Decline in property values increased the credit risk of South Korea's real estate and banking industries

by Wang Chenye

- NUS-CRI Agg PD for South Korean banks and the real estate industry has elevated over the past year. Further breakdown of the real estate industry shows a divergence in the Agg PD of residential and commercial real estate as the impact of a decline in property values is potentially catalyzed by the unusual Jeonse system
- NUS-CRI Forward PD suggests that risk in both the banking and real estate industries is to remain elevated in the short term, as banks are threatened with deteriorating asset quality due to potentially souring real estate exposure

The recent rate hike cycle only accelerated the deterioration of credit quality in South Korea's real estate and banking industries, which has been affected by impaired credit conditions since 2022. As seen in Figure 1a, the NUS-CRI aggregate (median) 1-year Probability of Default (Agg PD) for South Korean real estate has been increasing steadily, with peaks in late 2022 when a government-backed developer missed its debt payment and housing prices dropped. The default triggered a credit crunch in the corporate bond market, hurting the debt servicing ability of South Korean companies, and adding further pressure to the asset quality of the South Korean banks. Now, South Korea's unusual Jeonse rental system could become a new catalyst that worsens the short-term credit outlook of the country's real estate and banking industry as property values continue to fall. Over the next twelve months, the NUS-CRI aggregate (median) Forward 1-year PD (Forward PD³) signals further deterioration in the country's real estate industry as property values continue to slump amidst a wider economic slowdown, impacting the housing and commercial real estate market. The Forward PD for South Korean banks also suggests that though their credit risk remains elevated, prudential policies may mitigate any further short-term deterioration in their credit profile.

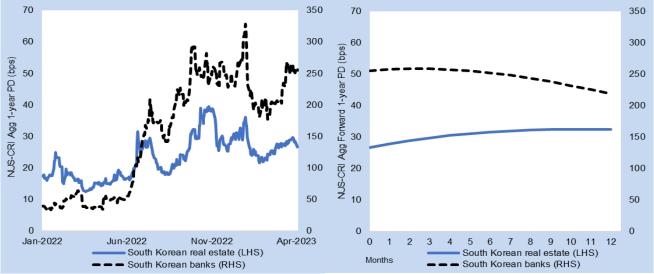


Figure 1a (LHS): NUS-CRI Agg (median) 1-year PD for South Korean real estate companies and South Korean banks⁴. Figure 1b (RHS): NUS-CRI Agg (median) Forward 1-year PD for South Korean real estate companies and South Korean banks. Source: NUS-CRI

¹ In September 2022, the developer of theme park Legoland Korea missed USD 150mn bond repayment, initiating the turmoil.

² Jeonse is a unique housing rental system in South Korea where tenants pay a lump sum deposit instead of monthly rent. This deposit usually ranges from 60%-80% of the property's value. The landlord holds onto the deposit while the tenant lives in the property rent-free for a predetermined period of time, typically 2-3 years. At the end of the lease, the landlord returns the deposit to the tenant in full.

³ The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similarly to a forward interest rate. For example, the 6-month Forward 1-year PD is the probability that the firm defaults during the period from 6 months onwards to 18 months – this is conditional on the firm's survival in the next 6 months.

⁴ Although the savings banks are classified as <u>non-banks</u> in South Korea, the bank sample in this report does include the savings banks, in line with NUS-CRI 2020 industry classification.

South Korea's central bank, the Bank of Korea (BoK), was one of the first central banks to tighten monetary policy, raising its base interest rates in Aug-2021.⁵ Resultantly, as both domestic and overseas funding costs rose, the Agg PD of the real estate industry jumped in the middle of last year, in tandem with the <u>fall</u> in South Korean apartment prices. With the bank lending rate nearly <u>doubled</u> since the beginning of the rate hike cycle, households' cost of servicing their debt increased rapidly, leading to a widespread sale of properties. Property developers are also struggling to with waning demand, with the total number of unsold homes throughout South Korea surpassing <u>75,000</u> in Jan-2023, highest level since 2012. The apartment prices fell at a <u>record</u> pace in Oct-2022, in line with the rising credit risk for the whole real estate industry, as shown in Figure 1a.

In particular, the South Korean residential property market has been more susceptible to the ongoing slowdown as indicated by the Agg PD of the residential real estate and commercial real estate industries diverging in the second half of last year (see Figure 2a), possibly due to the unusual Jeonse rental system. This system provides 'initial capital' (deposit) for landlords and allows tenants to avoid monthly rent payments. The landlords often use the deposit, which is usually between 60%-80% of the property value, to finance other investments, i.e., more properties. However, when the housing market experiences a downturn, the landlords may not have sufficient funds to return the deposit to tenants because the next Jeonse deposit, being a certain percentage of the declining property value, is less. Landlords may be forced to liquidate their holdings through a fire sale of their properties, which could result in further declines in property values.

