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Current Account Dynamics and the Saving-Investment Nexus In a Changing and Uncertain World

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ABSTRACT

We re examine the determinants of current account balances (CAB) and the saving-investment nexus with focus on emerging market and developing economies (EMDEs). We are in a new age in terms of facing not just economic challenges but also other non-economic challenges such as global climate changes, increasing natural disasters, and wars. We face the need to reexamine the determinants of CAB along with national saving and investment. We first take an event study approach, examining how these variables have evolved historically in the wake of wars, natural disasters, and pandemics. The second is a cross country panel investigation of CAB, national saving, and of investment. In the presence of global financial instability, EMDEs tend to experience an improvement in CAB due to a fall in investment. A rise in oil prices increases both national saving and investment, but the change in investment is greater than the change in national saving, which worsens CAB. Contractionary monetary policy by the U.S. Federal Reserve Board tends to lower both national saving and investment, but the impact on CAB is not statistically different from zero. The more frequently a country experiences wars, on average, its CAB tends to improve. When a climatological or geographical disaster occurs, its CAB, national saving, and investment tend to improve. A rise in the level of U.S. monetary policy uncertainty leads to an improvement in CAB, mainly due to a fall in investment.

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1. Introduction

In recent years, we have been confronted with near unprecedented developments in the global economy, ranging from political to natural. The COVID pandemic of 2020 imposed tremendous socio-economic stresses. In the winter of 2022, as the global economy was recovering, Russia drastically expanded its intervention to Ukraine – manifesting in the largest ground war in Europe in 70 years --. In addition to devastating the Ukrainian economy, the conflict destabilized the global economy, spurring commodity prices and heightening uncertainty. These events have occurred against a backdrop of increasingly frequent geophysical, climatological and environmental disasters.

Uncertainty has the potential to affect savings and investment behavior, and therefore external balances. Cross-country and systematic analysis of the determinants of these variables has been somewhat neglected over the past few decades. However, we know that macroeconomic behavior has changed in response to previous pandemics, albeit not as much as during the Black Death. For example, Jorda, Singh, and Taylor (2020), infer a drop in investment and an increase in savings from a decline in real interest rates.

In this paper, we investigate the impact of external shocks and uncertainties on current account, saving, and investment. For that, we use the following two methods:

1. An event study, focusing on major events (e.g., wars, natural disasters, epidemics).
2. A panel analysis of the determinants of the current account balance (CAB), saving, and investment behavior.

The theoretical framework of our empirical examination is as follows:

We investigate how uncertainty affects economies' saving and investment behavior, which in turn affects CAB. There are many types of uncertainty and many ways to measure the degree of

uncertainty. We consider specific events (e.g., wars, disasters, etc.) that can be sources of uncertainty, and consequently elevate certain risks. Such higher levels of risk should affect economic agents' consumption and thereby saving behavior and investment.

The major research questions are:

1. How does the CAB behave around the time of high uncertainty, or economic or non-economic disasters? How can we identify the impacts on saving and investment?
2. Can we identify the impacts of uncertainty-related factors on medium-term behavior of the CAB, saving, and investment?

In what follows, we first briefly survey the development of current account balances, national saving, and investment over a 50-year period. Next, we conduct event study analyses to examine how the CAB, national saving, and investment respond when an economy faces external shocks, or events that increase the level of uncertainty, such as natural disasters, wars, and financial crises. In Section 3, we conduct a more systematic regression analysis to estimate the determinants of the CAB, national saving, and investment. Section 4 augments the regression analysis with variables representing various types of external and global shocks and uncertainty. In Section 5, we make concluding remarks.

2. Trends in Current Account Balances, Saving, and Investment

2.1 Trends in Current Account Balances

Figure 1 illustrates the medians of the CAB for advanced economies (AEs) and emerging market and developing economies (EMDEs) over the period from 1970 to 2021. The interquartile range is denoted by the dashed lines.[1] One characteristic to note is that whether for

[1] We focus on medians, rather than arithmetic or weighted averages, in order to minimize the impact of outliers.

AEs or EMDEs, CAB tends to worsen around the times when the world experienced major financial crises such as the Latin American debt crisis of 1982, the Asian Financial Crisis of 1997-1998, and the Global Financial Crisis (GFC). Except for the GFC, a deterioration of the CAB is followed by a rapid improvement.

Figure 2 compares the CAB by regional groupings. From here on, the sample is composed only of EMDEs. The Middle Eastern economies (MNA), many of which are also oil exporters, experienced large CA surplus in the 1970s, early 1980s, 2000s, and early 2010s. These are the times when oil prices rose. Figure 3 shows the CAB for oil and non-oil exporting country groups. Oil importing EMDEs experienced persistent CA deficits while oil exporters experienced large surpluses except for the late 1980s through the 1990s and mid-2010s.

The behavior of oil exporters is not always shared with exporters of other commodities. In Figure 4, where the CAB of commodity exporter and commodity importer groups are compared[2], the median of commodity exporters traces that of commodity importers, except for the late 2000s and early 2010s. In those periods, the prices of many commodities rose, contributing to a deterioration of the CAB for commodity importing EMDEs.

2.2 Behavior of CAB, saving, and investment – Event study analyses

We focus on the following shocks or events, in order to identify the impact of disasters, wars, and crises:

- ☐ Climatological disasters (e.g., wild fire, drought, glacial lake outburst)
- ☐ Biological disasters (e.g., epidemic, insect infestation, animal accident)
- ☐ Geophysical disasters (e.g., earthquake, mass movement, volcanic activity)

[2] The definition of commodity exporters or importers is based on the World Bank's categorization. For the list of sample economies and subsample compositions, refer to Online Appendix 1.

- ☐ Wars
- ☐ Currency crisis
- ☐ Banking crisis
- ☐ Debt crisis

The data for climatological, biological, and geophysical disasters are extracted from the EM-DAT: The International Disaster Database, created by the Centre for Research on the Epidemiology of Disasters (CRED).[3] The dummy for wars is provided by the Correlates of War (COW) database and Peace Research Institute Oslo (PRIO) database. The data for currency, banking, and debt crisis is based on Laeven and Valencia (2008, 2012). We examine the behavior of CAB, national saving, investment, and real output growth around the time of a disaster or crisis of concern, for EMDEs.

Figures 5 through 11 show the mean CAB, real output growth rates, national saving, or investment in the period three years before and after the occurrence of a disaster or crisis which happens at time $t=t_0$.[4] The mean of an economic variable of concern is calculated for the sample that only includes the economies that experienced the disaster or crisis of concern in the sample from 1973 through 2018.[5]

Figure 5 shows that the means of the variables of interest for the countries that experienced climatological disasters. One can see that these economies experience a slight deterioration of the CAB while both national saving and investment rose moderately. The small deterioration of CAB is driven by an improvement in investment that is slightly larger than that of national saving. At

[3] https://www.emdat.be/

[4] When a disaster or crisis occurs over more than one year, the value of an economic variable of concern as of t_0 is the average of the variable over the period of the disaster/crisis situation. The value as of t_0+1 will be the year after the last year of the disaster/crisis situation.

[5] The data is available for the period from 1970 through 2021. But only the economies that have the data from t_0-3 though t_0+3 are included in the sample. Also, only the economies all of whose CAB, national saving, and investment are available are included in the sample. Dotted lines indicate 90% confidence intervals.

the time of the occurrence of a climatological disaster, real output growth rather improves in the post-disaster period. This outcome might be driven by post-crisis reconstruction efforts, which can lead to CAB deterioration.

Figure 6 repeats the same exercise for the occurrence of wars. Once a war breaks out, CAB starts improves in year t_0 through t_0+2. There is a significant concurrent decline in the growth rate in year t_0-1 through $t=t_0$. While both national saving and investment decline in $t=t_0$, investment declines by less. National saving gradually and steadily rises in the post-war period though the extent of recovery is smaller for investment. The rise of saving reflects a fall in consumer spending.

When a geophysical disaster occurs, both national saving and investment rise (Figure 7), which explains why the CAB barely changes. When a developing country experiences a geophysical disaster, the national output growth rate slightly falls, but recovers quickly in the immediate aftermath. Overall, output growth does not dramatically react to a geophysical disaster, suggesting that the damage of a geophysical disaster tends to be geographically concentrated.

Figure 8 shows that CAB improves after experiencing a biological disaster, and that is driven by a rise in national saving. Economic growth rises in the post-disaster period, especially in year t_0+1. However, the number of observations for biological disasters is limited. Hence, the estimated responses panels of figures are not robust.

Once a currency crisis occurs, output growth falls sharply, and national saving rises (Figure 9). After peaking at $t_0=0$, national saving declines in the following two years while investment stabilizes. The change in CAB seems to be mostly driven by the change in national saving, though other events like exiting a fixed exchange rate regime also positively affects the CAB and economic growth.

Figure 10 shows that when a banking crisis occurs, both national saving and investment fall,

though while investment continues to fall until t_0+1, saving recovers moderately in t_0+1, all of which lead to an improvement of the CAB. A banking crisis also involves deterioration of output growth, but the bottom of output growth occurs at year t_0+1. Although it recovers from t_0+2 on, the investment ratio does not return to the precrisis level, hence contributing to the improving CAB. The underperformance of investment in the post-banking crisis period may be due to persistent credit constraints in the post-crisis period, such as that in many EMEs that went through banking crises during the Asian Financial Crisis.

Economies that have experienced debt crises have experienced deteriorating output growth rates even before the onset of the crisis (Figure 11). The decline in the growth rate is greatest at $t_0=0$. Like in the case of currency crises, the investment ratio falls significantly during and in the immediate aftermath of the crisis. Although the investment level starts recovering in t_0+2, the investment level does not return to the pre-crisis level by t_0+3. The CAB improves rapidly after the crisis because the decline in investment levels was greater than that of national savings.

From Figures 5 through 11, we can make some generalizations. First, the change in the CAB at or around the time of a crisis or disaster tends to be smaller compared to national saving or investment because the changes of the latter two variables tend to offset each other. Second, the movements of national saving and investment appear to be highly correlated with each other. Based on the seminal paper by Feldstein and Horioka (1980), high correlation between national saving and investment suggest that the degree of financial integration is not so high, which is consistent with the fact that our regression analyses focus on developing and emerging market economies. Third, when the disaster or external shock of concern is regionally contained, as in the case of a climate or geophysical disaster, national savings and investment do not move significantly.

These visual presentations and interpretation of the development of the CAB, saving, and

investment focus on the short-term dynamics. Also, these graphs do not control for other factors and variables that can affect CAB, national saving, and investment.

In the following sections, we take a more systematic approach and examine whether and to what extent disasters can affect the macroeconomic variables in the immediate run.

3. Systematic Empirical Analysis of CAB, National Saving, and Investment

3.1 Literature review on the determinants of CAB

The national income accounting identity states that the current account balance is identically equal to the gap between national saving and investment. This means that findings relevant to saving and investment relationship should also be important for the current account, and vice versa. That means that the empirical findings of Chinn and Prasad (2003) and subsequent related papers (e.g., Chinn and Ito (2007, 2022), Chinn, Eichengreen, and Ito (2014)) as well as the IMF's External Balance Assessment approach (Phillips, et al. 2013) should be relevant. However, to the extent that common shocks hit saving and investment, factors important to saving and investment individually might be obscured when examining the current account. For instance, measures of financial openness rarely show up as statistically important in current account analyses, but might for saving or investment. More on the theoretical debates on the determinants of CAB, refer to Chinn and Ito (2022).

3.2 Basic Specification

We rely upon the panel cross-country time series analysis of all available countries (as in Chinn-Ito-Eichengreen (2014) or Chinn-Ito (2022)), viz.

$$y_{i,t} = \alpha + \beta_1 BB_{i,t}$$

$$+ \beta_2 FD_{i,t} + \beta_3 LEGAL_i + \beta_4 KAOPEN_{i,t}$$

$$+ \emptyset_1 \left(FD_{i,t} \times LEGAL_{i,t}\right) + \emptyset_2 \left(LEGAL_{i,t} \times KAOPEN_{i,t}\right) + \emptyset_3 \left(KAOPEN_{i,t} \times FD_{i,t}\right)$$

$$+ X_{i,t}^{'} \Gamma + u_t + \varepsilon_{i,t} \,. \qquad (1)$$

where y_{it} refers to CAB, national saving or investment, all expressed as a share of GDP).

We examine the correlation between y_{it} and four sets of independent variables:

- Fiscal variable (budget balance: *GOVBGDP*)
- Demographic variables (youth and elderly dependency ratios: *RELDEPY* and *RELDEPO*)
- Financial development variables (financial deepening, institutional development, financial openness)
- Other control variables (output growth, initial net international investment position, terms of trade volatility, and relative income)

Financial openness is measured using the *KAOPEN* index of Chinn-Ito (2006) and legal/institutional development (*LEGAL*) is measured as the first principal component of law and order, bureaucratic quality, and anti-corruption measures. As for financial development, we measure it with private credit creation as a share of GDP (*PCGDP*). Net foreign assets as a ratio to GDP (*NFAGDP*, from Lane and Milesi-Ferretti, 2001a, 2007, 2017); relative income (to the U.S.) together with its quadratic term *rel_inc*; terms of trade volatility (*TOT_vol)*; output growth (*GROWTH)*; trade openness (exports plus imports as a share of GDP; *TRADE*); a dummy variable for oil exporting countries (*OIL*); and time fixed effects (u_t).

Furthermore, to capture any evidence for the saving glut hypothesis, that is, the less developed the financial system, the more likely savings are to be redirected externally, we include in the estimation the interaction terms of financial development, financial openness, and the *LEGAL* variable.

We estimate this model using panel data for 35 advanced economies (AE) and 91 emerging market and developing economies (EMDE) between 1970 and 2019, using non-overlapping 5-year averages of the data, thereby permitting a focus on medium-term variation in current account balances, rather than short-term, cyclical, behavior. All the variables, except for net foreign assets to GDP, are converted into the deviations from their GDP-weighted world mean prior to the calculation of five-year averages while net foreign asset ratios are sampled from the first year of each five-year panel as the initial conditions.[6] The use of demeaned series controls for rest-of-world effects. In other words, a country's current account balance is determined by developments at home relative to the rest of the world.[7]

A large literature focuses on the contrasting saving, investment and current-account-balance behavior of industrial and developing countries, often disaggregating further between emerging markets (middle-income countries with relatively extensive access to international capital markets) and other developing countries, pointing out that potential determinants of these outcomes – growth rates, financial development, demographic structure, for example – differ importantly across these groupings. In addition, a number of studies (e.g. Alfaro, et al. 2008; Chinn and Ito, 2007; Ito and Chinn, 2009) have suggested that the impact of these variables and their

[6] Terms-of-trade volatility (*TOT_vol*), trade openness (*TRADE*), and legal development (*LEGAL*) are averaged for each country over the sample period. Hence, they are time-invariant.

