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Title Financialisation of housing in South Korea: State-sanctioned popular speculation on housing

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Abstract

The South Korean economy has been rapidly financialising since the early 2000s. The housing market is the primary channel through which this shift in the structure of the economy has taken place. This paper sheds light on the widespread speculation on housing by households across income strata as financialisation became entrenched. Households join the race for short-term capital gains from an ever-growing asset bubble in the housing market, using easy access to loans. This process has been actively encouraged by the state.

Two peculiar aspects of the Korean housing market characterise the financialisation of households, namely the pre-sale of apartments and the availability of deposit-only rental agreements. The two schemes enable extremely high-leverage investment and thus facilitate speculation by households. The state underpins the functioning of both schemes both directly and indirectly.

Keywords: financialisation; housing; Korea; real estate; household; asset-based welfare; mortgage.

JEL classification: R31, D14, P16, O18.

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1. Introduction

Financialisation of housing has shaped the South Korean economy in the past few decades, particularly since the 1997-98 Asian financial crisis. Korea's household debt amounts to 105.8 per cent of the GDP and 206.5 per cent of the net disposable income, which is the third highest in the world (International Monetary Fund, 2022). It is led by the rise of housing-related loans including mortgages.

The vicious circle of easy access to loans and real-estate asset bubble is not unique to South Korea (Korea hereafter). What is distinct in Korea's financialisation of housing, however, is the widespread household engagement in speculation on housing. Profit motive has deeply penetrated the conduct of households across income strata, centring on short-term capital gain rather than fixed income. The subject of, and the motive behind speculative investment on housing in Korea vastly differ from those of other advanced economies.

In most advanced economies, it is mostly the finance capital and few non-financial corporations that use housing as a channel for financial investment, be it a fixed income generator or a real-estate asset that can rise in value in the future. Although properties are increasingly becoming recognised as a means of investment by households elsewhere as well, it has long been established as common practice in Korea.

For Korean households, profit motive focused on capital gain has been so ingrained in their decision-making process that it practically renders it impossible to distinguish the purpose of transactions in the housing market, whether it is for residential purpose or speculative purpose. Often, it is one and the same.

This is enabled and encouraged by the establishment of two peculiar devices in the Korean housing market, which arose against the backdrop of financial repression. The first is the mass pre-sale of apartments. Absolute majority of the newly built apartments, including those from re-development, are sold in the beginning stage of the construction. Buyers pay up to 70-90 per cent of the price during the construction period, spanning 2-3 years on average, via multiple instalments. This effectively funds the cost of construction, significantly lowering the borrowing cost for the construction companies. In return, buyers get to lock in the price at the point of signing the pre-sale contract as opposed to the price when the construction is complete (Son et al., 2016, p.80; You, 2009, p.44).

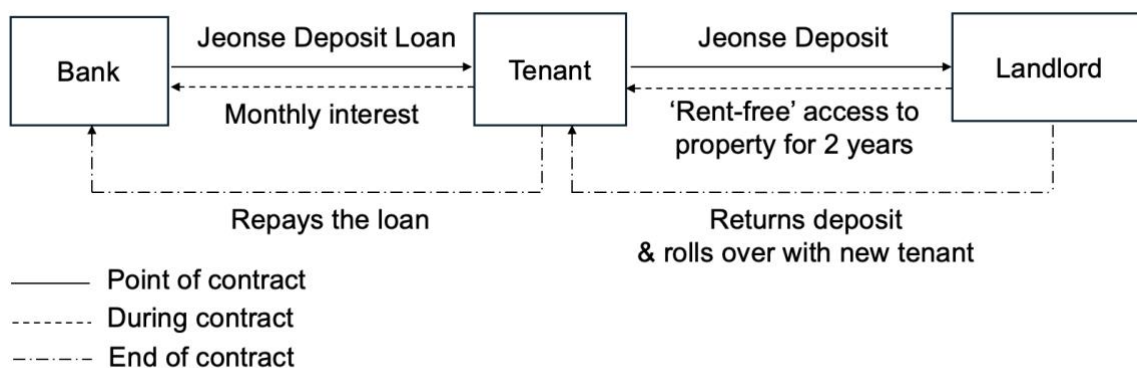
The second is a deposit-only rental agreement called Jeonse¹. The tenant puts down a deposit that amounts to around 70 per cent of the sale price for a fixed period, normally 2 years, in lieu of monthly rent. The deposit is returned to the tenant at the end of the contract. This is a form of private loan by a tenant to the landlord. Landlords forego fixed income in exchange for a cost-free borrowing. Tenants lend a

¹ In some studies, it may be referred to as Chonsei or Chonsae, due to deploying different methods of anglicisation.

lump-sum amount to the landlord in exchange of 'rent-free' access to housing for 2 years.

Tenants may also borrow the Jeonse deposit from a bank and hand it over to the landlord. They pay interest to the bank each month and, when the contract ends, receive the deposit back from the landlord and return it to the bank. In other words, the principal simply changes hands from the bank to the landlord, mediated by the tenant. Instead of paying monthly rent to the landlord, tenants pay interest to the bank, effectively assuming the borrowing cost of capital for the landlord. The flow of funds in this case is visualised in [Figure 1] below.

[Figure 1] Simplified flow of funds under a Jeonse contract funded via Jeonse deposit loan



Source: drawn by author

After the financial liberalisation following the 1997-98 Asian financial crisis, the two schemes gained even more popularity with newly available loans to households. Their prevalence has engendered a unique configuration in Korea's economy where households typically borrow from financial institutions and on-lend the funds to capitalists and landlords. The state has actively provided households with means to access these two schemes, perpetuating and accelerating financialisation of housing.

This paper will start by examining the current debate on financialisation of housing in Section 2, focusing on the theoretical frameworks that can be useful to analyse Korea's case. Literatures specifically related to the two main topics of the paper, pre-sale and Jeonse, will be incorporated in Section 3 and 4, as the paper lay out the mechanisms of the two schemes, respectively. Section 3 and 4 will analyse the way these devices effectively function as tools for extremely high-leverage investments and highlight the role of the state underpinning their functioning. Section 5 will conclude.

2. Literature review: financialisation of housing

The literature of financialisation of housing is relatively new, but fast-growing. Its main contribution comes from linking the literature of financialisation and housing studies, that had been existing rather independently until recently. It does so by

situating housing finance at the centre of financialisation and financialisation at the centre of housing studies (Aalbers, 2017b).

By situating housing at the centre of financialisation, the literature recognises various crises found in the housing market and housing finance as the key element of financialisation, as opposed to a mere side effect. This is particularly relevant in the Korean context where real-estate assets account for 71.5 per cent of the total household asset composition (Statistics Korea, 2023a, p.8). Construction sector also leads the country's economic growth, by contributing 15 per cent of the GDP as of 2020 (Park S.W. et al., 2022).

