The Progression of Urbanization and Spatial Formation in Japan after World War II

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1. Introduction

The progression of spatial formation in Japan after World War II can be roughly divided into five periods. The first is the post-war reconstruction period (from 1945 to the mid-1950s), which aimed at rebuilding housing and restoring industry. The second is the high economic growth period (from the mid-1950s to the beginning of the 1970s). Investment in heavy industry had advanced, leading to the formation of the area known as the Pacific coastal belt (“Taiheiyo Belt”), which comprised four major industrial zones. While this resulted in large-scale migration to big cities, the countryside, in contrast, was undergoing a process of depopulation. At around the same time, social issues such as pollution, traffic congestion, and garbage management were becoming increasingly problematic. The third is the low economic growth period that followed the oil crisis (from 1973 to the mid-1980s). In terms of the economy, it was necessary to change the focus of the industrial structure from manufacturing to the service sector during this period. In terms of spatial formation, drawing on the lessons learned from the phenomenon of excessively high population density in megacities, national land planning was carried out with the objectives of decentralization and development localization. The fourth period involved the economic bubble and its aftermath (from the mid-1980s to the mid-2000s). Investment in urban infrastructure increased, leading to a loosening of regulations and numerous urban redevelopment projects. The primary feature of the fifth period, which started in the mid-2000s, is a shrinking of the population. The total population in Japan is estimated to decrease from about 128 million in 2010 to about 87 million by 2060. This will be accompanied by the aging of society and steady increases in the need for welfare and medical services, even though the total amount of public financing will be decreasing. Therefore, it is increasingly important how we, meaning those who live in present day society, design the future of the nation.

2. Urbanization and Spatial Formation

The main themes of this paper are urbanization and spatial formation in Japan. First, I will clearly discuss the basic viewpoints. In Japanese regional and community studies, researchers have conventionally had the viewpoint that capitalistic developments have influenced Japanese society. The influences typically noted are urbanization and the attendant spatial changes.

Urbanization leads to an increase in population density in cities and depopulation in the countryside. Rapid urbanization disrupts the balance of the spatial distribution of the population, and this conflict is clearly visible between urban and rural areas. This is particularly evident in Japanese history after World War II. Even when we consider problems in urban society, we must sometimes examine what has happened in rural society. In discussing spatial formation, the main theme of this paper, we must examine the social phenomenon of urbanization as it affects both cities and all of
society.

National land planning in Japan has been carried out on the basis of this perspective. Sometimes, the government invests intensively in urban areas; at other times, local investment is increased to promote balance. Understanding the reasons and targets for such investments are important because they provide knowledge of the spatial formation of Japanese society over time.

The relation between development and economic conditions is also important. During the recovery period after World War II, Japan strove to catch up economically with other advanced countries and to develop measures to advance this aim. However, now that Japan is one of the world’s major economic powers, the meaning of development has changed. It is therefore necessary to understand the intentions behind changes in spatial formation.

Starting in the next section, we discuss urbanization and spatial formation in Japan as they occurred over time.

3. Period 1: Postwar Reconstruction (1945 to the mid-1950s)

World War II devastated Japan’s major cities, creating a shortfall of as many as 4.2 million houses across Japan. Japan’s postwar urbanization thus started with a fundamental challenge: to rebuild the numerous bombed-out houses and provide a housing supply sufficient for the resident population. However, during this period, the Japanese government was engaged in by postwar reconstruction efforts, and was therefore unable to spare the funds needed to resolve the public housing crisis. To address this lack, the government started pursuing separate housing policies tailored to each social class. In this way, Japan established a basic housing policy consisting of three pillars: provision of financial assistance to aspiring homeowners (Housing Loan Corporation Act of 1949; Jūtaku kinyu kouko hou), provision of public rental houses to low-income groups (Public Housing Act of 1951; Kouei jūtaku hou), and provision of apartment complexes to the urban middle class (Japan Housing Corporation Act of 1955; Nihon jūtaku koudan hou).

Another important development during this period was Japan’s restoration as a member of the international community. The signing of the San Francisco Peace Treaty of 1951 signified that Japan had regained its membership in the international community in a political sense. Economically, however, Japan remained weak. Over the course of two world wars, the Japanese economy had shifted from light to heavy industry, but the postwar Japanese economy was still geared to meet military demand. While Japan faced the need to shift toward civilian demand, the government invested heavily in coal and steel on a priority production basis. Japan’s war-weary industries ultimately found a new lease on life in the Korean War, which created a “special demand” (Tokujū), and placed Japan on a path of high economic growth.

