A Study on Small-Sized Rental Housing Market for Single or Two-Person Households and Strategies to Enhance the Supply in Korea

by

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ABSTRACT

Since 2000, the population structure has been rapidly changing in Korea. Especially, with the trends of delayed marriage, low fertility rate, high divorce rate, separated family due to jobs and education, and the growth of the senior population, the number of single or two-person households is expected to increase despite the decline in population. The government has recognized the importance of the small-sized rental housing market, and it introduced various policies to satisfy the increased demand. However, the supply market has not yet been boosted, because many big companies hesitated to execute their business concerning their profitability, and small companies and individuals suffered from lack of expertise while operating and managing their land and properties. In this situation, this study develops some strategies to increase the supply of small-sized rental housing and to improve the quality of living environments by reviewing the diverse cases and business models in Korea and in other countries. To understand the characteristics and needs of single and two-person households, they can be classified into 4 groups. This classification will be a base for developers and construction companies when they supply housing units and when the government provides subsidies and tax benefits. The biggest problem with the supply is the lack of land because of its high price. To solve this problem, a sub-lease business model is suggested, and using existing multi-family and multiplex housing is another way. With the sub-lease business model, the introduction of professional lease management services will help satisfy all the needs of landowners, tenants, developers and construction companies. For development projects, project financing is a common method to raise funds in Korea. As in the United States, various funding sources, such as asset-backed securities, Real Estate Investment Trusts, and a portfolio, are required. For construction, the modular method can be an option to save construction cost and time.
ACKNOWLEDGEMENTS

This Thesis would not have been completed without a variety of support and guidance of many people around me.

Firstly, I would like to express my sincerest gratitude to Professor Albert Saiz for his constructive guidance and invaluable feedback during my long journey. He also gave me appreciated advices and unstinting helps for my school life at MIT.

This thesis is dedicated to my devoted husband, Ki Woong, whose unconditional love and support throughout my entire MIT years made everything possible.

My parents and parents-in-law also deserve thanks for their unwavering love. They encouraged me to attend MIT and supported mentally and financially my life in the US.

Special thanks go to my brother, Byung Chang, for his patience and continuous encouragement.

I also thank Professor David Geltner, William Wheaton, Dennis Frenchman, Tricia Nesti, all CRE faculty members, and fellow classmates of Class of 2015 for their generous helps.
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Chapter 1. Introduction

Since 2000, the population structure in Korea has been rapidly changing. Data from the 2010 Korean census shows that the growth rate of the population has been declining and the population is forecast to decrease starting in 2035. With the trends of delayed marriage, low fertility rate, high divorce rate, separated family due to jobs and education, and the growth of the senior population, the number of single or two-person households is expected to rise. This situation may result in an increase in the number of households despite the decline in population. This is not a unique phenomenon to Korea as many other countries experience similar situations all over the world.

As single or two-person households increase, the demand for small-sized housing units is also rising. Single or two-person households more often rent rather than owning due to economic reasons. In accordance with the changes in market conditions, such as stabilized housing prices and low interest rates, the apartment rental market is changing from the yearly or two-year deposit-basis, Jeonse, into one based on monthly rent. As baby boomers have recently started to retire, they tend to be interested in small-sized rental housing as investment products to earn income after retirement. In addition, many construction companies are aggressively launching new brands and entering into the small-sized housing market because the sales market for large-scale apartments continue to decline. The government has recognized the importance of the small-sized rental housing market, thus it introduced urban living housing in 2009 and adopted the concept of quasi-housing in 2010 to stimulate the market.

However, the supply market for small-sized housing has not yet exploded. Many big companies hesitated to execute their businesses because high land prices result in low business profits. Additionally, small companies and individuals have suffered from lack of expertise while operating and managing their land and properties. Moreover, newly-supplied urban living housing units and micro-unit apartments are constructed with very limited sizes, 140 square feet, in order to increase the companies’ profitability, so the properties cannot provide single or two-person households with safe and comfortable dwelling environments with improved living conditions. They will probably turn to slums in the future.

In order to find strategies to enhance the supply of small-sized housing and to improve the
residential environment of the city, this study is going to research and analyze the cases of other comparable countries, which already experienced the change in population and family composition and are now systematically supplying, operating, and managing small-sized rental housing. This study also plans to provide more diversified and detailed cases of business models rather than simple research and analysis on comparable countries. With lessons from other countries, several strategies will be suggested, from a policy perspective and a business perspective.

If I can suggest some strategies to guarantee both the quantitative supply of small-sized rental housing and qualitative development for living environments, this study will help meet the various needs of related parties in the small-sized rental housing market, including tenants, owners, construction companies, and developers.
Chapter 2. Demand Analysis

2.1 Demographic Changes

2.1.1 Increase in number and ratio of single and two-person households

According to the data from the 2010 Korean census, the growth rate of population has been declining and the population will decrease starting in 2035. With the trends of delayed marriage, the later birth of the first child, high divorce rate, separated family due to jobs and education, and the growth of the senior population, the number of single or two-person households has increased. As seen in table 1, both of the growth rates of households and single-person households have exceeded the population growth. This situation may lead to the increase in the number of households despite the decline in population.

Table 1. Total Population, Household and Single-Person Household by Year (unit: 000)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Growth</th>
<th>Total Households</th>
<th>Growth</th>
<th>Single-person Household</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>43,390</td>
<td>7.4%</td>
<td>11,355</td>
<td>18.6%</td>
<td>1,021</td>
<td>54.5%</td>
</tr>
<tr>
<td>1995</td>
<td>44,553</td>
<td>2.7%</td>
<td>12,958</td>
<td>14.1%</td>
<td>1,642</td>
<td>60.8%</td>
</tr>
<tr>
<td>2000</td>
<td>45,985</td>
<td>3.2%</td>
<td>14,312</td>
<td>10.4%</td>
<td>2,224</td>
<td>35.4%</td>
</tr>
<tr>
<td>2005</td>
<td>47,041</td>
<td>2.3%</td>
<td>15,887</td>
<td>11.0%</td>
<td>3,171</td>
<td>42.5%</td>
</tr>
<tr>
<td>2010</td>
<td>47,990</td>
<td>2.0%</td>
<td>17,339</td>
<td>9.1%</td>
<td>4,142</td>
<td>30.6%</td>
</tr>
<tr>
<td>2015</td>
<td>50,617</td>
<td>5.5%</td>
<td>18,705</td>
<td>7.9%</td>
<td>5,061</td>
<td>22.2%</td>
</tr>
<tr>
<td>2020</td>
<td>51,435</td>
<td>1.6%</td>
<td>19,878</td>
<td>6.3%</td>
<td>5,877</td>
<td>16.1%</td>
</tr>
<tr>
<td>2025</td>
<td>51,972</td>
<td>1.0%</td>
<td>20,973</td>
<td>5.5%</td>
<td>6,561</td>
<td>11.6%</td>
</tr>
<tr>
<td>2030</td>
<td>51,160</td>
<td>0.4%</td>
<td>21,717</td>
<td>3.5%</td>
<td>7,097</td>
<td>8.2%</td>
</tr>
<tr>
<td>2035</td>
<td>51,888</td>
<td>-0.5%</td>
<td></td>
<td></td>
<td>7,628</td>
<td>7.5%</td>
</tr>
</tbody>
</table>


Since 1980, four-person households had been a common standard family structure; however, two-person households exceeded the number of four-person households in 2010. This situation resulted from the nuclear family phenomenon, including couples without children and elderly couples without dependent children. The average number of members in a household decreased from 4.45 in 1980 to 2.69 in 2010. Parallel to the increase of two-person households, the number of single-person households also increased from 382,743 in 1980 to 4,142,165 in 2010, which is more than ten times. Both single and two-person households represented 48% of the total households in Korea and the percentage of these two groups will become larger in the future. As seen in Figure 2, single and two-person households are expected to constitute 34.3% and 34% of the total households in 2035 respectively.
Table 2. Size of households by Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7,969,201</td>
<td>9,571,361</td>
<td>11,354,540</td>
<td>12,958,181</td>
<td>14,311,807</td>
<td>15,887,128</td>
<td>17,339,422</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Single-person Household</td>
<td>382,743</td>
<td>660,941</td>
<td>1,021,481</td>
<td>1,642,406</td>
<td>2,224,433</td>
<td>3,170,675</td>
<td>4,142,165</td>
</tr>
<tr>
<td></td>
<td>4.8%</td>
<td>6.9%</td>
<td>9.0%</td>
<td>12.7%</td>
<td>15.5%</td>
<td>20.0%</td>
<td>23.9%</td>
</tr>
<tr>
<td>2-person Household</td>
<td>839,839</td>
<td>1,175,532</td>
<td>1,565,713</td>
<td>2,184,626</td>
<td>2,730,548</td>
<td>3,520,545</td>
<td>4,205,052</td>
</tr>
<tr>
<td></td>
<td>10.5%</td>
<td>12.3%</td>
<td>13.8%</td>
<td>16.9%</td>
<td>19.1%</td>
<td>22.2%</td>
<td>24.3%</td>
</tr>
<tr>
<td>3-person Household</td>
<td>1,152,569</td>
<td>1,579,668</td>
<td>2,163,272</td>
<td>2,636,254</td>
<td>2,987,405</td>
<td>3,325,162</td>
<td>3,695,765</td>
</tr>
<tr>
<td></td>
<td>14.5%</td>
<td>16.5%</td>
<td>19.1%</td>
<td>20.3%</td>
<td>20.9%</td>
<td>20.9%</td>
<td>21.3%</td>
</tr>
<tr>
<td>4-person Household</td>
<td>1,619,742</td>
<td>2,421,627</td>
<td>3,350,728</td>
<td>4,110,359</td>
<td>4,447,170</td>
<td>4,289,035</td>
<td>3,898,039</td>
</tr>
<tr>
<td></td>
<td>20.3%</td>
<td>25.3%</td>
<td>29.5%</td>
<td>31.7%</td>
<td>31.1%</td>
<td>27.0%</td>
<td>22.5%</td>
</tr>
<tr>
<td>5-person Household</td>
<td>1,597,002</td>
<td>1,862,908</td>
<td>2,140,073</td>
<td>1,666,981</td>
<td>1,442,895</td>
<td>1,222,126</td>
<td>1,078,444</td>
</tr>
<tr>
<td></td>
<td>20.0%</td>
<td>19.5%</td>
<td>18.8%</td>
<td>12.9%</td>
<td>10.1%</td>
<td>7.7%</td>
<td>6.2%</td>
</tr>
<tr>
<td>6-person Household</td>
<td>1,167,500</td>
<td>1,182,604</td>
<td>671,062</td>
<td>496,861</td>
<td>344,992</td>
<td>266,930</td>
<td>241,063</td>
</tr>
<tr>
<td></td>
<td>14.7%</td>
<td>12.4%</td>
<td>5.9%</td>
<td>3.8%</td>
<td>2.4%</td>
<td>1.7%</td>
<td>1.4%</td>
</tr>
<tr>
<td>7-person or more</td>
<td>1,209,806</td>
<td>688,081</td>
<td>442,211</td>
<td>220,694</td>
<td>134,364</td>
<td>92,655</td>
<td>78,894</td>
</tr>
<tr>
<td></td>
<td>15.2%</td>
<td>7.2%</td>
<td>3.9%</td>
<td>1.7%</td>
<td>0.9%</td>
<td>0.6%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Average</td>
<td>4.45</td>
<td>4.04</td>
<td>3.69</td>
<td>3.34</td>
<td>3.12</td>
<td>2.88</td>
<td>2.69</td>
</tr>
</tbody>
</table>

