

**GLOBAL REBALANCING: LIMITATIONS OF THE
EAST-ASIA-CENTRIC APPROACH
AND THE ROLE OF EUROPE**

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1. INTRODUCTION

The group of twenty developed and emerging countries (G-20), which is attempting to coordinate global macroeconomic policies, has identified rebalancing of global imbalances as one of their biggest priorities. These imbalances refer to the pattern of current account deficits and surpluses that has emerged in the global economy since the late 1990s (World economic outlook, April 2009). In particular, it involves the large current account deficit of the US and corresponding surpluses of China, Japan, and other East Asian economies. An important aspect of this phenomenon is that large volumes of financial capital and savings have been flowing from the surplus economies to the US economy. Over time, this leads to an ever-increasing stock of net foreign liabilities for the US economy, which is held by the rest of the world. This situation is of great concern because it is felt that such trends in international movements in capital cannot be sustained forever as there would be a ceiling to the demand for US assets made by international investors. Once these ceilings are reached (or even before that point) there could be a sudden reversal in these trends in capital flows that would cause a collapse of the US dollar (Edwards (2006), Feldstein (2008)). Since the US dollar is still the only global medium of exchange, a collapse in the dollar could lead to a breakdown of the global financial architecture. Apart from this major systemic cost that the global imbalances potentially pose to the global financial stability, they also have country specific implications. These country specific costs are different for deficit and surplus countries. As far as the deficit countries are concerned, the huge capital inflows due to the imbalance can overwhelm the capacity of even the most sophisticated financial systems to intermediate them effectively and safely. A recent example is the period before the global crisis, when these capital inflows made the US markets very liquid,

resulting in low interest rates and under-pricing of risk. Another problem with countries having sustained deficits is that they accumulate external debts, which may be unsustainable in future. In the surplus economies on the other hand, particularly in the emerging markets, these imbalances imply that savings has not been channeled into emerging market investment, but rather into consumption and government expenditure in rich countries. For example in China, the domestic savings rate is higher than the investment rate, indicating lost opportunities in domestic investment. Surplus countries with undervalued exchange rates also generate under-investment in non-tradeables (Bergsten et. al. (2009)). Such distortions can have major long-run consequences for them. The surplus countries also end up accumulating excess foreign exchange reserves. These generates low yield and have high opportunity costs for poor and emerging market economies (Mann (2010)). If the surplus country manages its exchange rate, it also faces the unpleasant choice between inflationary pressures and extensive sterilization. As these costs - both systemic and country specific - have become clear, there has emerged a robust consensus among global policymakers as well as academicians that global imbalances are a major hindrance towards sustainable global growth and hence global macroeconomic policies need to be coordinated in order to eradicate or minimize this phenomenon.

In order to adopt appropriate policies for the eradication of global imbalances, it is important to understand the factors that have given rise to this phenomenon in recent times. A large and growing literature - that has focused mostly on the large current account deficits of the US economy and the large and increasing surpluses of the East Asian economies including China, Japan, and the Asian tigers - has tried to identify some of these factors. Most contributions can be classified into three alternative approaches to the problem. These are (i) global imbalances are due to a rise in US trade deficit as a result of a decline in its household savings (Feldstein (2008)) (ii) global imbalances are due to a savings glut in Asia (Bernanke (2005)) and (iii) global imbalances are due to emerging Asia's export-led development approach with undervalued exchange rates and reserve accumulations (World Economic Outlook (April, 2009)). The first approach stresses that the US deficit has increased in the last decade as its private savings have

remained low and its fiscal deficits have gone up. During the pre-crisis period, US households have saved less and consumed more as the value of their wealth has increased, initially due to the late 1990s boom in stock markets and subsequently on account of the housing boom (Chinn et. al. (2011)). Since saving is low in US, it imports from the rest of the world to in order to invest in domestic equipment. Thus low national saving has been identified as one of the fundamental reasons for US current account deficit (Backus et. al. (2009)). Conversely, the high private savings rates in East Asia, has been identified as another factor behind global imbalances and has received a lot of attention in the literature. The second approach has attempted to identify the factors that explain these high saving rates in East Asia. Some contributions focus on the demographic characteristics of these economies that consist of a large fraction of the population in the prime working-age years. Moreover, the rate of female labour force participation is high. Both these factors lead to relatively low dependency ratios and result in high household savings (Lim (2010)). Other studies claim that high rates of precautionary savings also push up the savings rate. High life expectancy and weak (or absence of) social security are the main causes of high rate of precautionary savings in many Asian countries. Other reasons for high precautionary savings in these countries include lack of adequate expenditures on healthcare and children's education. High cost of residential property in many East Asian countries also leads to high savings and low current consumption rates (Abeysinghe and Choy (2004)). Another important factor is the relative underdevelopment of the financial sectors in these economies that lead to low returns on savings and necessitate a larger amount of savings to yield the income required for retirement support and precautionary reasons. Widening income inequality also concentrates income among high-income group that tend to be high savers. Apart from the household sector, the corporate sector is a major contributor to high aggregate national savings in many of the Asian countries. This is the result of structural features of the corporate sector, mainly low shares of labour (wages) in national income. Both in China and Singapore, there are high and rising shares of state-owned enterprises or government-linked corporations in GDP, that reinvest their profit rather than distributing their corporate incomes. In particular, in corporatist states like China, Singapore, and Malaysia, there is little political pressure on state-owned enterprises and government-

