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The Rise of Korea's Credit Ratings after the Asian Currency Crisis: a Panel Analysis of Determinants

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1. Introduction

The fluctuations of credit ratings can make a considerable impact on a nation's finance and economy. Moody's 9-notch downgrading of the Korea's credit rating from A1 to B- during the 1997 Asian currency crisis led to a rise in foreign currency loans' cost, and this placed a heavy burden on the overall macroeconomy. When the credit rate is downgraded, the demand for that country's bonds is generally decreased as the risk premium for them increases. This in turn causes costs for government debt to rise, thus presenting difficulties for the stable management of national finance.

As a means to overcome the 2008 global financial crisis, major developed countries including the US have been implementing expansionary monetary and fiscal policies. Due to financial problems that emerged in the wake of these policies, a number of developed countries have had to witness the downgrading of their credit ratings. To take the US as an example, there was a large amount of friction in Congress in the first half of 2011 over the political debate on raising the debt ceiling. As a result, one of the world's three major credit-rating agencies, Standard & Poor's (S&P), downgraded the credit rating of US government bonds by a notch for the first time in the history of rating the country, stripping the US of its well-guarded AAA rating.

In the case of Japan, national debt soaring over 200% of GDP is a source of major concern, and rising oil imports following the earthquake-induced nuclear power plant accidents have led to a large trade deficit. Such factors are causing Japan's sovereign credit ratings to drop. As for the Eurozone, severe economic recession has made it necessary for fiscally struggling countries to receive support from the European Central Bank or Eurozone members, and they currently await a verdict from member countries. Eurozone members, however, are finding it hard to reach an agreement, due to differences in opinion. In addition to countries that have received bailouts, the credit ratings of Spain and Italy have also been downgraded, and prospects are cloudy even for countries that have maintained fiscal soundness. As shown above, the downgrading of credit ratings has a direct correlation to political, economic and social factors.

This paper takes a closer look at the credit ratings of Korea, which have taken the highest leap among all OECD countries since the Asian currency crisis in 1997. The paper includes an examination of Korea's credit rating trends, and analyzes the determinants of sovereign credit ratings using national panel data so as to better understand the cause behind the rise of Korea's credit ratings. The paper will conclude with suggestions on how these credit ratings can be retained or raised.

2. The Fluctuations of Korea's Credit Ratings

Korean government bonds were first rated by Moody's in November 1986. The long-term foreign currency credit rating for Korea's sovereign bonds back then was A2. S&P followed suit in October 1988, rating Korea at A+, a notch higher than Moody's. Entering the 1990s, Moody's raised Korea's credit rating by a notch and kept it there until the late 90s, while S&P raised the country's credit rating to AA- in May 1995. Fitch started rating Korea from June 1996 and matched S&P's assessment at the time at AA-.

The 1997 Asian currency crisis that erupted, and Korea had to witness the rapid downgrading of its credit ratings. Korea requested an IMF bailout in November 1997, all three credit-rating agencies pulled Korea's ratings down rapidly. In just two months, Korea was downgraded by eight to nine notches from A1~AA to B-(Ba1)~B+. Thanks to positive evaluations of economic restructuring efforts after the bailout, Korea's credit ratings gradually recovered to reach A-(A3)~A by 2002. Bright forecasts for economic growth, low unemployment rates and price stabilization, all signs of a sound macroeconomy, helped the country's credit ratings to steadily continue on this upward climb. Eventually, judging the geopolitical risk posed by North Korea to be weaker than before, in September 2012, S&P and Fitch raised Korea's credit ratings to pre-foreign exchange crisis levels of A+ and AA-, respectively. Meanwhile, Moody's rated Korea at Aa3 in August 2012, the Korea's highest rating ever including before the Asian currency crisis.