*Source: Statistics Korea, 'Population Census (1980~2010)'

Figure 1. Number of Households by Year

*Source: Statistics Korea, 'Population Census (1980~2010)’
### Table 3. Expected Households in the Future

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>14,312</td>
<td>15,887</td>
<td>17,339</td>
<td>17,359</td>
<td>18,705</td>
<td>19,878</td>
<td>20,937</td>
<td>21,717</td>
<td>22,261</td>
</tr>
<tr>
<td>Single-person Household</td>
<td>2,224</td>
<td>3,171</td>
<td>4,142</td>
<td>4,153</td>
<td>5,061</td>
<td>5,877</td>
<td>6,523</td>
<td>7,091</td>
<td>7,628</td>
</tr>
<tr>
<td>2-person Household</td>
<td>2,731</td>
<td>3,521</td>
<td>4,205</td>
<td>4,202</td>
<td>4,991</td>
<td>5,759</td>
<td>6,523</td>
<td>7,158</td>
<td>7,579</td>
</tr>
<tr>
<td>3-person Household</td>
<td>2,987</td>
<td>3,325</td>
<td>3,696</td>
<td>3,699</td>
<td>3,988</td>
<td>4,188</td>
<td>4,321</td>
<td>4,377</td>
<td>4,318</td>
</tr>
<tr>
<td>4-person Household</td>
<td>4,447</td>
<td>4,289</td>
<td>3,898</td>
<td>3,905</td>
<td>3,522</td>
<td>3,126</td>
<td>2,767</td>
<td>2,450</td>
<td>2,190</td>
</tr>
<tr>
<td>5 or more</td>
<td>1,922</td>
<td>1,582</td>
<td>1,398</td>
<td>1,400</td>
<td>1,144</td>
<td>929</td>
<td>766</td>
<td>640</td>
<td>546</td>
</tr>
<tr>
<td><strong>Ratio of 1 or 2-person households</strong></td>
<td>35%</td>
<td>42%</td>
<td>48%</td>
<td>48%</td>
<td>54%</td>
<td>59%</td>
<td>62%</td>
<td>66%</td>
<td>68%</td>
</tr>
</tbody>
</table>


### Figure 2. Household Composition by Numbers of People

2.1.2 Regional Distribution of Single-Person Households

Since 1980, single-person households in Seoul have accounted for more than 20% of the total single-person households in the nation. Also the number of single-person households in Kyunggi-do has constantly increased. Thus, most of the single-households are concentrated in Seoul and its neighboring region and they grow fast in major cities.
Table 4. Regional Distribution of Single-Person Households

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>382,743</td>
<td>660,941</td>
<td>1,021,481</td>
<td>1,642,406</td>
<td>2,224,433</td>
<td>3,170,675</td>
<td>4,142,165</td>
</tr>
<tr>
<td>Seoul</td>
<td>82,477</td>
<td>156,207</td>
<td>257,382</td>
<td>382,024</td>
<td>502,245</td>
<td>675,739</td>
<td>854,606</td>
</tr>
<tr>
<td>Pusan</td>
<td>27,598</td>
<td>49,436</td>
<td>77,230</td>
<td>115,574</td>
<td>154,237</td>
<td>222,515</td>
<td>290,902</td>
</tr>
<tr>
<td>Daegu</td>
<td>-</td>
<td>41,764</td>
<td>59,890</td>
<td>82,766</td>
<td>107,913</td>
<td>148,331</td>
<td>192,472</td>
</tr>
<tr>
<td>Incheon</td>
<td>-</td>
<td>22,071</td>
<td>38,321</td>
<td>67,546</td>
<td>97,127</td>
<td>141,511</td>
<td>190,882</td>
</tr>
<tr>
<td>Kwangju</td>
<td>-</td>
<td>-</td>
<td>23,350</td>
<td>43,088</td>
<td>60,207</td>
<td>87,447</td>
<td>122,506</td>
</tr>
<tr>
<td>Daejon</td>
<td>-</td>
<td>-</td>
<td>20,327</td>
<td>41,142</td>
<td>62,742</td>
<td>98,678</td>
<td>134,938</td>
</tr>
<tr>
<td>Woosan</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>42,532</td>
<td>57,923</td>
<td>77,421</td>
<td></td>
</tr>
<tr>
<td>Kyunggi-do</td>
<td>55,362</td>
<td>81,913</td>
<td>131,698</td>
<td>229,800</td>
<td>337,555</td>
<td>562,995</td>
<td>777,360</td>
</tr>
<tr>
<td>Kangwondo</td>
<td>17,289</td>
<td>27,523</td>
<td>40,108</td>
<td>66,132</td>
<td>91,545</td>
<td>122,139</td>
<td>155,453</td>
</tr>
<tr>
<td>Choongchungbuk-do</td>
<td>11,556</td>
<td>21,772</td>
<td>28,650</td>
<td>53,645</td>
<td>78,780</td>
<td>114,584</td>
<td>150,455</td>
</tr>
<tr>
<td>Choongchungnam-do</td>
<td>18,015</td>
<td>31,642</td>
<td>31,566</td>
<td>66,240</td>
<td>101,097</td>
<td>149,102</td>
<td>201,875</td>
</tr>
<tr>
<td>Jeonrabuk-do</td>
<td>18,221</td>
<td>30,806</td>
<td>44,712</td>
<td>78,676</td>
<td>104,780</td>
<td>136,754</td>
<td>175,026</td>
</tr>
<tr>
<td>Jeonranam-do</td>
<td>35,422</td>
<td>50,317</td>
<td>55,041</td>
<td>103,844</td>
<td>130,679</td>
<td>163,718</td>
<td>197,084</td>
</tr>
<tr>
<td>Kyungsangbuk-do</td>
<td>67,140</td>
<td>66,284</td>
<td>96,251</td>
<td>130,826</td>
<td>163,919</td>
<td>224,611</td>
<td>289,704</td>
</tr>
<tr>
<td>Kyungsangnam-do</td>
<td>37,918</td>
<td>66,234</td>
<td>99,661</td>
<td>157,947</td>
<td>162,923</td>
<td>226,117</td>
<td>286,485</td>
</tr>
<tr>
<td>Jeju-do</td>
<td>11,745</td>
<td>14,972</td>
<td>16,624</td>
<td>23,156</td>
<td>26,152</td>
<td>38,511</td>
<td>44,996</td>
</tr>
</tbody>
</table>

* Source: Statistics Korea, 'Population Census (1980 ~ 2010)'
2.1.3 Gender and Age Distribution of Single-Person Households

More women compose single-person households than men. The difference between women and men was 10% in 2005 but the gap has decreased to 7% in 2010.

*Figure 3. Distribution of Single-Person Households by Sex*

![Graph showing distribution by sex and year]

*Source: Statistics Korea, Population Census (2005 ~ 2010)*

The percentage of single-person households by age showed that the “less than 39” and “70 or older” groups comprised the largest portion in 2005 and 2010. The higher ratio of “less than 39” group is explained by delayed marriage, the later birth of the first child, and the high rate of divorce. However, with longer life expectancy, seniors over 70 have become a larger part of single-person households and exceeded the numbers of the “30 to 39” group in 2010. Most of the men are evenly concentrated in “less than 30”, “30 to 39”, and “40 to 49”, but women’s distributions are dramatically divided into two groups: “less than 30” and “70 or older”.

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Table 5. Distribution of Single-Person Households by Gender and Age (unit: 000)

<table>
<thead>
<tr>
<th></th>
<th>2005 Total</th>
<th>Single Person Household</th>
<th>2010 Total</th>
<th>Single Person Household</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Total</td>
<td>15,887</td>
<td>3,171</td>
<td>1,418</td>
<td>1,753</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Less than 30</td>
<td>1,389</td>
<td>723</td>
<td>384</td>
<td>339</td>
</tr>
<tr>
<td></td>
<td>8.7%</td>
<td>22.8%</td>
<td>27.1%</td>
<td>19.3%</td>
</tr>
<tr>
<td>30 to 39</td>
<td>3,586</td>
<td>629</td>
<td>410</td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>22.6%</td>
<td>19.9%</td>
<td>28.9%</td>
<td>12.5%</td>
</tr>
<tr>
<td>40 to 49</td>
<td>4,369</td>
<td>474</td>
<td>269</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>27.5%</td>
<td>15.0%</td>
<td>19.0%</td>
<td>11.7%</td>
</tr>
<tr>
<td>50 to 59</td>
<td>2,979</td>
<td>366</td>
<td>164</td>
<td>202</td>
</tr>
<tr>
<td></td>
<td>18.8%</td>
<td>11.5%</td>
<td>11.6%</td>
<td>11.5%</td>
</tr>
<tr>
<td>60 to 69</td>
<td>2,111</td>
<td>430</td>
<td>106</td>
<td>324</td>
</tr>
<tr>
<td></td>
<td>13.3%</td>
<td>13.6%</td>
<td>7.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>70 or older</td>
<td>1,453</td>
<td>548</td>
<td>83</td>
<td>464</td>
</tr>
<tr>
<td></td>
<td>9.1%</td>
<td>17.3%</td>
<td>5.9%</td>
<td>26.5%</td>
</tr>
</tbody>
</table>

* Source: Statistics Korea, Population Census (2005 ~ 2010)

2.1.4 Marriage Status

Among single-person households, “Single” status represents the highest portion (44.5%) and more men are in “Single” status than women. For women, the percentage of “Bereavement” is the highest. In general, single households are concentrated in “less than 39”, married or divorced households in “40 to 59”, and widowed households in “60 or older”. Men are getting married later than women and men in their thirties seem to live alone because they can afford to live economically. Women over 70 have a longer life expectancy and their younger age of marriage also results in a high widowed percentage (There is a social custom that women usually are younger than men when they get married in Korea. However, recent trends show that couples of older women and younger men have been increasing).
Table 6. Marriage status of Single-Person Households

<table>
<thead>
<tr>
<th>Total-person Household</th>
<th>Single</th>
<th>Marriage</th>
<th>Bereavement</th>
<th>Divorce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4,142,165</td>
<td>1,924,341</td>
<td>2,217,824</td>
<td>337,977</td>
<td>1,013,167</td>
</tr>
<tr>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>&lt; 30</td>
<td>811,657</td>
<td>432,694</td>
<td>378,963</td>
<td>242,570</td>
</tr>
<tr>
<td>19.6%</td>
<td>22.5%</td>
<td>17.1%</td>
<td>38.3%</td>
<td>50.5%</td>
</tr>
<tr>
<td>30 to 39</td>
<td>790,842</td>
<td>508,506</td>
<td>282,336</td>
<td>433,853</td>
</tr>
<tr>
<td>19.1%</td>
<td>26.4%</td>
<td>12.7%</td>
<td>39.1%</td>
<td>30.6%</td>
</tr>
<tr>
<td>40 to 49</td>
<td>638,315</td>
<td>381,248</td>
<td>247,067</td>
<td>183,226</td>
</tr>
<tr>
<td>15.4%</td>
<td>19.8%</td>
<td>11.1%</td>
<td>16.5%</td>
<td>11.7%</td>
</tr>
<tr>
<td>50 to 59</td>
<td>590,721</td>
<td>293,504</td>
<td>297,217</td>
<td>54,024</td>
</tr>
<tr>
<td>14.3%</td>
<td>16.4%</td>
<td>13.4%</td>
<td>4.9%</td>
<td>4.7%</td>
</tr>
<tr>
<td>60 to 69</td>
<td>527,249</td>
<td>167,181</td>
<td>360,068</td>
<td>10,990</td>
</tr>
<tr>
<td>13.7%</td>
<td>11.4%</td>
<td>16.2%</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>70 or older</td>
<td>793,381</td>
<td>141,208</td>
<td>652,173</td>
<td>2,708</td>
</tr>
<tr>
<td>19.2%</td>
<td>7.3%</td>
<td>29.4%</td>
<td>0.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Source: Statistics Korea, ‘Population Census (2010)’

2.1.5 Global Trends

The increase in single or two-person households is not a unique situation to Korea as many other countries all over the world have experienced a similar phenomenon. The average number of people per household is less than 2.5 in most of the developed countries and it is expected to be 2.2 in 2035 in Korea.