Financialisation of housing is multifaceted and can be approached from various angles. Much attention has been paid on the explosion of household debt in advanced economies, driven by the rise of mortgages. The conversation surrounding this issue largely revolves around its role of generating long-term fixed income for institutional investors such as pension funds, primarily via securitisation (See, for example, Brenner, 2006; Christophers, 2011; Fernandez and Aalbers, 2016; Gotham, 2009; Lee, 2014).

There is no denial that securitisation is one of the most crucial drivers of financialisation of housing, for the following two reasons. First, the continued popularity of financial derivative such as mortgaged-backed securities (MBS) and collateralised debt obligations (CDOs), even after the 2007-9 global financial crisis, incentivises commercial banks to encourage households to take out mortgages to form underlying assets (Montgomerie and Williams, 2009).

Secondly, securitisation significantly lowers the risks of holding loans for banks, allowing them to expand the size of household lending (Lee, 2014). The interest earnings from mortgage loans have accounted for increasingly greater portion of the banks' revenue across the advanced economies. What has remained overlooked in this literature, however, is the question of 'why do households borrow?' other than the obvious need to put a roof over their heads.

One potential answer could be found in many states pursuing asset-based welfare, as neoliberal politics has become dominant across several countries. Doling and Ronald (2010, p.165) state that "rather than relying on state-managed social transfers to counter the risks of poverty, individuals accept greater responsibility for their own welfare needs by investing in financial products and property assets which augment in value over time."

This individual responsibility to secure one's own financial stability throughout various stages of life, leads to a phenomenon called financialisation of everyday life (Martin, 2002; Langley, 2008). In the process, as Fields (2017) highlights, the exchange value of home overrides the use value, fundamentally changing the meaning of housing as a home into a means of capital investment.

Some scholars, including Crouch (2009) and Watson (2010), called it 'privatised Keynesianism' and 'house price Keynesianism' respectively. It describes the

phenomenon whereby consumption is fuelled by an asset bubble in the housing market as opposed to real wage increases. This asset-based welfare for the working class largely excludes the younger generation and those in precarious employment and unpaid labour (Gabor and Kohl, 2022; Kang, 2017).

This is very much applicable to the Korean welfare system since the 1980s. Song M.G. (2020) argues that the Korean state has opted for a so-called 'formation of the middle class' strategy. By encouraging the working class to pursue individual asset formation, it effectively diverted the public attention away from class struggle. This trend has only accelerated after the rise of financial liberalisation with easy access to loans and continued growth of asset bubble in the housing market (Kim M.S., 2020; Song H.S., 2020).

Underlying this trend is the financialisation of the state. Not only is the state itself increasingly subject to the logic of finance and portfolio management, but also its decisions to roll back from universal provision of basic goods and services actively invites the finance capital to extract profit from the working class (See, for example, Donoghue, 2022; Aalbers, 2017a; Bernt et al., 2017; Montgomerie and Büdenbender, 2015;).

In Korea's case, there was nothing for the state to roll back from, as the country was going through late development in the 1960s to 1980s. The role of providing necessities, other than the old-age pension, was simply assigned to the private sector for political and economic reasons and continues to be largely left at the hands of the private capital (Kim T.G., 2017).

While the literature on housing as the generator of fixed income for finance capital has gained meaningful attention in the aftermath of the global financial crisis, several prominent Marxist scholars such as Harvey (1982; 2004), Lefebvre (1992), highlighted the function of real-estate assets as a capital investment outlet for non-financial enterprises since long before the crisis. This strand of argument builds upon the concept of monopoly capital and overaccumulation as the fundamental contradiction of capitalism (Baran and Sweezy, 1966; Arrighi, 2004).

Lefebvre (1992) states that real-estate assets create and store surplus value for capital, as property values continue to rise exponentially. Harvey (1982) famously called the phenomenon a 'spatial fix'. It mainly describes how the process of financial engineering overcomes the nature of real-estate asset (local, fixed, spatially bound) and turns it into a global, liquid, and tradable asset in the financial market. Building on their analyses, Fernandez and Aalbers (2016) called financialisation of housing as a real estate asset-driven regime of accumulation.

The transformation of houses as a tradable good is manifested in an extreme way in Korea's housing system, where more than half of all households reside in standardised apartment units according to the latest census conducted in 2021 (Statistics Korea, 2022, p.24). This phenomenon has emerged in the context of rapid urbanisation and acute housing crisis in the 1960s and 1970s. Large-scale apartment complexes were deemed as the most cost-efficient way to provide

housing, and the state actively promoted these as the modern, Western way of living, while subsidising their construction. Combined with skyrocketing prices, apartments quickly became established as a status symbol in Korean society.

This has engendered an intense commodification of housing. Mass production of housing with little variety dominates the housing provision in Korea. This lays the foundation for pre-sale en masse as the 'consumers' already know what to expect without necessarily seeing the complete product. Houses become a tradeable good, no longer spatially bound, with standard features and abundant information on transaction history.

What is notable in Korea is that this chase after short-term capital gain has not been limited to finance capital, or even capital in general. Korean households across income strata have joined the rat race for short-term capital gain. This fits the lens of financialisation proposed by Lapavitsas (2013, p.20) as "a systemic transformation of advanced capitalist economies pivoting on changes in the underlying conduct of nonfinancial enterprises, banks, and households." The following sections examine the resultant change in household conduct in detail.

3. Pre-sale of apartments en masse

Though apartment complexes may be cost-efficient to build in comparison to the traditional Korean houses, their profitability was questionable in the beginning. Not only was the state subsidy often insufficient, but also there was lack of real demand due to households not having access to loans. The large scale of the projects was often deemed too risky for many construction companies and real-estate developers, making them reluctant to take on such projects. To solve these issues, the state allowed pre-sale in 1977 (Son et al., 2016).

Developers could now sell the to-be-built apartment units to households and receive payments amounting to 70-90 per cent of the final price during the construction period. For developers and construction companies, this guaranteed sales revenue and significantly lowered the borrowing costs. The state enjoyed the increase in housing supply without directly providing funds, as the buyers were funding the construction themselves (You, 2009).

Buyers, in exchange, were able to lock in the price at the point of sale, rather than the price when the construction was complete. Moreover, as the entire scheme was conceived as a social policy to provide housing for first-time buyers, the state has put upper limits to the pre-sale prices on many of the properties. This meant a huge discount, as well as an opportunity for massive capital gains, for the buyers (Son et al., 2016; Choi, 2021).

To be sure, the buyers take certain risks, such as the construction taking longer than promised, either the construction company or developer going bankrupt, or the finished product not meeting the expectations. There is also a risk of the price after completion falling below the pre-sale price. However, in the context of land and housing prices soaring year after year since the 1960s, these were risks that many were willing to take. This opened the floodgates for high-income or high-net-worth households to take advantage of the opportunity (Son et al., 2016; Choi, 2021; Jeon, 2019).

As domestic residential properties turned out to be hugely lucrative, it also attracted more developers and constructors into the housing market. Intended or not, the state has effectively assigned the role of housing provision almost entirely to the private sector (Kim T.G. 2017).