3. Sovereign Credit Rating Determinants – A Panel Data Analysis

This chapter uses OECD panel data to conduct an empirical analysis on the determinants of sovereign credit ratings. The analysis period is from 1995 to 2010, and credit ratings by Moody's, S&P and Fitch are set as explained variables. The Afonso, Gomes and Rother (2011) analysis method is used on OECD panel data to analyze the determinants. Data for the empirical analysis includes the credit ratings and macroeconomic, fiscal, financial, social indices of 34 OECD countries. The period was set from 1995 to 2010 with consideration to data availability, and the data used was organized by year.

According to the analysis of an ordered logit model, statistically, countries with higher per capita incomes (cross-border) had higher credit ratings, and a rise in per capita income (within borders) also led to higher credit ratings. The higher the per capita income, the more likely the country is to rank among developed countries, and the debt repayment capabilities of developed countries tend to receive higher credit ratings. Countries with higher economic growth rates (cross-border) received lower credit ratings, reflecting the tendency of countries in relatively lower development stages to have high economic growth rates but low credit ratings. Countries with lower inflation rates (cross-border) received higher credit ratings, and a drop in inflation rates (within borders) also caused credit ratings to rise. This would be because countries sustaining stable prices are more likely to have a stable financial system, as well as an independent rein on monetary policies. It is also due to the fact that countries with low inflation growth have currencies that are stable in terms of purchasing power.

Countries with low fiscal deficits or fiscal surpluses (cross-border) received high credit ratings. It was, however, hard to say that changes in the fiscal balance (within borders) largely affected credit ratings. Meanwhile, countries with lower corruption levels (cross-border) received higher credit ratings, and lower corruption levels (within borders) were also beneficial in raising credit ratings by Fitch.

As for current balance, although countries with less current-account deficits or larger current-account surpluses (cross-border) had higher credit ratings, it could not be said that improvements in a country's current balance (within borders) was cause for higher credit ratings. Existing analyses results do show that in the case of developing countries, current accounts and credit ratings have a high correlation. However, the fact that a number of developed countries have recently been recording current account deficits seems to have clouded the analysis results for credit rating changes within a country.

The stigma effect on countries that struggled through financial crises was cause for low credit ratings. Since a financial crisis indicates that uncertainties have permeated a financial system, there are often cases in which the government has to take on the burden of debts in financial institutions, etc. in order to keep the system going. Therefore, the emergence of financial uncertainties negatively affects sovereign credit ratings even while other variables remain stable, and this impact is known to last a considerable period.

Lower government debt (cross-border) led to an increase in credit ratings. Lower debt within a country was also cause for higher credit ratings.

On the changes in the explained variables within a country, it could not be said that variables other than inflation rates, per capita income, and government debt led to changes in credit ratings by fluctuating within a country. This implies that countries which have experienced ups and downs in credit ratings should place a priority on per capita income levels, as well as the management of inflation and government debt.

4. Factors Raising Korea's Credit Ratings

Korea's economic growth rate from 1995 to 2010 recorded an average of 4.8%. The country's per capita income has continued to rise, and now exceeds 20,000 dollars. During the analysis period, Korea twice faced crises, the first being the Asian currency crisis that hit the region in late 1997, and the second being the 2008 global financial crisis. These two adversities caused Korea's economic growth rate to fall. Moreover, the 2003 credit card lending distress in Korea dampened domestic demand, again causing a dip in the economic growth rate, although by a slighter degree compared to the two major crises. Meanwhile, per capita income continued to rise during this period, excluding 1998 and 2009. The economic growth rate experienced fluctuations, but apart from the duration of the two crises (foreign exchange crisis and global financial crisis), the continued strength of the Korean won as well as "+ (plus)" growth backed the steady climb of per capita income. As the economic growth rate, in general, rose and fell during this period, it could not be said to have affected credit ratings, but the consistent rise of per capita income did play a large part in raising credit ratings to their current levels.

