

Recent Fluctuations in Current Account: Factors and Implications

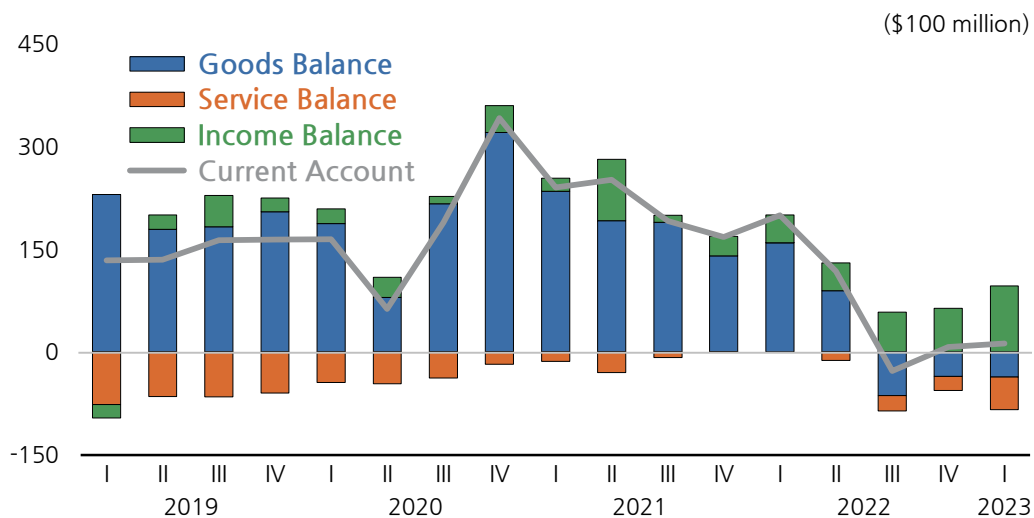
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1. Issue

■ Some interpret the recent current account deficit as evidence of deteriorating fundamentals in the Korean economy, arguing that this trend may persist in the future.

- The current account deficit reached its peak in Q4 2020 and has been on a downward trajectory since, registering a deficit of \$2.02 billion (\$4.96 billion, original series) in H2 2022.
- Certain observers view this current account deficit as signaling a decline in the economy's competitiveness or external soundness, necessitating an examination of the macroeconomic implications of current account fluctuations.

Changes (SA) in Current Account and Contribution by Component



Note: Q1 2023 refers to January-February.
Source: Bank of Korea.

■ This study seeks to elucidate the factors contributing to the recent decline in the current account and forecast its future trajectory.

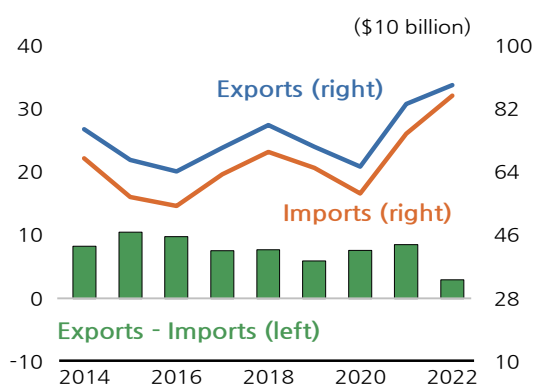
- Concurrently, it aims to evaluate the external soundness of the Korean economy in relation to the decreasing current account.

2. Economic Implications of the Current Account Balance and Recent Conditions

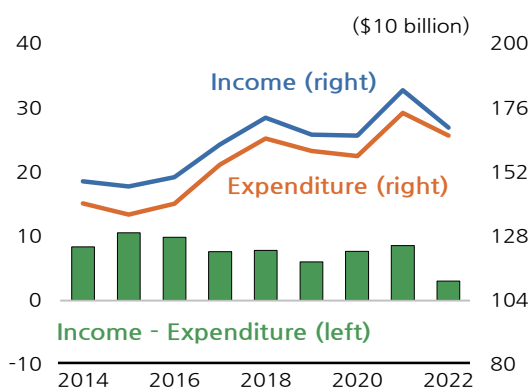
■ Theoretically, a surplus or deficit in current account is not inherently problematic; rather, it is crucial to identify the causes of current account changes and comprehend their macroeconomic implications.