According to a 2014 report from Euromonitor International1, Western Europe showed the highest percentage of single-person households (31%), followed by North America (27.6%) and Eastern Europe (27.4%). Specifically, the top 5 of the highest percentage of single-person households are Norway, Denmark, Finland, Germany, and Switzerland, where they represented about 42% of total households. Among Asia Pacific countries, Japan showed a relatively higher percentage. As seen in the graphs below, the percentage of single-person households will exceed 30% of the total in 2035 in Korea. Thus, studies on the single housing market in North America and Japan will provide good pointers to understand and improve the Korean small-sized housing market.

1 http://www.euromonitor.com/medialibrary/PDF/pdf_singlePersonHH-v1.2.pdf
**Figure 4. Average Number of People per Household**

- Germany (2010): 2.0
- Netherlands (2011): 2.2
- Norway (2011): 2.2
- Austria (2011): 2.3
- England (2011): 2.4
- Australia (2006): 2.5
- Canada (2006): 2.5
- Japan (2010): 2.5
- United States (2010): 2.6
- New Zealand (2006): 2.6
- Korea (2035): 2.2
- Korea (2010): 2.7

**Figure 5. Percentage of Single-Person Households**

- Germany (2010): 40.2%
- Netherlands (2011): 37.0%
- Norway (2011): 39.7%
- Austria (2011): 36.3%
- England (2011): 29.4%
- Australia (2006): 26.5%
- Canada (2006): 26.8%
- Japan (2010): 32.3%
- United States (2010): 26.7%
- New Zealand (2006): 22.6%
- Korea (2035): 34.3%
- Korea (2010): 23.9%

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2,3 Seol, Dong Pil and Yoon Suk Woo. (2012), *A study on efficiency of housing supply policy resulted from increase in single or two-person households*, Korean Policy Research vol.12 No.4

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2.2 Types of Housing

2.2.1 Housing Types of Single-Person Households

More than half of the people in single-person households live in single houses (59.4%) and apartments are their second choice. Especially, “70 or older” people show the highest percentage of living in single houses. For apartments, “50 to 59” represents the highest percentage.

Table 7. Housing Types of Single-Person Households by Age (unit: 000)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Single house</th>
<th>Apartment</th>
<th>Townhouse</th>
<th>Multiplex House</th>
<th>House in Non-residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4,142</td>
<td>2,460</td>
<td>1,057</td>
<td>83</td>
<td>235</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>59.4%</td>
<td>25.5%</td>
<td>2.0%</td>
<td>5.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Less than 30</td>
<td>812</td>
<td>541</td>
<td>112</td>
<td>7</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>19.6%</td>
<td>66.6%</td>
<td>13.8%</td>
<td>0.9%</td>
<td>5.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>30 to 39</td>
<td>791</td>
<td>400</td>
<td>234</td>
<td>13</td>
<td>58</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>19.1%</td>
<td>50.6%</td>
<td>29.6%</td>
<td>1.6%</td>
<td>7.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td>40 to 49</td>
<td>628</td>
<td>336</td>
<td>192</td>
<td>13</td>
<td>40</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>15.2%</td>
<td>53.5%</td>
<td>30.6%</td>
<td>2.1%</td>
<td>6.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>50 to 59</td>
<td>591</td>
<td>324</td>
<td>183</td>
<td>16</td>
<td>35</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>14.3%</td>
<td>54.8%</td>
<td>31.0%</td>
<td>2.7%</td>
<td>5.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>60 to 69</td>
<td>527</td>
<td>310</td>
<td>153</td>
<td>16</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>12.7%</td>
<td>58.8%</td>
<td>29.0%</td>
<td>3.0%</td>
<td>5.9%</td>
<td>1.7%</td>
</tr>
<tr>
<td>70 or older</td>
<td>793</td>
<td>550</td>
<td>181</td>
<td>18</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>19.1%</td>
<td>69.4%</td>
<td>22.8%</td>
<td>2.3%</td>
<td>3.8%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

* Source: Statistics Korea, Population Census (2010)’

2.2.2 Size of the House for Single-Person Households

The most common size for single-person households is “430 square feet to 645 square feet (sf)” and “215sf to 430sf” followed. This fact indicates that single-person households prefer small-sized housing or that they can afford only small-sized housing. According to the types of housing, “645sf to 915sf” showed the highest percentage in single houses, “430sf to 645sf” in apartments and townhouses, “215sf to 431sf” in multiplex houses and houses in non-residential buildings.
Table 8. Size of the house for Single-Person Households

<table>
<thead>
<tr>
<th>Size</th>
<th>Total</th>
<th>Single house</th>
<th>Apartment</th>
<th>Townhouse</th>
<th>Multiplex House</th>
<th>House in Non-residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,132,965</td>
<td>727,450</td>
<td>1,059,648</td>
<td>81,959</td>
<td>236,240</td>
<td>27,668</td>
</tr>
<tr>
<td>Less than 215 sf</td>
<td>17,578</td>
<td>9,780</td>
<td>1,452</td>
<td>885</td>
<td>2,447</td>
<td>3,014</td>
</tr>
<tr>
<td>215sf-430sf</td>
<td>562,532</td>
<td>115,517</td>
<td>321,495</td>
<td>13,059</td>
<td>102,900</td>
<td>9,561</td>
</tr>
<tr>
<td>430sf-645sf</td>
<td>767,974</td>
<td>210,246</td>
<td>435,402</td>
<td>35,242</td>
<td>82,222</td>
<td>4,862</td>
</tr>
<tr>
<td>645sf-915sf</td>
<td>541,473</td>
<td>249,912</td>
<td>227,586</td>
<td>22,947</td>
<td>36,508</td>
<td>4,520</td>
</tr>
<tr>
<td>915sf-1,076sf</td>
<td>124,958</td>
<td>97,587</td>
<td>11,935</td>
<td>5,063</td>
<td>7,688</td>
<td>2,685</td>
</tr>
<tr>
<td>1,076sf-1,399sf</td>
<td>69,385</td>
<td>23,211</td>
<td>37,697</td>
<td>3,219</td>
<td>3,844</td>
<td>1,414</td>
</tr>
<tr>
<td>More than 1,399sf</td>
<td>49,065</td>
<td>21,197</td>
<td>24,081</td>
<td>1,544</td>
<td>631</td>
<td>1,612</td>
</tr>
<tr>
<td></td>
<td>4,142</td>
<td>1,323</td>
<td>903</td>
<td>1,636</td>
<td>124</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>31.9%</td>
<td>21.8%</td>
<td>39.5%</td>
<td>3.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td></td>
<td>812</td>
<td>48</td>
<td>190</td>
<td>510</td>
<td>41</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>5.9%</td>
<td>23.4%</td>
<td>62.8%</td>
<td>5.0%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

* Source: Statistics Korea, 'Population Census (2010)'

2.2.3 Rental Demand

Table 9 shows that most single-person households, 64.3%, tend to rent. To simplify the analysis, Jeonse, the yearly or two-year deposit-basis rental, is treated here as one of the rental types, because it is not a way to purchase a house. Its concept is similar to a deposit, but the value of Jeonse is 50% to 80% of the sales price. After the contract expires, some or all the money will be returned to the tenant. When a tenant gives the amount of Jeonse to the owner, the owner invests the money in other financial products and is able to earn at least interest income. However, in accordance with changes in market conditions such as stabilized housing prices and low interest rates, Jeonse is losing its advantages.

Table 9. Types of Single-Person Households

<table>
<thead>
<tr>
<th>Types</th>
<th>Total</th>
<th>Owning</th>
<th>Jeonse</th>
<th>Rent with Deposit</th>
<th>Rent without Deposit</th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4,142</td>
<td>1,323</td>
<td>903</td>
<td>1,636</td>
<td>124</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>31.9%</td>
<td>21.8%</td>
<td>39.5%</td>
<td>3.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Less than 30</td>
<td>812</td>
<td>48</td>
<td>190</td>
<td>510</td>
<td>41</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>5.9%</td>
<td>23.4%</td>
<td>62.8%</td>
<td>5.0%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>
Renting with deposit comprised the largest proportion in single-person households, which means that this is the most common method to live in a house for single-person households. Only for seniors, purchasing the house is preferred (Figure 6).

**Figure 6. Methods of housing by Age**

In conclusion, with the demographic changes and the high percentage of renters, the demand on small-sized rental units has been gradually increasing in the housing market in Korea.
Chapter 3. Housing Policy and Supply Analysis for Single-Person Households

3.1 Housing Policy

National housing policies had mainly focused on quantitative supply and housing welfare for low-income households, but since 2000, with demographic structural changes, the demand for policies for various social classes has been increasing. Especially, single or two-person households are a pressing issue in recent housing policy reforms.

Most of the policies were dedicated to supply medium- or large-sized housing for households with children. There existed many disadvantages for single-person households, with relatively low income, on a conventional apartment application. In addition, with the boom of reconstruction/redevelopment in major downtowns, small-sized townhouses and multiplex houses were demolished to build high-rise office buildings or apartments, so single-person households had to find Officetels and Goshiwons with low living qualities and high danger of fire. In fact, these alternatives were defined as non-residential by law.

In order to ease the problems of the small-sized housing market, the government started to adopt a policy to increase the supply of small-sized rental houses. This policy was detailed in the real estate White Paper as, “the methods to revitalize the supply and to construct stabilized housing”, in 2008. The methods encouraged the supply of housing in urban areas rather than in suburban areas.

On December 29th, 2008, the Ministry of Land, Infrastructure and Transport announced “the methods to supply dormitory and studio-typed housing for single and two-person households”, and introduced the concept of “urban living housing”, affordable small-sized housing, to strengthen the social safety net for low-income households in urban areas. After the introduction of the urban living housing, financing procedures and regulation were relaxed (Aug. 23rd, 2009), the number of parking requirements was reduced, and limits on the size of housing were eased (Sep.10th, 2009) to encourage the construction of urban living housing.

In April 2010, the government adopted the concept of “quasi-housing” to embrace all types of

* Officetels and Goshiwons are unique small-sized housing types in Korea for single-person households. More detailed information will follow in the next chapter.
housing, which were non-residential by law, and to stimulate the supply of Officetel, Goshiwon, and senior housing more safely.