4. Period 2: High Economic Growth Period (the mid-1950s to the beginning of the 1970s)
4.1. Urban Expansion and the Dismantling of the Community

The agglomeration of manufacturing industries into industrial zones distributed along the Pacific Belt resulted in formidable industrial output, allowing Japan to achieve high economic growth. In cities, industrial clusters formed along with residential districts to house the workers who propped up the industrialization (“industrialization = urbanization”). Industrial development accelerated the population drift from rural areas to cities, and the cities absorbed this influx by expanding outward into the suburbs.

Japan now faced the need to secure an efficient supply of housing to cater to the dramatically transformed urban environment. Accordingly, the government encouraged the construction of large-scale housing developments and condominium complexes in suburban areas. The 1960s saw the development of Osaka City’s Senri New Town, a residential district with a population of about 100,000. Senri New Town marked the start of a series of “new town” developments of similar population sizes, including Kozoji New Town, Tama New Town, Senboku New Town, Kohoku New Town, and Chiba New Town. The majority of the apartment complexes in these developments adopted the standard residential layout scheme originally developed for public housing. This scheme uses the number of rooms plus letters to designate common room areas; the description is written as nDK (number of rooms + dining room and kitchen) or nLDK (number of rooms + living room, dining room, and kitchen). Because housing designs based on this model were geared toward families with few (n+1) members, the mass supply of such housing led to living spaces becoming bound up with family formation; therefore, the nuclear family became entrenched as the basis of urban settlement (“nDK = family model”; Moritan 1990:382).

The results of a 1967 housing survey indicated that housing units outnumbered families. In response, the government decided to shift the focus of its policy from the quantitative expansion of single-family housing units (“one family, one house”; issetai ichi jūtaku) to the qualitative improvement of the housing stock (“one room, one person”; hitori isshitsu). However, the “nDK” model of the single-family housing persisted, and thus the nuclear family remained the cornerstone of urban settlement. Increasing suburbanization led to a major flow of the population into the suburbs, which reduced the population of city centers (the so-called “donut phenomenon”) and led to the decline of inner cities.

As part of this suburbanization process, cities started placing residential districts at the outskirts of the city center, resulting in a basic urban structure in which the city center served as a commercial and industrial zone and the suburbs served as “bedroom community” territory. Once cities became clearly partitioned in this way, the city centers and suburbs started facing their own particular challenges.

Increasingly more residential districts emerged in suburban rural areas, leading to a rapid influx of newcomers. The increasing mingling of the settled and mobile populations undermined the
traditional social order of the rural community, which was premised on territorial connectedness. A sizeable gulf emerged between the behaviors and values of the existing urban residents (the old middle class) and the new, largely white-collar, urban residents (the new middle class). In many cases, the two groups held contradictory political positions on local issues. As for the city centers, a population influx of mostly younger families gradually eroded the territorial connectedness of downtown communities, which had been centered on merchant households. It is generally asserted that urbanization entails major changes in human relations. This notion is prevalent in research on urbanism, and particularly in a theory advocated by Louis Wirth (1938) and other members of the Chicago school of sociology.

As a result of these changes in human relations, a number of social functions that had been performed primarily through the family and local community started being entrusted to external channels, such as public services and the market. For example, the bulk of education functions shifted to public schools and private cram schools (juku), while welfare services, such as elderly nursing care, were increasingly entrusted to specialized facilities. Urban sociologists have characterized these developments as the proliferation of an urban lifestyle and described them as either “the collective handling of common problems by specialized experts and institutions” (Kurasawa 1977:26) or the “socialization of daily life” (Takahashi 1984:58–65). As a result of the weakening of local ties and the loss of connection to local areas, local organizations such as neighborhood associations ceased to function as autonomous bodies and began to exist as political pressure groups or the lowest tier of government administration.

Although the dismantling of the existing social order has been evaluated in various ways by academics, there is general agreement that this development prompted the government to develop (from the end of the high economic growth period onward) a community strategy for fostering a new kind of local community founded on respect for individual autonomy. Academically speaking, this development can be contextualized as the dismantling of community ties that were bound up with the process of industrial development; at the same time, it can be regarded as an attempt to explore an alternative form of community ties, one that is grounded in the process of consumption.