- The current account balance is calculated as the difference between imports and exports,¹⁾ and can also be expressed as a discrepancy between income and expenditure (domestic demand), reflecting the decisions made by economic agents based on domestic and international economic conditions.
- A variety of factors influencing income and domestic demand can cause the current account to fluctuate.
 - For instance, a contraction in global trade volume or a deterioration in the terms of trade (export prices relative to import prices) could lead to an erosion of income conditions, consequently diminishing the current account balance.
 - An appreciation of the won (a decrease in the real effective exchange rate) may suppress income due to reduced external demand, while a decrease in the won-denominated price of imported goods may boost demand, causing a decline in the current account.
- As such, it may be inappropriate to assess economic fundamentals or competitiveness based solely on short-term shifts in the current account, which merely represent a gap between income and expenditure, without considering the underlying factors.

Gap between Exports and Imports



Gap between Income and Expenditure



Source: Bank of Korea.

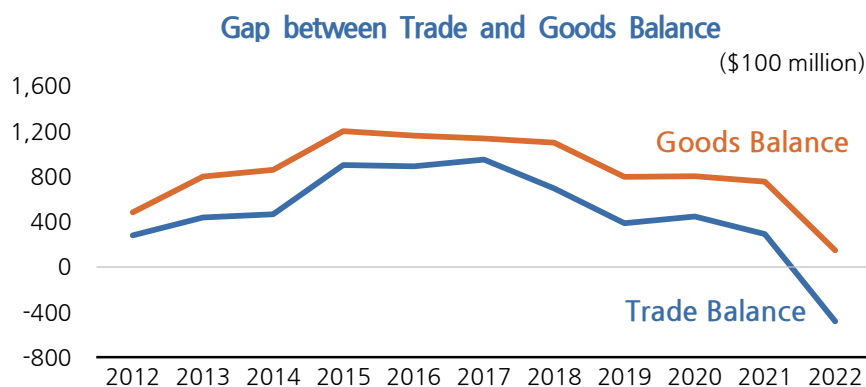
■ On the other hand, if a deficit endures, it could impact the external stability of the Korean economy, as changes in the current account serve as a factor altering net foreign assets.

- If the current account deficit is sustained, foreign currency financing conditions may worsen, potentially leading to broader concerns about external soundness.

1) See the Box for further details.

Box. Definition and Understanding of the Current Account Balance

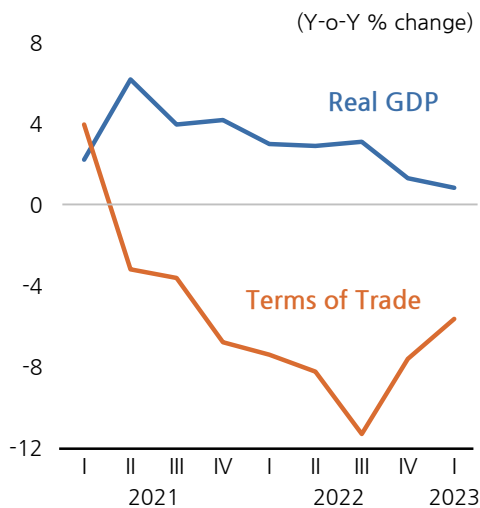
- The current account is typically calculated as the sum of goods, services, and primary and secondary income accounts.
 - The sum of the goods and services accounts represents the gap between production and expenditure, while the sum of primary and secondary income accounts represents the gap between income and production; the current account balance is equal to the gap between income and expenditure.
- The trade balance, in deficit for 14 consecutive months since March 2022, is conceptually similar to the goods account within the current account, but calculated differently.
 - In the trade balance, imports are counted on a cost, insurance, and freight (CIF) basis, while exports on a free-on-board (FOB) basis.
 - Another differences concern the timing of import and export accounting and the scope of goods.
 - The trade balance includes simple movements of goods without a transfer of ownership, whereas the goods balance only includes transactions involving an actual transfer of ownership.
- The trade balance is undoubtedly valuable for its timely nature, but it tends to underestimate figures, as it includes freight and insurance costs within imports; thus, when evaluating foreign currency financing conditions shaped by domestic and international transactions, the goods account may offer a more reliable benchmark compared to the trade balance.
 - From 2012 to 2022, the annual trade balance averaged about \$36.1 billion lower than the goods balance.