Inflation rates during the analysis period recorded a yearly average of 3.4%. During the 1997 Asian currency crisis, the Korean won was rapidly devalued, causing import prices to hit the ceiling, which in turn greatly increased inflation rates. In addition, prior to the Lehman Brothers collapse, an expansion in global liquidity caused international commodity prices to jump in leaps and bounds, also bringing about import price uncertainties and thus, inflation. Apart from the two instances of sharp inflation, Korea's inflation remained stable at around 3%. After the Asian currency crisis, the Bank of Korea set a policy goal for managing inflation. Since then, the Bank of Korea switched the target price index from consumer prices to core consumer prices, and then back to consumer prices, and also switched the monetary base rate from the call rate to the 7-day RP rate. Thanks to the implementation of inflation targeting following the Asian currency crisis, Korea's inflation rate has generally stayed within the boundary of the policy target. Since consumer prices were stable, inflation rates had a minimal effect on credit ratings after the year 2000.

Korea's fiscal and current account balances for the analysis period sustained a surplus of 1.9% and 2.3% to GDP, respectively. Although since 2005, the fiscal balance fell short of the average surplus, based on a 3-year moving average there was no case in which deterioration in the fiscal balance led to deficits. A comparison of the lowest and highest points for the 3-year moving average show a mere gap of 2.8%p, proving that the fluctuation range was also narrow. The same goes for the current account balance, as based on a 3-year moving average the balance has been in the black ever since the foreign exchange crisis. The Korean won remained strong after the foreign exchange crisis, and until the 2008 global financial crisis, the current account surplus to GDP showed an overall decrease. After the global financial crisis, however, the surplus to GDP turned around to expand. The sustenance of fiscal and current account surpluses indicate that national finance conditions held low risk, but the fluctuation ranges were not wide enough to include these factors as key contributors to the rise in Korea's credit ratings. On the other hand, a definite contributing factor to the rise in Korea's credit ratings in the early 2000's was the current account turnaround to surplus after the foreign exchange crisis.

Korea's anticorruption index for the analysis period recorded an average of 4.5 points. During the foreign exchange crisis, institutional inertia or high corruption levels in the government were pinpointed as causes behind the faulty financial system, and this consequently led to a drop in the anticorruption index to about 0.9 points below average. In the following years, the economy gradually recovered and thorough reshuffling measures were taken, pulling the anticorruption index up to the current 5.22 points. It can be said that this helped raise Korea's credit ratings, but the impact itself was minimal.

The country's government debt to GDP ratio stood at an average of 20.9%. The Asian currency crisis was the setting for Korea's IMF bailout, and following economic contraction led to less tax revenues and increased government debt. The country recovered its international credit standing since then, and as foreign lending became easier, government debt also gradually rose. Currently, the government debt to GDP ratio is kept between 30% and 40%. As government debt increased gradually, rather than in sharp spikes due to external shock, this has not had a significant negative impact on credit ratings.

5. Conclusion and Implications

Inflation rates, per capita income and government debt have been analyzed as being the most statistically significant factors as determinants of credit ratings. In the case of Korea, the continued rise in credit ratings since the Asian currency crisis was thanks to key factors such as increased per capita income, a sustained current account surplus, price stabilization and a drop in the anti-corruption index. Government debt, however, increased during the analysis period, and restricted further upgrading in the sovereign credit ratings.

The best way to retain or raise Korea's credit ratings is to encourage the continued upward climb of per capita income. This was the most influential factor in raising Korea's credit ratings after the Asian currency crisis, and per capita income also plays a major role in affecting credit ratings among different countries. Government debt is also a key factor. In the case of Korea, increasing government debt in the post-Asian currency crisis era had a negative effect on the country's credit ratings. Although it does not make much difference for credit ratings among countries, it may serve as a contributing factor if the economy slows down and a failure in government debt management occurs. Price stabilization and the sustenance of a current account surplus were both contributing factors to raising Korea's credit ratings. Considering current inflation levels, current account surpluses, government debt and per capita income, what Korea should do to further raise its sovereign credit ratings is to continue increasing income levels, maintain current levels of the inflation rate and current account surplus, and manage government debt. KIEP