linked corporations to distribute their income to boost domestic consumption. This is a major reason for high government savings in these countries (Lim (2010)). There have been a few studies focusing particularly on China and its high savings rate. Modigliani and Cao (2004) attribute China's high household saving to (i) the high growth following the economic reforms since the end 1970s and (ii) the introduction of the one-child policy at around the same time, which led to a gradual increase in the ratio of employment to total population. The household saving rate (as a share of household disposable income) has been around 25 percent since 2000. This set of factors, however, cannot fully explain China's high national saving ratio, which is partly due to saving outside the household sector - by enterprises and the government. High savings of enterprises are explained by increase in profitability in recent years and also because of high share of capital-intensive industry in GDP and a traditional policy of low (or no) dividends. Government saving is also remarkably high in China compared to other countries, reaching 7.5 percent of GDP in 2001. This is the result of a policy favoring government-financed investment over government consumption (Kuijs (2005)). A few contributions have adopted the third approach and explained global imbalances as a result of undervalued exchange rate and reserve accumulation in certain Asian countries. According to Williamson and Cline (2010) the major disequilibria in the world remains the overvaluation of the dollar and the undervaluation of the renminbi. In the absence of any action by China to correct its exchange rate will lead the disequilibria to persist. If China corrects its exchange rate, a number of other Asian currencies (India, Indonesia, Japan and Korea) will need to appreciate too. The appreciation of the renminbi against US dollar will make Chinese exports dearer in foreign market. This will lead to a decrease in the Chinese current account surplus.

It is clear from the wide range of the literature cited above that a number of factors could have accentuated the phenomenon of global imbalance. A consensus seems to be emerging that all of these factors have played some role in the overall imbalance in the global economy in the recent past. This has led to policy recommendations based on approaches that attempt to counter some of these factors. Policy recommendations have focused either on external sector policies (trade and investment) or on domestic demand

management policies. Theoretically, imposing restrictions on cross border trade and investment flows could reduce global imbalances. However, protectionist policies are not the best strategies to adopt as they imply a risky and highly uncertain tradeoff. On the other hand, implicit or explicit subsidization can lead to the accumulation of trade surpluses or deficits and removal of such subsidies would reduce trade imbalances (Deardorff (2010)). Trade imbalance could arise due to the asymmetry in the levels of trade protection. In other words, any asymmetries in the structure of trade barriers could result in the build-up of unsustainable imbalances. Trade imbalances may also occur if import barriers are persistently higher in services than in goods in both countries or if one of the countries has higher import barriers on both products. A removal of such subsidies could result in reduction of trade imbalances (Kowalski and Lesher (2010)).

The most influential contributions to the literature on policy recommendations have focused on demand management in the deficit and surplus economies. This mainly involves encouraging US consumers to contribute less to the world's consumption and East Asian consumers to contribute more. Theoretically, one option for policymakers is to adopt policies to reduce aggregate demand and hence external sector deficits of the US economy. However, such a policy will reduce global demand and push the US and the global economy into long-term recessions. Thus the policy package for global rebalancing has to involve increasing aggregate demand sufficiently in the trade partners of the US, rather than focusing on reducing the demand in the US economy. In this context, the Chinese policy makers have been advised that they cannot rely on their exports for their future economic growth. Accordingly they should increasingly try to boost domestic demand in China. The recent evidence suggests that Chinese consumption is becoming a larger share of its GDP and current account surplus becoming much smaller. Demand side adjustments have also been suggested to other developing Asian countries, in order to escape from the heavy reliance on exports. This involves expansion of domestic demand and broadening regional trade opportunities in final demand for goods and services. Governments in these countries have been encouraged to target policies at either increasing domestic consumption or domestic investment or both.

The literature on global imbalances implicitly (or in a few cases explicitly) recognizes the phenomenon as an outcome of the structure of the current global economy, instead of an interaction between two or a few economies. However, when it comes to policy recommendation, a vast majority of the contributions focus exclusively on the role of the East Asian economies in general, and that of China in particular. According to Kumar and Alex (2011), the current global macroeconomic imbalances are partly due to rapid economic growth in Asia. Emerging Asia¹ in general and China in particular have been the key source of current account surpluses. Apprehension about the private capital flows and insufficient effective demand induce these countries to accumulate foreign exchange reserves and run current account surpluses. The USA and China are the two major contributors to the global macroeconomic imbalances. In 2008, for example, the USA had a huge current account deficit of around 1.16 percent of world GDP and China had a large surplus of US\$426 billion. Thus, according to them, the policy measures to correct the global imbalances should focus on restructuring the current accounts of Emerging Asian economies, especially that of China. As per their recommendation, rebalancing in Asia can be achieved by structural reforms that should be undertaken to raise domestic private consumption demand in East Asia, particularly in China. This will help the deficit countries including the USA to rebalance their economies by taking the advantage of external demand. It will also reduce the dependence of PRC on external demand to sustain its double-digit growth performance. Another important policy measure that they suggest for rebalancing is to enhance intra-regional trade and investment flows (regional economic activity) by promoting pan-Asian economic integration and establishing institutional mechanisms for designing and financing regional infrastructure projects. They argue that trade and economic integration between the ASEAN+4² and establishment of an Asian Investment Bank (AIB) will help to achieve the full potential of intra-regional trade and investment activity in Asia. AIB would supplement the efforts of the Asian Development Bank (ADB) and other national development banks to finance infrastructure projects in Asia (Kumar and Alex (2011)).

