This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Financial Sector Development in the Pacific Rim, East Asia Seminar on Economics, Volume 18

Volume Author/Editor: Takatoshi Ito and Andrew K. Rose, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-38684-8

Volume URL: http://www.nber.org/books/ito\_07-2

Conference Date: June 22-24, 2007

Publication Date: February 2009

Chapter Title: Comment on "Consumer Credit Market in Korea since the

Economic Crisis"

Chapter Author: Winston T. H. Koh

Chapter URL: http://www.nber.org/chapters/c0412

Chapter pages in book: (196 - 200)

Shin, I., C. Hahn, and C. Park. 2003. *The causes of increase in credit delinquents and policy tasks* (in Korean). KDI Policy Report. Seoul: Korea Development Institute.

Shin, I., and C. Park. 2006. *Credit information system in Korea: Current condition and policy priorities* (in Korean). KDI Policy Report. Seoul: Korea Development Institute.

## **Comment** Winston T. H. Koh

The chapter examines the events surrounding the rapid expansion of household debt in South Korea since the foreign exchange crisis that Korea suffered in 1997, which occurred as part of the Asian Financial Crisis. A specific focus of the chapter is to investigate the developments in the housing loan market and the credit card crisis in 2003, and the government response to address the issues in both the housing loan market and the credit card industry. The chapter argues that the crisis stems from regulatory failure, and with timely and proper regulatory actions, much of the difficulties that occurred in the credit card market would have been alleviated or averted.

I will make two general comments about the chapter, before going into the specific comments. Firstly, in light of the intersecting sets of issues discussed in the chapter, it would be useful to provide, as a backdrop to the analysis, a brief discussion of the state of the South Korean economy since 1997, in terms of rate of gross domestic product (GDP) growth, foreign investment inflow, current account deficit, and so on in order that the reader can better appreciate the forces driving the economy and understand the impetus for the business strategies of the banks and credit card companies and the government's responses. In particular, it would be useful to find out if there were certain macroeconomic conditions that had prevented the authorities from taking certain preventive or corrective actions to address the developments in the credit markets.

Second, to the extent that data are available, it would be interesting to analyze the data by age of household head as well as by income/assets to gain a fuller picture. Table 5.1 and 5.2 look at household debt by age and income/asset holdings, respectively. It would be interesting to analyze the data by age of household head as well as by income/assets, if the data are available.

Winston T. H. Koh is an associate professor of economics and associate dean of the School of Economics at Singapore Management University.

## **Bank Lending to the Housing Market**

The chapter noted that the household debt market in Korea has undergone three distinguished phases since 1997:

- The first phase was from 1997 to 1999, when household debt fell sharply due to monetary tightening in the aftermath of the 1997 economic crisis in Korea.
- The second phase was from 2000 to 2002, when household debt expanded sharply, recovering to the precrisis level. Debt-to-income ratio rose from 63.8 percent at the end of 1999 to 113.3 percent in 2002, while the debt-to-asset ratio also rose considerably, from 40.1 percent at the end of 1999 to 51.8 percent in 2002.
- The third phase was from 2003 onward, the expansion in household debt came to a grinding halt, and the financial sector went into another crisis.

As described in the chapter, three factors were behind the developments. The first and most obvious factor is the prevailing low interest rate environment. Interest rates in Korea fell since 1999, as the authorities eased monetary policy after the economy had stabilized following the economic crisis in 1997 to 1999. The low interest rates led to increased borrowings from households, particularly in collateralized housing loans.

Next, financial sector deregulation led to a shift in the business strategy of financial institutions. Before the Asian financial crisis, Korean banks were urged by the government to lend to Korean conglomerates, or *chaebols*. As the author noted, "profitability of individual banks was not a primary concern as long as banks served the policy goals set by the government." Following the Asian financial crisis, the policy stance in financial regulation shifted toward one of fostering market efficiency in the credit markets. Financial institutions are now free to set their interest rates and prices for the services they provide. Entry barriers to the financial sector have been lowered, and foreign players are now welcome to establish local subsidiaries or acquire domestic financial institutions.

Finally, driven by the need to maintain the bottom line, banks turned their attention away from loans to the corporate sector, which were deemed to be riskier, to loans to the household sector, which were considered more lucrative and less risky than loans to the corporate sector. Moreover, in the restructuring that the Korean economy went through following the 1997 financial crisis, the focus of funding by Korean corporates shifted away from bank loans to fund-raising via bond and share issuance in the capital market. Hence, the increase in attention by banks toward the household sector coincided with a reduction in demand for bank loans from the corporate sector.

During the five-year span from 2001 to 2005, it is reported that 71 percent of the increase in household debt provided by banks was attributable to increase in loans secured by residential properties (LSRP). Loans by banks to households rose from an average prevailing rate of below 30 percent of the total loan portfolio in 1998 to reach 49.8 percent in 2005, surpassing the loans to the corporate sector for the first time. Loans to households secured by residential properties rose from 47.8 percent at the end of 2000 to reach 62.4 percent in 2005.