[7] Lane and Milesi-Ferretti (2001a) apply the same treatment to the explanatory variables for the same reason. The data are mainly drawn from the World Bank's *World Development Indicators*, IMF's *International Financial Statistics*, and IMF's *World Economic Outlook*. Further detail can be found in the Data Appendix.

values may differ systematically across these groupings. We therefore estimate separate regressions for AEs, EMDEs, and emerging market economies (EMEs), in addition to the full sample.[8]

3.3 Basic findings

Table 1 reports the estimates of CAB, national saving, and investment for the full sample and the subsamples of AEs, EMDEs, and EMEs.

According to Table 1-1, fiscal balance, i.e., public saving, plays an important role in external balances. A one percentage point increase in the fiscal deficit results in a 0.27 to 58 percentage point increase in the current account deficit, depending on country groups.[9] Among the subsamples, the EMDE sample tends to have the largest magnitude of estimated coefficients, while the AE and EME groups tend to have smaller estimated coefficients though the estimates remain statistically significant.

Columns (5) through (8) of Table 1-1 and Columns (1) through (4) of Table 1-2 suggest that the significantly positive coefficients of fiscal balance are mainly reflecting the significantly positive coefficients of fiscal balance in national saving, not so much in that of investment. According to the estimates of national saving determinants, a one percentage point increase in budget balance would lead to a 0.74 percentage point increase in national saving for AEs and 0.59 for EMDEs. In the investment estimation, the estimate of fiscal balance is significantly positive only for AEs with its estimate small. For the EME group, the coefficient of fiscal balance is significantly negative.

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[8] EMEs are those classified as either emerging or frontier in 1980–1997 by the International Financial Corporation, plus Hong Kong and Singapore.

[9] These estimates are relatively large compared the findings in Erceg et al. (2005), Bussière (2010), Corsetti and Muller (2006), and Gruber and Kamin (2007).

The Ricardian hypothesis predicts that any change in public saving would be offset by the exact same change but with the opposite sign in private saving, thus making the estimated coefficient of budget balances zero. The Ricardian framework can be extended to predict public dissaving would not crowd out private investment, thus making public saving and investment uncorrelated. In fact, for the full sample and the EMDE subsample, the estimate of fiscal balance is found to be insignificant in the investment estimation.

Based on these findings, the behavior of most of our sample countries is not consistent with the Ricardian equivalence – public saving does affect national saving. That is because the impact of public saving is not offset by the movement of private saving as shown in the estimation results for private saving (columns (5) through (8) of Table 1-2).

The estimates provide some evidence consistent with the life-cycle hypothesis. Countries with higher young dependency ratios tend to have lower national saving and investment. For AEs and EMEs, higher old dependency ratios also have the same effects on national saving and investment. The findings of the CAB estimates are not much robust, which may probably be because the impacts of demographical factors in national saving and investment cancel out each other.

In countries with well-developed financial markets, agents can cover and share risks more effectively and efficiently. For example, in China, down payments are larger, so more saving is needed to prepare for the purchase of a home. In such an economy, financial markets tend to be less complete. Hence, cash provides safer liquidity, that makes the volume of down payments higher.

We find that greater financial development can have negative impacts on CAB for AEs and EMEs. The negative impact on CAB for AEs is primarily because financial development tends to lead to greater investment. For EMEs, the negative impact is driven by the native impact of

financial development on national saving.

According to the saving glut hypothesis, the degree of financial openness and the extent of institutional/legal development matters. Our estimates suggest that greater financial openness tends to lead to lower national saving (though not significantly so for EMEs). For the full and EMDE samples, countries with more open financial markets tend to experience lower investment. The significantly negative impacts of greater financial openness on the CAB are consistent with the greater magnitude of the KAOPEN estimate for national saving than for investment. The negative impact of financial openness on national saving is greater for countries with more developed institutions and legal systems, another consistent result to the saving glut hypothesis. However, the negative interaction effect is also found in the investment estimation. Hence, the interactive effect is less robust for the CAB estimation.

Besides the saving glut effects, countries experiencing high economic growth tend to save more and invest more, although the impacts on saving and investment again seem to cancel each other. The impact of high growth on national saving and investment especially appears to be larger for EMEs.

The other control variables, while not of central importance, largely enter in as expected.

Larger net foreign asset positions, which tend to generate a stronger income effect, affect the current account balance positively, as anticipated. The relative income terms, which tend to be jointly, if not always individually, significant, indicate that higher income countries generally have more positive current account balances (capital tends to flow from richer to poorer countries as suggested by the standard neoclassical growth model – see e.g. Lucas (1990)). Terms of trade volatility induces precautionary saving and CAB improvement for AEs and EMEs, though the positive impact of TOT volatility on investment is somewhat counterintuitive while the negative

impact for AEs and EMEs makes sense. Finally, as we have seen graphically, oil exporting countries have stronger current account balances and national saving, other things equal.

3.4 Robustness Tests

We have conducted the estimations so far by using the simple pooled OLS method (with robust standard errors).[10] One attribute of pooled OLS is that one imposes the restriction that the effect of a change in a given right hand side variable has the same cross-country effect as within-country. That is, if the budget balance were to increase in a given country, for example, the effect over time would be quantitatively the same as between countries. This restriction can be relaxed by using a fixed effects specification. That is, a fixed effect model controls for time-invariant variables or variables that grow only slowly, that yields within impacts of independent variables.

While estimation with fixed effects is effective in capturing unobservable country-specific or systematic effects, estimation with random effects would be more appropriate when country-specific effects are non-systematic.

Clearly, all the variables involved in our analysis are to one degree or another endogenous. Hence, one has to worry about simultaneity bias. One particularly plausible source of simultaneity can arise from the possible feedback of the current account balance on government budget balances (through tax receipts or government spending, for instance). We implement two-stage least squares (2SLS) estimation by instrumenting the budget balance variable with selected variables. The instruments include the dummy for the left-wing government (*LEFT*); military spending as a ratio to GDP (*MILEXP*); yearly changes in unemployment rates (*D_U*); and regional dummies. The rationale for using these instruments follows the past literature on the determinants of budget

[10] The OLS estimation is used, and heteroscedasticity of the variables is clustered around the sample country.

balances such as Roubini (1991), Roubini and Sachs (1989a, b), Persson and Tabellini (2001), and Braconier and Holden (2004).[11] For each sample, we remove instruments that are found to be insignificant in the first-stage estimation.

Although the purpose of our estimation exercise is to focus on medium-run movements in CAB, national saving, and investment, one may wonder if the same or more consistent results could be obtained by estimating with annual data, so that we could also examine the dynamics of the variables of our focus. Hence, we also conduct a robustness check using annual data.

When conducting panel data analysis with annual data, properly handling the dynamics of the data in the panel context and controlling for endogeneity are important. As another robustness check, we use the system generalized method of moments (GMM) estimation method. This method allows us to consistently estimate dynamic panels while accounting for joint endogeneity and controlling for potential biases arising from country-specific effects. Hence, we choose the system GMM method over the difference GMM (Arellano and Bond, 1991; Arellano and Bover, 1995; Blundell and Bond, 1998). Last, considering that the time dimension of our panel is larger than the cross-country dimension, an overabundance of moment conditions can lead to an over-identification and downward bias in standard errors. To mitigate this, we make a finite-sample correction (Windmeijer, 2005) to standard errors.[12]

[11] Based on these papers, the right-wing governments tend to prefer smaller governments whereas the left-wing governments may prefer big governments and welfare-states with larger social safety nets, though these kinds of characterization is rather controversial especially in recent years. Governments willing to spend more for the military are willing to do deficit spending. There is some heterogeneity among countries in different regions. For example, Latin American and African economies tend to be more aggressive in deficit spending, while Asian economies tend to be more conservative.

[12] The explanatory variables can be categorized to a vector of endogenous variables (internal instruments) and a vector of exogenous variables. The former includes budget balance, net foreign asset, relative income level and its squared, and financial development. Exogenous instruments include young-age and old-age dependency ratios, financial openness, the interaction of financial openness with legal development and financial development, the interaction between financial development and legal development, TOT volatility, trade openness, oil exporter dummy, and output growth.

Here, we conduct estimations by applying fixed effects and 2SLS models to five-year panels, GMM, fixed effect, and random effect to the annual data for the estimation. The estimation results are reported in Tables 2-1, 2-2, and 2-3 for CAB, national saving, and investment, respectively. We only present the robustness check results for the EMDE group. In column (1) of each table, the results of the OLS estimation for EMDE reported Tables 1-1, 1-2, and 1-3 are reproduced for comparison.

Among the various model specifications, the estimate of government budget balance is the most stable in estimating the current account balance equation. It is significantly positive, except for the 2SLS estimation model, with the magnitude ranging from 0.46 to 0.58 among the three models.

The national saving estimate also yields persistently and significantly positive coefficients on the budget balance, across all the estimation models. For the estimation of investment, when the budget balance variable enters the model statistically significantly, its estimate is negative. Theoretical prediction suggests that the estimate of budget balance should be positive – if a government conducts deficit spending, that can crowd out investment with higher interest rates. However, our findings are not consistent with this prediction.

In the GMM model with annual data for the three dependent variables, the first-lag variable enters the estimation with significantly positive estimates, suggesting that CAB, saving, and investment are persistent while the degree of persistence is greater for national saving than for investment, which also explains a middle-level of persistence for CAB.

Generally, the signs of the estimates appear to be qualitatively consistent. Whether using annual data or five-year panels, fixed effects models yield more statistically significant estimates. That suggests that time variations also contribute to the variances of the three dependent variables.

3.5 Other Factors

We have tried to exhaust candidate variables as the determinants of current account, national saving, and investment so as to reduce the possibility of omitted variable bias. From the literature, we specifically included the change in labor force, the monetary policy rate of the respective economies, the degree of urbanization, and FDI inflows as a share of GDP. We report the estimates of these candidate variables in Appendix-Table 1. However, it is only FDI inflow that turned out to be significant in determining the CAB, national saving and investment.

A country that receives more FDI flows tends to run current account deficit. This reflects the fact that FDI inflows have a negative association with national saving; this makes sense in that FDI flows from overseas can be a substitute for national saving. Moreover, FDI inflows can lead to greater domestic investment. Because of its negative impact on national saving and a positive impact on investment, FDI inflows are associated with a lower current account balance.

4. Analyzing the Impacts of Economic and Non-Economic Uncertainties

Thus far, we have not explicitly examined the impacts of economic or non-economic uncertainties. Now, we include $UNC_{i,t}$ in the estimation model as below where $UNC_{i,t}$ represents economic or non-economic external shocks or uncertainties.

$$y_{i,t} = \alpha + \beta_1 BB_{i,t} + \beta_2 FD_{i,t} + \beta_3 LEGAL_i + \beta_4 KAOPEN_{i,t} + \emptyset_1\left(FD_{i,t} \times LEGAL_{i,t}\right) + \emptyset_2\left(LEGAL_{i,t} \times KAOPEN_{i,t}\right) + \emptyset_3\left(KAOPEN_{i,t} \times FD_{i,t}\right)$$

$$+ X_{i,t}^{'}\Gamma + \boldsymbol{UNC}_{\boldsymbol{i,t}}^{'}\boldsymbol{\Theta} + u_t + \varepsilon_{i,t} . \qquad (2)$$

4.1 Global events

In the estimates we have had thus far reported, we included time fixed effects to capture the impacts of global factors. However, time fixed effects do not represent 'what kind of' external or global shocks. Here, we redo the regression analyses, replacing the time fixed effects with variables that specifically represent some kind of external or global shock.

The candidate variables as global or external shocks are:

- Maximum level of VIX within 5-year period;
- Oil price;
- US interest rate; and
- Dummy for global recession.

We first test to see if global financial instability affects CAB, national saving, or investment. In the estimation in column (1) of Table 3, we use the VIX index from the Chicago Board Options Exchange as a measure of the extent of investors' risk aversion, and include the index as the maximum level within each five-year panel.[13] The significant positive estimate on CAB and the negative (though marginally significant) estimate on investment indicate that, when a severe financial instability occurs, or is expected to occur (either of which is to be captured by a rise in the VIX index), CAB tends to improve, though investment deteriorates. Financial uncertainty or instability might increase perceived risks for investors, who would in response become more risk averse, leading to a decline in investment. A severe global financial shock would induce capital

[13] The other explanatory variables are included, but their estimates are not reported in the table to conserve space. We also tested by including the five-year average of the VIX index, and found that the estimation results are intact.

outflow from EMDEs, that leads investment to decline and CAB to improve.

Oil price movements can exert shocks to the global economy as we experienced in the 1970s, mid-2010, and during the COVID-crisis period. When the oil price variable (as five-year average) is included in the estimation, its estimate is insignificant for the CAB estimates, but the estimates are significantly positive in the national saving and investment estimation. An oil price increase leads to an increase in national saving and investment. Possibly, oil price increase may lead to more investment to build more extraction facilities and alternative resources to reduce the reliance on oil. National saving also rises as a result, possibly reflecting an income effect. When the oil price index is included along with the other global shock variables (column 5), its estimate on CAB now becomes statistically negative in addition to the positive impact on investment.

As happened in 2022 to 2024 and other past events, U.S. monetary policy or expectations on its possible change can have a great influence on the economic behavior of other economies (Rey, 2013). Hence, we include the U.S. federal fund rate in the estimation. Its estimate for national saving and investment is negatively significant while its estimate on CAB is nonexistent. Probably, the impacts of the U.S. federal fund rate on national saving and investment cancelled each other.

When other external factors are also included in the estimation, the impact of the U.S. interest rate becomes significantly negative for CAB and national saving. A rise in U.S. policy interest rates would attract capital flows to the U.S., that suggests that sample economies should experience capital outflows. Hence, the estimate of U.S. monetary policy on CAB being significantly negative in model (5) is counter-intuitive.

4.2 Wars, disasters, pandemics

Do wars, disasters, and pandemics affect saving and investment? This is a crucial question

given what we have experienced from 2020 through 2024.

In Table 4, we augment the regression model with the dummy variables we used in Section 2, that represent war, climatological disasters, biological disasters, and geophysical disasters. Here, we include these dummies as the number of a disaster of concern occurs in each five-year panel.[14] For all three dependent variables, these variables are included individually in columns (1) through (4) and jointly in columns (5) and (6).[15]

According to the results in Table 4, the more frequently a country experiences wars in a five-year period, on average, its CAB tends to improve, though we do not observe any significant effects in either national saving or investment estimates. One possible explanation for this is that when a war breaks out, capital tends to flow out of the war-torn country. The increase in capital outflow involves an improvement in CAB.