In accordance with those policies, the new policy to, “supply small-sized housing for single or two-person households in the subway catchment area in major cities”, was announced in 2009. According to the policy, new towns, in so called redevelopment promotion areas, will be selected around subway catchment areas. Many other regulations will be relaxed to build 120,000 small-sized housing units, such as dormitory-type housing and Officetel by 2018 for young professionals and newly-wed couples.

“The methods to stimulate the supply on small-sized housing in urban areas (2010)” law allows the public sector and the Korea Land and Housing Corporation, LH\(^5\), to purchase multi-family and multiplex houses, to demolish deteriorated parts of urban areas, and to redevelop urban living housing to expand its supply. With regard to the quasi-housing sector, the strict standards around bathrooms and the regulation of Officetels, that required that 70% of the space be work area, were removed.

In addition, in order to encourage developers to construct urban living housing, multi-family housing, and Officetels, the Ministry of Land, Infrastructure and Transport devoted 2% of the existing special housing fund, increased lines of credit, and eased loan qualification standards. As for public housing, when apartments are designed, the percentage of small-sized housing, less than 646sf, has increased from 20% to 70 % to meet the demand of one- or two-person households.

3.2 Types of Housing for Single-Person Households and Supply Trend

3.2.1 Types of Housing

Based on the Building Codes, there are two main allowed types of housing in Korea: single housing and multi-family complexes. The Housing Act adds the quasi-housing and urban living housing to these two types of housing.

\(^5\) LH is a government-owned corporation which is responsible for the development of land and cities, and the construction and management of public housing.
Table 10. Types of housing

<table>
<thead>
<tr>
<th>Single Housing</th>
<th>Multi-family Complex</th>
<th>Quasi-Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>House constructed on detached housing site</td>
<td>Apartment</td>
<td>≥ 5 floors</td>
</tr>
<tr>
<td>Multiple House</td>
<td>Townhouse</td>
<td>≤ 4 floors</td>
</tr>
<tr>
<td>Multi-family</td>
<td>Multiplex Housing</td>
<td>≤ 4 floors</td>
</tr>
<tr>
<td>Public</td>
<td>Urban Living Housing</td>
<td>Studio type</td>
</tr>
<tr>
<td>Official residence</td>
<td>for mayor or prime minister</td>
<td></td>
</tr>
</tbody>
</table>

Among houses, the types of housing used as small-sized rental housing for single or two-person households are Multi-family, Multiplex, small-scale apartments, urban living housing, Goshiwon and Officetel. The supply trends of small-scale apartments in the housing market, which are a dominant dwelling product in Korea, are discussed below. The characteristics and market environments of possible small-sized rental housings, urban living housing and quasi-housing, will be discussed in the next chapter.

3.2.2 Small-scale Apartments

In 2010, the total inventory of apartments was 8,080,000. 41.9% of the inventory was made up of small-scale apartments smaller than 645 sf⁶. Even though the demand for small-sized housing has been increasing due to the rise in single or two-person households, the supply of medium- or large-scale apartments is increasing. The reason is that, as income levels of residents become higher, they expect higher value appreciation of larger units in the future, and companies want higher construction profits. As seen in Figure 7, in 1996, small-scale apartments represented 62.2% of the total apartments but the percentage continuously decreased until 2007. However,

⁶ Huh, Hyucjai. (2010), A Study on Changes in Demand for Small-Sized Rental Housing and Supply Activation Strategies, Graduate School of Konkuk University
the percentages of medium-scale apartments with a size between 645 sf and 915 sf and large-scale apartments larger than 915 sf have been increasing.

The lack of supply of small-scale apartments has led to a dramatic increase in the Jeonse price. In accordance with the change in market conditions, such as stabilized housing prices and low interest rates, the apartment rental market is changing into one based on monthly rent from the yearly deposit-basis, called Jeonse. This situation also caused the rise in the Jeonse price because tenants prefer Jeonse to monthly rent.

Figure 7. Supply Percentages by Sizes of Apartments

3.2.3 Urban Living Housing

The urban living housing was introduced in May 2009 to meet the increasing demand on small-sized housing for single or two-person households. According to the regulation, the number of units per project should be more than 20 but less than 300. Additionally, the urban living housing is composed of 3 types: studio (130sf ~ 538sf), multi-family (<915sf) and multiplex (<915sf). To enhance the supply of small-sized housing in urban areas, the regulation allows a developer, who plans to build less than 30 units, to reduce the complication of the permitting procedure by following the Building Codes instead of the Housing Act.

Huh, Hyucjai. (2010), A Study on Changes in Demand for Small-Sized Rental Housing and Supply Activation Strategies, Graduate School of Konkuk University
With the increased demand of small-sized housing due to the rise in single or two-person households and the increased interest in profitable real estate for baby boomers to prepare for retirement, since 2010, the number of permits to construct urban living housing has increased. According to the Ministry of Land, Infrastructure and Transport, in 2011, planned projects amounted to 69,905 units (20,592 units in 2010) and projects under construction totaled 19,009 units (2,615 units in 2010).

By region, Seoul and Kyunggi-do approved 59% (40,986 units) of the total in the nation and Pusan came in second place (with 11,988 units, 17.2%). Most of the permits were for development of the studio type units (86.6%).

The government expected to stabilize the housing market for college students, young employees, and newly-wed couples because the urban living housing was built around subway catchment area and universities. Also, numerous permits for urban living housing are expected to help stabilize the Jeonse market with a short-term construction period.

**Figure 8. The number of permits for urban living housing**

![Graph showing the number of permits for urban living housing from Sep '10 to Nov '11](image)

*Source: Ministry of Land, Infrastructure and Transport (January, 2012)*

### 3.2.4 Quasi-Housing

Even though the original usage of the buildings was non-residential, some buildings were used as housing to accommodate increased single or two-person households and seniors. The government realized the importance of registering and maintaining these buildings, and therefore
 adopted the concept of quasi-housing in April 2010. The quasi-housing sector is composed of Goshiwon, Officetel, and senior houses.

3.2.4.1 Goshiwon

Goshiwons are located around universities and are occupied by students who don’t live in dormitories. The size is quite small, with only a desk and a bed, without a kitchen. These living quarters were illegal before, but in April 2010, the Goshiwon was included in the quasi-housing category. According to the statistical data from National Emergency Management\(^8\), the number of Goshiwon in 2010 was 6,597, which increased by 7.69% from 6,126 in 2009. More than half of the Goshiwon were located in Seoul and 1,335 of Goshiwon were in Kyunggi-do.

\textit{Table 11. Number of Goshiwon}

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th></th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seoul</td>
<td>3,738</td>
<td>3,922</td>
<td>Jeonbuk</td>
<td>109</td>
<td>114</td>
</tr>
<tr>
<td>Kyunggi</td>
<td>1,214</td>
<td>1,335</td>
<td>Kyungnam</td>
<td>68</td>
<td>73</td>
</tr>
<tr>
<td>Pusan</td>
<td>201</td>
<td>257</td>
<td>Chungnam</td>
<td>60</td>
<td>73</td>
</tr>
<tr>
<td>Kwangju</td>
<td>174</td>
<td>176</td>
<td>Chungbuk</td>
<td>59</td>
<td>69</td>
</tr>
<tr>
<td>Daegu</td>
<td>165</td>
<td>195</td>
<td>Kyungbuk</td>
<td>47</td>
<td>56</td>
</tr>
<tr>
<td>Inchon</td>
<td>156</td>
<td>169</td>
<td>Jeonnam</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Daejeon</td>
<td>83</td>
<td>89</td>
<td>Kangwon</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ulsan</td>
<td>34</td>
<td>48</td>
<td>Jeju</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sum</td>
<td>6,126</td>
<td>6,597</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^*\)Source: National Emergency Management, Prevention Statistics (2010)\(^9\)

2.4.2 Officetel

Officetel is a hybrid property, combining office and hotel. Its original purpose was to serve as offices for start-ups and small businesses, but nowadays people use it as both office and housing. To meet the demand of housing, the government permitted the heated floor system, a very common heating system in Korean dwellings, and relaxed the parking restriction, from 1 parking space per household to 0.8 per household. Moreover, the National Housing Fund started to support financing for Officetel development. However, when the Officetel was used as housing, it caused a transfer income tax problem with highly imposed tax rates because a household may

\(^8\) One of the government organizations which worked for firefighting and prevention against disasters, but was integrated into the Ministry of Public Safety and Security in November, 2014.
own more than one house. With a decreased supply of this product after 2004, an imbalance between supply and demand emerged. It resulted in the rise in sales price of Officetel in 2008 and 2009, despite the global crisis in 2008 and the decline in rental profit.

**Figure 9. Supply of Officetel**

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>5,040</td>
<td>22,532</td>
<td>47,608</td>
<td>24,779</td>
<td>10,234</td>
<td>3,497</td>
<td>12,547</td>
<td>10,197</td>
<td>10,767</td>
<td>1,900</td>
<td>2,070</td>
</tr>
</tbody>
</table>

**Figure 10. Percentage of increase in sales price**

<table>
<thead>
<tr>
<th>Region</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nation</td>
<td>5.8%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Major cities</td>
<td>1.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Kangnam</td>
<td>9.8%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Mapo/Yeoido</td>
<td>5.8%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Other parts of Seoul</td>
<td>8.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Seoul</td>
<td>8.0%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

9 Transfer income tax system that imposed higher tax rates to a household, who has more than one house, was abolished in 2014. Therefore, regular tax rates are imposed on all houses.

10 Huh, Hyucjai. (2010), *A Study on Changes in Demand for Small-Sized Rental Housing and Supply Activation Strategies*, Graduate School of Konkuk University

11 Huh, Hyucjai. (2010), *A Study on Changes in Demand for Small-Sized Rental Housing and Supply Activation Strategies*, Graduate School of Konkuk University
After adopting the concept of quasi-housing in 2011, construction permits for Officetel have increased. As per the Ministry of Land, Infrastructure and Transport, planned projects amounted to 1,219 units (31,600,000 gross square feet, a 2.3 times increase compared to 2010), projects under construction to 929 units (24,800,000 gsf, 2.9 times), and finished projects to 347 units (7,100,000 gsf, 2.3 times).

By region, Seoul and Kyunggi-do approved 54% (17,100,000 gsf) of the total in the nation and Pusan followed (5,700,000 gsf, 18.1%). Most of the Officetel was built less than 430 sf (8,161 units).

This increase resulted from eased construction regulations and the introduction of a tax benefit based on the passing of the law “countermeasure for Jeonse and Rent” in 2011. However, there are still threats such as high land price in urban area and relatively high construction cost compared to apartments.
Chapter 4. Case Studies

4.1 Korea

The types of housing used as small-sized rental units for single or two-person households are not only Multi-family, Multiplex, Goshiwon, and Officetel but also dormitories for students, high-quality residences for foreigners, and urban living housing. This chapter will focus on Goshiwon, one type of quasi-housing, urban living housing, which was recently added to the market, and dormitories for students.

