, the "Guiding Opinions on Adding Elevators to Existing Residential Buildings in Guangdong Province" issued by the Department of Housing and Urban-Rural Development of Guangdong Province in 2008 is the earliest local normative document so far [6].

Various local governments differ in terms of conditions, compensations, funding methods, use of maintenance funds, design and construction, and approval and acceptance for additional elevators. In practice, they learn from each other and revise, improve and standardize relevant policies in a timely manner.

4.3.2 Policy Orientation Learning Among the Advocacy Alliances

Although the two major advocacy alliances are on opposite sides, in order to better maintain their alliance belief system in each other's competition and persuasion, they also need to learn the reasonable concepts of the competition alliance, pay attention to the interests of each other, and better implement their own beliefs.

The interest demand of the opposition alliance focuses on the allocation of elevator installation and operating costs, compensation for the damage to the interests of low-rise residents, the process of installing elevators, and the safety of construction.

In response to the interest demand of the opposition alliance, the support alliance responds in a timely manner and puts forward various countermeasures, thus promoting the continuous improvement of the policy.

In terms of elevator installation costs, from the initial application for housing maintenance funds to

government subsidies, it is now further stipulated that the owner can apply for housing provident fund for the part paid by the owner. The government continues to expand funding channels to ease the financial pressure on owners due to the installation of elevators. At the same time, the government has refined the apportionment ratio of elevator installation costs for owners on different floors; in terms of elevator operating costs, the initial allocating of the usage fee has also been changed to the current billing by swiping card based on the usage rate or a certain percentage of the cost according to the floor; for low-rise households, due to the installation of elevators, problems emerge such as the impact of daylighting, noise and housing depreciation, and the policy further refines the relevant provisions of monetary compensation based on the specific owners' property losses combined with the impact on life; in response to the complicated process, cumbersome procedures and construction safety of applying for the installation of elevators, the successive policies have further stipulated simplifying the application process and approval procedures, and standardizing the conditions and safety standards of construction.

5. CONCLUSION

This article takes the policies related to the installation of elevators in old residential communities issued by the Ministry of Housing and Urban-Rural Development, the Ministry of Finance, the General Office of the State Council and other central government departments as the object of analysis. According to the content changes of the detailed rules and regulations of policies, the changes of the policy of installing elevators in old residential communities is divided into three stages.

Based on the theoretical analysis framework of the Advocacy Coalition, different advocacy alliances are divided according to the differences in support for installing elevators. This article starts with the conflicts and collisions of policy propositions between different alliances, the deepening of the aging of Chinese society, the replacement of the shanty town renovation policy with the renovation policy of the dilapidated, the change of governance concept, the change of economic situation and other external events, as well as the learning within and among the advocacy alliances etc., analyzing the reasons for the changes in the policy of installing elevators in old residential communities.

AUTHORS' CONTRIBUTIONS

Wenli Deng is responsible for the framework design, revision and finalization of the paper, and Siyu Pu is responsible for material collection and the first draft of the paper.

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