

Net International Investment Position Surplus: A Key to Reconciling Financial Stability and Internationalization

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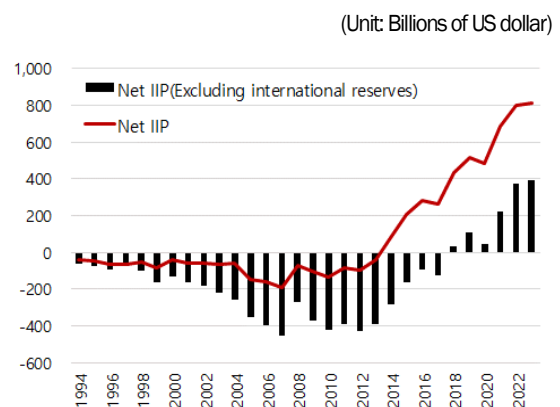
I. Introduction

Since the 2008 global financial crisis, Korea's external sector has undergone significant structural changes. Korea's net international investment position (IIP), the difference between external financial assets and liabilities, first achieved a surplus in 2014. In 2018, the net IIP, excluding international reserves, also turned into a surplus for the first time. Both indicators have steadily increased since then, reaching \$810.3 billion (net IIP including reserves) and \$390.1 billion (net IIP excluding reserves) respectively, at the end of the fourth quarter of 2023 (see Figure 1). This means that Korea's financial assets held abroad now greatly exceed its liabilities to foreign countries.

Korea has also joined the ranks of countries with a net IIP surplus. As of 2023, Korea's ratio of net IIP to GDP was 45.5%, ranking 10th among 46 major economies, while the ratio of

net IIP excluding international reserves was 21.0%, ranking 11th. Given these structural changes, we examine their economic implications for Korea in terms of financial stability and internationalization. Having experienced two currency crises, Korea has long recognized the inherent tension between financial stability and internationalization policies.

Figure 1. Net International Investment Position (IIP) of Korea



Source: Bank of Korea.

Strengthening financial stability measures can hinder internationalization efforts, while promoting internationalization can potentially undermine financial stability. Therefore, we investigate whether Korea's net IIP surplus status represents a significant structural shift that could alter this traditional understanding.

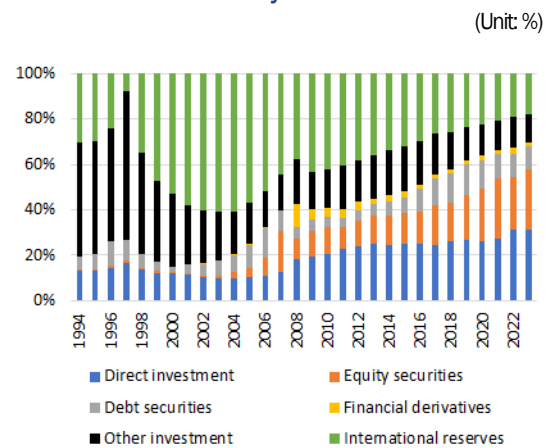
II. Development of International Investment Position

Korea's net IIP has been steadily expanding since the mid-2010s, when it first turned into a surplus. This surplus conversion mirrors the accumulation of the balance of payments, which reflects transaction effects (excluding valuation effects like exchange rate fluctuations and asset value changes). Examining Korea's net IIP by sector, net direct investments and net other investments turned positive in the early 2010s, followed by net equity securities investments in 2022. This shift is attributable to several factors, including the current account surplus, the expansion of foreign direct investment by Korean companies, the expansion of loans by domestic banks to overseas subsidiaries of Korean companies since 2000, the expansion of foreign investment by the general government (national pension), and the expansion of foreign investment by securities companies, insurance companies, and individuals in foreign securities since the 2008 global financial crisis.