Table 12. Summary of Housing for Single-person Households

<table>
<thead>
<tr>
<th></th>
<th>Goshiwon</th>
<th>Dormitory</th>
<th>Studio</th>
<th>Urban living housing</th>
<th>Officetel</th>
<th>Serviced residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>54~323 sf</td>
<td>140~196 sf</td>
<td>140~355 sf</td>
<td>140~538 sf</td>
<td>177~711</td>
<td>183~1,938sf</td>
</tr>
<tr>
<td>Contract Period</td>
<td>1 month</td>
<td>6 months</td>
<td>over 6 months</td>
<td>1 year</td>
<td>1 year</td>
<td>1 day/ 1 month</td>
</tr>
<tr>
<td>Rent</td>
<td>$200~600</td>
<td>$500~2,000</td>
<td>$500~800 / $5,000</td>
<td>$500~800 / $10,000</td>
<td>$500~$1,200 or Jeonse</td>
<td>$2,000 ~16,000</td>
</tr>
<tr>
<td>Tenant</td>
<td>Students/ young professionals/ low income</td>
<td>Students</td>
<td>Students / young professionals</td>
<td>Students / young professionals</td>
<td>Students / young professionals</td>
<td>Young professionals/ foreigners</td>
</tr>
<tr>
<td>Public Facilities</td>
<td>Kitchen, Restroom, laundry room, Shower room, PC room</td>
<td>Laundry room, gym, library, dining room, convenient store</td>
<td>Lounge, Convenient store</td>
<td>Fitness, Sauna, Pool, Business center, restaurant, lounge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>Meal, Security service, Free internet</td>
<td>Meal, Delivery, Security, Free internet</td>
<td>Security service</td>
<td>Security service</td>
<td>All services like Hotel</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>Owner / Chain</td>
<td>School / Private Corp.</td>
<td>Owner/ Developer</td>
<td>Owner/ Developer / Management</td>
<td>Owner/ Developer</td>
<td>Franchise</td>
</tr>
</tbody>
</table>

4.1.1 Goshiwon

The original usage of Goshiwon was as a short-term residence for students who studied for state exams to be selected as the nation’s diplomats, administrators, judges and prosecutors. Recently,
with low rent, short term lease, meals, convenient transportation and no deposit, young low-income individuals prefer residing in Goshiwon, despite the fact that there are dangers of fire and noise problems due to their location in the middle of retail zones or high-density areas around subway stations.

With the concept of quasi-housing, recent trends show that the supply of profitable Goshiwons has gradually been increasing because of the simplicity of the permitting process, while urban living housing has had more difficulty expanding its supply because of the generally depressed state of the real estate industry and high land prices. According to data from Seoul city, the supply of urban living housing was 3,451 and the supply of Goshiwon was 27,058 in July, 2010.

Unlike other housing units, Goshiwons are very suitable for young single-person households, who move frequently and don’t have enough money to afford a bigger house, because they are located in subway catchment areas and don’t require a deposit. However, its poor surroundings don’t satisfy minimum residing standards for more upscale consumers, and densely-concentrated Goshiwon areas are at risk of becoming new “slums”. In addition, owners regard Goshiwon as a fast source of profit, and tenants consider it a temporary residence to eventually move into newer and better housing units. To improve the supply and demand of Goshiwons, both perceptions are required to change.

Figure II. Pictures of Goshiwons

*Source: goshi1.net*
4.1.2 Urban Living Housing

There are two types of suppliers of urban living housing: mid- or large developers or subsidiary construction companies, and individual builders, who develop Multi-family or Multiplex housing.\(^{12}\)

Mid-sized developers or construction companies are Hanwon, Hami Global, Hana, Dongdo, and AM Plus from Aekyung Group. Large-sized companies, which have small-sized housing business plans, are Samsung, GS, Lotte, Hyundai, Dae rim, Guemho, DongA, Woomi, Ssangyong, Daewoo, and Halla. Some of them have recently finished the launching of new brands and the development of generic floorplans. Most of them rarely execute their business plans. Recently, Woomi and Ssangyong started to supply urban living housing. Subsidiary companies, such as Hyundai Asan, SK D&D and Halla Vivaldi, have entered the market, while large-sized construction companies have hesitated to get into the market because of the low profits. Small-sized developers, who are actively developing Multi-family and Multiplex type urban living housing, are Soomok.

4.1.2.1 Adena by Hanwon

Two urban living housing buildings by Hanwon were finished and one building is under construction.\(^{13}\) One of the finished buildings, Adena 534, is the first urban living housing in Korea; a studio type with 194 sf. This typology is very popular for students and young professionals because it is located near to subway station and there are parks, hospitals and department stores.

The shape of the building looks like a small-sized apartment complex and it has underground parking lots, public facilities, smoke zones and a rooftop. Parking lots were constructed following the previous law, based on the number of units. Nowadays, however, the law has

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\(^{12}\) The permits for constructing urban living housing increased in H1 2011, compared to 2009 when the urban living housing option was introduced, most of the permits, however, were for individual builders. Moreover, even though individual builders or construction companies are approved by cities, some of them fail to finish the construction, so the number of supply seems to be less than the number of permits.

\(^{13}\) Finished buildings were developed and constructed by Hanwon, but one under construction is constructed by Wooshin.
changed, so parking space is abundant compared to that in newer urban living housing units.

Table 13. Summary of Adena 534

<table>
<thead>
<tr>
<th>Location Type</th>
<th>Seoul, Gwanak-gu, Shillim-dong 534-1 Urban Living Housing, Studio type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall / Units</td>
<td>-1F ~9F / 149 units</td>
</tr>
<tr>
<td>Size</td>
<td>196sf / 18type (58), 18Atype(80), 18Btype(10), 18Ctype(1)</td>
</tr>
<tr>
<td>GSF</td>
<td>56,567sf / FAR: 209.5%</td>
</tr>
<tr>
<td>Transportation</td>
<td>Subway line 2</td>
</tr>
<tr>
<td>Construction</td>
<td>July 2010</td>
</tr>
<tr>
<td>Rent</td>
<td>Deposit USD 10,000 / Rent USD 650</td>
</tr>
<tr>
<td>Parking</td>
<td>Basement: 38/ Ground: 37</td>
</tr>
<tr>
<td>Common Area</td>
<td>Rooftop, Smoke zone</td>
</tr>
<tr>
<td>Furniture</td>
<td>Built-in</td>
</tr>
<tr>
<td>Service</td>
<td>Concierge, Entrance card, CCTV</td>
</tr>
</tbody>
</table>

*Source: www.adenahouse.co.kr

Figure 12. Pictures of Adena534

4.1.2.2 Maibaum by Soomok

Soomok launched a brand for single or two-person households, Maibaum, which provides customized spaces by using compact floorplans, duplex type, and folding furniture. 14 buildings of this typology were finished, and 4 buildings are under construction. Maibaum is the typology Soomok developed for urban living housing using the land other owners already possessed. For
example, Maibaum in Jegi-dong was constructed in an area where several universities are located, so the main tenants are students and the sizes of the rooms are 129 ~ 161 sf. The strong advantage of this housing typology is having a convenience store on the first floor and its location is very near to subway stations. This raises the profitability for the owner and improves the convenience for the residents.

Soomok not only supplies urban living housing but also operates a subsidiary company for lease management. Small-sized rental housing units, such as urban living housing, need facility management to make tenants comfortable, lease management to attract new occupants, and financial management. Time and effort can be saved when small-sized rental housing is managed in trust by a professional lease management company. With the increased demand for small-sized rental housing, the importance of the professional lease management service cannot be underestimated.

**Table 14. Summary of Maibaum**

<table>
<thead>
<tr>
<th>Location</th>
<th>Seoul, Dongdaemun-gu, Jegi-dong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Urban Living Housing, Studio type</td>
</tr>
<tr>
<td>Tall / Units</td>
<td>1F ~ 4F (1F: convenient store) / 22 units</td>
</tr>
<tr>
<td>Size</td>
<td>129 ~ 161sf</td>
</tr>
<tr>
<td>GSF</td>
<td>5,867sf / FAR: 179.66%</td>
</tr>
<tr>
<td>Transportation</td>
<td>Subway line 6</td>
</tr>
<tr>
<td>Construction</td>
<td>November 2010</td>
</tr>
<tr>
<td>Rent</td>
<td>Deposit USD 10,000 / Rent USD 500 ~ 700</td>
</tr>
<tr>
<td>Parking</td>
<td>6</td>
</tr>
<tr>
<td>Common Area</td>
<td>Terrace on 4th floor</td>
</tr>
<tr>
<td>Furniture</td>
<td>Built-in</td>
</tr>
<tr>
<td>Management</td>
<td>Soomok Lease Management</td>
</tr>
</tbody>
</table>

*Source: http://blog.naver.com/sooys3777

**Figure 13. Pictures of Maibaum**

*Source: blog.naver.com/sooys3777
4.1.2.3 Platinum S by Ssangyong

Platinum S is a mixed-use development with retail and urban living housing. Several retail operations are located from the second basement to the first floor. Its floorplan provides not only studios but also duplex types on the top floor. The units are 4 inches higher than other apartments, expanding storage space above the furniture. In addition, there is separate storage space for each unit in the basement of the building.

Table 15. Summary of Platinum S

<table>
<thead>
<tr>
<th>Location</th>
<th>Seoul, Yeongdeungpo-gu, Daelim-dong 717</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Urban Living Housing, Studio type, Duplex type, Retail</td>
</tr>
<tr>
<td>Tall / Units</td>
<td>-3F ~ 12F / 291 units</td>
</tr>
<tr>
<td>Size</td>
<td>Atype 194sf(270), Btype(Duplex) 344sf(5)</td>
</tr>
<tr>
<td></td>
<td>Ctype(Duplex+Terrace) 301sf(6), Dtype 194sf (2)</td>
</tr>
<tr>
<td></td>
<td>Etype(2bay+Terrace) 248sf(8)</td>
</tr>
<tr>
<td>GSF</td>
<td>164,900,000sf</td>
</tr>
<tr>
<td>Transportation</td>
<td>Subway line 2 and line 7</td>
</tr>
<tr>
<td>Construction</td>
<td>August 2013</td>
</tr>
<tr>
<td>Rent</td>
<td>Deposit USD 10,000 / Rent USD 500~700</td>
</tr>
<tr>
<td>Parking</td>
<td>Basement: 117/ Grond: 12</td>
</tr>
<tr>
<td>Common Area</td>
<td>Rooftop, Fitness, Storage</td>
</tr>
<tr>
<td>Furniture</td>
<td>Penthouse, built-in, bidet</td>
</tr>
<tr>
<td>Service</td>
<td>Digital door lock, CCTV, Entrance card</td>
</tr>
</tbody>
</table>

*Source: www.platinum-s.co.kr

Figure 14. Pictures of Platinum S

*Source: www.platinum-s.co.kr

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4.1.2.4 Hyundai Well Heim by Hyundai Asan

Hyundai Well Heim is composed of two buildings and was constructed by Hyundai Asan. Hyundai Well Heim uses the open space between the two buildings to locate a park as parking lots, and has installed a rooftop for green space.