When a climatological disaster happens, both national saving and investment tend to rise, but the disaster's impact on investment is not robust to inclusion of other disasters. A rise in national saving might be attributed to a rise in precautionary saving. As such, that leads an improvement in the CAB of the disaster-hit country.

Countries with biological disasters tend to experience lower levels of national saving and investment. Its estimate is significantly positive for CAB, and is robust to the inclusion of other disasters.

Geophysical disasters are found to have significantly positive impacts on the CAB, national saving, and investment. It is interesting to see that a country that experiences more frequent geophysical disasters tends to increase its investment. That likely reflects reconstruction efforts

[14] Ideally, the economic cost of disasters would be included instead of the number of disasters. However, such data would significantly reduce the number of observations due to serious problems with data availability. Hence, we use the variables that represent the number of observations.
[15] Time fixed effects are included in the estimations again.

and foreign aid in the immediate aftermath of a geophysical disaster ("Charity Hazard[16]").

To illustrate whether the empirical results have economic significance, we use cases of geophysical disasters in the 2005-09 period. In this period, Chile ran current account surplus of 1.73% (as a share of GDP) and experienced three occurrences of geophysical disasters. In the previous five-year period, i.e., the 2000-04 period, Chile ran current account deficit with the size of -0.15% and did not experience any geographical disaster. That suggests that Chile's current account balance improved by 1.89 percentage points between the 2000-04 period and the 2005-09 period. Also, considering that Chile experienced three geographical disasters during the 2005-09 period, and that the estimate of the number of geographical disasters is 0.002, out of the improvement in the current account balance by 1.89 percentage points, 0.6% is driven by the three geographical disasters.

If instead of current account balance, we look at national saving, Chile's national saving rose by 1.81 percentage points between the 2000-04 period and the 2005-09 period. Given that Chile experienced three geographical disasters and that the estimated number of geographical disasters is 0.005, out of the improvement in national saving by 1.81 (from 26.5% to 28.3%) percentage points, 1.50% is driven by the three geographical disasters. Thus, the impact of geophysical disaster occurrences is not just statistically, but also economically, significant.

4.3 Uncertainty

Lastly, we test the impacts of some variables that pertain to uncertainty.

The World Uncertainty Index (WUI) measures the extent of uncertainty for sample countries.

[16] "Charity hazard" refers to a state where disaster risk is not highly insured because individuals anticipate to receive financial assistance from the government or aid from the private sector or overseas. See Raschky and Weck-Hannemann (2007).

it is constructed by counting the frequency of the word "uncertainty" appearing in the Economist Intelligence Unit (EIU) country reports.[17] For our purposes, we use WUI for individual countries instead of WUI Global, so as to focus on the extent of uncertainty each individual country faces. We rely upon the World Uncertainty Index maximum value in the 5-year period as a general proxy measure for crisis situations in the country.

The extent of uncertainty can certainly rise if a country faces a crisis situation. To capture it, we also examine whether the occurrence of currency, banking, and debt crisis can affect the nexus between CAB, national saving, and investment by using the crisis dummies introduced in Section 2 (Laevan and Valencia, 2020).

We also examine the impact of recession. It is clear that recessions increase the degree of uncertainty and affect both savings and investment, and thereby the CAB.

Table 5 reports the estimated coefficients for the WUI, the financial crisis dummies, and the recession dummy. The WUI is included in the estimation in the same manner as the VIX was included in the previous estimation. The highest value of the WUI for a country in each five-year panel is used.

According to the table, if a country faces a higher degree of uncertainty, the impacts on CAB, national saving and investment are negative, and not statistically different from zero. The finding persists even when other uncertainty variables are included in the regression. These results are different than those found in Furceri et al. (2024) with local projection impulse response functions, and might be attributable to our focus on medium run effects. As we saw in Figures 9 through 11, it is often the case that economies inflicted with a currency, banking, or debt crisis tend to experience V-shaped movements in the variables of our concern around the time of the crisis.

[17] Refer to https://worlduncertaintyindex.com/ and Ahir, Bloom and Furceri (2022).

Hence, in five-year frequency or from the perspective of medium-run, the variations in these variables become smoother, that makes the statistical significance of the financial crisis dummies on the CAB, national saving, and investment.

The negative impact of debt crisis on national saving is marginally significant, which reflects that when a debt crisis occurs, households, firms and the government dissave to help repay the accumulated debt. During a debt crisis, many agents face a shrinkage of their assets while the size of liabilities remains intact, contributing to a rise in debt burden which agents may try to pay off by deleveraging.

According to the results of the full model in column (6), economic recession leads to a decrease in saving and investment while current account balance remains unchanged. Recessions increase the level of uncertainty and thereby reduce investment. Real income is impaired by recessions. Thus, economic agents are forced to deleverage their financial and real assets in order to maintain economic life.

As the last exercise, we test a group of different types of uncertainty indexes. As we have seen, policy uncertainty arising from the U.S. can affect other economies through spillover effects. Lastauskas and Nguyen (2023) empirically show that U.S. monetary policy uncertainty increases volatility in local output and inflation and lowers output, inflation, and the interest rate. Kim, et al. (2024) also show that a U.S. monetary policy uncertainty shock causes contraction in local economies (while its impact is greater for floating exchange rate regime than for fixed exchange rate regime). Mumtaz and Ruch (2023) argue that global monetary or fiscal policy uncertainty shock works in the same way as a negative supply shock. A policy uncertainty shock would cause output to contract and prices to rise.

In Table 6, we test the impact of different types of U.S. economic policy uncertainty, which

we measure using the uncertainty indexes of Baker, et al.'s (2016), namely, the indexes of U.S. (overall) economic policy uncertainty, U.S. monetary policy uncertainty, U.S. fiscal policy uncertainty, and U.S. trade policy uncertainty. The index for U.S. economic policy uncertainty measures the overall level of U.S. economic policy uncertainty. In other words, the index for U.S. economic policy is composed of the three other policy uncertainties. For details, refer to Data Appendix and https://worlduncertaintyindex.com/ .

According to Table 6, the overall impact of U.S. economic policy uncertainty on CAB is significantly negative. The greater the uncertainty of U.S. economic policy, the worse the CAB for local developing economies. That is mainly because the level of national investment rises. This finding is inconsistent with the above discussed literature in which higher level of global or U.S. uncertainty would lead to a fall in output (which implies CAB would improve due to a rise in absorption).

When we focus on U.S. monetary policy shock, we find that a U.S. monetary policy shock would lead to an improvement in CAB, mainly due to a fall in investment – national saving would fall as well, but the magnitude of the fall in investment is greater. This finding is more consistent with what is argued in the literature.

U.S. fiscal policy uncertainty seems to increase local economies' investment while it does not affect national saving. Hence, the CAB the deteriorates in response to heightened fiscal policy uncertainty. When both monetary and fiscal shocks are included in the estimation (column (5)), the positive impact of monetary shocks on CAB is larger in absolute value than the negative shock of fiscal policy on CAB, suggesting that overall, our finding is consistent with the literature.

5. Concluding Remarks

Climate change, natural disasters, wars, energy crises buffet the world economy, heightening uncertainty. Understanding how economic behavior is affected by these events, and associated uncertainty, is consequently of importance. Given that small open economies are particularly vulnerable to external shocks, it is of even greater importance. Armed with new data, we have focused on analyzing how EMDEs in particular respond to uncertainty in terms of the saving-investment nexus that constitutes the dynamics of current account.

We first conduct event studies to examine if there are any regularities in the saving and investment behavior in response to major events (wars, natural disasters, epidemics). Second, we implement a panel regression analysis to identify the determinants of current account, saving, and investment behavior, including variables that represent major events.

The event studies yielded several interesting results. First, the impact of external events or disasters on the CAB tends to be smaller than the impact on national saving or investment. That is mainly because the impacts on the latter two variables cancel out each other. Second, the movements of national saving and investment appear to be highly correlated with each other, a result consistent with Feldstein and Horioka (1980). The high correlation between national saving and investment suggests that the sample economies, i.e., EMDEs, are not highly integrated with international financial markets. Third, when the disaster or external shock of concern is regionally contained, as in the case of a climate or geophysical disaster, national savings and investment do not move significantly.

From the regression exercises, we found the following notable results.

When financial instability occurs on a global scale, EMDEs tend to experience an improvement in CAB due to a fall in investment. A current account improvement can involve capital outflow, though these impacts are statistically insignificant. A rise in oil prices increases

both national saving and investment, but the change in investment is greater than the change in national saving, which worsens CAB. Contractionary monetary policy by the U.S. Federal Reserve Board tends to lower both national saving and investment, but the impact on CAB is not statistically different from zero.

The more frequently a country experiences wars, on average, the more the CAB tends to improve. When a climatological disaster happens, all of its CAB, national saving, and investment tend to improve. Geophysical disasters can have significantly positive impacts on all the three variables as well. The impact of currency, banking, or debt crisis on the three macroeconomic variables is usually discernable from zero. This result is different from those of event studies. That means that while financial crisis impacts the saving-investment dynamics in the short-run, financial crisis does not leave scar on national saving and investment in the median run.

Using the indexes of U.S. economic, monetary, fiscal, and trade policy uncertainty, we examined how uncertainty driven by U.S. economic policy can affect EMDEs. We find that the type of US economic policy uncertainty matters. For instance, if the extent of uncertainty in U.S. monetary policy rises, national investment falls more than national saving, leading an improvement of CAB. U.S. fiscal policy uncertainty positively affects local economies' national investment, resulting in a deteriorating CAB.

Data Appendix

We provide below a listing of the mnemonics for the variables used in the analysis, descriptions of these variables and the source(s) from which the primary data for constructing these variables were taken.

Mnemonic	Source*	Variable description
CAGDP	WDI, WEO	Current account to GDP ratio
GOVBGDP	WDI, IFS, WEO	General government budget balance, ratio to GDP
MILSPEND		Military spending, ratio to GDP
PRIVSAVGDP	WDI, WEO	Domestic saving minus budget balance, ratio to GDP
INVGDP	WDI, WEO	Investment, ratio to GDP
NFAGDP	LM	Stock of net foreign assets, ratio to GDP
RELY	PWT	Relative per capita income, adjusted by PPP exchange rates, Measured relative to the U.S., range (0 to 1)
RELDEPY	WDI	Youth dependency ratio (relative to mean across all countries), Population under 15 / Population between 15 and 65
RELDEPO	WDI	Old dependency ratio (relative to mean across all countries), Population over 65 / Population between 15 and 65
YGRAVG	WDI	Average 5-year real GDP growth
TOT_vol	WDI	Terms of trade
TRADE	WDI	Openness indicator: ratio of exports plus imports of goods and nonfactor services to GDP
PCGDP	WBFS	Ratio of private credit to GDP
KAOPEN	CI	Capital account openness
BQ	ICRG	Quality of Bureaucracy
LAO	ICRG	Law and order
CORRUPT	ICRG	Corruption index
LEGAL	Authors' calc.	General level of legal development, first principal component of BQ, LAO, and CORRUPT.
UI	World Uncertainty Index Database (WUI)	Country *i*'s Uncertainty Index. It measures the general level of uncertainties arising from country *i* economic policies. The index is based on the frequency of articles in newspapers that discuss policy-related economic uncertainty. https://worlduncertaintyindex.com/ Baker, Bloom and Davis, 2016).
USEPU	WUI	U.S. economic uncertainty. It measures the general level of uncertainties arising from U.S. economic policies in general. The index is based on the frequency of articles in

		American newspapers that discuss policy-related economic uncertainty.
USMPU	WUI	U.S. monetary policy uncertainty. It measures the frequency of articles in American newspapers that discuss policy-related economic uncertainty and also contain one or more references to U.S. monetary policy.
USFPU	WUI	U.S. fiscal policy uncertainty. It measures the frequency of articles in American newspapers that discuss policy-related economic uncertainty and also contain one or more references to U.S. fiscal policy.
USTRU	WUI	U.S. trade policy uncertainty. It measures the frequency of articles in American newspapers that discuss policy-related economic uncertainty and also contain one or more references to U.S. trade policies.

* These are mnemonics for the sources used to construct the corresponding. CI: Chinn and Ito (2006); DPI2004: ICRG: *International Country Risk Guide*; IFS: IMF's *International Financial Statistics*; LM: Lane and Milesi-Ferretti (2006); OECD: *OECD Economic Outlook* Database; PWT: *Penn World Table*; WBFS: World Bank Financial Structure Database; WDI: *World Development Indicators*; and WEO: *World Economic Outlook*. WUI: World Uncertainty Index (Home - World Uncertainty Index).

Appendix-Table 1: Impacts of Other Variables – EMDE

(a) Current Account

	(1)	(2)	(3)	(4)	(5)
Monetary policy rate	-0.068				-0.013
	(0.049)				(0.051)
Change in labor force		-0.293			-0.373
		(0.224)			(0.246)
Urbanization			-0.021		-0.008
(% of total population)			(0.025)		(0.024)
FDI inflow (% of GDP)				-0.694	-0.697
				(0.106)***	(0.118)***
N	512	501	577	576	449
Adj. R2	0.51	0.51	0.48	0.57	0.61

(b) National Saving

	(1)	(2)	(3)	(4)	(5)
Monetary policy rate	0.023				0.076
	(0.089)				(0.100)
Change in labor force		0.006			-0.061
		(0.260)			(0.302)
Urbanization			-0.003		0.002
(% of total population)			(0.037)		(0.038)
FDI inflow (% of GDP)				-0.247	-0.278
				(0.117)**	(0.121)**
N	507	494	568	567	446
Adj. R2	0.50	0.51	0.49	0.49	0.51

(c) Investment

	(1)	(2)	(3)	(4)	(5)
Monetary policy rate	0.064				0.065
	(0.084)				(0.097)
Change in labor force		0.304			0.272
		(0.258)			(0.326)
Urbanization			0.023		0.020
(% of total population)			(0.033)		(0.036)
FDI inflow (% of GDP)				0.385	0.394
				(0.118)***	(0.134)***
N	512	499	575	574	449
Adj. R2	0.29	0.26	0.29	0.31	0.28

Note: The other explanatory variables are included, but their estimates are not reported in the table to conserve space.

References:

Ahir, H., N, Bloom, and D. Furceri. 2022. “The World Uncertainty Index,” NBER Working Paper #29763. Cambridge, United States: National Bureau of Economic Research.