¹ Emerging Asia includes China, Hong Kong, India, Indonesia, Korea, Malaysia, Singapore, Taipei, Thailand and Viet Nam.

² ASEAN+4 refer to the ten countries of Association of Southeast Asian Nations (ASEAN) plus the PRC, Japan, Korea and India.

Clearly, a large volume of literature has suggested that the solution to the problem of global imbalances lies in bringing about structural changes in East Asian economies that lead to increases in their domestic consumption such that they depend less on external demand to drive their growth process. These contributions suggest that a policy induced increase in the domestic consumption of these East Asian economies would bring down their trade surplus with the US, and hence the US economy would have a much lower trade and current account deficit. As we have discussed above, a large number of contributions have identified various factors that lead to high savings/low consumption in these economies and prescribe policies to counter these factors. It may be noted that this literature is entirely based on East Asian economies, and does not include similar analysis for, say, Germany, although it is a significant contributor to the global imbalances. Thus, these studies suggest an East-Asia-centric approach to global rebalancing. Is such an approach sufficient to solve global imbalances? Since the combined Current Account surplus in these East Asian economies is larger than the size of the US deficit, it may be tempting to conclude that a reduction in the East Asian surpluses is sufficient to solve the problem. Unfortunately, such a conclusion may be fallacious since it does not recognize the interconnectedness of the global economy. Any reduction in the Current Account surplus of the East Asian economies (as a result of, say, demand management policies in these economies) can lead to an equal reduction in US deficits only under the condition that there is no change in the external balances of other regional blocs. However in a globalized world, the Current Account Balance of other regional blocs are also affected by policies adopted by the East Asian countries, and hence the result of reducing the surplus of these countries on the US deficit is uncertain. Under extreme circumstances, a reduction in East Asian surpluses may lead to an equal increase in the external surplus of some other trade partners of the US economy, as a result of which there may be no reduction in the US deficits. Clearly, in order to attempt global rebalancing, it is important for global policymakers to know the precise impact of policy-induced reduction of East Asian surpluses on the rest of the world economy, including the US. This requires a macro-modeling framework that adopts the important economic interlinkages between the major regional blocs of the world economy and can be used to simulate the impact of policies adopted in one or a few regional blocs on the rest of the

world. There is another reason why such a model-based analysis is useful for policy makers. Rebalancing involves adopting structural policies that change consumption and savings patterns of economies or blocs. It is well understood that such policies take time to work out. This implies that policy makers will not be in a position to identify and choose sets of regional blocs that must contribute to rebalancing sequentially, as this will give result after a very long time and may lead to a breakdown in global coordination. Thus, the regions have to be chosen simultaneously at the time such a policy is to be initiated. Bound by this constraint, the only reasonable approach involves comparing model based scenarios with different sets of blocs and choosing that set of blocs that fulfill the policy objective in these scenarios.

In light of the above discussions, the objective of the current study is to use a global macro-econometric model to analyze the feasibility of the East-Asia-centric approach to global rebalancing, identify its limitations, if any, and also throw light on the possible role of other regional blocs in this context. Section two describes the CAM global macro-econometric model that has been used for the analysis. Section three describes some simulation results generated from the model. Section four discusses the results and draws conclusions.

2. THE MODEL³

The model views the world economy as an integrated system comprising of 19 blocs. The developed world is represented by the 'US', 'North Europe', 'Central Europe', 'South Europe', 'East Europe', 'West Europe', 'Japan', 'Other Developed' and 'East Asia High Income'. The developing and emerging economies of 'China' and 'India' are taken individually. There are two main energy-exporting blocs - the former USSR ('CIS') and 'West Asia'. Other blocs include 'Central America', 'South America', 'Other East Asia', 'Other South Asia', 'North Africa' and 'Other Africa'. The model assumes that the behaviour of the countries and blocs have similarities as they are all part of a global economy but also differ because of their specific situations in terms of geography, level

³ This section is based on Cripps, Izurieta and Vos (2010a and 2010b).

of development, financial position etc. A common set of identities and behavioural equations is used for all blocs of countries to reflect the notion that they are part of the same world economy. Panel estimation methods are used to estimate the behavioral functions. Equations are thus estimated to yield common global parameter values for these behavioral functions while individual (country or bloc-level) differences are captured in the intercept terms of the equation. Thus all the estimated equations of the model have country or bloc fixed effects in the panel estimations.