**Table 16. Summary of Hyundai Well Heim**

<table>
<thead>
<tr>
<th>Location</th>
<th>Seoul, Gangdong-gu, Gil-dong 343-1,2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Urban Living Housing, Studio type</td>
</tr>
<tr>
<td>Building 1</td>
<td>-1F ~15F / 128 units</td>
</tr>
<tr>
<td>Building 2</td>
<td>-1F ~6F / 139 units</td>
</tr>
<tr>
<td>Size</td>
<td>B1: 183sf / B2: 151sf ~ 194 sf</td>
</tr>
<tr>
<td>GSF</td>
<td>B1: 53,000sf / B2: 47,000 sf</td>
</tr>
<tr>
<td>Transportation</td>
<td>Subway line 5</td>
</tr>
<tr>
<td>Construction</td>
<td>April 2012</td>
</tr>
<tr>
<td>Rent</td>
<td>Deposit USD 10,000 / Rent USD 550</td>
</tr>
<tr>
<td>Parking</td>
<td>B1: 40 / B2: 36</td>
</tr>
<tr>
<td>Common Area</td>
<td>Rooftop, Lobby</td>
</tr>
<tr>
<td>Furniture</td>
<td>Built-in</td>
</tr>
<tr>
<td>Service</td>
<td>Package delivery, Cleaning</td>
</tr>
</tbody>
</table>

*Source: http://cafe.naver.com/kig/6651076

**Figure 15. Pictures of Hyundai Well Heim**

*Source: http://cafe.naver.com/khs24/51*
1.2.5 QV by SK D&D

SK D&D is constructing QV (Quality Value, Qualified Value) in Kangdong and Yongsan. QV in Kangdong is located between two subway stations and it is a mixed-use property with Officetel and urban living housing. All units are arranged horizontally, so they have two windows. Ssamzi Park is located at the entrance of the building and a rooftop is installed for public use. In addition, in order to increase the storage space, it uses the ZAGA inside system\textsuperscript{14}, which was developed by the SK D&D furniture department, and the QV-Total Solution\textsuperscript{15}, which was developed in cooperation with LG electronics.

*Source: http://www.skdnd.com/

Table 17. Summary of QV

<table>
<thead>
<tr>
<th>Location</th>
<th>Seoul, Gangdong-gu, Gil-dong 456-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Urban Living Housing + Officetel</td>
</tr>
<tr>
<td>Tall / Units</td>
<td>-1F ~ 20F / 126 units</td>
</tr>
<tr>
<td>Size</td>
<td>134sf urban living housing (91)</td>
</tr>
<tr>
<td></td>
<td>207sf officetel (35)</td>
</tr>
<tr>
<td>GSF</td>
<td>40,319sf</td>
</tr>
<tr>
<td>Transportation</td>
<td>Subway line 5</td>
</tr>
<tr>
<td>Construction</td>
<td>February 2013</td>
</tr>
<tr>
<td>Selling price</td>
<td>USD 123,000 ~ 129,000</td>
</tr>
<tr>
<td>Parking</td>
<td>33</td>
</tr>
<tr>
<td>Common Area</td>
<td>Ssamzi Park, Rooftop</td>
</tr>
<tr>
<td>Furniture</td>
<td>Built-in, digital temperature</td>
</tr>
<tr>
<td>Service</td>
<td>Digital door lock, CCTV, home video phone</td>
</tr>
</tbody>
</table>

*Source: http://www.skdnd.com/

Figure 16. Pictures of QV

*Source: http://www.skdnd.com/

\textsuperscript{14} Built-in wardrobe with shoe rack and drawer

\textsuperscript{15} Built-in electronic system: drum washer, built-in refrigerator, cook top, air conditioner, etc.
4.1.2.6 Summary of Urban Living Housing

Urban living housing is constructed by itself or combined with Officetel and retail. The reason why construction companies develop urban living housing with Officetel and retail is to raise FAR and profitability. This also serves to improve the quality of life by adding more parking lots and convenience stores, but may diminish the sense of safety due to the much higher density. Officetel, which is typically developed with urban living housing, has a similar size and rent to urban living housing, but the selling price, maintenance fees, and taxes can be different. Usually the monthly rent of urban living housing is $500 ~ $800 with a deposit of $10,000.

After supply limitations were changed to 300 units per project, most companies develop at about 300 units of urban living housing per complex. The size of each unit is typically less than 215 sf, which prevents owners from paying a transfer income tax, and most of the floorplans are studio types. To improve the quality of life in such small units, companies use built-in furniture and expand spaces through balconies and some companies have built duplex units.

Urban living housing is considered one of the profitable real estate products for individual investors and prime new housing products for construction companies because of the tax benefits and mitigation of regulations that were enacted precisely to activate their supply. However, when urban living housing is developed with a smaller amount of units, it is in fact economically more similar to Multi-family or Multiplex housing. When it is developed at its maximum allowed density, it cannot deny the similarity to apartments and Officetel. Since most of the floorplans are for studio types, the area in which the urban living housing complexes are located may be perceived as slums and this fact may weaken the quality of life.

Thus urban living housing should be developed by combining it with not only studio types but also various types and sizes of housing. Moreover, to effectively operate and maintain the entire process of leasing and selling, professional lease management companies are required, as in Japan.

Table 18. Summary of Urban Living Housing

<table>
<thead>
<tr>
<th>Location</th>
<th>Subway catchment area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size/ Units</td>
<td>Small amount: 20 units, Large amount: 300 units limitation</td>
</tr>
<tr>
<td>Floorplan</td>
<td>129 ~ 430sf, mainly less than 215sf</td>
</tr>
<tr>
<td>Floorplan</td>
<td>Mostly studio type</td>
</tr>
</tbody>
</table>
Urban living housing only: 0.3 per unit
Mixed use with Officetel: 0.4 ~ 0.5 per unit
Built-in furniture
Extended balcony, sliding door, storage space
Rectangular floorplan or duplex type
Rooftop, park, fitness
Storage room, unmanned delivery system
CCTV, entrance card to strengthen security
Sale price: USD 110,00 ~ 250,000
Rent: USD 500 ~ 800 with deposit 10,000

4.1.3 Dormitories for College Students

Dormitories are the facilities that provide accommodation at low cost for students and employees. Especially, dormitories for students were built on campus, but recently private companies offer high qualified dormitories with BTO\(^{16}\) or BTL\(^{17}\).

Dormitories accommodate college students and graduating students at a lower cost than any other single-person housing, but their supply is small compared to their demand and there are several disadvantages, such as the existence of curfews and grade requirements.

4.1.3.1 Private Investment Dormitory

Since 2006, private companies have invested to build dormitories. Given that such companies focus on upscale products, this trend has actually increased the rents of the dormitories and improved the dwelling environments. Private dormitories are built by using BTO or BTL. The rents are expensive because of the higher quality and the fact that the companies have to recoup their investment at higher yields within a certain period of time.

4.1.3.1.1 Ku:1 House in Konkuk University

Ku:1 House is the first private investment dormitory in Korea. It opened for the second semester of 2006 and it has five buildings with from 12 to 15 floors. It accommodates 3,070 people in

---

\(^{16}\) BTO (Build-Transfer-Operate): a private company constructs a dormitory and operates it during a certain amount of time to retrieve the investment, so the private company has the right to operate, but ownership belongs to the government.

\(^{17}\) BTL (Build-Transfer-Lease): a private company invests money, constructs a dormitory and then gains interest and rent from the government. Both the right to operate and ownership belong to the government.
1,635 units. In each unit, there is a bed, a desk, a chair, a wardrobe, a bookshelf, a shoe rack, a refrigerator and a restroom. Students can access free internet in the building. Also, there are lounges, study rooms, laundry rooms, mail-boxes, a restaurant, a cafe, a convenience store and a barber shop. Each semester, rents are $2,200 for a single room, and $1,500 for a shared room.

**Figure 17. Pictures of Ku:l House**

<table>
<thead>
<tr>
<th>Exterior</th>
<th>Single room</th>
<th>shared room</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://kulhouse.konkuk.ac.kr/" alt="Exterior Picture" /></td>
<td><img src="https://kulhouse.konkuk.ac.kr/" alt="Single Room Picture" /></td>
<td><img src="https://kulhouse.konkuk.ac.kr/" alt="Shared Room Picture" /></td>
</tr>
</tbody>
</table>

*Source: [https://kulhouse.konkuk.ac.kr/](https://kulhouse.konkuk.ac.kr/)

### 4.1.3.1.2 Gonzaga Hall in Sogang University

Gonzaga Hall was built as BTO in partnership with ‘Sogang Sarang Fund’ from KDB Asset Management and students can lease the units after paying a rent of $2,000 and $800 for meals based on a 6-month contract. From a third basement to the 12th floor, it has standard rooms to accommodate 900 students and guest rooms for foreign professors. In the basement, there are parking lots, a food court, a restaurant, a café, a bookstore, and a convenience store.

**Figure 18. Pictures of Gonzaga Hall**

<table>
<thead>
<tr>
<th>Interior</th>
<th>Exterior</th>
<th>Common Place</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://gonzaga.sogang.ac.kr/" alt="Interior Picture" /></td>
<td><img src="https://gonzaga.sogang.ac.kr/" alt="Exterior Picture" /></td>
<td><img src="https://gonzaga.sogang.ac.kr/" alt="Common Place Picture" /></td>
</tr>
</tbody>
</table>

*Source: [https://gonzaga.sogang.ac.kr/](https://gonzaga.sogang.ac.kr/)
4.1.3.2 Rental Housing for Students

4.1.3.2.1 Jeonse/Rental Housing for Students

Jeonse/Rental housing for students is a business that the Korea Land and Housing Corporation (LH) carries forward for low-income students. A certain number of students are selected as recipients. LH establishes a Jeonse contract with the owner of the housing unit it chooses and then signs separate contracts with the students at low rents. For the class of 2016, the total number of recipients will be 3,000, which increased by 1,000 compared to last year.

Table 19. Number of Recipients by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>Enrolled students</th>
<th>Freshman</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Single</td>
<td>Shared</td>
</tr>
<tr>
<td>Seoul</td>
<td>1,000</td>
<td>700</td>
<td>100</td>
</tr>
<tr>
<td>Inchon</td>
<td>100</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>Kyunggi</td>
<td>700</td>
<td>490</td>
<td>70</td>
</tr>
<tr>
<td>Pusan</td>
<td>160</td>
<td>112</td>
<td>16</td>
</tr>
<tr>
<td>Daegu</td>
<td>70</td>
<td>49</td>
<td>7</td>
</tr>
<tr>
<td>Kwangju</td>
<td>100</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>Daejeon</td>
<td>130</td>
<td>91</td>
<td>13</td>
</tr>
<tr>
<td>Ulsan</td>
<td>10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Kangwon</td>
<td>100</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>Chungbuk</td>
<td>100</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>Chungnam</td>
<td>160</td>
<td>112</td>
<td>13</td>
</tr>
<tr>
<td>Jeonbuk</td>
<td>105</td>
<td>75</td>
<td>10</td>
</tr>
<tr>
<td>Jeonnam</td>
<td>30</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Kyungbuk</td>
<td>130</td>
<td>91</td>
<td>13</td>
</tr>
<tr>
<td>Kyungnam</td>
<td>100</td>
<td>70</td>
<td>10</td>
</tr>
<tr>
<td>Jeju</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Source: [http://myhome.lh.or.kr/notice/announce/](http://myhome.lh.or.kr/notice/announce/)

Rents are about 30% of the Jeonse price, $40 ~ 120 a month, with a deposit $1,000. The typical lease period is two years, and students can extend their contracts three times, so students can live in the same house at most 6 years. Housing should be in the city where the university is located and authorized to make a Jeonse or rent contract. In addition, any type of housing under this scheme, such as single housing, multi-family, multiplex, apartment, or Officetel, is acceptable as
long as its size is less than 538 sf.