Arellano, M., and S. Bond. 1991. “Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations.” *Review of Economic Studies* 58(2): 277-297.

Arellano, M., and O. Bover. 1995. “Another Look at the Instrumental Variable Estimation of Error-Components Models.” *Journal of Econometrics* 68(1): 29-51.

Baker, Scott R., N. Bloom, S. J. Davis. 2016. “Measuring Economic Policy Uncertainty,” The Quarterly Journal of Economics, Volume 131, Issue 4, November 2016, Pages 1593–1636.

Blundell, Richard and S. Bond. 1998. “Initial conditions and moment restrictions in dynamic panel data models”, Journal of Econometrics 87 (1998) 115—143.

Braconier, H. Holden, S., 2004. Fiscal Policy in the OECD: Measurement and Cyclical Adjustment, mimeo.

Bussière, M. and M. Fratzscher, and G. J. Müller. 2010. “Productivity Shocks, Budget Deficits and the Current Account,” *Journal of International Money and Finance*, 29, 1562-1579.

Chinn, M.D., Eichengreen, B. and Ito, H., 2014. A forensic analysis of global imbalances. Oxford Economic Papers, 66(2), pp.465-490.

Chinn, M.D. and Ito, H., 2022. A Requiem for “Blame It on Beijing” interpreting rotating global current account surpluses. Journal of International Money and Finance, 121, p.102510.

Chinn, M.D. & H. Ito. 2007. "Current Account Balances, Financial Development and Institutions: Assaying the World 'Savings Glut'," Journal of International Money and Finance, Volume 26, Issue 4, p. 546-569 (June 2007).

Chinn, M.D. and Prasad, E.S., 2003. Medium-term determinants of current accounts in industrial and developing countries: an empirical exploration. Journal of international economics, 59(1), pp.47-76.

Corsetti, G. and G. J. Müller. 2006. "Twin Deficits: Squaring Theory, Evidence and Common Sense," *Economic Policy* 21: 597–638.

Erceg, C. J., L. Guerrieri, and C. Gust. 2005. "Expansionary Fiscal Shocks and the U.S. Trade Deficit," *International Finance*, 8: 363-397.

Feldstein, M. and C. Horioka 1980. "Domestic Saving and International Capital Flows," *Economic Journal*, 90 (358): 314–329.

Furceri, D., G. Karras, and K. Yarveisi. 2024. "The Effects of Uncertainty on the Current Account," mimeo (July).

Gourinchas, P. O. and H. Rey. 2007. "From World Banker to World Venture Capitalist: U.S. External Adjustment and the Exorbitant Privilege," In: *G7 Current Account Imbalances: Sustainability and Adjustment*, 11-66, National Bureau of Economic Research, Cambridge, MA.

Gruber, J. W. and S. B. Kamin. 2007. "Explaining the Global Pattern of Current Account Imbalances," *Journal of International Money and Finance*, 26: 500-522.

IMF, 2016, *2016 External Sector Report*, International Monetary Fund, July 27.

Ito, H. and M.D. Chinn. 2009. "East Asia and Global Imbalances: Saving, Investment, and Financial Development". In T. Ito and A. Rose, ed., *Financial Sector Development in the Pacific Rim*, National Bureau of Economic Research-East Asian Seminar on Economics 18.

Jordà, Ò., Singh, S.R. and Taylor, A.M., 2022. Longer-run economic consequences of pandemics. Review of Economics and Statistics, 104(1), pp.166-175.

Kim, S., Y. Jung, and Y. Yun. 2024. “US Monetary Policy Uncertainty Spillover and the Role of Exchange Rate Regime, ary Policy Uncertainty Spillover and the Role of Exchange Rate Regime (August 14, 2024). Available at SSRN: https://ssrn.com/abstract=4171236 or http://dx.doi.org/10.2139/ssrn.4171236 .

Laeven, Luc and Fabian Valencia, 2008, “Systemic Banking Crises: A New Database,” IMF Working Paper No. 08/224.

Laeven, Luc and Fabian Valencia, 2012, “Systemic Banking Crises Database: An Update,” IMF Working Paper No. 12/163.

Lane, P.R., and G.M. Milesi-Ferretti. 2017. "International Financial Integration in the Aftermath of the Global Financial Crisis." *IMF Working Paper* No. 17/155 (May).

Lane, P. R. and G. M. Milesi-Ferretti. 2007. “The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004,” *Journal of International Economics* 73: 223-250.

Lane, P. and G.M. Milesi-Ferretti. 2001a. “Long-capital Movements,” NBER Working Paper #29763. Cambridge, United States: National Bureau of Economic Research.

Lane, P. and G.M. Milesi-Ferretti. 2001b. “The external wealth of nations: measures of foreign assets and liabilities for industrial and developing economies.” Journal of International Economics, 55, pp 263–294.

Lastauskas, P. and A.D. Minh Nguyen. 2023. “Global impacts of US monetary policy uncertainty shocks,” Journal of International Economics, Volume 145, November 2023, 103830. https://doi.org/10.1016/j.jinteco.2023.103830.

Lucas, Robert, 1990, "Why Doesn't Capital Flow from Rich to Poor Countries?" American Economic Review, Vol. 80 (May), pp. 92–96.

Mumtaz, H. & F. U. Ruch. 2023. “Policy Uncertainty and Aggregate Fluctuations : Evidence from Emerging and Developed Economies,” Policy Research Working Paper Series 10564, The World Bank.

Persson, T. Tabellini, G., 2001. Political Institutions and Policy Outcomes: What are the Stylized Facts? CESifo Working Paper Series No. 459, April.

Phillips, M.S., Catão, M.L., Ricci, M.L.A., Bems, M.R., Das, M.M., Di Giovanni, M.J., Unsal, M.F., Castillo, M., Lee, J., Rodriguez, J. and Vargas, M.M., 2013. The external balance assessment (EBA) methodology. International Monetary Fund.

Raschky, P. and H. Weck-Hannemann. 2007. “Charity hazard—a real hazard to natural disaster,” Environmental Hazards, Vol 7, issue 4, pp 321-329.

Rey, Hélène. 2013. “Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence.” In Federal Reserve Bank of Kansas City, Global Dimensions of Unconventional Monetary Policy, Proceedings of the Jackson Hole Symposium, pp 285–333.

Roubini, N., 1991. Economic and Political Determinants of Budget Deficits in Developing Countries. Journal of International Money and Finance, Vol. 10, S49-S72.

Roubini, N. Sachs, J. D., 1989a. Political and Economic Determinants of Budget Deficits in the Industrial Democracies. European Economic Review, Vol. 33, 903-938.

Roubini, N. Sachs, J. D. 1989b. Government Spending and Budget Deficits in the Industrial Countries. Economic Policy, Vol. 8, 99-132.

Windmeijer, F. 2005. “A Finite Correction for the Variance of Linear Efficient Two-step GMM Estimators.” *Journal of Econometrics* 126: 25 – 51.

Table 1-1: Basic Model Augmented with Saving Glut Variables, Current Account Balance and National Saving

	Current Account				National Saving			
	(1) Full	(2) AE	(3) EMDE	(4) EME	(5) Full	(6) AE	(7) EMDE	(8) EME
Government budget balance	0.542	0.364	0.581	0.273	0.592	0.738	0.594	0.172
	(0.060)***	(0.088)***	(0.081)***	(0.075)***	(0.069)***	(0.119)***	(0.082)***	(0.124)
Net foreign assets (initial)	0.026	0.016	0.024	0.035	0.015	0.012	0.008	0.023
	(0.005)***	(0.008)**	(0.006)***	(0.006)***	(0.004)***	(0.006)*	(0.005)*	(0.010)**
Relative income	0.104	0.268	0.095	0.106	-0.001	0.118	0.015	0.101
	(0.030)***	(0.072)***	(0.038)**	(0.039)***	(0.033)	(0.075)	(0.045)	(0.055)*
Relative income squared	-0.032	-0.101	-0.029	0.002	-0.008	-0.035	-0.007	-0.058
	(0.015)**	(0.042)**	(0.017)*	(0.029)	(0.014)	(0.046)	(0.016)	(0.035)*
Dependency ratio (young)	-0.003	-0.048	-0.005	-0.018	-0.057	-0.099	-0.037	-0.110
	(0.010)	(0.018)***	(0.014)	(0.013)	(0.013)***	(0.020)***	(0.017)**	(0.021)***
Dependency ratio (old)	0.001	-0.015	0.005	-0.035	-0.011	-0.031	0.000	-0.088
	(0.006)	(0.014)	(0.008)	(0.012)***	(0.009)	(0.022)	(0.010)	(0.017)***
Financial Develop. (PCGDP)	-0.011	-0.019	0.025	-0.050	0.020	-0.005	0.002	-0.046
	(0.007)	(0.009)**	(0.027)	(0.017)***	(0.010)**	(0.010)	(0.040)	(0.022)**
Legal development (LEGAL)	-0.002	-0.004	0.015	-0.016	0.005	-0.002	-0.017	-0.014
	(0.004)	(0.006)	(0.010)	(0.009)*	(0.005)	(0.006)	(0.014)	(0.012)
PCGDP x LEGAL	-0.006	-0.005	0.014	-0.028	-0.006	0.002	-0.021	-0.043
	(0.005)	(0.011)	(0.011)	(0.012)**	(0.006)	(0.012)	(0.015)	(0.014)***
Financial open. (KAOPEN)	-0.005	-0.006	-0.013	0.003	-0.016	-0.013	-0.036	0.004
	(0.004)	(0.005)	(0.006)**	(0.007)	(0.005)***	(0.005)***	(0.009)***	(0.007)
KAOPEN x LEGAL	0.002	0.012	-0.001	0.005	-0.001	0.021	-0.009	0.003
	(0.001)*	(0.002)***	(0.002)	(0.002)**	(0.001)	(0.004)***	(0.003)***	(0.002)
KAOPEN x PCGDP	-0.008	-0.010	-0.012	-0.008	-0.005	-0.012	-0.006	-0.005
	(0.004)*	(0.010)	(0.006)*	(0.007)	(0.007)	(0.011)	(0.010)	(0.009)
TOT volatility	0.116	0.221	0.107	0.202	-0.013	0.472	-0.006	0.221
	(0.054)**	(0.152)	(0.055)*	(0.079)**	(0.073)	(0.223)**	(0.075)	(0.119)*
Avg. GDP growth	-0.066	-0.297	-0.033	-0.048	0.718	0.277	0.736	1.280
	(0.111)	(0.166)*	(0.124)	(0.099)	(0.100)***	(0.221)	(0.107)***	(0.165)***
Trade openness	-0.005	0.013	-0.025	-0.001	0.018	0.031	0.009	0.011
	(0.006)	(0.007)*	(0.009)***	(0.012)	(0.007)**	(0.011)***	(0.012)	(0.011)
Oil exporting countries	0.015	-0.004	0.030	0.025	0.097	-0.013	0.120	0.038
	(0.010)	(0.019)	(0.011)***	(0.015)*	(0.013)***	(0.020)	(0.014)***	(0.020)*
Observations	917	278	638	326	909	278	630	323
Adjusted R-squared	0.46	0.56	0.46	0.52	0.48	0.60	0.48	0.57
# of countries	126	35	91	42	126	35	91	42

Notes: * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Above are point estimates from OLS, and in parentheses are robust standard errors assuming heteroscedasticity clustered around the sample country. Time fixed effects are included in the estimation, but only they are not reported in the table converse space.

Table 1-2: Basic Model Augmented with Saving Glut Variables, Investment and Private Saving

	Investment				Private Saving			
	(1) Full	(2) AE	(3) EMDE	(4) EME	(5) Full	(6) AE	(7) EMDE	(8) EME
Government budget balance	-0.012	0.239	-0.042	-0.341	-0.409	-0.262	-0.411	-0.828
	(0.059)	(0.085)***	(0.069)	(0.089)***	(0.069)***	(0.119)**	(0.082)***	(0.123)***
Net foreign assets (initial)	-0.010	-0.006	-0.012	-0.013	0.016	0.012	0.009	0.023
	(0.005)*	(0.007)	(0.006)**	(0.007)*	(0.004)***	(0.006)*	(0.005)*	(0.010)**
Relative income	-0.072	-0.105	-0.050	0.016	0.001	0.118	0.018	0.098
	(0.030)**	(0.078)	(0.039)	(0.046)	(0.034)	(0.075)	(0.045)	(0.055)*
Relative income squared	0.011	0.040	0.014	-0.056	-0.010	-0.035	-0.009	-0.056
	(0.010)	(0.052)	(0.012)	(0.032)*	(0.015)	(0.046)	(0.016)	(0.035)
Dependency ratio (young)	-0.052	-0.073	-0.020	-0.095	-0.057	-0.099	-0.037	-0.108
	(0.012)***	(0.017)***	(0.016)	(0.018)***	(0.013)***	(0.020)***	(0.017)**	(0.020)***
Dependency ratio (old)	-0.012	-0.036	0.005	-0.056	-0.011	-0.031	0.000	-0.086
	(0.009)	(0.016)**	(0.011)	(0.016)***	(0.009)	(0.022)	(0.011)	(0.017)***
Financial Develop. (PCGDP)	0.036	0.016	0.044	-0.006	0.020	-0.005	0.005	-0.045
	(0.008)***	(0.009)*	(0.031)	(0.016)	(0.010)**	(0.010)	(0.040)	(0.022)**
Legal development (LEGAL)	0.004	0.002	-0.022	-0.023	0.005	-0.002	-0.018	-0.013
	(0.004)	(0.005)	(0.010)**	(0.009)**	(0.005)	(0.006)	(0.014)	(0.012)
PCGDP x LEGAL	-0.001	0.006	-0.019	-0.033	-0.006	0.002	-0.020	-0.042
	(0.005)	(0.008)	(0.012)	(0.011)***	(0.006)	(0.012)	(0.015)	(0.014)***
Financial open. (KAOPEN)	-0.009	-0.003	-0.014	-0.003	-0.001	0.021	-0.009	0.003
	(0.004)**	(0.004)	(0.008)*	(0.006)	(0.001)	(0.004)***	(0.003)***	(0.002)
KAOPEN x LEGAL	-0.004	0.006	-0.009	-0.007	-0.004	-0.012	-0.004	-0.005
	(0.001)***	(0.003)**	(0.003)***	(0.002)***	(0.007)	(0.011)	(0.010)	(0.009)
KAOPEN x PCGDP	0.006	-0.003	0.018	0.007	-0.016	-0.013	-0.036	0.004
	(0.005)	(0.006)	(0.009)**	(0.007)	(0.005)***	(0.005)***	(0.009)***	(0.007)
TOT volatility	-0.124	0.124	-0.103	0.278	-0.005	0.473	0.004	0.215
	(0.054)**	(0.148)	(0.058)*	(0.101)***	(0.073)	(0.223)**	(0.074)	(0.120)*
Avg. GDP growth	0.856	0.808	0.823	1.450	0.723	0.273	0.741	1.286
	(0.118)***	(0.215)***	(0.123)***	(0.131)***	(0.103)***	(0.222)	(0.110)***	(0.163)***
Trade openness	0.015	0.004	0.028	0.030	0.018	0.031	0.010	0.012
	(0.005)***	(0.007)	(0.012)**	(0.010)***	(0.007)**	(0.011)***	(0.012)	(0.011)
Oil exporting countries	0.076	0.013	0.083	-0.003	0.094	-0.013	0.117	0.036
	(0.011)***	(0.017)	(0.013)***	(0.017)	(0.013)***	(0.020)	(0.014)***	(0.020)*
Observations	919	278	640	326	908	278	629	323
Adjusted R-squared	0.27	0.49	0.28	0.53	0.39	0.47	0.39	0.52
# of countries	126	35	91	42	126	35	91	42

Notes: * $p<0.1$; ** $p<0.05$; *** $p<0.01$. Above are point estimates from OLS, and in parentheses are robust standard errors assuming heteroscedasticity clustered around the sample country. Time fixed effects are included in the estimation, but only they are not reported in the table converse space.