Though born out of lack of funding both from demand and supply side, pre-sale did not dissipate even after the financial liberalisation. Even with much higher GDP per capita and accessible loans to most, it continued to meet the needs and/or desires of all parties involved. In fact, so popular has been the pre-sale of apartments since inception that it generated some highly distinctive features in the Korean housing system. The following sections will delve into the way the state continues to underpin its operation and perpetuates financialisation, as well as facilitating its functioning as a capital investment channel for households.

3.1 The exercise of political power in the pre-sale market

The state has been directly involved in the operation of the pre-sale market in housing. As the demand for housing regularly far outstrips the supply, an incredibly complex set of rules of selection came into place over time. It is the state that sets the principles of these rules of selection. This has two major implications. Firstly, they contribute to form state's loanable money capital by concentrating household savings into a state-run fund called the National Housing and Urban Fund. Secondly, though the rules of selection reflect the nature of the pre-sale scheme as a social policy to provide housing, it brought about some seemingly unintended consequences of exacerbating household asset liquidity.

3.1.1 The state's collection of household disposable income

The Korean state has long relied on collection of household savings to fund many of its operations. Throughout the era of financial repression, it virtually monopolised household finance by providing far higher interest rates on deposit than the very few competitors that existed in the market (Son et al., 2016). This was instrumental in the formation of loanable money capital by the state. The introduction of pre-sale in 1977 provided an extra channel for the state to collect household savings.

To be eligible to bid for pre-sale, one needs a specific savings account called Cheong-yak. It can be compared to the Lifetime Individual Savings Account (ISA hereafter) in the UK in that it is a long-term savings product for households, encouraged by the state. Though the specific benefits provided differ, their purpose is similar, which is to be used for purchasing first home. The UK government matches 25 per cent of the saving for ISA up to 4,000 pounds a year. Cheong-yak savings account, however, provides an 'opportunity' to obtain housing at discount. The monetary incentive provided by the Korean government is far more indirect and is left to the housing market performance.

As of 2023, there were nearly 28 million Cheong-yak savings accounts (Korea Real Estate Board, 2023). Given that each person can only have one Cheong-yak

account, and the population between ages of 15-64 is 35.7 million, this means that around 80 per cent of the 'economically active population' defined by Statistics Korea (2024) own this account. In fact, it is common practice for the Korean workers to open a Cheong-yak savings account once they start their first full-time job, unless their parents had already opened one for them before they turned 18.

Cheong-yak savings account was only provided by the Korea Housing Bank (KHB hereafter) up to 2000 and have been provided by all major commercial banks since 2001. Regardless of which bank one opens this account with, however, the deposit ends up in the same place by law, namely the National Housing and Urban Fund (NHUF hereafter). In other words, banks operate as mere service providers, outsourced by the state (Son et al., 2016).

The NHUF is now managed by the Korea Housing and Urban Guarantee Corporation (HUG hereafter), which operates under the Ministry of Land, Infrastructure and Transport. The major purpose of the NHUF is to aide young and low-income households' access to housing. Table 1 shows the balance sheet of the NHUF as of end-2022 (Korea Housing and Urban Guarantee Corporation, 2023). Majority of its total assets, 220 trillion won, is supported by borrowed funds, reflected in the liabilities amounting to 189 trillion won.

Cheong-yak savings deposit, amounting to 95 trillion won, accounts for over half of the NHUF's total liabilities. The other half largely comes from the sales of National Housing Bonds. These are five-year fixed-rate bonds of which the interests are paid in lump-sum at maturity. Their purchase is mandated for all parties involved in housing purchase, development, and construction (Korea Legislation Research Institute, 2019).

On the assets-side, both short- and long-term loans are provided to households and construction companies. They include mortgages for first-time buyers and different types of Jeonse deposit loans, as well as subsidies for construction of public rental housing and social housing. The latter is often done via public-private partnership (PPP) model, largely outsourced to private construction companies.

The management of short-term trading securities are outsourced to three securities and asset management companies. Out of 35 trillion won invested in long-term equity securities, almost 27 trillion is capital contribution to Korea Land and Housing Corporation. Over 5 trillion won is equity securities of dozens of real-estate investment trusts (REITs), many of whom are outsourced by the NHUF to manage public rental housing or social housing.

[Table 1] The NHUF's balance sheet – end 2022 (trillion won)

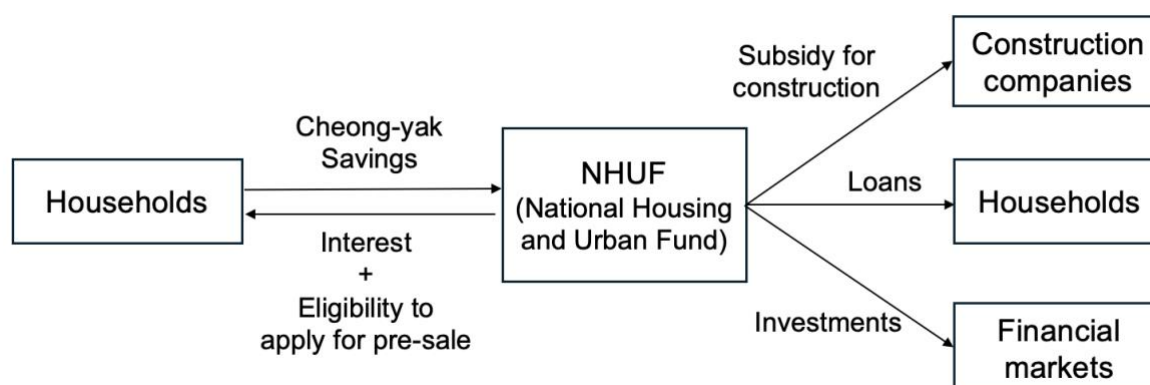
Assets		Liabilities	
Liquid assets	66	Current liabilities	122
Short-term trading securities	28	Cheong-yak savings deposit	95
Short-term loans	23	National Housing Bond	15
Investment assets	155	Long-term borrowing liabilities	67
Equity securities	35	National Housing Bond	67
Long-term loans	125	Total	189
		Net Assets	
Total	220	Total	31

Source: Korea Housing and Urban Guarantee Corporation (2023)

Note: Only notable items are listed. Figures are rounded off at the nearest trillions.

In other words, household disposable income, collected by the state forms state-managed loanable money capital, as shown in the liabilities side of the NHUF's balance sheet. The state lends the capital back to the households to aid low-income and young households' access to housing. It also lends it to construction companies to subsidise housing provision. Considerable amount gets funnelled directly to the financial market by the state, including the stock market and REITs. Simplified flow of funds is illustrated below in [Figure 2]. This is clearly financialisation of housing, directly led by the state.