The main sectors of the CAM are (i) private sector demand and income (ii) government demand and income (iii) international trade in manufactured goods, primary commodities, energy and services (iv) international factor payments and transfers, external positions, exchange rates and capital flows (v) government and domestic banking sector flows and balances (vi) prices (vii) output and (viii) capacity and inflation. The whole model includes a large number of behavioral equations and identities, the details of which are given in Cripps, Izurieta and Vos (2010a and 2010b). Here we shall discuss the principal macroeconomic identity and its components that lie at the heart of the model and determines the external imbalances across the countries/blocs in the model. From basic international macroeconomics we know that for any economy,

$$Y = C + Ip + Ig + G + (X - M) \quad \dots 1$$

Here, Y is national income, C is domestic consumption, Ip is private investment, Ig is change in inventories, G is government expenditure, while X and M are total exports and imports of goods and services including investment incomes and transfers. Next, defining private disposable income Yp as national income not absorbed by the government Yg , we have,

$$Yp = Y - Yg \quad \dots 2$$

Again, private consumption can be rewritten in terms of the savings function Sp , i.e.,

$$C = Y_p - S_p. \quad \dots 3$$

Thus the above identity can be rewritten as

$$(S_p - I_p - I_v) + (Y_g - G) = (X - M) \quad \dots 4$$

This identity shows that the sum of excess savings in the private and the government sector is identical to the current account balance of an economy. Thus global imbalances are closely related to the domestic demand structure in major economies. In the CAM, all the variables that are components of the above identity are determined endogenously in the model. We will now describe in some detail how each of these components are modeled in the CAM.

In the model, the *rate of savings* targets an optimal wealth to income ratio (equation 5). The savings function includes lagged savings to capture path-dependent patterns. The second element, $\Delta Y_p / Y_{p-1}$, introduces a short-term lag in the response of consumption to changes in real income. In addition inflation, $spvi$, and the lagged real interest rate, irs_{-1} , have their own effects on savings. The symbols a_b and e_b denote bloc-specific fixed terms and stochastic errors (the same symbols are used in all equations that follow).

$$\Delta \frac{S_p}{Y_{p-1}} = \Phi \left\{ \frac{S_{p-1}}{Y_{p-2}}, \frac{\Delta Y_p}{Y_{p-1}}, \frac{\Delta W_{p-1}}{W_{p-2}}, spvi, irs_{-1}, \alpha_b, \varepsilon_b \right\} \quad \dots 5$$

Private investment, I_p (equation 6) shows a standard accelerator pattern responding to $dlogV$, the rate of growth of GDP. The first lagged term captures path-dependency, while investment is also influenced by financial conditions such as the rate of bank lending, ILN , and the long term interest rate, represented by the real bond rate, irm .

$$\Delta \log \frac{I_p}{V_{-1}} = \Phi \left\{ \log \frac{I_{p-1}}{V_{-2}}, \Delta \log V, \frac{ILN_{-1}}{V_{-1}}, irm, \alpha_b, \varepsilon_b \right\} \quad \dots 6$$

Inventory adjustment (equation 7) exhibits an accelerator response similar to the investment function with the short-term real interest rate, *irs*, replacing the bond rate.

$$\Delta \frac{IV}{V_{-1}} = \Phi \left\{ \frac{IV_{-1}}{V_{-2}}, \Delta \log V, \frac{ILN_{-1}}{V_{-1}}, \Delta \frac{ILN}{V_{-1}}, irs, \alpha_b, \varepsilon_b \right\} \quad \dots 7$$

Government income, *Yg*, (equation 8) is modeled to be path dependent, as well as a function of the growth of gross national income with some lag. The inherited stock of government debt, *Lg-1/Y-1*, usually calls for increased efforts to raise taxation, while interest on accumulated debt will erode government receipts.

$$\frac{\Delta Y_g}{Y_{-1}} = \Phi \left\{ \frac{Y_{g-1}}{Y_{-1}}, \frac{\Delta Y}{Y_{-1}}, \frac{\Delta Y_{-1}}{Y_{-1}}, \frac{L_{g-1}}{Y_{-1}}, irm_{-1}, \frac{L_{g-1}}{Y_{-1}}, \alpha_b, \varepsilon_b \right\} \quad \dots 8$$

Government spending on goods and services, *G* (equation 9), is path-dependent, responds to the level and rate of change of government income and tends to rise with population, *N*. Government spending is also adjusted in response to the inherited debt burden, *Lg-1/Y-1*, and the external balance as a ratio to GDP *CA\$-1/Y\$-1* (external imbalances may require policy correction through contraction of domestic demand).

$$\Delta \log G = \Phi \left\{ \log G_{-1}, \Delta \log Y_g, \frac{Y_{g-1}}{Y_{-1}}, \log N_{-1}, \log \frac{L_{g-1}}{Y_{-1}}, \frac{CA\$_{-1}}{Y\$_{-1}}, \alpha_b, \varepsilon_b \right\} \quad \dots 9$$

The model distinguishes between two parts of the current account balance, i.e., (i) the trade balance and (ii) net incomes and transfers from abroad. International trade is modeled separately for the manufacturing, energy, primary and services sectors in the CAM. The international market for manufactures is modeled on a bilateral basis. Imports respond to activity, prices, the real exchange rate, etc, with the price being calculated as a weighted average of export prices of suppliers. Exports are driven by market shares (i.e. share of imports of each bloc) responding to relative unit costs, calculated as a weighted average of domestic costs and costs of imports of primary commodities, energy and services as well as manufactures). Energy production, demand and trade flows are determined in physical terms. A world-pool for traded energy products is cleared by movements of the world price of oil. The oil price is treated as a benchmark and other kinds of energy (gas, coal and primary electricity) are measured in ‘tons of oil equivalent’ (toe). The international market for primary commodities functions as a price-clearing pool with some friction resulting in partial quantity adjustment. Bloc equations, given world prices and domestic demand, determine net exports or imports. Exports of each bloc are scaled to ensure that world exports will equal world imports and the world price responds to growth of world imports. The international market for services trade is another pool. Net exports of each bloc are measured in international purchasing power and depend on the real exchange rate and service requirements of different branches of merchandise trade. Imports are determined as a function of net exports and the same variables, leaving exports (gross) to be calculated as the balancing item. Finally, net income and transfers from abroad is estimated as a balance to improve stability. A lagged variable absorbs the error correction dynamic process, while the inherited net external position, when multiplied by the interest rate of reference of the reserve currency bonds, serves as a proxy for factor revenues. Net receipts may also correlate directly with changes in the external position.