Table 2-1: Robustness Checks, EMDE, Current Account Balances

	Five-year panels			Annual data		
	OLS	Fixed Effect	2SLS	GMM	FE	RE
	(1)	(2)	(3)	(4)	(5)	(6)
CAB (*t*–1)				0.365		
				(0.086)***		
Government budget balance	0.581	0.459	0.118	0.506	0.528	0.559
	(0.081)***	(0.061)***	(0.167)	(0.084)***	(0.030)***	(0.029)***
Net foreign assets (initial)	0.024	0.010	0.022	0.006	-0.004	-0.002
	(0.006)***	(0.005)*	(0.006)***	(0.007)	(0.002)*	(0.002)
Relative income	0.095	0.259	0.159	0.024	0.245	0.179
	(0.038)**	(0.051)***	(0.053)***	(0.126)	(0.029)***	(0.024)***
Relative income squared	-0.029	-0.060	-0.038	0.002	-0.054	-0.041
	(0.017)*	(0.016)***	(0.022)*	(0.031)	(0.009)***	(0.008)***
Dependency ratio (young)	-0.005	-0.055	-0.005	-0.036	-0.062	-0.025
	(0.014)	(0.020)***	(0.016)	(0.026)	(0.013)***	(0.010)**
Dependency ratio (old)	0.005	-0.001	-0.000	-0.017	0.003	-0.006
	(0.008)	(0.016)	(0.011)	(0.037)	(0.011)	(0.007)
Financial Develop. (PCGDP)	0.025	-0.079	0.024	-0.000	-0.077	-0.032
	(0.027)	(0.041)*	(0.027)	(0.019)	(0.012)***	(0.010)***
LEGAL	0.015		0.017	0.012		0.002
	(0.010)		(0.011)	(0.008)		(0.006)
PCGDP x LEGAL	0.014	0.006	0.020	-0.009	-0.035	0.019
	(0.011)	(0.017)	(0.011)*	(0.017)	(0.007)***	(0.011)*
Financial open. (KAOPEN)	-0.013	-0.007	-0.021	0.004	0.002	0.002
	(0.006)**	(0.008)	(0.007)***	(0.005)	(0.003)	(0.003)
KAOPEN x LEGAL	-0.001	0.001	-0.002	-0.001	0.000	-0.002
	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)
KAOPEN x PCGDP	-0.012	-0.016	-0.015	-0.016	-0.009	-0.017
	(0.006)*	(0.008)**	(0.007)**	(0.009)*	(0.005)*	(0.005)***
TOT volatility	0.107		0.174	-0.061		-0.130
	(0.055)*		(0.064)***	(0.050)		(0.030)***
Avg. GDP growth	-0.033	-0.065	-0.015	0.061	-0.125	0.154
	(0.124)	(0.074)	(0.134)	(0.051)	(0.029)***	(0.068)**
Trade openness	-0.025		-0.020	-0.021		-0.036
	(0.009)***		(0.009)**	(0.014)		(0.012)***
Oil exporting countries	0.030		0.019	0.026		0.012
	(0.011)***		(0.013)	(0.014)*		(0.013)
Observations	638	655	609	2,601	2,712	2,640
Adjusted R-squared	0.46	0.13	0.41			
# of countries	91	93	89	92	95	92
Hansen test (p-value)				1.00		
AR(1) test (p-value)				0.00		
AR(2) test (p-value)				0.92		

Table 2-2: Robustness Checks, EMDE, National Saving

	Five-year panels			Annual data		
	OLS	Fixed Effect	2SLS	GMM	FE	RE
	(1)	(2)	(3)	(4)	(5)	(6)
National saving (*t*–1)				0.644		
				(0.124)***		
Government budget balance	0.594	0.431	0.508	0.264	0.345	0.358
	(0.082)***	(0.072)***	(0.222)**	(0.108)**	(0.030)***	(0.030)***
Net foreign assets (initial)	0.008	0.009	0.009	0.006	0.003	0.003
	(0.005)*	(0.006)	(0.005)	(0.005)	(0.002)	(0.002)
Relative income	0.015	0.290	-0.015	0.051	0.284	0.207
	(0.045)	(0.061)***	(0.058)	(0.109)	(0.030)***	(0.028)***
Relative income squared	-0.007	-0.070	0.007	-0.011	-0.065	-0.047
	(0.016)	(0.019)***	(0.018)	(0.027)	(0.009)***	(0.009)***
Dependency ratio (young)	-0.037	-0.060	-0.040	0.014	-0.028	-0.013
	(0.017)**	(0.024)**	(0.019)**	(0.031)	(0.013)**	(0.012)
Dependency ratio (old)	0.000	-0.010	-0.001	0.002	-0.003	0.004
	(0.010)	(0.019)	(0.012)	(0.029)	(0.011)	(0.009)
Financial Develop. (PCGDP)	0.002	-0.002	0.016	0.007	-0.018	0.002
	(0.040)	(0.050)	(0.040)	(0.013)	(0.012)	(0.011)
LEGAL	-0.017		-0.012	0.003		0.012
	(0.014)		(0.014)	(0.008)		(0.009)
PCGDP x LEGAL	-0.021	0.001	-0.016	-0.005	-0.005	0.000
	(0.015)	(0.021)	(0.016)	(0.015)	(0.013)	(0.012)
Financial open. (KAOPEN)	-0.036	-0.014	-0.036	-0.004	-0.003	-0.007
	(0.009)***	(0.009)	(0.010)***	(0.005)	(0.003)	(0.003)**
KAOPEN x LEGAL	-0.009	-0.005	-0.009	-0.003	-0.007	-0.008
	(0.003)***	(0.003)	(0.003)***	(0.002)	(0.002)***	(0.002)***
KAOPEN x PCGDP	-0.006	-0.000	-0.005	-0.006	-0.001	-0.001
	(0.010)	(0.009)	(0.010)	(0.011)	(0.005)	(0.005)
TOT volatility	-0.006		0.027	0.216		0.234
	(0.075)		(0.084)	(0.042)***		(0.031)***
Avg. GDP growth	0.736	0.506	0.760	-0.025	0.225	0.066
	(0.107)***	(0.088)***	(0.112)***	(0.065)	(0.030)***	(0.115)
Trade openness	0.009		0.008	0.000		-0.009
	(0.012)		(0.012)	(0.012)		(0.020)
Oil exporting countries	0.120		0.123	0.036		0.074
	(0.014)***		(0.016)***	(0.014)**		(0.021)***
Observations	630	645	601	2,562	2,660	2,602
Adjusted R-squared	0.48	0.16	0.49			
# of countries	91	93	89	91	93	91
Hansen test (p-value)				1.00		
AR(1) test (p-value)				0.00		
AR(2) test (p-value)				0.55		

Table 2-3: Robustness Checks, EMDE, Investment

	Five-year panels			Annual data		
	OLS	Fixed Effect	2SLS	GMM	FE	RE
	(1)	(2)	(3)	(4)	(5)	(6)
Investment (*t*–1)				0.554		
				(0.105)***		
Government budget balance	-0.042	-0.083	-0.053	-0.120	-0.171	-0.179
	(0.069)	(0.069)	(0.211)	(0.076)	(0.031)***	(0.031)***
Net foreign assets (initial)	-0.012	0.005	-0.010	0.000	0.008	0.006
	(0.006)**	(0.006)	(0.006)*	(0.004)	(0.002)***	(0.002)***
Relative income	-0.050	0.082	-0.096	-0.004	0.072	0.033
	(0.039)	(0.058)	(0.049)*	(0.086)	(0.030)**	(0.028)
Relative income squared	0.014	-0.026	0.027	-0.002	-0.020	-0.010
	(0.012)	(0.018)	(0.014)*	(0.022)	(0.009)**	(0.009)
Dependency ratio (young)	-0.020	0.038	-0.031	0.068	0.030	0.020
	(0.016)	(0.022)*	(0.017)*	(0.025)***	(0.013)**	(0.012)*
Dependency ratio (old)	0.005	-0.007	-0.001	-0.001	-0.011	0.005
	(0.011)	(0.018)	(0.012)	(0.026)	(0.011)	(0.009)
Financial Develop. (PCGDP)	0.044	0.074	0.056	0.003	0.049	0.046
	(0.031)	(0.046)	(0.031)*	(0.014)	(0.012)***	(0.011)***
LEGAL	-0.022		-0.017	-0.008		0.005
	(0.010)**		(0.010)	(0.010)		(0.009)
PCGDP x LEGAL	-0.019	0.009	-0.013	0.007	0.011	-0.009
	(0.012)	(0.019)	(0.012)	(0.017)	(0.009)	(0.012)
Financial open. (KAOPEN)	-0.014	-0.003	-0.013	-0.008	-0.002	-0.005
	(0.008)*	(0.009)	(0.009)	(0.004)*	(0.003)	(0.003)*
KAOPEN x LEGAL	-0.009	-0.006	-0.010	-0.003	-0.007	-0.006
	(0.003)***	(0.003)*	(0.003)***	(0.002)	(0.002)***	(0.002)***
KAOPEN x PCGDP	0.018	0.011	0.018	0.013	0.006	0.009
	(0.009)**	(0.009)	(0.009)**	(0.010)	(0.005)	(0.005)*
TOT volatility	-0.103		-0.087	0.281		0.360
	(0.058)*		(0.066)	(0.047)***		(0.031)***
Avg. GDP growth	0.823	0.543	0.797	-0.031	0.342	-0.144
	(0.123)***	(0.083)***	(0.123)***	(0.064)	(0.030)***	(0.113)
Trade openness	0.028		0.025	0.014		0.028
	(0.012)**		(0.013)**	(0.015)		(0.020)
Oil exporting countries	0.083		0.083	0.034		0.059
	(0.013)***		(0.013)***	(0.019)*		(0.021)***
Observations	640	657	610	2,593	2,697	2,631
Adjusted R-squared	0.28	0.02	0.29			
# of countries	91	93	89	92	95	92
Hansen test (p-value)				1.00		
AR(1) test (p-value)				0.00		
AR(2) test (p-value)				0.48		

Table 3: Impacts of Global Shocks– EMDE

(a) Current Account

	(1)	(2)	(3)	(4)	(5)
Max VIX in 5-yr period	0.044				0.158
	(0.018)**				(0.038)***
Oil price		-0.016			-0.099
		(0.010)			(0.024)***
US interest rate			0.045		-1.195
			(0.113)		(0.336)***
Dummy for global recession				-0.005	-0.009
				(0.004)	(0.005)**
N	552	585	585	585	552
Adj. R2	0.47	0.45	0.45	0.45	0.49

(b) National Saving

	(1)	(2)	(3)	(4)	(5)
Max VIX in 5-yr period	0.002				0.071
	(0.018)				(0.046)
Oil price		0.042			-0.020
		(0.015)***			(0.031)
US interest rate			-0.428		-0.933
			(0.195)**		(0.484)*
Dummy for global recession				-0.004	-0.005
				(0.005)	(0.005)
N	544	576	576	576	544
Adj. R2	0.49	0.49	0.49	0.48	0.50

(c) Investment

	(1)	(2)	(3)	(4)	(5)
Max VIX in 5-yr period	-0.028				-0.057
	(0.018)				(0.044)
Oil price		0.055			0.061
		(0.013)***			(0.026)**
US interest rate			-0.460		0.016
			(0.175)**		(0.447)
Dummy for global recession				0.003	0.007
				(0.006)	(0.007)
N	550	583	583	583	550
Adj. R2	0.24	0.29	0.28	0.26	0.28

Note: Time fixed effects are not included in the estimations. The other explanatory variables are included, but their estimates are not reported in the table to conserve space.

Table 4: The Impacts of Disasters on CAB, NS, INV

(a) Current Account

	War	Climato-logical	Biological	Geophysical	ALL ex, bio.	ALL
	(1)	(2)	(3)	(4)	(5)	(6)
# of war	0.004				0.003	0.003
	(0.001)***				(0.001)**	(0.001)**
# of climatological disasters		0.001			0.001	0.001
		(0.000)***			(0.000)***	(0.000)***
# of biological disasters			0.002			0.001
			(0.001)**			(0.001)*
# of geophysical disasters				0.002	0.000	0.000
				(0.000)***	(0.000)	(0.000)
N	647	647	647	647	647	647
Adj. R2	0.46	0.47	0.46	0.46	0.47	0.47

(b) National Saving

	War	Climato-logical	Biological	Geophysical	ALL ex, bio.	ALL
	(1)	(2)	(3)	(4)	(5)	(6)
# of war	0.002				0.001	0.001
	(0.002)				(0.002)	(0.002)
# of climatological disasters		0.001			0.001	0.001
		(0.000)***			(0.000)***	(0.000)***
# of biological disasters			-0.001			-0.002
			(0.001)			(0.001)*
# of geophysical disasters				0.005	0.003	0.003
				(0.001)***	(0.001)***	(0.001)***
N	631	631	631	631	631	631
Adj. R2	0.48	0.50	0.48	0.50	0.51	0.51

(c) Investment

	War	Climato-logical	Biological	Geophysical	ALL ex, bio.	ALL
	(1)	(2)	(3)	(4)	(5)	(6)
# of war	0.001				0.000	0.000
	(0.002)				(0.002)	(0.002)
# of climatological disasters		0.001			0.000	0.000
		(0.000)***			(0.000)	(0.000)
# of biological disasters			-0.002			-0.002
			(0.001)			(0.001)**
# of geophysical disasters				0.005	0.005	0.005
				(0.001)***	(0.001)***	(0.001)***
N	647	647	647	647	647	647
Adj. R2	0.29	0.30	0.29	0.32	0.32	0.33

Note: The other explanatory variables are included, but their estimates are not reported in the table to conserve space.