4.2. The Expansion of the Suburbs and Urban Sprawl

The rapid development of housing in suburban areas during the high economic growth period led to various problems emerging in relation to city life. At the time, Japan lacked an adequate system of development control and urban planning. This meant that disorderly development was rampant. In the new housing estates that sprang up the suburbs, glaring inadequacies were evident in the infrastructure necessary for urban life. These problems included a lack of sewage systems, deficient transport networks (which led to traffic accidents and gridlock), insufficient green space, overcrowded classrooms owing to school shortages, and few nearby medical and commercial
facilities (leading to an insufficient system of collective or social consumption). Because the housing estates tended to adjoin arterial roads, residents suffered from noise and traffic pollution in the form of health damage caused by exhaust fumes. Noise and vibrations from rapid transit systems, such as aircraft and the Shinkansen bullet trains, also started being treated as a problem during this period. Therefore, urban sprawl entailed a number of problems that threatened various aspects of life.

While it was originally sparked by industrialization, this rapid urban expansion led to the formation of both manufacturing clusters and housing estates in a simultaneous and unplanned manner. Accordingly, residential and industrial areas overlapped one another, creating the problem of public pollution (air pollution from factory exhaust, river pollution from factory wastewater, noise pollution, odors, etc.)

The growth of the urban population expanded consumption, which vitalized the urban economy. On the other hand, it also resulted in a social structure characterized by mass production, mass consumption, and mass disposal, leading to a problem with waste. Garbage incinerators and landfill sites were necessary to process the large volume of garbage produced in major cities, but construction of these facilities did not prove easy because many local residents resisted the building of “nuisance” facilities in their area. The shortage of garbage disposal facilities became a major issue, and rampant illegal dumping soon became a factor in environmental degradation.

4.3. The Hollowing Out of City Centers and the Ensuing Inner City Problems

Advancing suburbanization led to the formation of vast metropolises. Core management functions (headquarter functions of industrial capital, financial capital, etc.) began concentrating in the centers of these metropolises. Looking at Japan as a whole, the Tokyo metropolitan area stood out, in particular, as a magnet for these core management functions. The shortage of office space in city centers prompted an increase in land prices. As a result, a vast number of small cubicle rental apartments emerged in the centers of large metropolises. This development deteriorated the living environment, prompting a sharp decline in the population of city centers. A trend began to emerge among young people and mainstay households, in particular, to leave city centers and move into newly developed suburban housing estates, leading to an increasingly old city center population and the erosion of the community. The decline of the nighttime residential population led to business closures and underutilized facilities (such as schools). Meanwhile, the rise in unoccupied housing brought a rise in crime.

A rise in land prices prompted calls for the rationalization of land and space use in city centers. With a view to ushering in a new form of land and space control, the Building Standards Act (Kenchiku kijun hou) was revised in 1970 to abolish height restrictions and introduce a floor-area ratio system. The aim in loosening these restrictions was to encourage a new supply of spaces and thus control land prices. However, contrary to hopes, this revision only led to new problems.
First, it encouraged developers to build high-rise buildings, as this maximized land use. However, the large number of high-rises caused new problems by, among other things, blocking out light and wind and causing electromagnet interference. There were many disputes over these problems until sun-shadow regulations were finally incorporated into the Building Standards Act in 1976. Thus, legal buildings, as opposed to illegal buildings or unsuitable existing structures, were inflicting harm on the living environment.

Above all, allowing buildings to have a high volumetric capacity resulted in further rises in land prices. Replacing height restrictions with the concept of floor-area ratio meant that existing buildings expanded their facilities to unused space above the top floor. This situation caused a rise in land asset prices, making city center properties even more unaffordable to many.

In this way, the ratio of city center land owned by corporate bodies increased, and the land was increasingly subject to speculative impulses based on capitalist logic (exchange value). As a result, city center land gradually lost its function as a residential space.

5. Period 3: Economic Slowdown following the “Oil Shock” (1973 to the mid-1980s)

5.1. Residents’ Movements

The public did not sit idly by. It responded to the problems affecting city residents during the high economic growth period. During the late 1960s and 1970s, residents’ movements emerged in various places. These movements involved formal protests aimed at protecting residents from the problems impacting local communities. As such, they represented a challenge to unrestrained urban sprawl.