Source: Bank of Korea; Korea Customs Service.

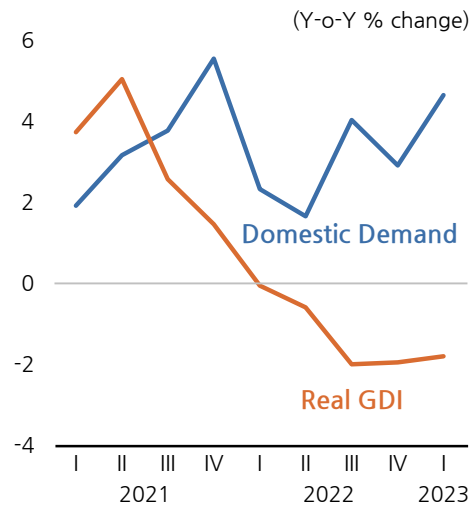
- Korea's GDP growth has decelerated in recent months due to the global economic slowdown, with deteriorating terms of trade **depressing real incomes**, while **domestic demand has sustained high growth**.
 - Slower growth in real GDP since Q4 2022 has led to a deterioration in income conditions.
 - Real income has contracted at a rate of approx. 2% since Q3 2022, as the terms of trade continue to worsen.
 - While import prices have declined, mainly for crude oil, the terms of trade (export prices relative to import prices) have persisted in their downward trend as export prices, including semiconductor prices, have experienced sharper declines.
 - Consequently, real gross domestic income (GDI), which is calculated by adjusting real trade gains and losses reflecting changes in the terms of trade to real GDP, continues to recede.
 - Domestic demand growth has remained robust, as consumer spending and equipment investment have continued to grow at a high rate since 2H 2022.

Changes in Real GDP and Terms of Trade



Source: Bank of Korea.

Changes in Real GDI and Domestic Demand



- As such, the current account balance (income minus domestic demand) has been **diminishing** since Q3 2022 due to macroeconomic conditions, such as **slowing income** and **improving domestic demand**.

3. Analysis of Short-term Drivers of Current Account Fluctuations and Projection

■ This section presents a quantitative analysis of factors driving short-term fluctuations in the current account using a structural vector autoregressive model and projects the trajectory of the current account.

● The author established variables in the following order: world trade volume, terms of trade, real effective exchange rate, real domestic demand, and current account. It is assumed that the structural shocks of each variable affect the current account from the time when the shock occurs.

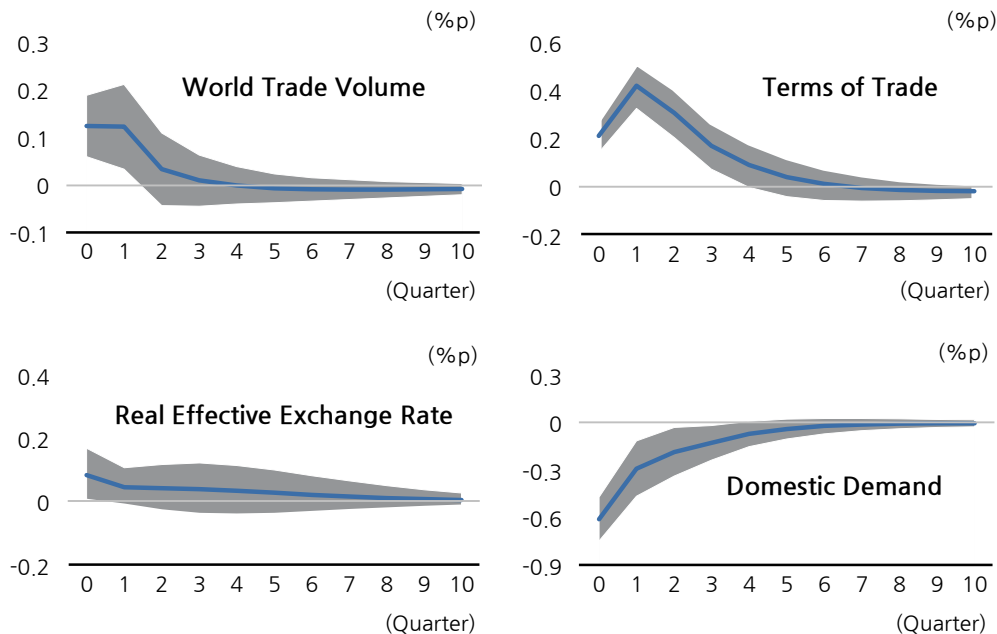
– The analysis period covers Q1 2012 to Q4 2022, and all variables, except for the real effective exchange rate (log value) and the current account (% of GDP), were used in terms of QoQ growth basis.