[Figure 2] Simplified flow of funds for the NHUF



Source: drawn by author

3.1.2 Rules of selection for pre-sale

When there are more applicants for pre-sale than the number of apartment units for a particular complex, the selection of the buyers runs on a point system. The points are largely based on two criteria: one's contribution to the Cheong-yak savings account and their socio-economic situation. The former is determined by the amount and duration of their contribution. For the latter, those with more dependants and those that have not owned home for a longer period get higher points. When the number of highest-scoring applicants still exceed the number of units available, it generally becomes random selection akin to lottery.

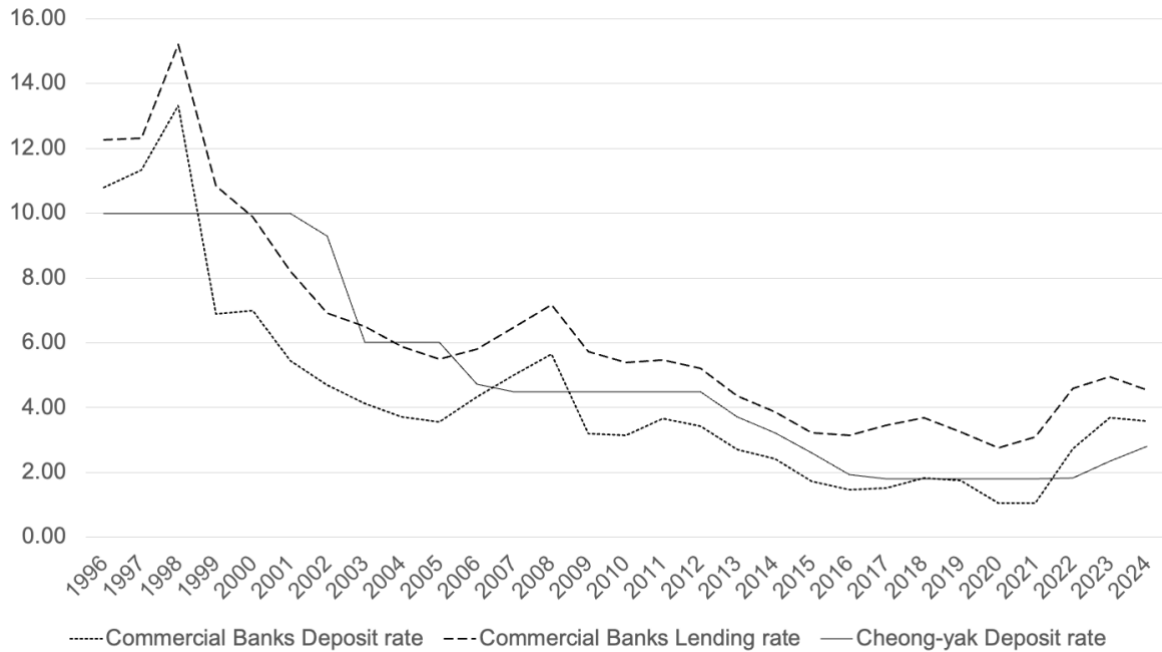
These rules of selection mean that simply having a Cheong-yak savings account is most often insufficient to be selected to buy an apartment one desires for pre-sale. Households are incentivised by design to deposit a sizeable amount of their disposable income for a long period in this account. One cannot withdraw their own money without completely closing the account, meaning the points collected thus far for the duration of contribution gets scrapped.

Households, therefore, when in need of urgent cash, often opt to borrow, particularly as banks offer loans against Cheong-yak savings contributions. The interest rate earned on Cheong-yak savings deposit is set by the Ministry of Land, Infrastructure and Transport. On the other hand, the interest rate on the secured loan against Cheong-yak contribution is left at the providing bank's discretion. This structurally allows banks to take advantage of the rules of selection which penalises discontinuity of the contribution.

[Figure 3] shows the average deposit rates and lending rates by major commercial banks, and Cheong-yak deposit rates from 1996 to 2024. Except for the times of major crises, namely the 1997-98 Asian financial crisis and 2007-9 global financial crisis, Cheong-yak savings account offered considerably greater interest on deposit compared to other savings accounts by commercial banks, up to 2012. This fits the original purpose of the Cheong-yak account as a government-encouraged tool for saving for first-time buyers.

However, the difference between the two begins to narrow from 2012, until they eventually reverse from 2022. While the interest rates rose in the aftermath of the global pandemic, the interest rate offered on Cheong-yak accounts remained the same for 7 years from 2016 to 2022. In November 2022, the lending rates offered by major banks against Cheong-yak deposit as collateral ranged from 3.04 and 6.65 per cent (Bae, 2022), whilst the deposit rate was fixed at 1.8 per cent by the state decision.

[Figure 3] Commercial banks' deposit rates, commercial banks' lending rates, and Cheong-yak deposit rates, 1996-2024 (%)



Source: Commercial banks' deposit rates and lending rates were calculated by author as average based on Bank of Korea (2024); Cheong-yak deposit rates were calculated by author as weighted average (the sum of number of days applicable/number of days of the year*corresponding interest rate) based on Woori Bank (2024).

Note 1. 2024 data are based on 01 January – 31 April 2024.

Note 2. Cheong-yak deposit rates are the highest rate at the time, applicable for those that held the account for 2 years or longer.

Note 3. The average deposit rates offered by major commercial banks showed a negligible difference from the base rate set by the Bank of Korea, with most years seeing a disparity of less than 0.05 per cent.

3.2 Use of pre-sale for short-term capital gains

It is imperative, consequently, to consider more closely the flow of potential profit in the pre-sale market, as the fundamental incentive of the Cheong-yak account is the opportunity to obtain housing at discount. This section analyses these flows by deploying a very simple formulation. Suppose an individual A wins a pre-sale deal of a property. The stream of payment A is expected to make can be expressed as Equation (1).

$$P_{t=0}^p = \sum_{t=0}^N I_t \tag{1}$$

$P_{t=0}^p$ refers to the pre-sale price, with $t = 0$ the point of signing the pre-sale contract. N is the duration of construction, thus making $t = N$ the point when construction is complete, and the property gets registered to the title deed. Though the down payment, instalments, and the final payment of the outstanding balance at $t = N$

tend to be slightly different, and depending on the terms of the pre-sale contract, for this analysis we express I_0 as the down payment and I_N as the final payment of the outstanding balance, for the sake of simplicity.

As pre-sale of apartments was born as housing provision policy for first-time buyers, often the pre-sale price ($P_{t=0}^p$) is capped at a considerably lower level than the estimated market value, $E[P_{t=0}^m]$ by state regulation (You, 2009, p.18), as expressed in Equation (2). This difference is the fundamental driver of the pre-sale market. The bigger the difference between the two, the more popular and competitive the pre-sale becomes.

$$E[P_{t=0}^m] - P_{t=0}^p > 0 \quad (2)$$

As pre-sale became extremely popular and competitive, re-sale markets arose. Many households bid for properties without full commitment to reside there. The pre-sale deal in popular areas where the value of (2) is high and/or the property values are rising rapidly is almost guaranteed to be sold in the re-sale market, often at premium.