The rapid rise in the urban population was accompanied by the degradation of the living space environment. The targets of the residents’ movements were diverse. Some movements targeted the sources of environmental harm, calling for the closure of facilities, the cancellation of development projects, and the prevention of public pollution, while others called for the construction of facilities aimed at improving the environment and demanded specific services and improvements to consumer life. Specific examples of these movements include groups that opposed the construction of arterial roads, large shopping malls, and land rezoning projects; groups that sought to prevent pollution from factories, roads, and railways; groups that opposed the construction of waste incineration or wastewater treatment facilities; groups that opposed the construction of high-rise buildings; groups that opposed the construction of micro-unit apartment buildings; groups that called for the construction of sewage systems, green spaces, schools, hospitals, transport facilities, and roads; groups that campaigned for the building of cultural facilities (libraries, public halls); groups that campaigned for the enhancement of medical and welfare services; groups that campaigned against environmentally damaging chemicals in soap (the “soap movement”); groups that campaigned for more recycling; groups that campaigned for planting greenery and demanded cleaner rivers; and groups that campaigned for the preservation of cultural heritage and landscapes.
According to data about the Tokyo metropolitan area, the most prevalent residents’ movements during the early 1970s were those concerned with environmental issues and public pollution. The next most prevalent movements were those campaigning for planning issues, such as the construction and location of urban facilities (Nitagai 1989:82–87). Although these movements developed in various ways, one typical pattern was for a residents’ movement centered on environmental conservation to develop into a movement for asserting rights over the environment and to subsequently evolve into a town-building movement. Furthermore, in the course of their evolution, many movements started targeting the existing system of urban development and launching formal protests against what they saw as the direct causes of the problems (such as enterprises responsible for pollution, land developers, etc.) These movements then went a step further and accused the government of being complicit in harmful activities and neglecting its managerial duties. The movements subsequently evolved into proactive town-building movements aimed at ameliorating and preventing problems or achieving certain demands (alternative urban development from the ordinary citizen’s perspective). Such movements extended their activities to the political sphere, resulting in the election of reformist mayors in a number of cities during the 1970s.

The rise of these residents’ movements signified that the Japanese people were now questioning urban development activities founded on capitalist principles and seeking to rebuild cities based on the principles of civic or consumer life. The fact that urban strategies from the 1970s started incorporating development restrictions and stipulations for combating pollution implies that the residents’ movements achieved a certain measure of success during this period.

5.2. Development of an Urban Planning System

After the emergence of urban problems and the rise of the residents’ movements, the government finally began to take action. From around 1970 onward, the government devised a series of restrictions on development as part of an urban strategy. Initially, the government attempted to curb development by formulating ordinances and guidelines at the local authority level. However, after a slew of losses in court actions with developers, the government came under pressure to revise the legal system for cities. The most important revisions were made to the City Planning Act (Toshi keikaku hou) and the Building Standards Act, in which the government added provisions for tighter restrictions on land use and introduced a floor-area ratio system with a view to curbing urban sprawl.

First, the City Planning Act underwent major revisions in 1968. These revisions provided for the segregation of urban areas into “urbanization areas” (Shigaika kuiki) and “urbanization-controlled areas” (Shigaika chousei kuiki) and established a new development licensing system. It was argued that the inadequacy of legal restrictions on development activity (such as residential land development) had theretofore been a factor behind the rapid urban sprawl. To ensure appropriate
urban formation, it would be necessary to have thoroughgoing land use planning. Therefore, the
government introduced the designations “urbanization areas” and “urbanization-controlled areas” to
demarcate areas where proactive urbanization was desirable from areas where it needed to be
controlled. Likewise, appropriate urban formation could not be achieved without monitoring and
regulating developments beyond a certain scale. Accordingly, the government introduced a
development licensing system. The revisions to the City Planning Act were soon followed in 1970
by revisions to the Building Standards Act. These revisions introduced further subdivisions in the
land-use zoning system and abandoned height restrictions, replacing them with the floor-area ratio
system. They also included the strengthening of measures against illegal construction. In this way,
the government gradually developed controls over development.