The natural question to ask is why banks were willing to increase their exposure to the real estate sector so sharply. Was the real estate market in Korea experiencing a boom during the period under study? If there was indeed a boom in the Korean real estate market (and other asset markets) during this period, then the increase in household debt may not appear to be a problem, at least from the banks' perspective, since the net asset value of households has also increased sharply during this period. As noted in the chapter, information on the aggregate asset holdings by households is not available. Nonetheless, it would be very helpful if the author could provide some data and analysis of the real estate market during this period. In fact, there might exist an "irrational exuberance-type" explanation for the euphoria in the banking sector in increasing its exposure to the real estate market. A booming real estate market coupled with increased competition among banks to lend to households is likely to lead to an underpricing of default risk in the real estate markets—as was found to be the case in many Asian countries in the run-up to the Asian financial crisis.

## Changing Structure of the Mortgage Loans

The housing market in Korea also turned out to possess several features that distinguish it from the typical long-term mortgage loan market that exists in other countries (as shown in table 5.6 in the chapter). Housing loans in Korea are short in maturity (typically one to three years) and are not amortized over the tenure of the loans. These housing loans are referred to as *bullet mortgages*. Interest payments are made monthly, and at the maturity of the housing loan, the principal is either rolled over or repaid. Loan quantum to asset value is typically less than 60 percent of the value of the properties, compared with the usual 70 percent or more in the conventional mortgage loan markets in other countries.

In taking on a bullet mortgage rather than a conventional long-term mortgage with amortization, a typical household would need to save for a long time in order to come out with a sizable downpayment of at least 40 percent of the purchase price of the property. As a result, the average age of a first-time home buyer in Korea is higher (from late thirties to the early forties) than that in other countries where the long-term mortgage market is established and the size of the initial downpayment is significantly smaller.

The chapter noted that in a booming real estate market, Korean banks

were willing to "rollover" housing loans if the households were not willing or able to fully repay the loan. However, in a declining real estate market, the bullet mortgage loan structure with its short maturity structure meant that banks would generally become more selective in granting rollovers and renewing the loans. As a result, households may be forced to sell their properties to repay the loans. It is likely that the selling pressure, however weak it may be to begin with, may start to snowball, leading to depressed property values and creating a vicious cycle by inducing further reluctance on the part of the banks to renew the loans. Compared with more conventional long-term mortgages, where loan quanta are higher, and household income is the key determinant of debt-servicing ability, the bullet mortgage structure seems to have a distinct disadvantage as it gives rise to boom-bust cycles.

The interesting question is why the housing loan market in Korea did not develop mortgages with longer tenures. It is noted in the chapter that while bullet mortgage contracts are vulnerable to housing price shocks, they are more robust to adverse income shocks because there is no principal repayment during the loan tenure. It is argued that compared with the "conventional" mortgage structure, there are likely to be fewer defaults under the bullet mortgage structure. I am not sure if this claim is always true or if it has been investigated in any context before. It is not necessarily the case that households will experience greater pressure to service the housing loan under a conventional mortgage structure because households may either reduce their savings or alter their spending patterns to cope with the higher monthly mortgage payments. In fact, households may reduce their consumption and save even more to cope with contingencies when their incomes are not enough to service the monthly mortgage payments.

The chapter noted that in 2002, the Korean policymakers started to take various policy measures to help smooth the rollover of maturing debts and to introduce conventional mortgages into the housing finance market. However, the Korean financial institutions are involved merely as agents of the Korean Housing Finance Corporation (KHFC). The question is why the banks aren't marketing long-term housing terms themselves as this appears to be a profitable market segment that has found huge demand, as the proportion of LSRP with amortization has doubled from 14.1 percent in 2003 to 28.3 percent in May 2005.

## Social Welfare Effects of the Increase in Household Debt

The author argues that the increase in household debt has brought about several positive effects. He cites as evidence, first, the increased inflow of credit resources into the household sector, reflecting efficiency improvements in the allocation of credit resources; and second, with easier access to credit, households were able to borrow and achieve a smoother lifetime consumption path. The caveat, of course, is proper credit evaluation and

risk management have been undertaken by banks to ensure that the quality of the loan portfolio does not deteriorate. However, as it turned out, this was not the case, given the particular structure of the housing loan market in Korea.

While there are likely positive effects on social welfare from the two developments described by the author, it is also important to consider the negative effects of the severe credit contraction that were to follow in 2003, when banks (as well as credit card companies) started to curb credit supply to the household sector. Annual growth rate of household debt dropped to and stayed around 10 percent. I am not sure if the net effects would have turned out to be positive overall.

Overall, I commend Dr. Park for an interesting chapter that provides a case study of some of the issues that policymakers in Asian markets have to grapple with as they restructure the economy, particularly in the aftermath of the Asian Financial Crisis. It was a pleasure to read the chapter and to be discussant at the NBER-EASE conference.