If A decides to sell the pre-sale contract to an individual B at a re-sale price $P_{t=n}^r$, with $t = n$ being the point of re-sale, the re-sale price can be expressed as Equation (3) below. B reimburses the down payment and instalments that A has paid so far ($\sum_{t=0}^n I_t$) and takes over the obligation to pay the remaining instalments ($\sum_{t=n+1}^N I_t$).

$$P_{t=n}^r = \sum_{t=0}^n I_t + P^* \quad (3)$$

P^* is the premium that B pays to A . One of the most important determinants of the premium is the difference between the pre-sale price and the estimated market value of the property at the point of re-sale. There are numerous other factors influencing the level of P^* , but for the sake of this analysis, we will assume that this is the only factor, expressed as Equation (4). It is not rare that the premium is in the range of hundreds of thousands in dollar terms.

$$P^* = E[P_{t=n}^m] - P_{t=0}^p \quad (4)$$

A 's profit, expressed as π_A is simply P^* . B 's expected profit, $E[\pi_B]$ is expressed as Equation (5). In other words, B bets on the possibility that the price will rise from the point of re-sale to the completion of construction ($P_{t=N}^m > P_{t=n}^m$).

$$E[\pi_B] = E[P_{t=N}^m] - (P_{t=0}^p + P^*) \quad (5)$$

Sometimes, however, P^* can be negative, if the market prices are falling and the expected market value of the property at $t = N$ is lower than the price locked in by pre-sale ($E[P_{t=N}^m] - P_{t=0}^p < 0$). In this case, P^* would be the price that A is willing to pay B to rid themselves of the obligation of the future payment $\sum_{t=n+1}^N I_t$.

The above is assuming that both parties fund the transaction out of their pockets. In practice, however, both are almost always funded by various loans. Thus, the re-sale includes the transfer of the liability of instalment loan from the seller to the buyer, and so forth. Ultimately, their respective profit will be π_A and π_B minus the interest.

The existence of pre-sale instalment loan significantly lowers the barrier for speculative investment in pre-sale. Pre-sale buyers must be able to fund the down payment and instalments until the re-sale takes place ($\sum_{t=0}^n I_t$). If one wins a pre-sale deal but do not take up on it, they get heavily penalised for future biddings for up to 10 years.

This means that without the instalment loan, only those that can afford the initial cost will bid for pre-sale, even if they intend to sell it off in the re-sale market. Yet, the existence of the instalment loan enables virtually anybody to practice this speculative investment, only the interest as the cost. Moreover, the eligibility criteria for instalment loan are far more lenient than mortgages.

This indicates that banks also assess that the property value would have risen significantly by the end of construction. Therefore, in the worst-case scenario, they can simply foreclose the property and that will likely cover the principal, interests, and more. Instalment loans are often taken out by a group of individuals that won the pre-sale deal of the same apartment complex. Again, it is taken out with little difficulty in comparison to individual mortgages.

Not only do banks lend more easily to the pre-sale buyers, but the loanable amount also tends to be far more generously determined than mortgages. The loanable amount for most mortgages used to be determined based on loan-to-value (LTV) ratio traditionally (You, 2009; Lee, 2014). This became largely replaced by debt-to-income (DTI) ratio, and then again by debt service ratio (DSR) as the stricter regulations got put in place (Choi, 2021). However, the instalment loans continue to be mostly based on LTV, which is a more lenient method of assessment of the loanable amount (Citizens' Coalition for Economic Justice, 2024).

Furthermore, for instalment loans, banks often set the 'value' of the property, which becomes the benchmark, as the estimated market value of the property ($P_{t=0}^m$), as opposed to the pre-sale price ($P_{t=0}^p$). It is not so rare where the loanable amount for instalment loan is greater than the pre-sale price itself ($P_{t=0}^p < \hat{\alpha} * P_{t=0}^m$), meaning that one may be able to buy a house with zero capital of their own.

Granted that most people pay the down payment, usually 10 per cent of the pre-sale price, out of pocket. However, even this can be funded by a credit loan. The payment of outstanding balance upon completion of construction, to sign the deed, can also be funded by a loan. In other words, every step of the way to purchase a property via pre-sale can be funded by loans, not private, but formal bank loans.

If A believes that the property value will continue to rise, long after $t = N$, but does not wish to live in the property themselves, they may let it to a tenant, while renting a property for a residential purpose. Suppose A lets their property to C , and rents from D . A becomes C 's landlord and D 's tenant simultaneously. Most often, these letting are done via Jeonse contract, the deposit-only rental agreement which will be explained in detail in the following section.

At times the government brings in various measures to prevent pre-sale being used for speculative investment purpose. Two major methods are outright ban or imposing hefty tax to make re-sale or letting of the pre-sale property economically prohibiting. However, these regulations are often brought in, lifted, and then brought back in with no consistency or legal justification other than a simple counter-cyclical logic.

Between 2011 and 2023, over 5 million apartments have been built (Ministry of Land, Infrastructure and Transport, 2024). In the same period, 2.9 million pre-sale transactions of apartments took place (KB Land and Korea Marketplace Systems, 2024). That is around 20 per cent of the number of entire 22 million residential properties in Korea (Ministry of Land, Infrastructure and Transport, 2022).

4. Jeonse: deposit-only rental agreements

Another significant element in the Korean housing market is the prevalence of Jeonse, a deposit-only rental agreement. A tenant puts down a lump-sum deposit that amounts to around 70 per cent of the sale price for the duration of contract, in lieu of monthly rent. The deposit is returned to the tenant at the end of the contract. The standard duration of contract is 2 years, with the possibility to be extended by extra 2 years should the tenant wish (You, 2009).

Jeonse became popular in the 1970s in earnest. Under the so-called developmental state, bank loans were mostly directed to large exporters and were virtually inaccessible to most households and 'small and medium enterprises.' While they were struggling with the lack of funds, many people were migrating to big cities with lump-sum amount of cash, from selling their home and/or land in their rural hometown. They needed cheap housing.

The deposit-only scheme served the needs/desires from both parties and quickly became established as a common form of housing in Korea. By the end of 1990s, around 30 per cent of the households were living under the Jeonse contracts, and this figure has largely maintained itself until today (Lee, 2014, p.46).