The City Planning Act was revised again in 1980 to introduce a district planning system modeled
after West Germany’s “binding land-use plan” (Bebauungsplan); this established three pillars of city
planning: a land-use zoning system, a development licensing system, and district planning. Of these,
the district planning system was repeatedly tweaked and adjusted to tailor it to the diverse
circumstances of each district. In this way, the government enabled the subdivision of planning units
and paved the way for today’s city block-based town-building.

At the beginning of the 1980s, the Japanese government started allowing resident participation in
city planning as a preventive measure against urban problems. This move was followed by
forerunner cases of town-building. The foremost example was Kobe city, specifically, the city’s
Maruyama and Mano districts. In these districts, having learned lessons from the problems of urban
sprawl and public pollution that occurred during the high economic growth period, district resident
organizations formed to promote a new form of town-building. Kobe city’s municipal government
then started pursuing town-building in collaboration with resident organizations, giving rise to a
participatory model. As a way of developing this model, Kobe city adopted a “town-building
ordinance” in 1983, the formal title of which was the “Ordinance on District Planning and
Town-building in Kobe City.” In a break from the traditional government-led model of
town-building, this ordinance declared that the city would honor to the greatest possible extent
residents’ proposals on town-building. The ordinance was epoch-making in that it provided
institutional backing for resident-led town-building. Subsequently, the Kobe model became a
template for innovative town-building methods, and it started being referenced and imitated across
the country. Other forerunner examples that garnered attention include Setagaya ward in Tokyo and
Yokohama in Kanagawa Prefecture, which adopted a resident/citizen-led model channeled through a
city design office.

In these forerunner examples, the municipal governments proactively gave residents the
opportunity to participate from the initial planning stage onward and provided their backing to
resident-led town-building and city planning efforts. During the 1970s, when urban problems began
to emerge, the demands of residents became a driving force that secured their autonomy. However, cracks started appearing in this resident autonomy in the 1980s. Resident participation can be positively evaluated for the fact that it became entrenched to a certain extent. However, some cases emerged in which municipal governments organized workshops to encourage resident participation, which was putting the cart before the horse and defeating the purpose of resident-led participation.

6. Period 4: The Bursting of the Bubble and the Lost Decade (the mid-1980s to the mid-2000s)

During the “bubble economy” years of the late 1980s, land prices in the centers of major metropolises soared, prompting redevelopment projects that were based largely on speculative impulses. People who lived in the downtown back alleys were squeezed out, and in their place, a succession of building complexes arose. As city centers started to become the preserve of office spaces, they became increasingly difficult places for private tenants and other groups to continue living. With even general apartment complexes constructed for residential purposes being repurposed as office spaces, many residents were forced out. Retail shops also disappeared, which further degraded the living space. The city center population declined further, and the few who remained tended to be building owners, longstanding elderly residents, and young people and singles who occupied micro-unit apartments. Therefore, the average age of the city center population rose.

During this bubble period, foreign financial capital flowed into Tokyo, which became increasingly computerized. Riding on the wave of economic globalization, Tokyo developed as a “world city,” attracting foreigners from all over the world. Immigrants included large numbers of ethnically Japanese foreign nationals and people from Asian countries. Many of these immigrants came to work and save money for their families back home, and thus worked in low-wage jobs. These foreign nationals took up residence in low-grade rental housing in the dilapidated districts of city centers, meaning that they lived in a poor environment and worked under poor employment conditions. Differences in lifestyles and customs sometimes caused friction with existing residents, and some residents’ movements even called for their expulsion. Thus, multicultural coexistence was called into question at a practical level.

In the 1990s, the “bubble economy” ended, and even offices started disappearing from city centers, which exacerbated the problems of the inner cities. In the late 1990s, the nighttime population of Chiyoda ward fell below 40,000, meaning that the very existence of the ward’s local authority was threatened. During this period, local authorities in city centers were pursuing a rationalization of the use of space (public facility location allocation), primarily by establishing combined-use facility complexes. For example, elementary schools were combined and reorganized, and empty classrooms were repurposed as welfare facilities. Local authorities also developed strategies for restoring the settled population. For example, they prepared guidelines mandating that new developments should give a certain ratio of land-to-housing and provided town-building support aimed at attracting
redevelopment projects.