When analyzing net IIP by assets and liabilities, the proportion of portfolio investments (equity and debt securities) has increased for

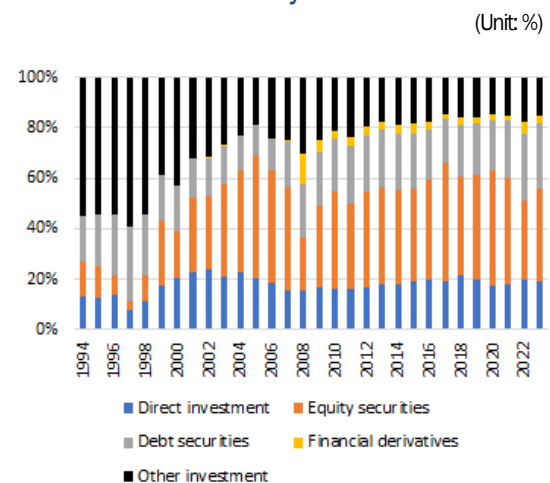
both, while the share of other investments has declined significantly (see Figure 2 and Figure 3). This pattern aligns with the characteristic changes in international capital flows observed since the 2008 global financial crisis.

Figure 2. Korea's External Financial Assets by Sectors



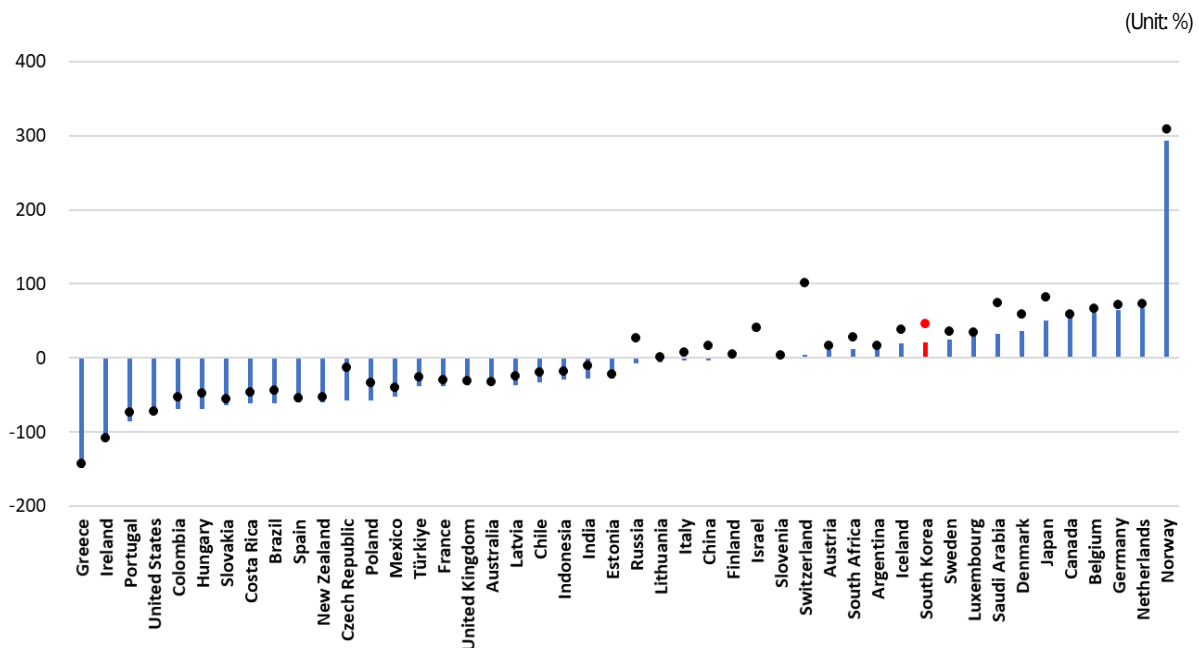
Note: Figure 2 represents the share of total external financial assets.
Source: Bank of Korea.