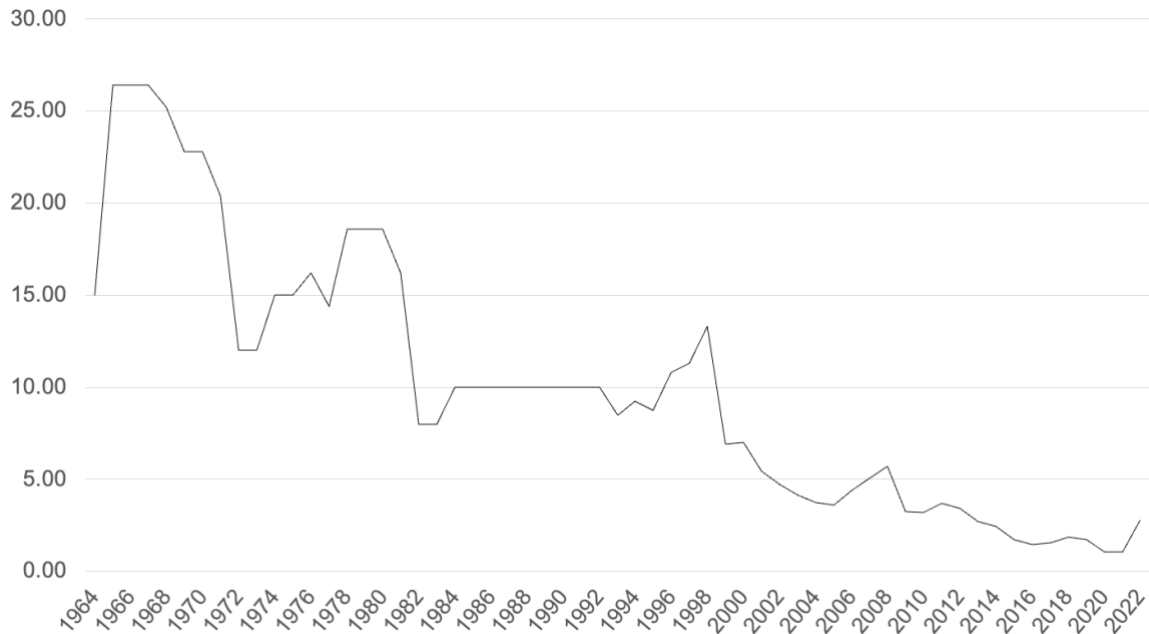
4.1 The interests of landlords and tenants

Landlords effectively forego fixed income in exchange for the cost-free loan. Underlying this decision is the belief that the profit from investing the money can be greater than the sum of rent they gave up. Their decision on investment channels are influenced by various macroeconomic factors such as the rate of interest, inflation, and economic growth, and the government regulations at the time related to rental markets, tax, and so on.

During the rapid industrialisation period, the state offered a high interest rate on bank deposit to attract household savings. As seen in Figure 2 below, until the 1980s, the deposit rate has been well over 10 per cent. Naturally, a lot of the landlords simply put the Jeonse deposit into their own bank account, earning a sizeable amount of

interest each month. From the 1980s, however, increasingly more Jeonse deposit was directed to the stock market or property market by landlords, in search for higher return on investment (Lee, 2014; Jeon, 2019).

[Figure 4] Bank deposit rate (1964-2022) (%)



Source: Bank of Korea (2023) for 1996-2022 data; Bank of Korea (2008) for 1964-1995 data

The prevalence of Jeonse allowed landlords to continuously roll over Jeonse contracts, effectively making Jeonse deposit a free capital. Once the incumbent contract is over, the landlord could simply receive Jeonse deposit from a new tenant and pass it onto the previous tenant. The landlord obtains all the returns from the investment, using the cost-free capital.

Many studies have been conducted by Korean scholars to analyse landlords' decision-making model. They mostly approach is as a constrained optimisation problem. The underlying assumption is that it is an investment decision utilising a residential property. The choice they generally focus on is one between receiving monthly rent and obtaining cost-free loan via Jeonse, to maximise utility (For example, see Ambrose and Kim S.W., 2003; Kim S.J. and Shin, 2013; Kim J.W., 2013; Kim, T.K, 2013; Cho S.W., 2010; Min, 2014).

Many of them appear to view the private loan as a 'indigenous response' (Ambrose and Kim S.W., 2003) stemming from excessive government intervention in the financial market. Kim S.J. and Shin (2013) highlight the positive role of Jeonse for its contribution for development in the absence of households' access to formal finance².

² Later works of Kim S.J., however, tend to be far more critical of Jeonse. The study mentioned in the following paragraph (Korea Economic Research Institute, 2024) was developed based on Kim S.J. and Goh (2018).

Despite being landlords' liabilities, Jeonse deposit is not included in the official statistics of the Korean household debt, as it is a private loan between households, not mediated by financial institutions. A latest study by Korea Economic Research Institute (2024) estimates Jeonse deposit to amount over 1,000 trillion won. According to this method, the total household debt, inclusive of Jeonse deposit is estimated to be just shy of 3,000 trillion won, which is 156.8 per cent of the country's GDP and 303.7 per cent of household net disposable income, making Koreans *the* most indebted people in the world by far.

Tenants tend to prefer Jeonse over monthly rent because the deposit functions as a long-term saving, albeit without interest, which they can eventually use to purchase their own house in the future. If the tenant funds the Jeonse deposit on their own, the opportunity cost of return on capital, be it an interest on bank deposit, or a profit from more high-risk investments, effectively becomes the rent. However, as of 2022, 1.36 million individuals have an outstanding Jeonse deposit loan from a bank (Bu, 2022).

4.2 Jeonse deposit loans

Jeonse deposit loan was first introduced by the KHB in 1994 as the state recognised Jeonse as a cheap way to provide housing for young and low-income households (Son et al., 2016). After the 1997-98 Asian financial crisis, commercial banks also joined in providing Jeonse deposit loans. As of 2024, 97 per cent of the Jeonse deposit loans are provided by banks.

Such loans really became popular after the 2007-9 global financial crisis. Until the December of 2008, the outstanding balance of Jeonse deposit loans was only 0.3 trillion won. By 2022, this figure has increased to 163.4 trillion won, accounting for 18.9 per cent of the entire Korean household debt (Citizens' Coalition for Economic Justice, 2024). This is included in the official statistics on household debt as it is tenants' loan from the financial institutions, mostly banks.

Several elements contributed to the popularity of Jeonse, funded by debt. Firstly, a considerable portion of the potential demand for purchase was redirected to the Jeonse market following the 2007-9 global financial crisis. The property market experienced a temporary shock after the crisis. On the other hand, many large-scale re-development projects, led by the state, were taking place in the Seoul Metropolitan Area (SMA hereafter) in the early 2010s, in part to stimulate the property market that went downturn following the crisis.

This meant new opportunities for pre-sale. As the vast majority of pre-sale is only for first-time buyers, many potential buyers decided to wait it out while living under Jeonse. Presence of Jeonse lowers the cost of renting substantially. If the cost of renting is akin to that of major cities in the West these days, it would have been unlikely that many people opted to wait for their luck to get the once-in-a-lifetime deal.

Secondly, the interest rate has a far more direct impact on Jeonse deposit loan than on mortgages. Conventionally, mortgages are long-term, amortised loans with fixed rate of interest, whereas 94 per cent of Jeonse deposit loans are short-term, variable interest with principal to be paid at once at maturity (Bu, 2022). A decade of low-interest regime following the 2007-9 global financial crisis significantly lowered the cost of Jeonse loan.

Thirdly, the state not only introduced Jeonse deposit loan, but also began to guarantee the landlords' liabilities. The HUG has consistently eased the criteria for Jeonse deposit loan guarantee. Banks love this trend as this virtually renders the risk of Jeonse deposit loan close to zero, on top of a much shorter term than mortgages, and interest rate risk covered by variable interests (Citizens' Coalition for Economic Justice, 2024).