From the discussions above, it is clear that all the variables in equation 1 (or equivalently equation 4) are determined endogenously in the model. Thus a baseline simulation (of the future) would generate current account balances of all the blocs solely on the basis of past behavior (captured in the parameters of the estimated equations). We can, of course, run

alternative scenarios with specific assumptions about one or more behavioral function in any of the countries or blocs contained in the model. In the next section, we shall use the baseline and alternative scenarios generated from the CAM in order to understand the issues related to global rebalancing that has motivated this study.

3. SOME RESULTS

In this section, we shall use the CAM model in order to investigate a number of issues related to global rebalancing. In particular, we shall try to throw light on the following questions:

1. Do global imbalances remain a major problem for the world?
2. Is an East-Asia-centric approach to global rebalancing sufficient to solve this problem or are their major limitations to such as approach?
3. What other regional blocs can play important roles in solving this problem?

In order to answer these questions, we generate a number of simulations of the world economy using the CAM model. Since our interest is in the future long run trends related to global rebalancing, our simulations are forecasts for the period 2013-14 to 2030-31. The simulations include (i) the baseline scenario that projects the future of the world economy based on past economic structure and behavior and (ii) some alternative scenarios that are based on very specific assumptions about policy and/or the structure of the world economy.

In order to focus on global imbalances, the study looks at the current account balance (as a ratio to GDP) for the US and other major economic blocs (including East Asian blocs) corresponding to the above scenarios. However, as we have noted earlier, it is not only the size of the current account balance, but also the resultant accumulation of net foreign assets (or liabilities), that is critical. Given the relationship between the flow (current account balance) and the stock (net foreign assets) variables, even a stable current account balance to GDP ratio can give rise to an increasing net foreign asset (or liability)

to GDP ratio, under certain conditions. In the context of the US economy, such an increasing net foreign liability position carries the risk of a sudden and disorderly change in the value of the dollar. Hence, we also focus on the net foreign asset/liability ratios for the blocs corresponding to the various simulations.

Do global imbalances remain a major problem for the world?

As discussed in previous sections, global imbalances have become larger and larger over the course of the last decade. It is only with the outbreak of the global financial meltdown and the subsequent recession, that there was some slowing down in the growth of these imbalances. The global meltdown has led to a very slow recovery and even now, there are real fears of a double dip recession. Given that such slowdowns and recessions automatically bring down consumption levels in some of the major deficit countries like the US, it is pertinent to ask whether global imbalances are relevant any more. Since our interest is in the future long-run behavior of the world, we try to analyze this issue by looking at future trends of the world economy corresponding to the baseline scenario. Fig 1 shows the GDP growth rate of the world and major blocs corresponding to the baseline scenario. The simulation shows that global growth is expected to bounce back in the long run and stay at reasonably high levels thereafter. Among the blocs that have contributed to imbalances in the past, the US is expected to have a reasonably high and steady growth rate throughout while China and EAH (bloc consisting of East-Asian high-income countries) – that initially have very high growth rates – shows a downward trend throughout the period. Are these patterns of growth going to increase or decrease global imbalances? Fig. 2 shows the CAB Ratios (Current Account Balance as a ratio to GDP) of all blocs corresponding to the baseline simulation. It clearly shows that in the long run, the global imbalances are set to return with the potential to cause disruption in the world economy. The CAB Ratio of the US is in deficit and falls continuously in the future despite a high growth in its GDP and reaches pre-meltdown levels (i.e., levels reached before 2008-2010) in the long run. Among the major trade partners of the US, China, Japan, EAH and Central Europe all exhibit increasing Current Account surpluses during this period.