■ The analysis result reveal that **world trade volume, terms of trade, and real effective exchange rate act as upward factors for the current account, while domestic demand as a downward factor.**

● A 1%p increase in world trade volume and terms of trade was found to cause an increase in the current account (% of GDP) of up to 0.13%p and 0.43%p, respectively.

● In contrast, a 1%p increase in real effective exchange rate was found to cause an increase of up to 0.09%p in the current account, but a 1%p increase in domestic demand was found to cause a decrease of up to 0.60%p in the current account.

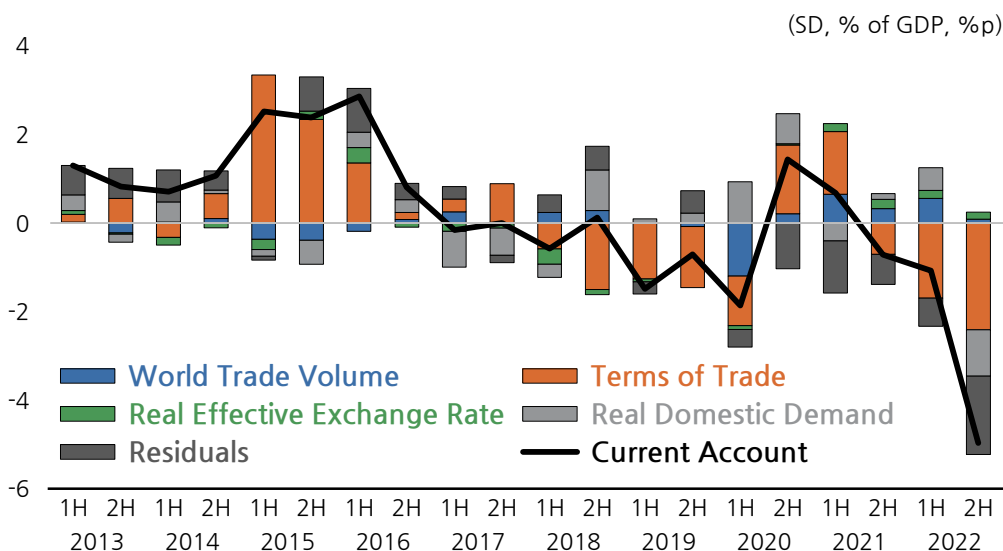
Impacts by World Trade Volume, Terms of Trade, Real Effective Exchange Rate, and Domestic Demand on Current Account Deficit



Note: Shaded areas represent the confidence interval of 1 standard deviation.
Source: Author's calculation.

- According to the results of a historical decomposition by impact factors, the recent decline in the current account was **mainly attributed to the deterioration in the terms of trade**, with a partial contribution from the recovery in domestic demand.
 - The current account (% of GDP) in 2H 2022 remained 5.0%p below the average for the analyzed period (2012-2022). Thus, it is necessary to identify the contribution made by each factor.
 - Rising crude oil and raw material prices due to geopolitical risks and falling prices of semiconductors, etc. resulting from global economic slowdown have significantly deteriorated the terms of trade, leading to a reduction in the current account.
 - The decline in the current account caused by weakening terms of trade in 2H 2022 was analyzed to be around -2.4%p, suggesting that the deterioration in the terms of trade was the main cause of the recent decline in the current account.
 - Despite stagnating economic activity due to the deterioration in external conditions in 2H, domestic demand remained relatively strong, contributing -1.0%p to the fall in the current account.
 - In contrast, the impact of world trade volume and the real effective exchange rate was found to be insignificant.
 - The recent widening of the forecast error (residuals) is likely due to the failure of the world trade variable to fully capture the fact that the Chinese economy, a major destination for Korea’s semiconductor exports, is performing poorly, compared to other sectors and countries.

Historical Decomposition by Impact Factors



Source: Author's calculation.