4.3 The 'gap investments'

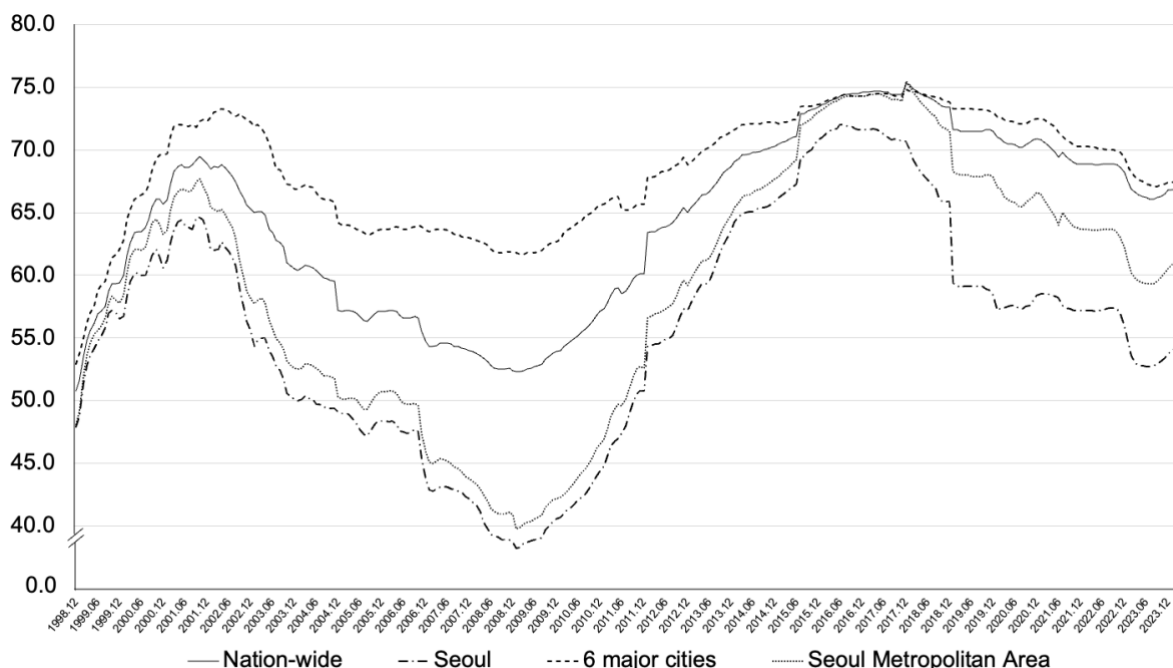
While the outstanding balance of Jeonse deposit loans soared in the 2010s for the reasons stated above and Jeonse deposit level continued to increase, the housing sales market fluctuated. Across the party line, the state has been imposing and lifting restrictions on housing finance in a counter-cyclical manner. For transactions of existing houses, the state intervention largely tackles mortgages. However, the Jeonse loans continued to expand, under the auspices of the state seeking to protect young and low-income households' access to housing.

Much research has been conducted, mostly within Korea, on the determinants of the level of Jeonse deposit. The ratio of Jeonse deposit to sales price is a parameter that is most frequently used in this context, as the two prices often affect one another. [Figure 5] shows the average ratio of Jeonse deposit to sale price of apartment units in 4 geographical categories from December 1998 to February 2024. The ratio, which used to be around 0.50 until the 1997-98 Asian financial crisis increased sharply in the 2010s, to reach 0.70-0.75.

Many studies suggest that in times/areas where sales prices are expected to stagnate or fall, part of demand for purchase is directed to the Jeonse market. For example, Ko and Kim D.H. (2013) argued that the reason why the increase was most pronounced in Seoul, in comparison to other urban areas, lies in the stagnation of the sales market in Seoul.

Sung and Park P. (2014) analysed the difference of sales price and Jeonse deposit of apartments in Seoul specifically. They concluded that the latter is more heavily affected by the 'utility of the residence', stemming from the physical properties of the house, locations, and so on, while the former is determined largely by the potential for capital gain, as the 'asset value is prioritised over utility by potential owners of apartments' (p.120, translated by the author).

[Figure 5] The ratio of Jeonse deposit to sale price of apartments (December 1998 to February 2024) (%).



Source: Korea Real Estate Board (2012; 2024)

This has lowered the barrier for a housing purchase. What is called the ‘gap investment’ by Koreans became popular in the second half of 2010s. One can purchase a property in which a tenant is living under Jeonse contract. They pay the difference (‘gap’) between the market value of the property and the Jeonse deposit to the seller, while taking over the liability to return the Jeonse deposit to the tenant when the Jeonse contract ends.

Alternatively, if there is no existing tenant or the property is newly built and bought via pre-sale, one may find a Jeonse tenant on their own while the purchase process is going on. The implication is the same: instead of a mortgage, the tenant’s Jeonse deposit funds their purchase.

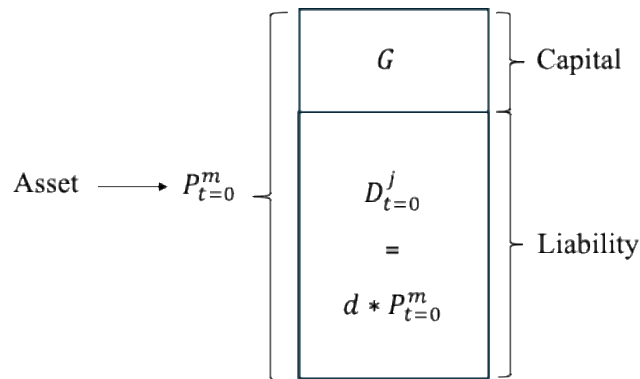
By turning to the private loan, one avoids the hurdles of formal finance, including various restrictions on the amount and eligibility criteria. Moreover, Jeonse deposit is an interest-free loan, unlike mortgages. The risk is that it is a relatively short-term loan in comparison to mortgages. This means that one either realises profit within the given time period, or must continuously roll over the loan until they can sell the property and materialise the profit.

This can be written as the Equation (6) below, where $P_{t=0}^m$ is the market value of the property at the point of purchase, $D_{t=0}^j$ is the Jeonse deposit at the point of purchase, and G refers to the ‘gap’, the difference between sale price and Jeonse deposit. Essentially, the left-hand side of the equation shows the value of asset and the right-hand side the liabilities plus capital.

$$P_{t=0}^m = D_{t=0}^j + G = \hat{d} * P_{t=0}^m + G \quad (6)$$

\hat{d} is the ratio of Jeonse deposit to sale price. Thus, there is a negative correlation between \hat{d} and G where the higher the former, the smaller the latter. As of February 2024, the average value of \hat{d} for apartments nation-wide is 0.67. In other words, an asset can be obtained by having only a third of its value as capital, and two thirds becomes the asset-owner's liability. [Figure 6] below illustrates Equation (6) visually.