Fig. 1: GDP Growth: World Economy and Individual Blocs

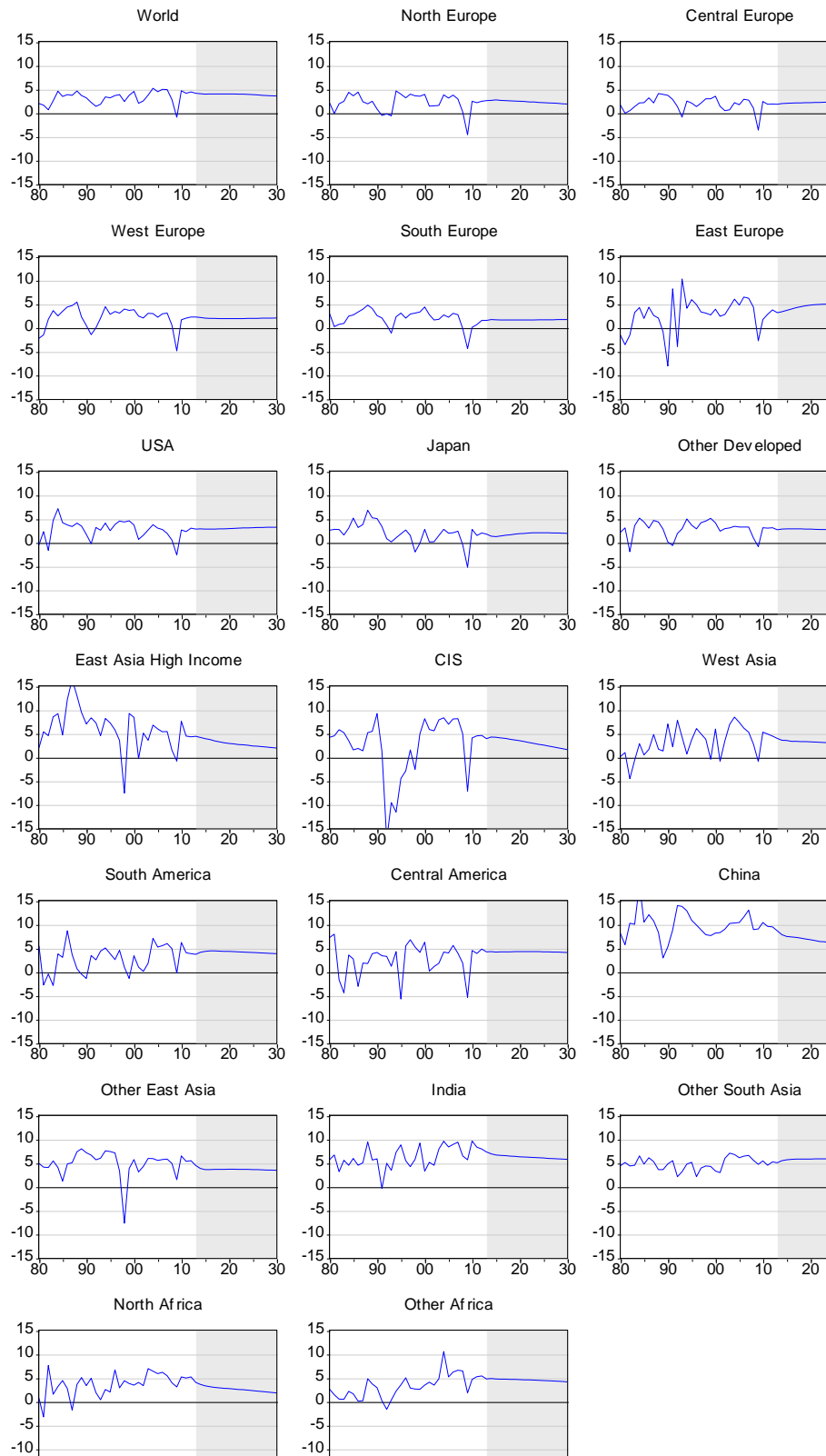


Fig. 2: Current Account Balance as a ratio to GDP