- Based on the above analysis results and the assumptions on each variable, the author assumed the following to project the current account in 2023.
 - The global economy will be sluggish in 1H but will gradually recover in 2H, with world trade volume growing at an annualized rate of 1.4%.
 - The contraction in terms of trade will slow, falling by 1.1% from 2022.
 - The real effective exchange rate will remain at its average level in April 2023 and domestic demand will increase by 2.1%, decelerating from 2.8% in 2022 due to economic slowdown.

Assumptions of Current Account Forecast for 2023

(YoY,%)

World Trade Volume	Terms of Trade	Real Effective Exchange Rate	Domestic Demand
1.1	-0.7	1.1	2.1

Source: KDI Economic Outlook.

- The analysis found that **the current account in 2023 is expected to run a reduced surplus of about \$16.0 billion (1.0% of GDP)** from 2022 (1.8% of GDP: \$29.8 billion).
 - The former half of the year is expected to exhibit a deficit (-1.0% of GDP: approx. -\$10.0 billion, original series), as the global economic slowdown continues while domestic demand remains relatively strong.
 - The latter half is expected to post a surplus of 2.8% of GDP (approx. \$26.0 billion, original series), as the upward factors of current account growth are materializing due to the global economic recovery and decelerating decline in domestic demand.
 - The terms of trade and the real effective exchange rate is expected to fluctuate little, potentially having minimal impact on the current account.
 - Meanwhile, the goods balance in 2023 is projected to be 0.4% of GDP (approx. \$6 billion).

2023 Current Account Forecast

(% of GDP)

	1H	2H	Annual
Current account	-1.0 (-\$10.0 billion)	2.8 (\$26.0 billion)	1.0 (\$16.0 billion)
Goods balance	-0.8 (-\$9.0 billion)	1.5 (\$15.0 billion)	0.4 (\$6.0 billion)

Note: Current account as a percentage of GDP is seasonally adjusted, with () indicating the amount in the original series.

Source: Author's calculation.

4. Assessment of External Stability of the Korean Economy

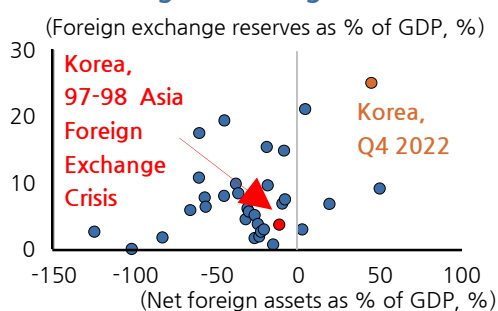
■ This section conducts a cross-country panel data analysis to ascertain the impact of recent current account developments on the external soundness of the Korean economy.

- Comparing the indicators of external soundness for Korea with those of other countries that have experienced a sudden foreign exchange crunch (FX crisis, hereinafter), it evaluates the likelihood of the current decline in the current account triggering a foreign exchange crisis (See the Box for further details on the analysis).

■ It is unlikely that the Korean economy will experience another foreign exchange crisis, given its current external soundness.

- Korea's present level of foreign exchange reserves (25% of GDP) and net foreign assets (45% of GDP) are significantly different from those of countries that have experienced an FX crisis in the past (see figure on the left).
 - Korea's external soundness is in much better shape today than it was during the Asian financial crisis.
 - The ratio of short-term foreign debt to foreign exchange reserves (39%) is also lower than during past crises (286%), suggesting that the risk of short-term capital outflows is not high.
 - Given that Korea's net foreign assets account for 46% of GDP, a year or two of current account deficit is unlikely to trigger a foreign exchange crisis due to a reduction in net foreign assets.
- Moreover, unlike net debtor countries, the probability of a foreign exchange crisis due to a fall in the current account is lower in net creditor countries like Korea (see figure on the right).
 - The cross-country panel analysis shows that a decline in the current account in net debtor countries increases the likelihood of a foreign exchange crisis, but no relationship between a decline in the current account and the likelihood of a foreign exchange crisis was observed in net creditor countries.