Figure 3. Korea's External Financial Liabilities by Sectors



Note: Figure 3 represents the share of total external financial liabilities.
Source: Bank of Korea.

Figure 4. International Comparison of Net International Investment Position



Notes: 1) All figures as of end of 2023 (except for Russia, for which figures are from end of 2021).

2) The bars indicate the net IIP (excluding international reserves) to GDP ratio, while the dots indicate the net IIP to GDP ratio.

Source: International Financial Statistics, IMF.

The international comparison of international investment positions reveals several noteworthy characteristics. First, few countries maintain a net IIP surplus (excluding international reserves). In this context, Korea's transition from a net IIP deficit to a surplus represents a significant shift. As of 2022, only 15 out of 46 major economies recorded a net IIP surplus, with Korea ranking 11th in terms of the net IIP to GDP ratio (see Figure 4).

Second, most countries with a net IIP surplus (excluding international reserves) are European, and many achieved this status around 2010. Korea's net IIP (excluding international reserves) turned positive in 2018, somewhat later than most. Finally, for countries where net IIP (excluding international reserves) has

shifted from deficit to surplus, the surplus has generally persisted. This suggests that Korea's net IIP surplus is not a temporary phenomenon but a structural change.

III. Net IIP and Financial Stability

We investigated the relationship between a country's status as a net international investment position (IIP) surplus and its financial stability. Specifically, we analyzed whether an increase in net IIP strengthens the stability of capital flows (inflow and outflow) and contributes positively to external sector soundness. We also explored the potential channels through which this relationship might operate.

Following the definitions of Forbes and Warnock (2012), we measured four distinct episodes of sudden capital flows: surge, stop, flight, and retrenchment. We then employed a complementary log-log model with dummy variables for each episode to analyze the relationship between net IIP surplus countries and these four episodes. Our empirical analysis covered 66 countries from the first quarter of 2001 to the fourth quarter of 2020.

The analysis revealed a significant association between net IIP surplus, meaning creditor status, and the retrenchment episode. In such countries, experiencing a stop episode increases the probability of a subsequent retrenchment (see Appendix Table 1). This suggests that net creditor countries act as a buffer, with foreign assets returning to the home country during potential crises, thus preventing deterioration in external sector soundness. For Korea, a country still sensitive to the trauma of past currency crises, this finding implies the existence of a market-friendly stabilization mechanism distinct from international reserves. This mechanism could help mitigate the risk of future currency crises.

IV. Net IIP and Financial Internationalization

We analyzed the implications of a net international investment position (IIP) surplus for a country's international competitiveness in financial services. In our study, we used the revealed comparative advantage (RCA) of fi-

ancial service exports as a proxy for international competitiveness in financial services. This index measures a country's comparative advantage in the financial industry (banking, securities, and insurance) relative to its overall service exports.

Using a fixed-effect panel model for 41 countries, our analysis revealed that external financial assets positively affect financial service RCA. Importantly, the magnitude of this effect varies significantly depending on whether the country is experiencing a net IIP surplus or deficit. Specifically, the positive relationship between external financial assets and financial service RCA is more pronounced during periods of net IIP surplus compared to net IIP deficit periods (see Appendix Table 2).

This is likely due to the enhanced financial stability during periods of net IIP surplus, which facilitates the expansion of financial companies' overseas operations through both regulatory easing by policymakers and diversification strategies on the part of financial companies, aimed at increasing profitability. These findings suggest that Korea's continued net IIP surplus could lead to increased international competitiveness in financial services.

V. Conclusions and Policy Implications

In conclusion, our analysis demonstrates that a net international investment position (IIP) surplus significantly contributes to both financial stability and international competitiveness in financial services.

Several policy implications can be drawn from these findings. First, Korea's structural shift to a net IIP surplus has laid the groundwork for the simultaneous pursuit of financial stability and financial internationalization policies, which were previously considered incompatible. In particular, Korea now has the opportunity to actively pursue a financial internationalization policy that has traditionally lagged behind the prioritization of financial stability.