Priority is given to students who are recipients of basic livelihood assistance, have a single parent, or are discharged from a child welfare institute. Second priority is given to students whose household income is less than 50% of the average household income or less than 100% of the average household income if one or both of their parents are disabled.

*Table 20. Lease Condition*

<table>
<thead>
<tr>
<th>Number of person in unit</th>
<th>Deposit</th>
<th>Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>single person</td>
<td>$1,000</td>
<td>$70 ~ 120</td>
</tr>
<tr>
<td>two persons</td>
<td></td>
<td>$40 ~ 60</td>
</tr>
<tr>
<td>Second priority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>single person</td>
<td>$2,000</td>
<td>$100 ~ 180</td>
</tr>
<tr>
<td>two persons</td>
<td></td>
<td>$50 ~ 90</td>
</tr>
</tbody>
</table>

*Source: [http://myhome.lh.or.kr/notice/announce/](http://myhome.lh.or.kr/notice/announce/)*

39
4.2 Japan

4.2.1 Characteristics of Single-Person Households

Japan already experienced low fertility and aging population problems. According to the statistical data from the Population census, the total population is forecast to decrease after 2010, which is 25 years earlier than when Korea’s population will decrease. The main workforce, age 15 to 64, has declined since 2000. The percentage of seniors, 65 or older, is over 20% and it is forecast to increase to 39% in 2050.

*Figure 19. Population by Age and Percentage of 65 and over*


Since 1990, the single-person household has been the most common household and two-person households followed. Both of the households have represented over 50% of the total households since 2000. The average number of people per household was 2.42 in 2010 and it has been continuously decreasing. Similar to the Korean situation, the total number of households has increased.
Japan’s significant demographic structural changes have been observed since 2000 and the small-sized housing market for single- and two-person households has been well developed in the private sector since 1980. Although all public housing units were built for family-households, the local governments used their discretion in choosing residents to allow singles to live in public housing units. Most of the beneficiaries, however, were limited to seniors, the disabled and victims of domestic violence. The Urban Renaissance Agency\(^\text{18}\) maintains over 770,000 housing units across Japan, including 450,000 units in Tokyo. To select tenants, it sets the standards based on the applicant’s monthly income and the standards are relaxed for single-person households.

4.2.2 The Rental Housing Market and Cases

The end of the bubble area\(^\text{19}\) in 1990’s changed the concept of real estate from “possession” or

---

\(^{18}\) UR is an independent administrative corporation formed by the Japanese government. Its three main missions are to renew urban areas, to maintain public property/spaces, and to assist the public during disasters.

\(^{19}\) Real estate and stock market prices were greatly inflated from 1986 to 1991.
“investment” to “residence” and weakened the sales market of housing. To survive in the harsh housing market, developers and construction companies changed their strategies. First, they started owning, operating, and managing the properties, instead of selling them. Secondly, they made contracts with a landowner and developed, and operated the land and properties, instead of buying the land. Thirdly, to raise funds, they used mortgage backed securities and real estate investment trusts, instead of mortgage loans. Lastly, they purchased distressed properties, renovated, and sold them. Reopalace21 and Daito Trust Construction lead this trend. Along with the change of demographic structures, well developed public transportation in downtowns, such as Tokyo, helped revitalize the small-sized rental housing business because developers or construction companies were not required to build parking lots on the expensive land.

4.2.2.1 Reopalace21

Reopalace21 was established in 1973 and became one of the biggest lease management companies in the housing market in Japan. It manages 558,457 rooms as of the end of September 2015, and its targets are mainly single-person households, foreign students, businessmen, and foreigners for short-term or long-term stays.

Table 21. Summary of Leopalace21

<table>
<thead>
<tr>
<th>Name</th>
<th>Leopalace21 Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Office</td>
<td>2-54-11 Honcho, Nakano-ku, Tokyo 164-8622</td>
</tr>
<tr>
<td>President and CEO</td>
<td>Eisei Miyama</td>
</tr>
<tr>
<td>Established</td>
<td>8/17/1973</td>
</tr>
<tr>
<td>Common Stock</td>
<td>75,282 million yen</td>
</tr>
<tr>
<td>Number of shares</td>
<td>267,443,915 shares</td>
</tr>
<tr>
<td>Outstanding</td>
<td></td>
</tr>
<tr>
<td>Common Stock Listing</td>
<td>Tokyo Stock Exchange, 1st Section</td>
</tr>
<tr>
<td>Employees</td>
<td>7,735 (consolidated), 6,512 (non-consolidated) (as of September 2015)</td>
</tr>
</tbody>
</table>

Construction, leasing, and sales of apartments, condominiums, and residential housing
Development and operation of resort facilities
Hotel business
Broadband business
Elderly care business, etc


It provides two types of contracts: Monthly and Chintai (general) Contract, which is for long-
The biggest advantage of using Reopalace21 is to save the initial expenses because tenants don’t need to pay a deposit, gratuity fee and brokerage commission.

Table 22. Contracts for Reopalace21

<table>
<thead>
<tr>
<th>Contents</th>
<th>Monthly Contract</th>
<th>Chintal Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deposit</strong></td>
<td>0 Yen</td>
<td>0 Yen</td>
</tr>
<tr>
<td>Deposit to the lessor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gratuity fee</strong></td>
<td>0 Yen</td>
<td>0 Yen</td>
</tr>
<tr>
<td>Gratuity to the lessor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Brokerage commission</strong></td>
<td>0 Yen</td>
<td>0 Yen</td>
</tr>
<tr>
<td>Brokerage commission for property introduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Renewal fee</strong></td>
<td>0 Yen</td>
<td>16,200 Yen</td>
</tr>
<tr>
<td>Renewal fee to the lessor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Screening</strong></td>
<td>Tenant screening</td>
<td>Tenant screening</td>
</tr>
<tr>
<td>Tenant screening</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cleaning fee at move-out</strong></td>
<td>1,620 Yen (per 30 days)</td>
<td>1K 27,540 Yen ~ (Basic cleaning fee)</td>
</tr>
<tr>
<td>Reasonable cost when leaving the room, no need to worry because you know the price in advance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Furniture/Electric appliances</strong></td>
<td>Furnished (all apartments)</td>
<td>Furnished/ Unfurnished possible to choose</td>
</tr>
<tr>
<td>Basic furniture and appliances from the time you move-in</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>Free 1,645 Yen / 30days</td>
<td>1,645 Yen / 30days</td>
</tr>
<tr>
<td>Monthly utilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Service</td>
<td>Free Internet for buildings with ADSL and ISDN connection service</td>
<td>Free Internet for buildings with ADSL and ISDN connection service</td>
</tr>
<tr>
<td>Internet Service with no need for installation. Video distribution and CS channels.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Multiple tenants</strong></td>
<td>up to 3 people</td>
<td>up to 2 people</td>
</tr>
<tr>
<td>Roommates allowed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Its unique system, which helps the success of Leopalace21, is a master leasing system. The master leasing system provides owners with comprehensive services for the apartment management, from construction to management and operations, for a maximum of 30 years. The system involves pass-through net income payments to owners, as well as management and repair to take the burden off the owner, contributing to a steady income. The biggest risk in lease
housing management is vacancies because, with the 30-year master leasing contract, a fixed rent is paid to the owners for a certain period regardless of the existence of vacancies. Thus, the company tries to establish stable occupancy rates by strengthening sales against corporate clients and expanding tenant services that fit customers' needs. As seen in Figures 22 and 23, Leopalace21 focuses on various product developments to address the changing needs of tenants. It has been targeting young and single households in urban areas. Therefore, it has increased installations of facilities matching such tenants' needs, such as broadband connection and bathroom dryers, and improved the website to facilitate leasing contracts and payments. As a result, in single-person households, it obtained a market share of 2.4% in 2005 and 3.4% in 2010 and maintained an 86.8% annual average occupancy rate in 2015. In order to recruit more tenants, Leopalace21 utilizes franchise offices (164) and local real estate brokers (27,000) in addition to direct offices (184).

*Source: http://en.leopalace21.com/*

Figure 21. Master leasing contract (sub-lease method)
**Figure 22. Various product development of Leopalace21**

UNI-BIRTH
Apartment for young people

Arma-L
Apartment for female tenants

Standard equipment of "non-sound system," including noise reduction walls, soundproof drains, and non-sound floors


**Figure 23. Installation of facilities to meet tenants' needs**

2.2.2 Daito Trust Construction

Daito Trust Construction was established in 1974 and became one of the top 10 construction companies in Japan. It manages 902,974 units of residential and 36,992 of commercial as of the end of November, 2015, and maintains a 96.18% occupancy rate, which is higher than that of Leopalace21.

Table 23. Summary of Daito Trust Construction

<table>
<thead>
<tr>
<th>Name</th>
<th>Daito Trust Construction Co., Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Office</td>
<td>2-16-1, Konan, Minato-ku, Tokyo 108-8211 Japan</td>
</tr>
<tr>
<td>Established</td>
<td>6/20/1974</td>
</tr>
<tr>
<td>Capital</td>
<td>20,060 million yen</td>
</tr>
<tr>
<td>Stock</td>
<td>Listed in the 1st Sections of Tokyo and Nagoya Stock Exchanges</td>
</tr>
<tr>
<td>Employees</td>
<td>10,191 (as of the end of September 2015)</td>
</tr>
<tr>
<td>Business Activities</td>
<td>Design and Construction of apartments, condominiums, rental office buildings, factories and warehouses</td>
</tr>
<tr>
<td></td>
<td>Tenant recruiting, building maintenance, contracting arrangements</td>
</tr>
<tr>
<td>Branch Offices</td>
<td>218</td>
</tr>
</tbody>
</table>

Daito Trust Construction created its “Lease Management Trust System” to help landowners effectively utilize limited land. Similar to the master leasing system of Leopalace21, Daito encouraged the owners of non-business-purpose land to develop rental housing units to earn stable income and reduce tax payment\(^{20}\). The Lease Management Trust System provides four services: expert consultation, high quality construction, tenants recruiting activities, and business and building management services. Its sales staff provides landowners, who don’t have confidence in land use, with expert advice on various issues, such as financial planning, taxation law, legal matters and construction engineering. Daito has already developed various housing products, so the owners can choose the favorable type of housing units based on the expert’s advice. To help the owners make faster decisions, Daito Finance Co. Ltd., a subsidiary of Daito, provides affiliated loans and short-term loans for construction contract fees, which need to be paid before building completion. Once the owners decide to develop rental housing units, Daito starts its construction with DK network. This network enables its construction managers to

\(^{20}\) Reduced tax payments are not real estate holding tax but inheritance tax. When landowners contract with management companies to run a rental housing business, they can earn a fixed income and reduce tax payment by one-sixth.
access its database through PHS and PDA to obtain necessary information and monitor the progress of construction, which raises the productivity through effective management. After construction, Daito helps recruit tenants through various types of media, including on-line service, “e-Heya Net” and a property listing magazine called “Ju-SEE”. House Leave Co. Ltd., a subsidiary, contributes with a high occupancy rate. When a tenant requests to make a contract without a joint guarantor, House Leave guarantees the tenant’s debt on the lease. Daito Building Management Co. Ltd., wholly owned subsidiary, provides comprehensive building management services including building maintenance, rent collection, and contract management under the whole building lease contract or business trust agreements with landowners.