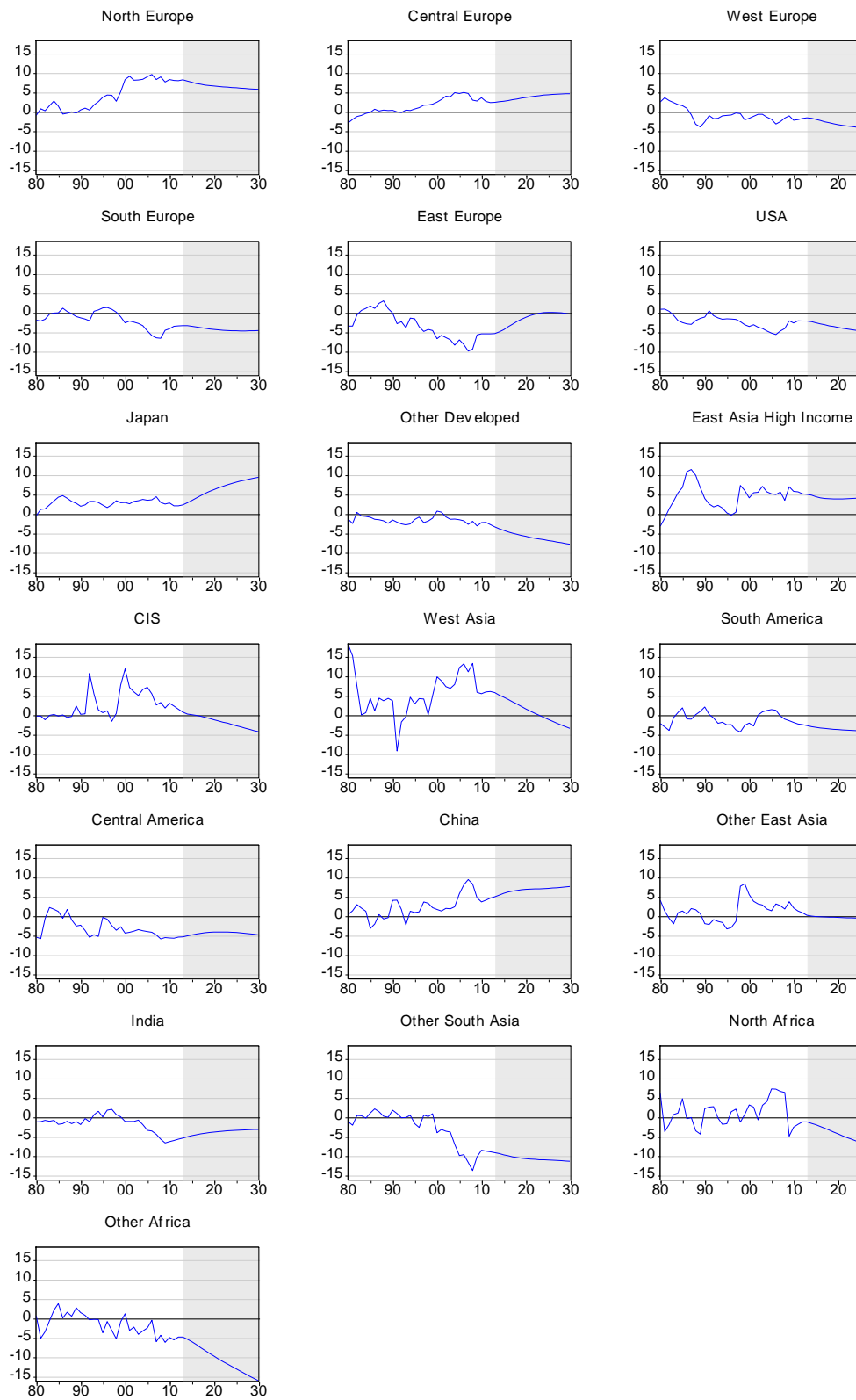
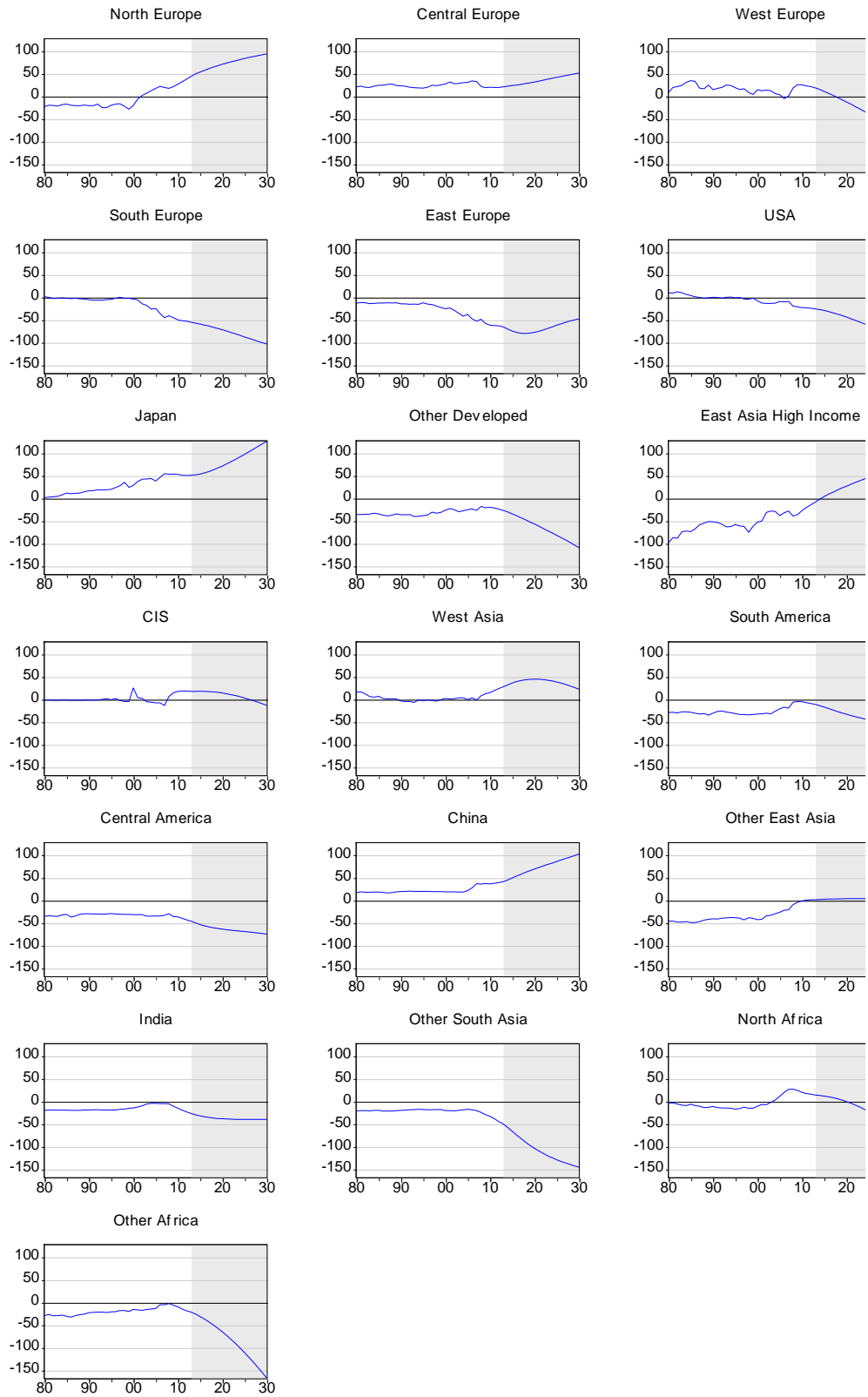
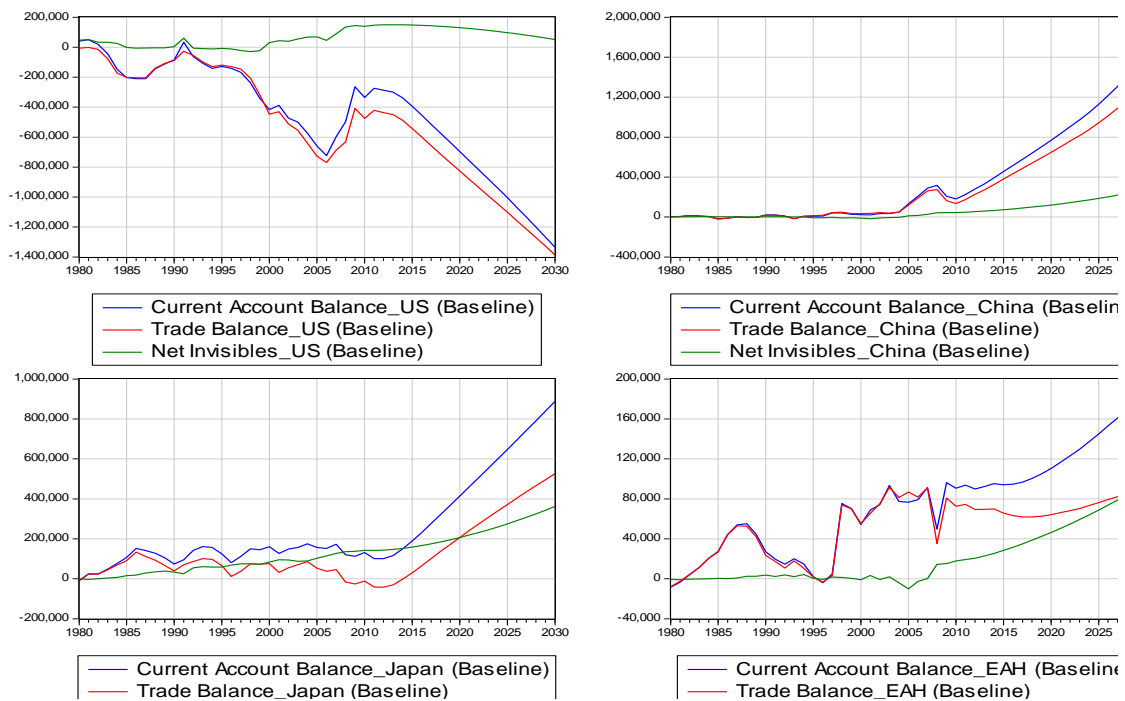