On the other hand, suburban housing estates such as Tama New Town started showing signs of aging, and problems began emerging in terms of vacant housing and increasing numbers of elderly residents. Arguably, this was an inevitable result of the housing supply being dependent on the “nDK = family model.” Meanwhile, glaring problems came to light in the institutional efforts to facilitate redevelopment. For example, renovating dilapidated apartment buildings proved difficult.

The response to these post-1990s urban problems was to pursue a new form of town-building, one that was tailored to the circumstances of each community, as opposed to the one-size-fits-all approach of prior urban planning. Under this new approach, the content of activities and the types of organizations varied depending on the particular problems of each district, which arguably signified that town-planning had entered a diversification phase.

In 1995, Japan was struck by the Hanshin Awaji Earthquake. The importance of community was emphasized throughout the rescue, emergency repair, and restoration stages. Consequently, the power of community started receiving public attention. In some districts, vibrant community activities had already been underway before the incident. In these districts, there were cases where residents took it upon themselves to engage in rescue efforts and firefighting during the chaotic period after the earthquake, and their achievements became noted success stories. In addition to residents’ efforts, volunteer activities played an essential role in reviving the disaster-affected areas, leading to increased attention on the importance of coordinating activities with volunteer organizations and non-profit organizations (NPOs).

These success stories prompted a reappraisal of community and led to energetic town-building efforts involving civic organizations (volunteers, NPOs, etc.). A wide range of fields is connected to modern town-building activities. Among these, an increase in safety consciousness (emergency preparedness, crime prevention, etc.) and an improvement in health consciousness (including welfare) have led to vibrant activities in local communities. These activities, while overlapping with the volunteer-based civic activities that came to prominence in the wake of the Hanshin Awaji Earthquake, increased the scale and scope of the activities. Welfare and town-building volunteers and environmental groups proactively organized themselves, and a greater number of groups acquired NPO status under the Act on Promotion of Specified Non-profit Activities (Tokutei hieiri katsudou sokushin hou), which was passed in 1998.

Today, “community” denotes a new direction. It does not have the same character as the neighborhood associations and local authorities of yesteryear, which were based solely on territorial connectedness, nor does it signify that local communities have been reorganized along individualist lines, as occurred in the community management administration of the 1970s, or fall into the context of ethnic coexistence and segregation, which came to public attention in the late 1980s alongside globalization. What it does denote is that Japan is increasingly interested in the notion of a
community of moderate ties, that is, a form of community in which local areas engage with the particular local issues of the day based on cooperation between residents and local governments and with coordination between various civic activities aimed at resolving such problems.

7. Period 5: A Period of Downsizing (the mid-2000s)

After peaking in 1995, the total working population of Japan had already started declining by the 1990s; however, the total population entered a definite declining trajectory in 2010. The total fertility rate had fallen to as low as 1.26 by 2005. While it recovered slightly, to 1.39 in 2010, it is expected to continue on a path of decline for the foreseeable future. This demographic shift will significantly impact the trends in cities and the spatial composition of Japan as a whole.

First, the population in large metropolises other than Tokyo has already started declining, and it is predicted that Tokyo’s population will also start to decline in 2020. This implies that the trend toward concentration in Tokyo will persist for some time. The change in age composition will also have a serious impact. If the population continues to age as predicted, this will increase the demand for welfare and medical services, leading to greater spending on social welfare. On the other hand, if birthrates continue to free-fall, the working population will shrink, leading to diminished tax revenues. This situation will place greater financial pressure on state and local authorities. In anticipation of this scenario, local communities have already started gearing up local welfare systems to cope with expanded social welfare costs.

On the other hand, since the Hanshin Awaji Earthquake, Japan has experienced a plethora of other natural disasters. In 2011, the Tohoku earthquake and tsunami wrought extensive damage across a large area. Coupled with the Fukushima nuclear disaster, this exposed a myriad of societal vulnerabilities. The government has made efforts to prepare the infrastructure for reconstruction and started investing in measures to build national resilience against future risks. With half a century having elapsed since the period of high economic growth, the aging infrastructure is now due for renewal, and recent architectural and civil engineering activities seem to suggest that developmentalism is making a comeback. However, there is a critical difference between the circumstances of Japan during the high economic growth period and the Japan of today; currently, there is little chance of Japan increasing its national finances. The time has therefore come to reconsider Japan’s approach as it enters an age of downsizing.

References