Figure 24. Product Lineup

![Product Lineup](http://www.kentaku.co.jp/e/)
4.3 United States

4.3.1 Characteristics of Single-Person Households

According to the data from the U.S. Census Bureau, the most common households were two-person households (14,768,000) and three-person households (9,979,000) in 1960. Since 1971 the number of single-person households has overtaken three-person households, and since 1975 single-person households and two-person households have represented over 50% of the total households. The percentages of single-households and two-person households continue to increase and the average number of people per household was 2.54 in 2015.

*Figure 25. Number of Households by Size*

The most significant housing policy in the United States is the treatment of owner-occupied housing for tax purposes, and federal subsidies to US renter households are much smaller. Therefore, the private sector for housing construction has been well developed within the financial market, while the public sector has been limited to very low-income households.

4.3.2 Cases

4.3.2.1 Single Room Occupancy (SRO) Program

Single room occupancy, SRO, is a form of housing in which one or two people live in individual rooms within a multiple-tenant building and share bathrooms and kitchens. The SRO program helps very low-income, single, homeless individuals acquire safe and clean housing in privately owned, rehabilitated buildings. Under the SRO program, the U.S Department of Housing and Urban Development (HUD) enters into annual contributions contracts with Public Housing Agencies (PHAs). These PHAs make Section 8 rental assistance payments to landlords on behalf of individuals who rent the rehabilitated dwellings. HUD provides rental assistance for SRO units for 10 years. Owners are compensated for the cost of rehabilitation and other costs through the rental assistance payments. In order to qualify for the program, each unit must need a minimum of $3,000 of eligible rehabilitation.

4.3.2.2 Micro-unit apartment

Carmel Place (My Micro NY) is the winning proposal in the adAPT NYC competition sponsored by the NYC Department of Housing Preservation and Development (HPD). Certain zoning regulations are waived at the Kips Bay site to allow Carmel Place to be developed because currently apartments, smaller than 400 sf, and an entire building of micro-units are not allowed. Carmel Place will be the first micro-unit apartment building in New York City and the tallest modular building in New York. The 55 micro-units, ranging from 250 to 370 sf, will achieve affordability for low- and middle-income households, and will enable the city to assist in resolving increased demand for one- and two-person homes within limited space. Modular construction is used for this project, and the method is to assemble all designed modules at the site, after all materials are standardized and 80% of the process is conducted in the factory. It has

many advantages because it is faster, less expensive, allows for high levels of quality control and significantly reduces waste and traffic. It is also safe for workers as construction is done inside, in controlled environments.

Table 24. Summary of Carmel Place

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Carmel Place/My Micro NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>335 E 27th Street, Kips Bay, Manhattan</td>
</tr>
<tr>
<td>Status</td>
<td>2013 - 2015 (In construction)</td>
</tr>
<tr>
<td>Area</td>
<td>35,000 sf</td>
</tr>
<tr>
<td>Program</td>
<td>55 micro-unit apartments + retail</td>
</tr>
<tr>
<td>Sustainability</td>
<td>LEED Silver target</td>
</tr>
<tr>
<td>Awards</td>
<td>1st Prize, adAPT NYC Competition, Architizer A+ Awards</td>
</tr>
<tr>
<td>Facilities</td>
<td>9’-8” floor-to-ceiling heights, juliet balcony, gym, lounge, community room, roof terrace, bicycle storage, tenant storage room and a small garden</td>
</tr>
</tbody>
</table>

Figure 26. Designs for Carmel Place and Process of Modular Construction

My Micro Unit
Average 286sf, 2 zones, 1 home
80% of the process is conducted in the factory.

All designed modules are assembled at the site.

Chapter 5. Conclusions

Even though the growth rate of the population has been declining and the population is forecast to decrease starting in 2035, the number of households in Korea will continue to increase. The reason is closely related to the increase in single- and two-person households, associated with the trends of delayed marriage, having children later, the high divorce rate, separated family due to jobs and education, and the growth of the senior population. Therefore, demand for small-sized housing is expected to grow, while demand for large-sized housing is decreasing.

People under 30 represent the highest percentage among single-person households. They are mostly students or new employees, who just started to work, and cannot afford to buy their homes. This reality will lead to a growth in the small-sized rental housing market in Korea. In fact, many Goshiwons and Officetels are operated with very low vacancy rates, although they arguably provide relative low quality of life.

To satisfy the increased demand for single or two-person households and to improve the quality of dwelling environments, the government introduced the concept of “urban living housing”, affordable small-sized housing, in 2009, and adopted the concept of “quasi-housing” in 2010, hoping to stimulate the supply.

As soon as the government announced the urban living housing plan, prices of land, in which urban living housing units were expected to be built, rose dramatically. This situation caused a decrease in the profitability for developers and construction companies and only a small number of urban living housing units were constructed at that time. The concept of quasi-housing also had a problem. Investors, who were interested in Officetel, had higher transfer income tax rates because they would own more than one house.

In the past, the population was expected to grow steadily and housing prices had always increased. In that situation, people believed apartments were the best investments and speculation amplified price fluctuations. As a result, mid- and low-income people could not afford a house. For mid- and low-income people, the purpose of rental housing is not to own the houses but to stay in them. Therefore, imposing the higher transfer income taxes to the providers of small-sized rental housing units will reduce the supply. Recently, the Korean government abolished the higher tax rates and imposed the regular tax rates on all house owners, regardless
of the number of houses. Even though tax problems were solved with the reformed policy, there still exist huge problems for individuals to run rental housing businesses due to lack of expertise, such as facility management and lease management. Owners of land or property pursue stable and continuous rental income with no knowledge of management. There are few professional lease management companies in Korea and only licensed realtors around the property help the owners operate and manage them.

In order to develop strategies to enhance the supply of small-sized housing units and to improve the residential environment, single and two-person households must be classified into 4 groups: students with low-income, young employees with low- or mid-income, middle-aged with high-income, and seniors.

Students, in their twenties, almost entirely depend on their parents with no or low-income. They stay in one room in a multi-family and multiplex, Goshiwons, or dormitories around universities and subway catchment areas. They usually come back to their parents’ home during weekends and holidays, so they prefer cheap rent and short-term stays.

Young employees, in their thirties, just started working and have a low- or mid-income of $1,000 ~ $3,000 a month. They stay in Officetels or urban living housing units with the preference for convenient transportation. They are willing to get married in the future and tend to enjoy entertainment and convenience. They tend to move frequently depending on their jobs and education, so they prefer short-term stays.

The middle-aged, in their forties and fifties, prefer having a house to renting, and a high percentage owns a car. The reasons why middle-aged people live alone include that they may be divorced, celibate, widowed or separated due to jobs and their children’s education. Singles downsize their home when they get divorced or become widowed and sometimes they need a second house when they are separated due to jobs and their children’s education. Some of them consider small-sized housing a profitable investment for retirement.

Seniors follow a similar pattern to the middle-aged people, but they have low-income or a pension. They prefer owning small-sized houses or staying in assisted living senior housing.

To prevent a city area with many small-sized housing units from becoming a slum, construction companies and developers should improve the quality of dwelling environments by considering
the characteristics and needs of each group. Especially for students and seniors, the private and public sectors need to cooperate to provide cheaper and safer housing units. For example, the government can provide universities with tax benefits to build more dormitory facilities and the Korea Land and Housing Corporation (LH) can provide some subsidies to owners of multi-family and multiplex housing to increase the number of Jeonse/Rental Housing for students and extend the qualification from specified low-income students to other students.

The most important consideration to supply housing for single or two-person households is the site, which should be subway catchment areas and close to downtown. Thus, purchasing land or sites for small-sized housing businesses causes the biggest problem due to their high prices. One possible way to solve this problem is a sub-lease contract. A sub-lease is a very well-known business model in Japan, while it seems not to be unknown in the Korean housing market. If the government makes lease contracts on the government-owned lands with public or private companies, it will help solve the lack of the land and high land price problem.

With the sub-lease business model, the introduction of professional lease management services will satisfy all the needs of landowners, tenants, developers and construction companies. In the past, housing property provided more appreciation gain than income gain. However, after the global financial crisis, with low interest rates, many participants want stable and steady income. As seen in the Japanese business model, through the long-term lease contracts between owners of property or land and construction companies, including professional lease management services, the owners don’t need to worry about operating and managing land and property and they earn stable and continuous income from the contracts. Companies secure land, constantly develop new projects, and maintain stable cash flow by operating and managing the properties. Tenants trust professional companies rather than individual owners and experience high quality of service and dwelling environments. Even though construction revenue is usually higher than operating and management revenue, the reason why construction companies are providing lease management service is that many landowners and tenants want this kind of service and companies have more opportunities to be involved in development projects through the contracts with owners. Moreover, with the trends of declining population and decreased demand for large-sized housing, professional lease management services are required to be competitive in the small-sized rental housing market. In Korea, Soomok provides professional lease management
services and shows considerable profitability, although it is a small-sized developer.

Another way to solve the lack of land is to use existing multi-family and multiplex housing to provide more small-sized housing. However, existing multi-family and multiplex housing have structural problems and cannot be directly used as small-sized housing for single or two-person households. Thus, a remodeling process is required for several people to share the houses. Also, to encourage new multi-family and multiplex housing to be constructed following specific standards for single or two-person households, the government needs to grant subsidies and tax benefits to owners of land and developers.

Recently, private construction companies and developers have supplied various urban living housing units to mitigate their shortage. However, most projects are based on sales to investors, not on direct rentals to tenants, so this supply can’t meet the demand of single or two-person households, who can’t afford to buy a home. Therefore, if public companies or LH add rental housing units for single or two-person households to public rental apartments, Bogeumjari, it will help single or two-person households rent homes at a lower cost. Private companies may not provide a continuous and systematic management service because business profitability is the most important. Thus, the public sector should control the supply and develop a professional lease management system. In addition, it should extend the qualifications to live in public rental housing, from only the disabled and low-income renters to other single or two-person households.

Most Korean development projects raise funds through the project financing method, from banks or financial institutions. Basically, the project financing method allows developers to borrow money based on their business profitability, not on their credit history. Banks and financial institutions are not willing to lend money without payment guarantees from relatively big construction companies, because banks or financial institutions lend money without collateral. Thus, individual builders or small-sized developers find it difficult to raise funds for their development projects. As in the United States, various funding sources, such as asset-backed security, Real Estate Investment Trusts, and a portfolio, are required. Even though there exist some asset-backed security and REITs in Korea, they are mainly focused on large-scale commercial real estate. Using asset-backed security and REITs will increase transparency of cash flow and help developers, who cannot obtain payment guarantees from big construction
companies, or raise funds without the financing project method.

Finally, small-sized rental housing should be cheap because most single or two-person households are low-income. Thus, modular construction is the one way to reduce construction cost and time. Modular homes are assembled at the site after all materials are standardized and 80% of the process is conducted in the factory. They cost less, can be built faster, are more solid, and are even more environmentally friendly than standard site-built homes. When they are demolished, most of the materials can be recycled. This construction method is successfully used in Japan and in the United States, with many advantages.

In this study, I suggest some strategies to increase the supply of small-sized rental housing and to improve the quality of those living environments. Some strategies from other countries can be difficult to adopt because each country has a different culture, and its own codes and regulations. However, these strategies give us hints to develop and stimulate the small-sized rental housing market in Korea. More studies on policy and companies’ profitability are required for more detailed solutions, but this study will be the starting point to understand the small-sized rental housing market.
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