Furthermore, the deposit paid by the tenant is often funded by loans from banks. As a result, widespread defaults by landlords can trigger a ripple effect of defaults by the tenants on loans provided by the banks, posing a systemic risk that can drive the credit risk of the South Korean banking industry higher. Additionally, most of the housing loans are based on <u>floating rates</u> in South Korea. In the current climate of high-interest rates, tenants may prefer to pay monthly rent over Jeonse, because the Jeonse loans become more expensive due to its high sensitivity to interest rate changes compared to monthly rents⁶, as shown in Figure 2b. This may cause landlords to <u>reduce</u> the required Jeonse deposit to attract tenants, leading to further difficulty in repaying previous tenants and exacerbating the market downturn.

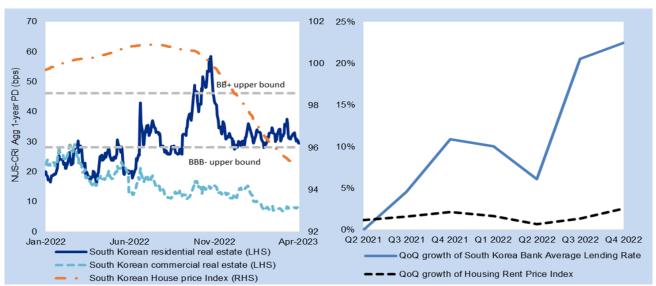


Figure 2a (LHS): NUS-CRI Agg (median) 1-year PD for South Korean residential real estate and South Korean commercial real estate with reference to PDiR2.0⁷ bounds⁸, as well as South Korea's House Price Index. Figure 2b (RHS): The QoQ growth of South Korea Bank Average lending rate and the QoQ growth of the Housing Rent Price Index in South Korea. *Source: NUS-CRI, Trading Economics, OECD*

The ripple effect might have already been felt by South Korean banks. The overdue property-related debts held by South Korean savings banks have doubled to USD 697.2mm in 2022 from 2021, with high delinquency rates.

⁵ The rising interest rate slowed the growth in house prices since the beginning of last year, warning of the reversal of property values that had risen during the BoK's pandemic QE

⁶ In times of low-interest rates, such as during the pandemic, many tenants may view Jeonse as a form of savings, where they earn rental income while paying low bank loan interest rates. However, in a period of rising interest rates and expected continued increases, the cost of floating-rate Jeonse loans increases for tenants.

⁷ The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation by mapping the NUS-CRI 1-year PDs to the S&P letter grades. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of relying solely on the reported default rates.

⁸ The sample of the subgroups only includes the companies that are clearly classified into specific industries, i.e., residential or commercial real estate. Therefore, the combination of the two subgroups is only part of the full sample of the South Korean real estate industry in Figure 1.

The banks experienced a 19% YoY reduction in their combined net profit last year despite the rising interest margin and interest income, which is the first decline in six years. To add to Korean banks' woes, the ongoing banking turmoil may also pressure their liquidity positions, impeding their ability to absorb shocks in the face of a property crisis. A potential silver lining for the banking industry is that the banks remain relatively well-capitalized, with increased provisioning over the last year providing some reprieve in the face of assets quality downturn. However, should the macroeconomic environment in South Korea worsen with rising unemployment, a hindrance in Korean households' debt-servicing capability could still pose a significant risk to the country's banking system. As such, even though the Forward PD term structure in Figure 1b suggests a marginally improving credit outlook for Korean banks, the aggregate Forward PD remains well above the BB- upper bound when referenced to PDiR2.0.

Furthermore, with an outstanding value of USD 828bn, over 40% of the South Korean GDP, the Jeonse loans in South Korea might have far-reaching consequences for the whole economy and the country's financial stability. The Jeonse market between tenants and landlords has formed a pseudo-shadow banking system where the landlords reinvest the Jeonse deposit to acquire additional properties, thereby increasing the leverage in the real estate market. As such, the "money multiplier" effect has been magnified, facilitating the creation of a real-estate market bubble. As the property values start to fall, the bullish investment in the market could crash rapidly and increase "run risk" to entities or even individual landlords with high leverages. To avoid a hard landing on the real estate market and further spill-over effects, the South Korean government has decided to take steps and announced to reduce the tax burden on the homeowners. Meanwhile, the BoK has slowed the pace of rate hikes, keeping the policy rate steady at 3.5% in its most recent meeting. These measures may help contain the fallout of potential widespread defaults by improving the industry's liquidity. However, the Forward PD in Figure 1b suggests that short-term credit outlook for the real estate industry is set to worsen.

⁹ The declining net profit is also affected by the banks setting aside <u>more reserves</u> in anticipation of higher bad debts in case of widespread asset quality deterioration.