[Figure 6] Illustration of 'gap investment'

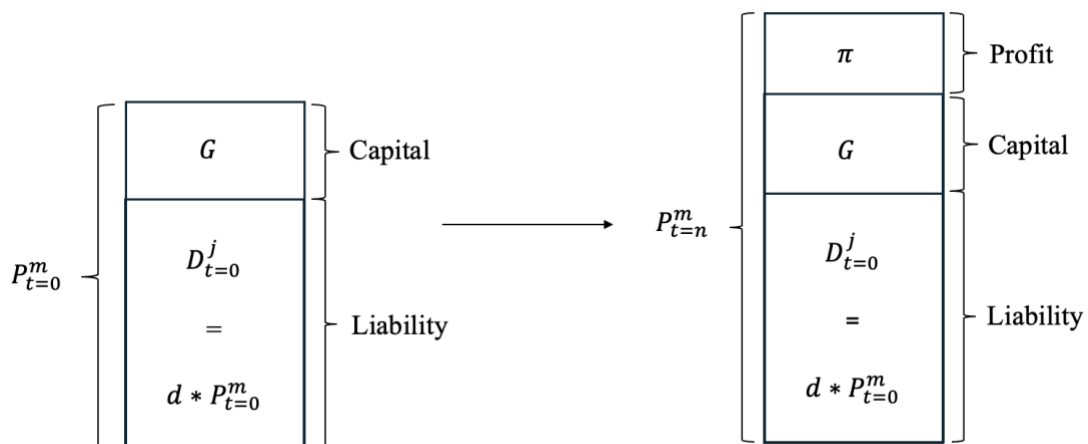


Source: drawn by author

It is a form of extremely high-leverage investment on housing, utilising a cost-free private loan, which is Jeonse deposit. So long as the property value does not fall, it is generally possible to continuously roll over the Jeonse contract, either with the incumbent tenant, or a new tenant. The profit (π) from this investment is the difference in the property value between the point of purchase ($t = 0$) and sale ($t = n$) as expressed in Equation (7). [Figure 7] below illustrates it visually, assuming the value of (7) is positive.

$$\pi = P_{t=n}^m - P_{t=0}^m \quad (7)$$

[Figure 7] Illustration of profit from 'gap investment' in case of asset value increase



Source: drawn by author

Assuming that one could roll over the Jeonse contract until $t = n$, their return on investment is $\frac{\pi}{G} * 100$ per cent. The liabilities can be either paid off or transferred to the new buyer of the property. One may use the profit from this to purchase another property using the same method and continue doing so. There has been no legal restriction at all on how many properties an individual can obtain using this method, leading to a handful number of individuals owning thousands of properties each.

From September 2017 to June 2022, over 733,000 transactions were made via this method. In the similar period, 38 per cent of housing purchase in Seoul (27.3 per cent nation-wide) was funded by the existing tenant's Jeonse deposit (Park J.B. et al., 2022).

4.4 The risks of Jeonse

However, this mechanism quickly becomes untenable when the property prices fall. Using the standard duration of Jeonse contract of 2 years and n referring to the number of months, If $P_{t=24}^m < P_{t=0}^m$ and \hat{d} remains the same, $D_{t=24}^j < D_{t=0}^j$. If this materialises, it becomes incredibly difficult to roll over the Jeonse deposit at the original level ($D_{t=0}^j$), if at all. Twice in history it became a nation-wide social issue, when many landlords were unable to return the Jeonse deposit due to falling housing prices and Jeonse deposit; the first time in the aftermath of the 1997-8 Asian financial crisis, and recently after the Covid-19 pandemic and the high interest rate regime that followed suit (Son et al., 2016; Citizens' Coalition for Economic Justice, 2024).

In extreme cases, when the landlord was unable to find a new tenant, and the $D_{t=24}^j$ fell way below $D_{t=0}^j$, the landlord sometimes convinces the existing tenant to extend the contract at $D_{t=2}^j$. Instead of returning $D_{t=2}^j - D_{t=0}^j$ at the point of renewing the contract at once, the landlord, struggling with lack of liquidity, offers to pay $\frac{D_{t=24}^j - D_{t=0}^j}{24}$ each month to the tenant.

This phenomenon is called 'reverse Jeonse'. At a glance, it appears an odd agreement where landlord pays a fixed amount each month to the tenant. However, the tenant runs the risk of not being able to get the deposit back, even after another 24 months. This is because there is no legal obligation to prove the landlord's financial status and liabilities when signing the Jeonse contract, despite it being extremely high-risk private loan.

In most cases when the landlord offers reverse Jeonse, it indicates that the landlord is fully stretched their leverage, on top of the Jeonse deposit, and unable to pay back the deposit even if they sell all the assets they own. Though Kim S.J. and Shin (2013, p.6) described it as 'bilateral collateralisation,' in case of landlord's default or bankruptcy, the property does not become the tenant's. Rather, it must be foreclosed, and the amount recovered from the auction goes to the creditors based on priority.

The Jeonse tenant's deposit takes priority only up to a certain amount, set by law depending on the area, and is generally significantly lower than the full amount of Jeonse deposit that the tenant lent the landlord.

As a consequence, the tenant is at an extremely vulnerable position to lose majority of the Jeonse deposit. Even when they can claim a portion or all of the Jeonse deposit back, it often involves long and complicated legal procedure, which are usually very costly.

In the face of the Jeonse deposit crisis, the state began to offer Jeonse deposit return loan for the landlords that struggle from liquidity crunch. In other words, as opposed to tackling the fundamental issue where an individual can borrow privately an excessive amount, regardless of their financial stability, the state decided to lend more to those that were indebted beyond means of recovery. This is highly reminiscent of the Eurozone crisis where peripheral European countries were bailed out with even more debt, only taking place on an individual level.

5. Conclusion

The two devices discussed in this paper were born in the context of financial repression. Pre-sale appeared as a means to provide housing when neither the state nor the private sector had enough funds for construction. Jeonse arose to finance landlords' capital investment and provide cheap access to housing for tenants. With the rise of various loans, however, these two schemes quickly became a channel to purchase a house with little capital of one's own. Easy access to loans, low interest rate, and soaring housing prices encourage people to borrow, invest in housing, which feeds back into the cycle.

The state leads this vicious cycle by directly providing loans and guaranteeing the landlord's liabilities. Moreover, the inconsistent policies and regulations on construction, housing finance, and taxation exacerbate the angst of the population that are yet to join the race for capital gain. In the midst of stagnant real wage, increasingly prevailing precarious employment, and continued absence of universal welfare provision, the Korean households have been forced to take the matter of securing financial stability into their own hands.

Housing became the primary channel via which the Korean households seek to do so. In the wave of extreme financialisation of housing, houses lose the meaning as a home and become a means of investment. The households, vast majority of whom are not capitalists, are made to think like a capitalist seeking to accumulate profit, despite not being one.

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