Table 5: The Impacts of Uncertainty on CAB, NS, and INV

(a) Current Account

	Max WUI	Currency	Banking	Debt	Recession	All
	(1)	(2)	(3)	(4)	(5)	(6)
Max. Uncertainty Index (Individual)	-0.059					-0.058
	(0.070)					(0.067)
D for currency crisis		0.001				0.003
		(0.006)				(0.007)
D for banking crisis			-0.005			-0.005
			(0.006)			(0.006)
D for debt crisis				-0.005		-0.006
				(0.012)		(0.012)
D for recession					0.003	0.002
					(0.008)	(0.008)
N	566	595	595	595	595	566
Adj. R2	0.45	0.43	0.43	0.43	0.43	0.45

(b) National Saving

	Max WUI	Currency	Banking	Debt	Recession	All
	(1)	(2)	(3)	(4)	(5)	(6)
Max. Uncertainty Index (Individual)	-0.180					-0.178
	(0.123)					(0.124)
D for currency crisis		0.018				0.025
		(0.011)				(0.011)**
D for banking crisis			0.005			0.006
			(0.009)			(0.009)
D for debt crisis				-0.017		-0.019
				(0.011)		(0.011)*
D. for recession					-0.013	-0.020
					(0.010)	(0.011)*
N	557	586	586	586	586	557
Adj. R2	0.52	0.49	0.48	0.49	0.49	0.53

(c) Investment

	Max WUI	Currency	Banking	Debt	Recession	All
	(1)	(2)	(3)	(4)	(5)	(6)
Max. Uncertainty Index (Individual)	-0.177					-0.176
	(0.117)					(0.116)
D for currency crisis		0.010				0.015
		(0.010)				(0.011)
D for banking crisis			0.004			0.005
			(0.008)			(0.009)
D for debt crisis				-0.003		-0.001
				(0.011)		(0.011)
D. for recession					-0.014	-0.019
					(0.009)	(0.009)**
N	564	593	593	593	593	564
Adj. R2	0.31	0.28	0.28	0.28	0.28	0.32

Note: The other explanatory variables are included, but their estimates are not reported in the table to conserve space.

Table 6: The Impacts of U.S. Uncertainty on CAB, NS, and INV

(a) Current Account

	(1)	(2)	(3)	(4)	(5)
US economic Policy Uncertainty	-0.038 (0.014)***				
US Monetary Policy Uncertainty		0.039 (0.017)**			0.043 (0.016)**
US Fiscal Policy Uncertainty			-0.015 (0.008)*		-0.015 (0.008)*
US Trade Policy Uncertainty				-0.004 (0.003)	-0.006 (0.003)**
N	552	552	552	552	552
Adj. R2	0.47	0.47	0.47	0.47	0.48

(b) National Saving

	(1)	(2)	(3)	(4)	(5)
US economic Policy Uncertainty	0.004 (0.021)				
US Monetary Policy Uncertainty		-0.072 (0.027)***			-0.068 (0.026)**
US Fiscal Policy Uncertainty			0.016 (0.011)		0.014 (0.011)
US Trade Policy Uncertainty				-0.005 (0.003)	-0.003 (0.003)
N	544	544	544	544	544
Adj. R2	0.49	0.50	0.49	0.49	0.50

(c) Investment

	(1)	(2)	(3)	(4)	(5)
US economic Policy Uncertainty	0.041 (0.015)***				
US Monetary Policy Uncertainty		-0.110 (0.024)***			-0.109 (0.023)***
US Fiscal Policy Uncertainty			0.030 (0.009)***		0.028 (0.009)***
US Trade Policy Uncertainty				-0.002 (0.003)	0.002 (0.003)
N	550	550	550	550	550
Adj. R2	0.25	0.27	0.25	0.24	0.28

Note: The other explanatory variables are included, but their estimates are not reported in the table to conserve space.

Figure 1: Trends in CAB

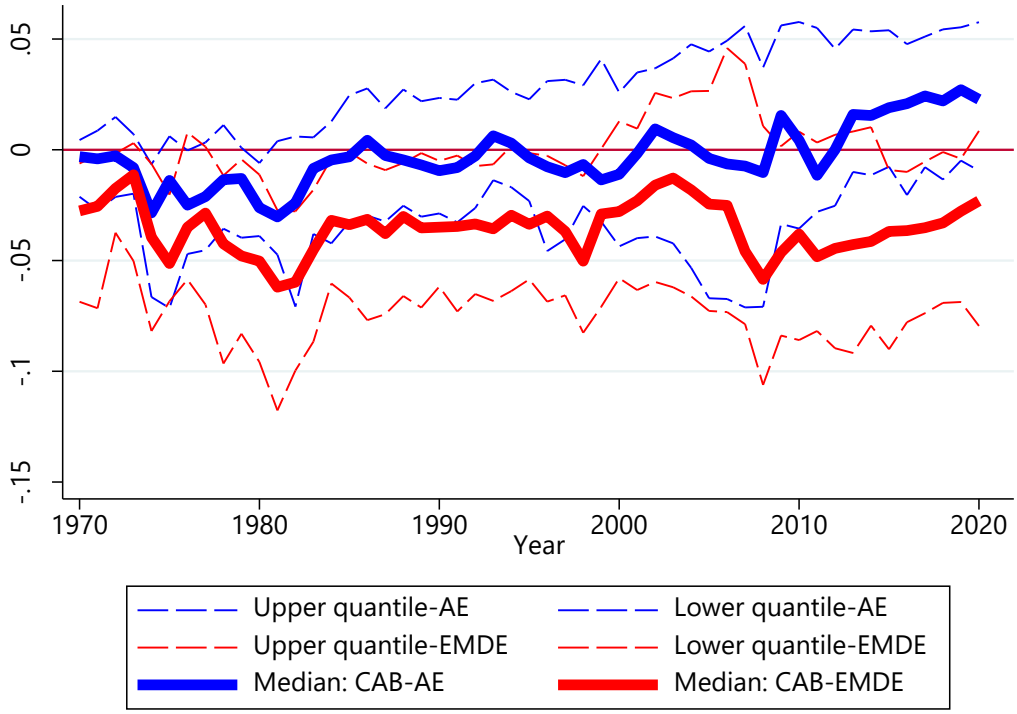


Figure 2: Trends in current account balance, regional groupings

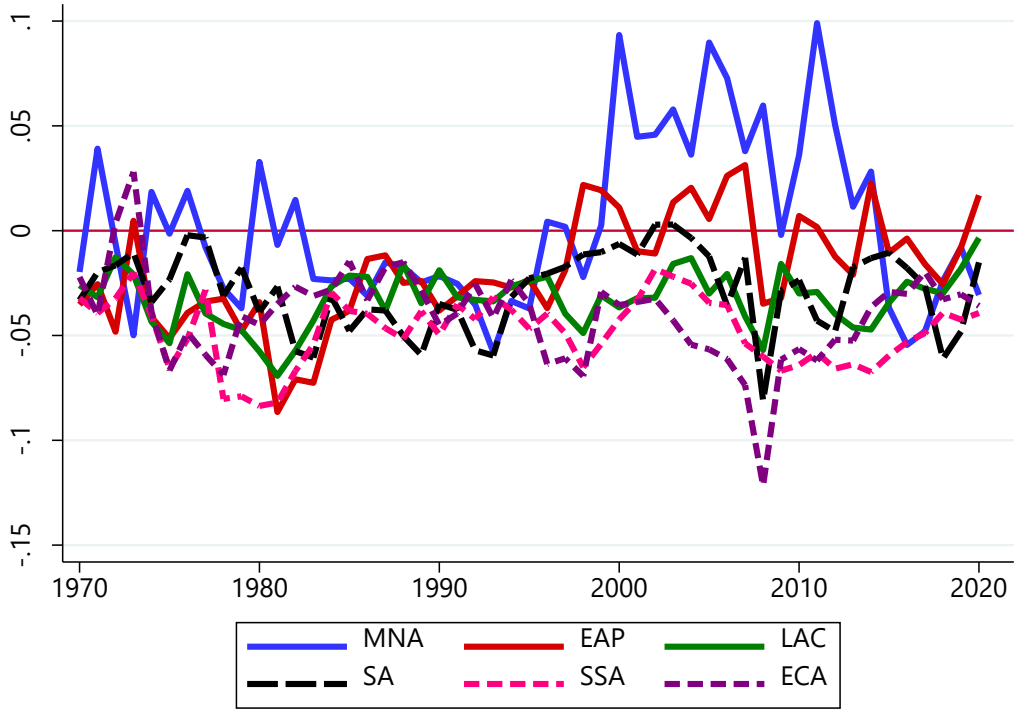


Figure 3: Trends in current account balance, oil exporters vs. non-oil exporters

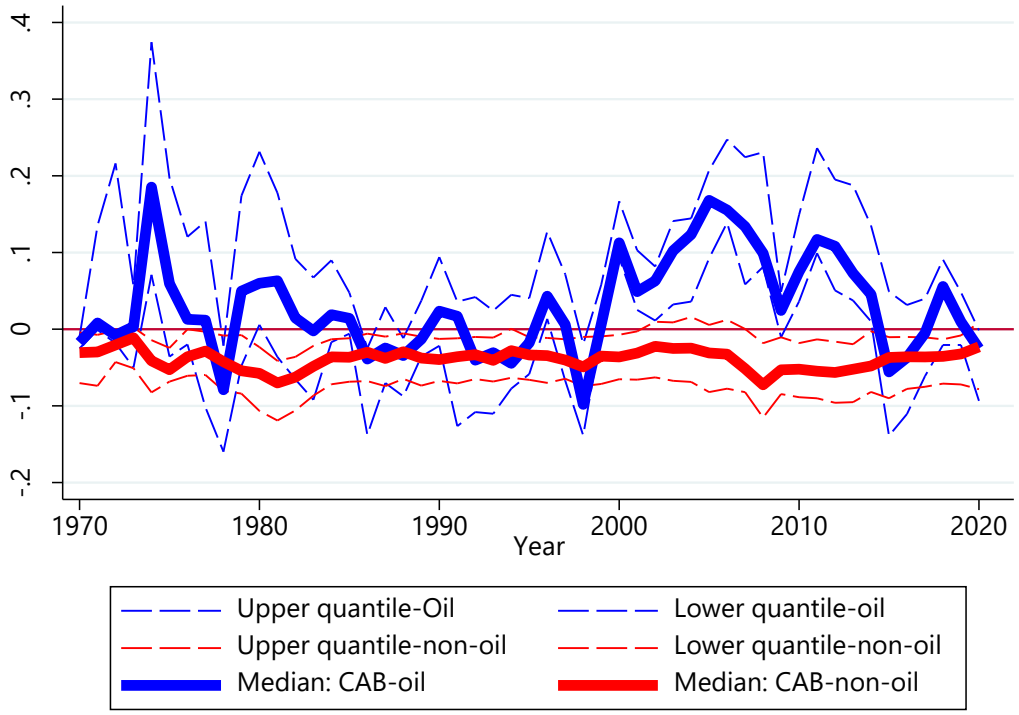


Figure 4: Trends in current account balance, commodity exporters vs. commodity importers

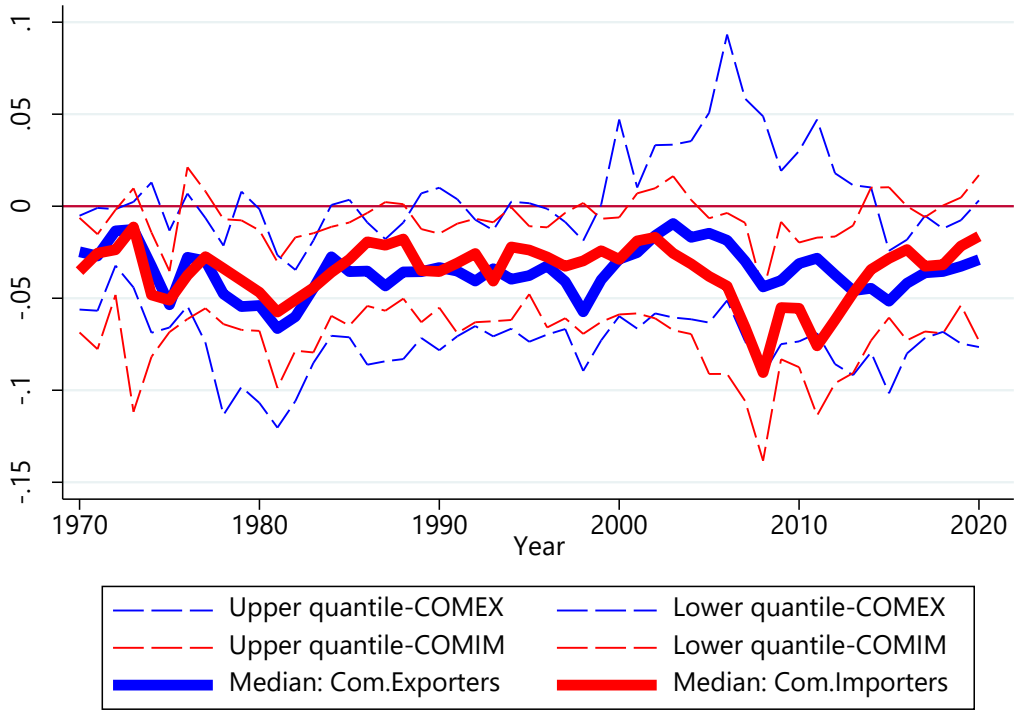
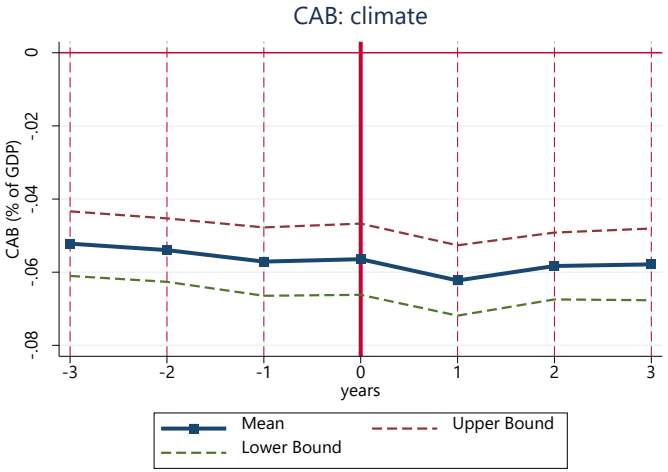
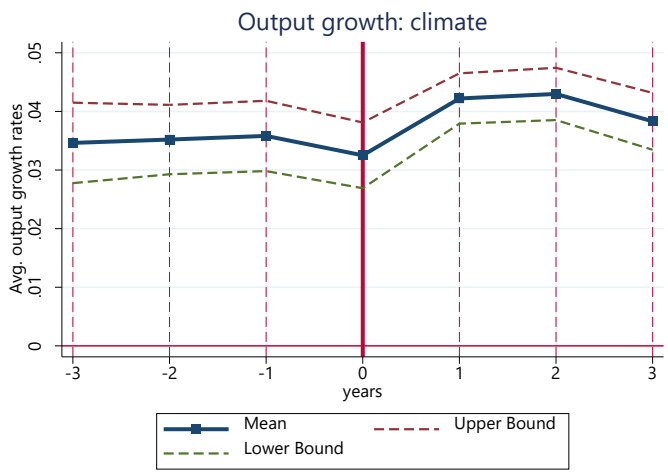