Second, given the evolving role of the private sector in financial stability due to this structural change in net IIP, it is necessary to re-evaluate macroprudential measures for capital flows that were introduced during periods of net IIP deficits. Such measures, including ceilings on FX derivatives positions, the macroprudential stability levy, and a tax on foreign bond investment, were primarily designed to curb a sharp increase in short-term foreign debt since 2010.

Third, there is a need to revise regulations and create an environment that fosters financial internationalization. Regulations on the overseas expansion and business activities of financial companies, introduced during the net IIP deficit period, should be improved to promote the internationalization of the financial industry and financial services. Furthermore, it is essential to strengthen financial cooperation with emerging economies and revitalize efforts to internationalize the Korean won, which has stagnated since 2010.

Finally, Korean policymakers should adopt a new approach to managing potential financial risks arising from the promotion of financial internationalization. Rather than focusing solely on FX-related macroprudential measures, the policy focus should shift towards the strict implementation of international standards, such as Basel III, to ensure financial stability. **KIEP**

Appendix Table 1. Regression Results (Four Distinct Episodes of Sudden Capital Flows as Dependent Variable)

Variable		KIEP (2023): year 2001~2010				KIEP (2023): year 2011~2020			
		Surge	Stop	Flight	Retrenchment	Surge	Stop	Flight	Retrenchment
Global Factors	VIX	-0.017 (0.026)	0.036*** (0.009)	-0.052 (0.041)	0.033*** (0.007)	-0.058* (0.030)	0.065*** (0.019)	-0.047 (0.038)	0.021 (0.021)
	Liquidity	-0.020 (0.015)	0.021 (0.015)	-0.032 (0.020)	0.001 (0.009)	0.059*** (0.012)	-0.016 (0.029)	0.009 (0.018)	0.010 (0.017)
	Interest rate	0.224 (0.355)	0.925*** (0.328)	0.229 (0.378)	0.480* (0.280)	-0.660*** (0.240)	-0.213 (0.170)	-0.346 (0.257)	-0.235 (0.162)
	Global GDP growth rate	0.285** (0.133)	0.023 (0.097)	0.264** (0.132)	0.125* (0.074)	-0.009 (0.060)	0.139* (0.075)	-0.132** (0.066)	0.108 (0.079)
Transition Factors	Geographical proximity	0.843** (0.384)	0.494** (0.243)	0.314 (0.578)	0.256 (0.364)	-0.610* (0.367)	-0.320 (0.305)	-0.106 (0.369)	-0.454 (0.289)
	Trade linkage	0.060 (0.052)	0.035 (0.030)	-0.004 (0.061)	0.105*** (0.020)	-0.163 (0.165)	-0.017 (0.105)	0.025 (0.122)	0.057 (0.038)
	Financial linkage	-0.002 (0.013)	0.003* (0.002)	0.004 (0.009)	0.005* (0.003)	-0.015 (0.013)	0.000 (0.005)	-0.019 (0.026)	-0.003 (0.011)
Country-specific Factors	Net international investment position (IIP) country	0.218 (0.397)	-1.895** (0.926)	0.196 (0.480)	0.681 (0.495)	-0.218 (0.544)	-0.153 (0.478)	-0.219 (0.513)	-0.634 (0.490)
	Episode	2.026*** (0.411)	2.197*** (0.304)	2.087*** (0.246)	2.292*** (0.254)	2.371*** (0.402)	1.657*** (0.470)	2.215*** (0.435)	1.685*** (0.431)
	Net IIP country x Episode	-0.865* (0.444)	1.372 (0.924)	-1.209*** (0.452)	-1.243*** (0.353)	0.194 (0.720)	0.954 (0.741)	0.286 (0.740)	1.352** (0.614)
	Capital control index	-0.311 (0.657)	0.272 (0.501)	-0.047 (0.679)	-0.070 (0.451)	0.393 (0.538)	-0.212 (0.442)	-0.305 (0.584)	0.246 (0.497)
	Government debt	0.003 (0.005)	-0.001 (0.004)	-0.007 (0.007)	0.005 (0.004)	-0.002 (0.005)	-0.003 (0.004)	-0.001 (0.006)	-0.005 (0.004)
	Country economic growth rate	0.021 (0.061)	-0.048 (0.039)	-0.048 (0.083)	-0.001 (0.034)	-0.017 (0.035)	-0.083* (0.048)	0.025 (0.039)	-0.056 (0.044)
	GDP per capita	-0.117 (0.086)	-0.014 (0.052)	0.167*** (0.062)	-0.019 (0.058)	0.106 (0.068)	0.029 (0.072)	-0.032 (0.092)	0.020 (0.071)