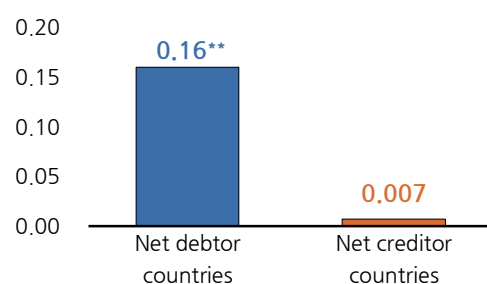
Korea vs. Countries Challenged by Foreign Exchange Crisis



Note: Blue-colored dots represent foreign exchange reserves and net external assets as a percentage of GDP in the year before the crisis for countries that experienced a foreign exchange crisis and capital outflows.

Source: Author's calculation based on Davis, Devereux, and Yu (2023).

Relationship between Current Account and Foreign Exchange Crisis



Note: 1) Represents the change (%p) in the probability of a foreign exchange crisis when the current account deficit against GDP falls by 1%p.

2) Statistical significance levels: *** p<0.01, ** p<0.05, *p<0.1.

3) The model is an extension of Davis, Devereux, and Yu (2023).

Source: Author's calculation based on Davis, Devereux, and Yu (2023).

5. Conclusions and Implications

- The analysis results show that the recent decline in the current account balance was driven by a sustained increase in expenditure despite a decline in income due to deteriorating external conditions.
 - The decline in the current account in 2H 2022 was largely due to a decrease in income caused by the decline in the terms of trade, with some contribution from domestic demand.
 - In 2023, the current account surplus is expected to narrow to 1.0% of GDP as domestic demand maintains a relatively high increase amid the persistent global economic slowdown.
- Given the current status of external soundness of the Korean economy, a sharp contraction in the foreign exchange market due to a decline in the current account is unlikely to occur.
 - Currently, Korea's foreign exchange reserves and net foreign assets are significantly different in size from those of countries that have experienced foreign exchange crises in the past, and even if the current account decline persists for one or two years, the likelihood of a foreign exchange crisis due to a decline in net foreign assets appears to be low.
- Therefore, it is advised that the macroeconomic policy stance should not be sensitive to short-term fluctuations in the current account.
 - It is important to note that the narrowing of the recent trade deficit may not guarantee macroeconomic stability.
 - In a situation where exports have contracted due to deteriorating external conditions beyond our control, narrowing the trade deficit would require slowing domestic demand, which could have a significant negative impact on employment, which is closely tied to domestic economic activity.
 - Consequently, when assessing the current situation and setting a policy framework, it is necessary to pay close attention to indicators closely related to macroeconomic conditions, such as prices, economic activity, and employment, rather than short-term fluctuations in the current account.

| Appendix |

Cross-country Panel Analysis Model

- This study examines the relationship between current account changes and the probability of a foreign exchange crisis through an regression analysis using cross-country panel data.
 - The model and data were adapted from Davis, Devereux and Yu (2023), with the author extending the existing model to analyze the relationship between current account changes and the probability of a foreign exchange crisis.
 - The analysis period spans 1970 to 2015 and includes 78 countries, comprising advanced economies and EMBI+ emerging economies.
 - To identify the impact of current account changes, the author separately analyzed the effects in net debtor and net creditor countries.
 - A dummy variable for net creditor countries, current account as a percentage of GDP, and the interaction term between the two variables were controlled for to examine significant differences between net debtor and net creditor countries.
 - The author also controlled for the US interest rate, foreign reserves as a percentage of GDP, the sum of total foreign assets and external liabilities as a percentage of GDP, real GDP per capita, energy prices, raw material prices excluding energy, and country-specific fixed effects (all control variables are previous year's observations).
 - The author estimated a linear probability model with a foreign exchange crisis dummy variable as the dependent variable.
 - The definition of a foreign exchange crisis in this study is based on Laeven and Valencia (2020), who defined a foreign exchange crisis as an occurrence when an annualized exchange rate growth is (i) greater than 30% and (ii) more than 10%p higher than the previous year's value.
 - In this study, a foreign exchange crisis refers to a sharp drop in the value of a country's currency due to a sudden crunch in the foreign exchange market.

Analysis Results

	Possibility of a foreign exchange crisis
A dummy variable for net creditor country × Current account	0.156* (1.99)
Current	-0.163** (-2.17)
Observations	2,729
R^2	0.0709

Note: 1) () means t-values clustered by country and time.

2) Statistical significance levels: *** p<0.01, ** p<0.05, * p<0.1

Source: Author's calculation using an extension of the model from Davis, Devereux, and Yu (2023).