Figure 5: Impacts of Climatological Disasters

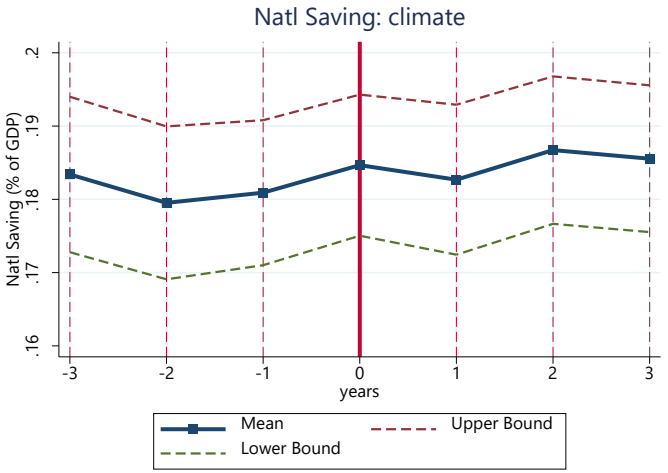
(a) CAB



(b) Output growth



(c) National saving



(d) Investment

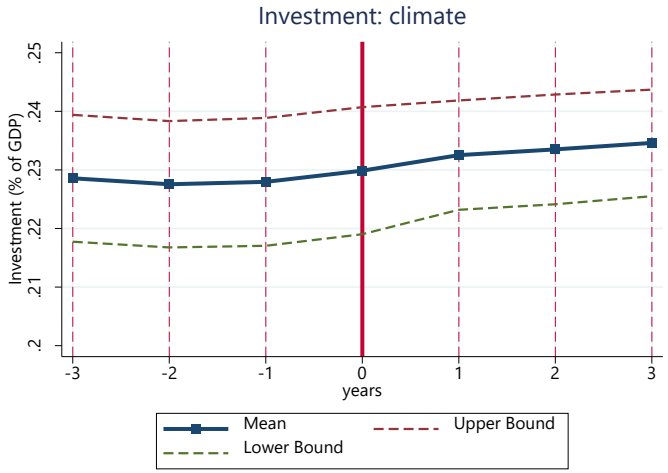
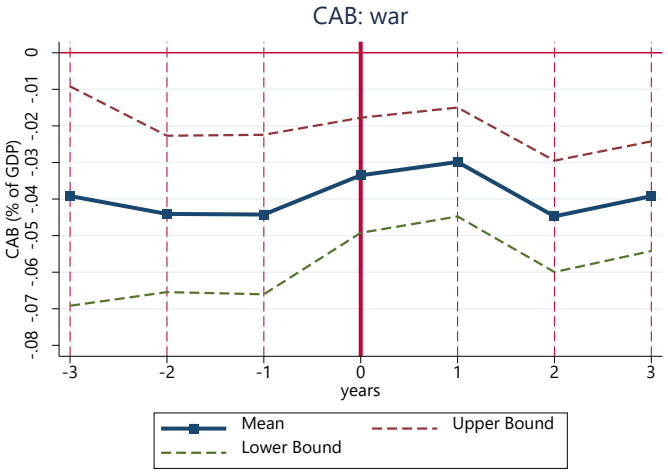
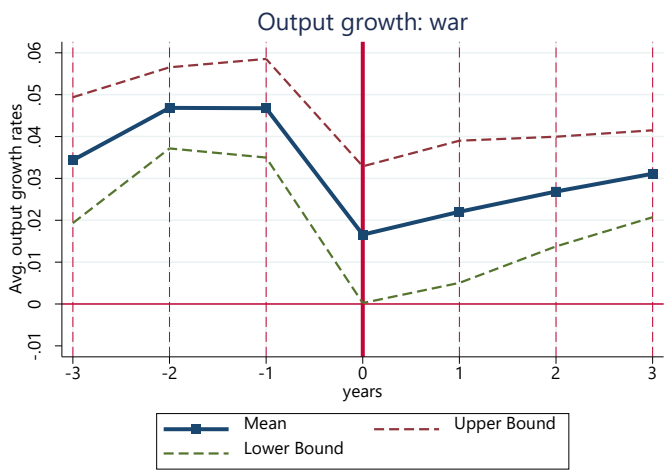


Figure 6: Impacts of Wars

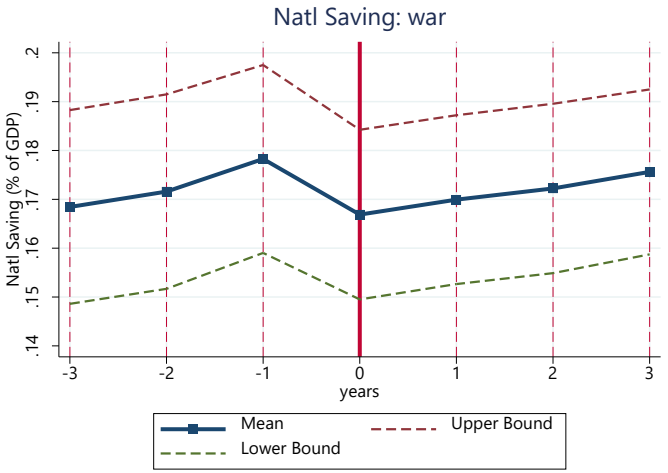
(a) CAB



(b) Output growth



(c) National saving



(d) Investment

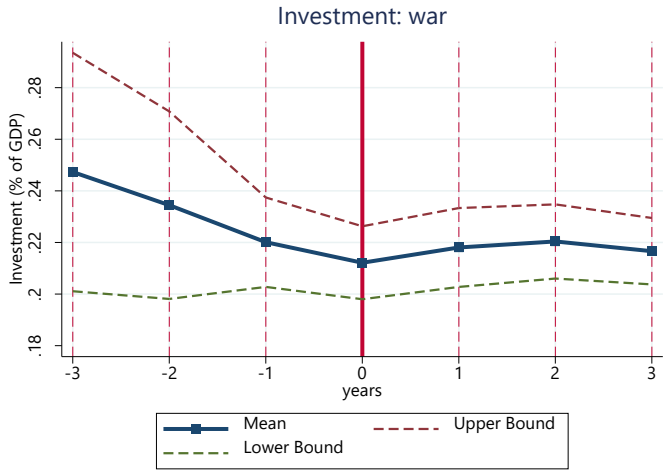
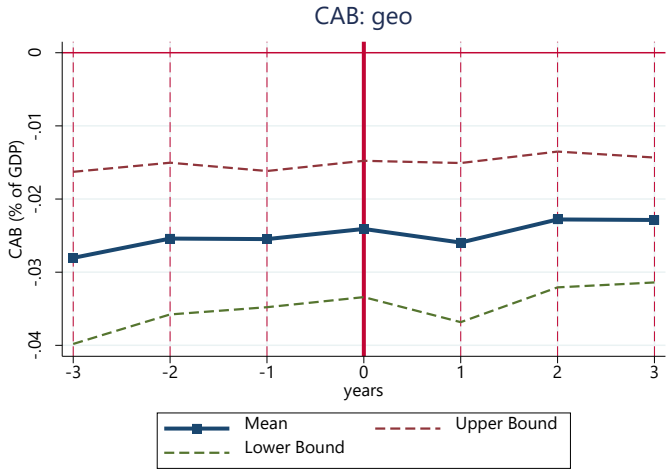
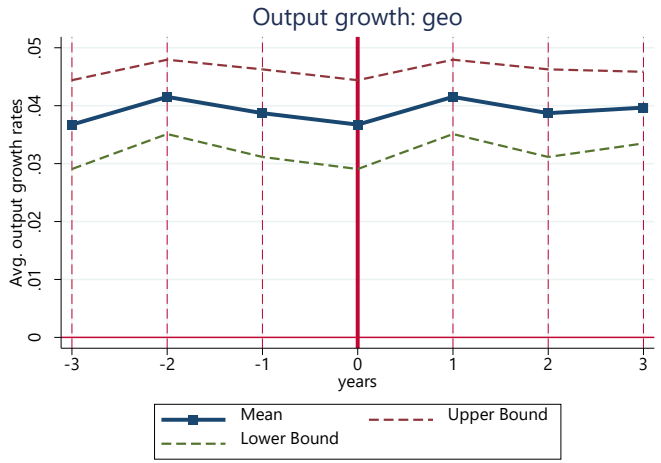


Figure 7: Impacts of Geophysical Disasters

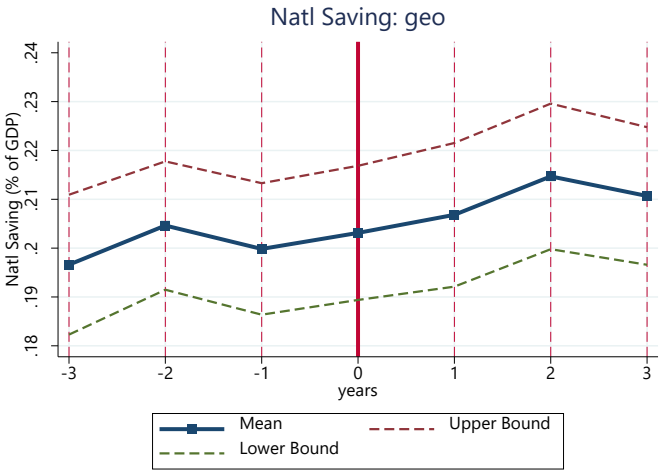
(a) CAB



(b) Output growth



(c) National saving



(d) Investment

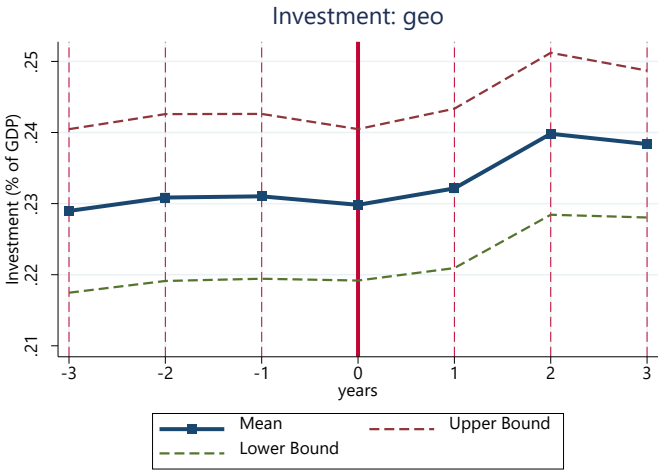
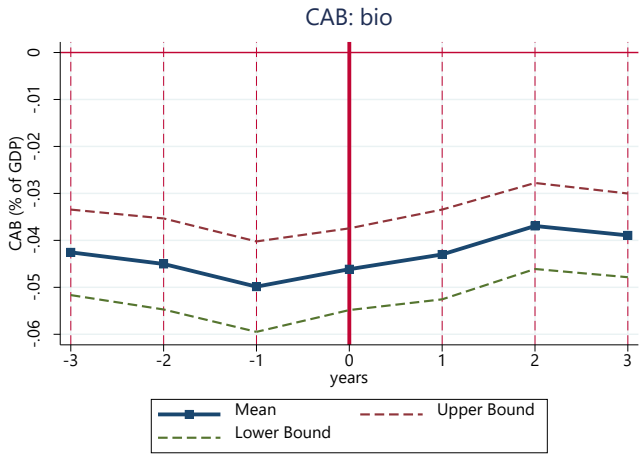
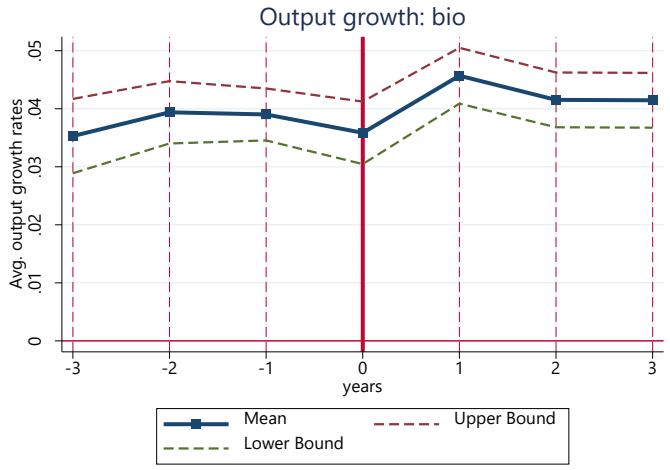