Notes: 1) Global factors:

VIX: The CBOE Volatility Index.

Liquidity: Combined M2 (money supply) of the United States, European Union, Japan, and the United Kingdom.

Interest Rate: Average long-term government bond yields of the United States, EU (core member countries), and Japan.

Global GDP Growth Rate: Average quarterly GDP growth rate of OECD member countries.

2) Transition factors:

Geographic Proximity: A dummy variable that takes a value of 1 if there is a country experiencing an episode of sudden capital flow in the same region, and 0 otherwise.

Trade Linkage: Calculated as the export weight of a country to its counterparts experiencing an episode of sudden capital flow.

Financial Linkage: Calculated as the foreign financial asset weight of a country to its counterparts experiencing an episode of sudden capital flow.

3) Country-specific factors:

Net IIP Country: A dummy variable where 1 indicates a net international investment position (IIP) surplus and 0 indicates a net IIP deficit.

Episode: A dummy variable representing episodes of sudden capital flows: Surge, Stop, Flight, and Retrenchment.

Capital Control Index: The Chinn-Ito Index.

Government Debt: The ratio of government debt to GDP.

Country Economic Growth Rate: The detrended real GDP growth rate using the Hodrick-Prescott filter.

GDP per Capita: The natural logarithm of quarterly GDP divided by annual population.

4) () is clustered standard errors.

5) *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

6) Dark and light shaded areas indicate significance at the 5% and 10% confidence level.

7) Coefficients for the constant terms are not reported.

Source: Author's calculation.

Appendix Table 2. Regression Results
(Revealed Comparative Advantage of Financial Service as Dependent Variable)

Dependent variable	(1)	(2)
: rca	Coefficient	Coefficient
L.rbfxvol	-0.00586* (-1.84)	-0.00628** (-1.97)
L.bankasset	0.00245*** (8.22)	0.00252*** (8.40)
L.internet	0.00503*** (5.92)	0.00515*** (6.05)
L.ka_open	0.127** (2.36)	0.118** (2.17)
L.poli	0.0186*** (4.11)	0.0180*** (3.98)
L.iip	0.000518*** (3.56)	0.000420*** (2.69)
L.Tdummy X iip		0.000149* (1.70)
Constant	-0.230** (-2.82)	-0.335*** (-3.88)
Observations	535	535
Fixed effect	Yes	Yes
Time effect	Yes	Yes
R ²	0.223	0.248

Note: 1) rca is the revealed comparative advantage of financial service, rbfxvol refers to the standard deviation of REER from BIS, bankasset is bank asset-to-GDP ratio, internet refers to the number of internet users (per 1,000 people), ka_open is the Chinn-Ito Index, poli is the political uncertainty index from the IMD, iip is the International Investment Position.

2) Tdummy variable takes on the value 1 and 0; 1 means net IIP surplus, 0 means net IIP deficit.

3) All explanatory variables are lagged by one period to the dependent variable.

4) () is t-statistic.

5) * p < 0.10, **p < 0.05, ***p < 0.01.

Source: Author's calculation.