Credit News

US regulator's USD 91bn bond book casts shadow over mortgage market

Apr 5. On the back of FDIC's rescue of the failed lender, SVB, investors are wary of increasing their position in the USD 11tn US mortgage-backed securities market (MBS). Post failure, the FDIC's holdings of SVB's MBS portfolio amounted to USD 69bn, while their holding of Signature Bank's MBS portfolio amounted to USD 22bn, totaling USD 91bn. Though the FDIC has already announced plans to sell the failed lenders' loan books, their plan for the sale of MBS securities is uncertain. Analysts estimate that the MBS securities likely have a 2 to 2.5 per cent coupon rate, for which the spread over treasury has been increasing, reducing the value of the bonds in the event of a sale. The sale also holds clear ramifications for the Federal Reserve as they will look at the market's reaction to FDIC's asset sale as a gauge for market appetite whenever they decide to liquidate their holdings. (FT)

Chinese banks ditch bad loans amid property woes

Apr 10. During the recent earnings season, Hong Kong listed Chinese banks demonstrated a stable asset quality as their non-performing loans remained steady in the face of difficult market conditions. Banks undertook numerous steps to ensure that the non-performing loans stay under control. The banks sold CNY 2.7tn worth of NPLs in the previous year, with many of the bad debts transferred to balance sheets of bad debt management companies. Consequently, credit rating agencies have warned of potential distress in the companies. Banks have also tried to reduce bad loans on their balance sheets via securitization. Additionally, the expectation of government support for banks has helped support their credit profile. (Nikkei)

A USD 1.5tn wall of debt is looming for us commercial properties

Apr 9. Approximately USD 1.5tn of commercial real estate debt in the US is coming due over the next two years, raising concerns regarding refinancing the debt once they come due. In an adverse scenario, market participants expect property values to fall as much as 40%, increasing the risk of default. Access to the necessary funds for refinancing is currently hindered by the collapse of SVB, which has rocked lending by smaller regional banks in the US that act as one of the primary sources of funds for property development. Rising interest rates by the Fed, in conjunction with higher default rates, are affecting CMBS deals. Sales of the securities without government backing dropped by close to 80 per cent YoY in Q1 2023. (Bloomberg)

Risky AT1 bonds rebound from plunge after Credit Suisse wipeout

Apr 5. The global market for additional tier 1 debt, also known as contingent convertible or AT1s, has rebounded from the sharp sell-off that followed Swiss regulators writing down USD 17 bn of Credit Suisse bonds to zero. The Bloomberg index of contingent convertible bonds globally has risen 10% from its low in Mar-2023 to a similar level to that seen before UBS's acquisition of Credit Suisse, and an iBoxx index of AT1 prices has also recovered to pre-takeover levels. Despite the recent recovery, AT1 prices remain well below levels seen at the start of the year amid wider investor concerns over the health of the banking sector on both sides of the Atlantic. (FT)

Office vacancies send real-estate investors to the exits

Apr 6. Prices of CMBS have been dropping to levels not seen since the beginning of the pandemic, threatening the commercial real estate space as vacancy rates and interest rates rise. The stress of securing funding has increased ever since the collapse of SVB because regional lenders have become more risk-averse. The spread above US treasuries for CMBS with BBB rating has increased by 2 percentage points from Feb-2023. The CMBS market acts as a signal for the wider real estate market as it provides a more timely and accurate representation of the health of the underlying mortgages. The main cause of concern, which is compounding the current stress faced by the real estate industry, is the rising delinquency rates as vacancies skyrocket. In downtown offices, vacancies reached 17.6% over the last three months, above 13.8% two years earlier. (WSJ)

Declines in loan values are widespread among banks (WSJ)

US bank lending slumps by most on record in final weeks of march (Bloomberg)

China traders borrow trillions to juice returns in bond market (Bloomberg)

Regulatory Updates

End may be in sight for global rate-hike cycle as Fed nears peak

Apr 10. The majority of global central banks may have reached a peak or have reached the end of their interest rate hike cycles, with a possible pause before monetary loosening occurs. The Federal Reserve's potential pause after one more increase in May could signal a turn in one of the most aggressive global interest rate cycle in decades. Resultantly, advanced economies and emerging markets alike may pivot towards rate cuts as early as this year. Bloomberg Economics forecasts that at least 20 of the 23 major jurisdictions monitored will lower borrowing costs in 2024. (Bloomberg)

UK watchdog orders publication of 'synthetic' dollar Libor rate

Apr 4. The FCA will continue to publish synthetic Libor rates from June 2023 to September 2024, replicating the one, three, and six-month US dollar Libor rates, usually pricing debt and derivative products. The decision follows previous similar extensions and will allow market participants to bridge legacy contracts except for cleared derivatives from Libor to an alternative rate. As of the start of the year, for instance, a large proportion of the USD 1.4tn junk bond market in the US is yet to make the transition, highlighting the difficulty faced in managing the transition between the two different reference rates. Outstanding exposures beyond the extension may be due to parties. (FT)

Australia pauses rate hikes to assess tightening impact, Q1 inflation in focus (Reuters)

Ueda kicks off BOJ governorship in first transition in a decade (Bloomberg)

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