Figure 8: Impacts of Biological Disasters

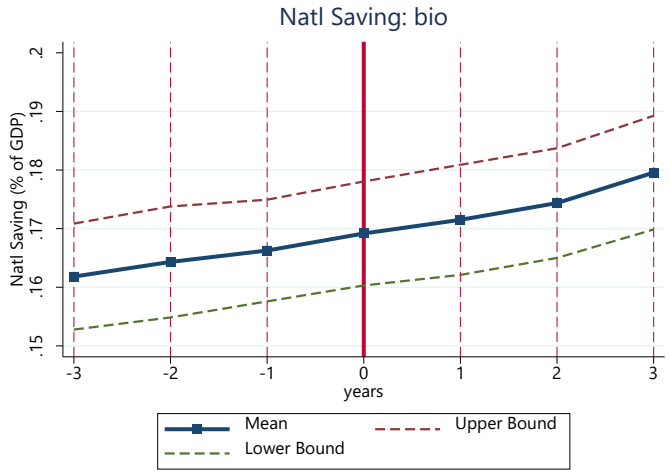
(a) CAB



(b) Output growth



(c) National saving



(d) Investment

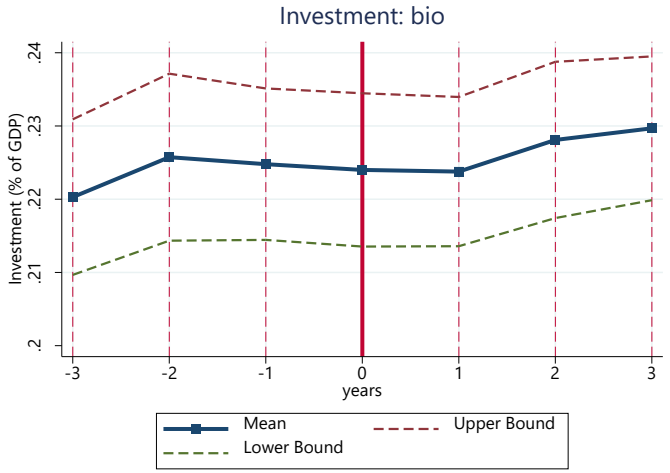
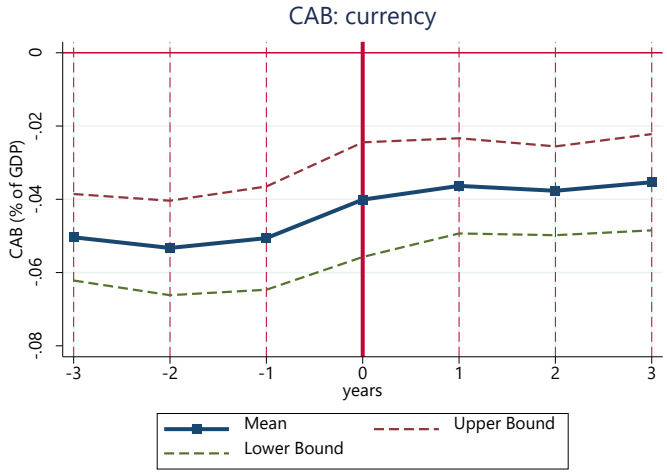
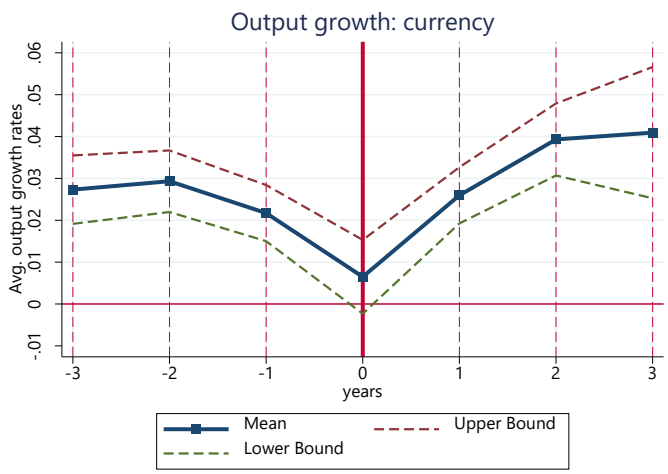


Figure 9: Impacts of Currency Crisis

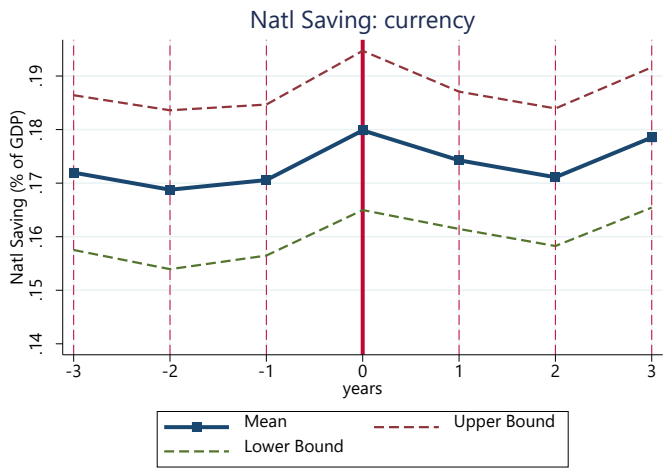
(a) CAB



(b) Output growth



(c) National saving



(d) Investment

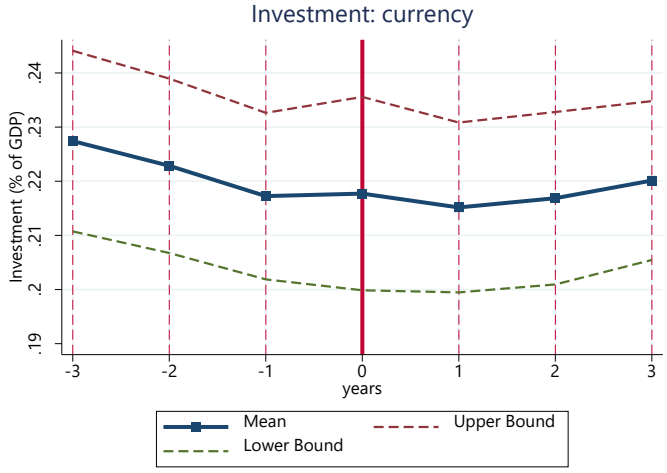
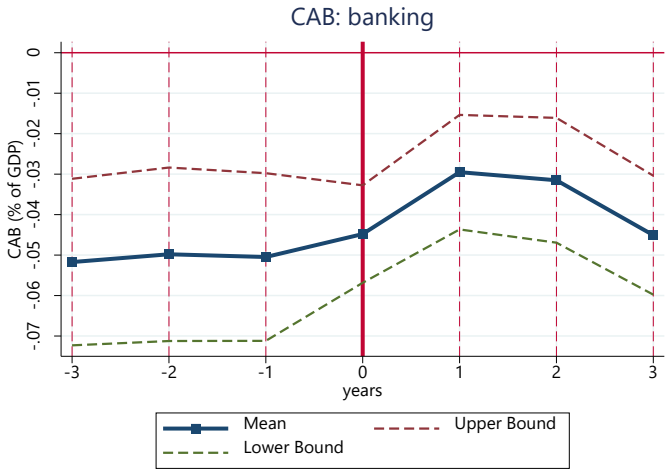
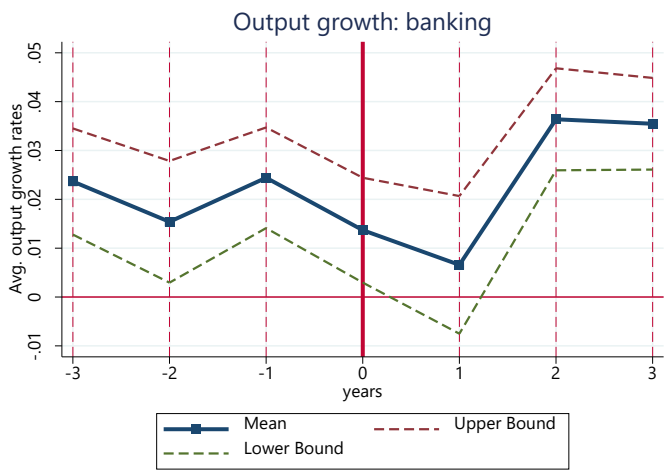


Figure 10: Impacts of Banking Crisis

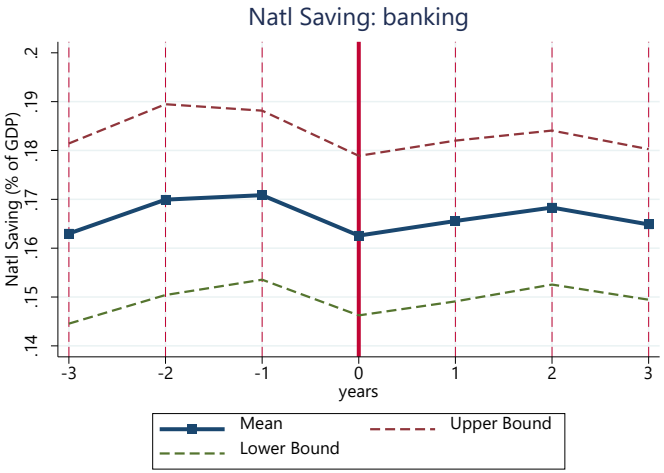
(a) CAB



(b) Output growth



(c) National saving



(d) Investment

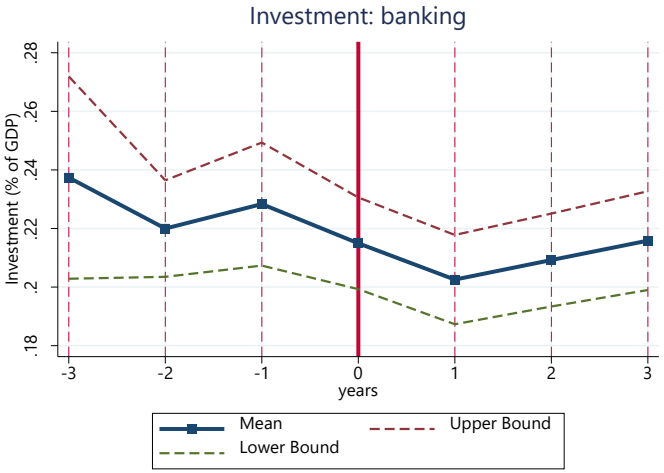
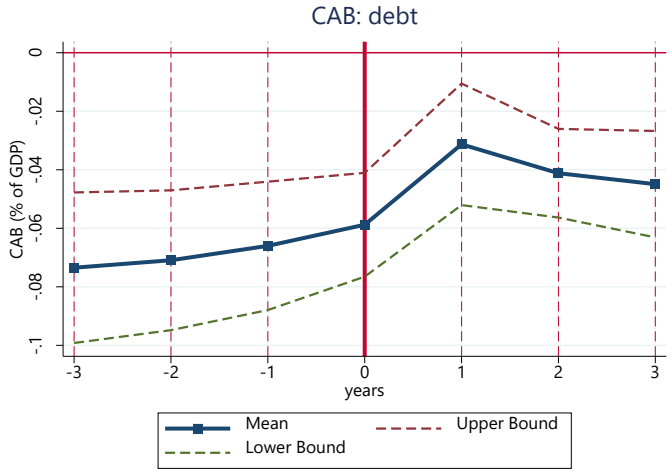
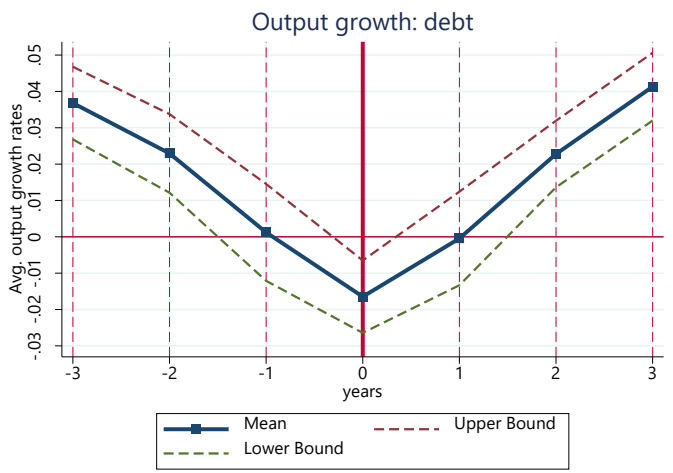


Figure 11: Impacts of Debt Crisis

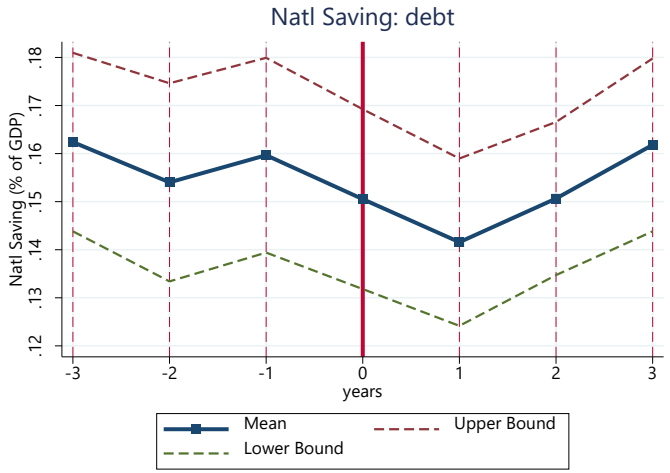
(a) CAB



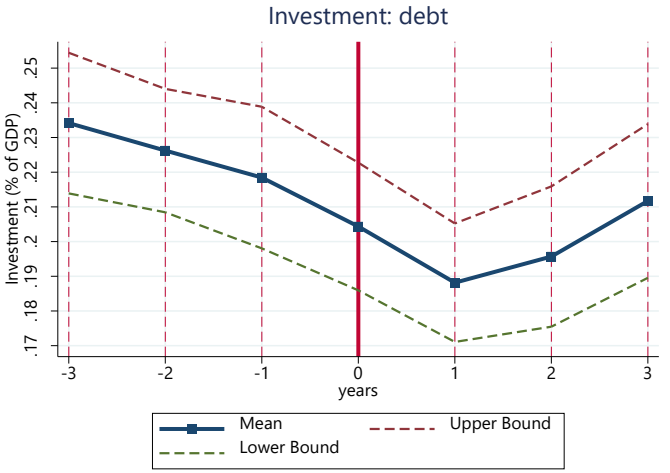
(b) Output growth



(c) National saving



(d) Investment



Online Appendix 1: List of Countries

Advanced Economies:

	Country	IMF Country Codes
1	Australia	193
2	Austria	122
3	Belgium	124
4	Canada	156
5	Cyprus	423
6	Czech Republic	935
7	Denmark	128
8	Estonia	939
9	Finland	172
10	France	132
11	Germany	134
12	Greece	174
13	Hong Kong, China	532
14	Iceland	176
15	Ireland	178
16	Israel	436
17	Italy	136
18	Japan	158
19	Korea, Rep.	542
20	Latvia	941
21	Lithuania	946
22	Luxembourg	137
23	Malta	181
24	Netherlands	138
25	New Zealand	196
26	Norway	142
27	Portugal	182
28	Singapore	576
29	Slovak Republic	936
30	Slovenia	961
31	Spain	184
32	Sweden	144
33	Switzerland	146
34	Taiwan	528
35	United Kingdom	112