Fig. 3: Net External Assets as a ratio to GDP



As noted earlier, it is not only the current account balance, but also the net external asset position – particularly that of the US economy – that is critical from the view of global imbalances. Fig. 3 depicts the net external assets to GDP ratio for all the blocs corresponding to the baseline scenario. Corresponding to the deterioration in the current account deficit, the net external liabilities of the US increase to nearly hundred percent of GDP in the long run. As many contributions to the literature on global imbalances have shown, this is much higher than what is thought to be a sustainable level of net US assets demanded by the rest of the world. This further highlights the return of global imbalances in the future. It is clear from Fig. 2 and Fig. 3 that global imbalances remain as pertinent as before the global meltdown and needs to be tackled by the world economy. In order to look at this phenomenon a bit more closely, we next separate the Trade Balance and the Net Invisibles for some of the major contributors to the imbalance. Fig. 4 depicts these variables, together with the current account balance, for the US, China, Japan and EAH.

Fig. 4: External Sector Balances of the US and Major East Asian Economies



From Fig. 4, we find that the constant increase in the size of the US Current Account deficit is almost entirely due to its Trade deficit, while the Net Invisibles of the US are in surplus throughout the period. Among the surplus blocs, the trade surplus plays the biggest role in China, while for Japan and the EAH, both the trade surplus and the net invisibles play an important role.

Is an East-Asia-centric approach to global rebalancing sufficient to solve this problem or are there major limitations to such an approach?

As we have discussed in previous sections, a large volume of literature has suggested that the solution to the problem of global imbalances lies in bringing about structural changes in East-Asian economies that lead to increases in their domestic consumption such that they depend less on external demand to drive their growth process. These contributions suggest that a policy induced increase in the domestic consumption of these East-Asian economies would bring down their trade surplus with the US, and hence the US economy would have a much lower trade and current account deficit. A large number of contributions have identified various factors that lead to high savings/low consumption in these economies and prescribe policies to counter these factors. As noted previously, this literature is entirely based on East Asian economies, and suggests an East-Asia-centric approach to global rebalancing. Since the combined Current Account surplus in these East-Asian economies is larger than the size of the US deficit, these studies seem to assume that an East-Asia-centric approach is sufficient to solve the problem. However, as we have argued earlier, a policy-induced reduction in East-Asian surpluses will also increase the surpluses of blocs other than the US and hence the net effect may not necessarily be sufficient to achieve global rebalancing. In order to quantify this net effect, we have generated alternative scenario 1, where we assume that three major East-Asian blocs, namely China, Japan and EAH, adopt structural policies to increase consumption/decrease savings sufficiently to bring down their current account surplus to zero. The other variables in the model including the current account balance of the other blocs are determined endogenously.

Fig. 5: Current Account Balance as a ratio to GDP

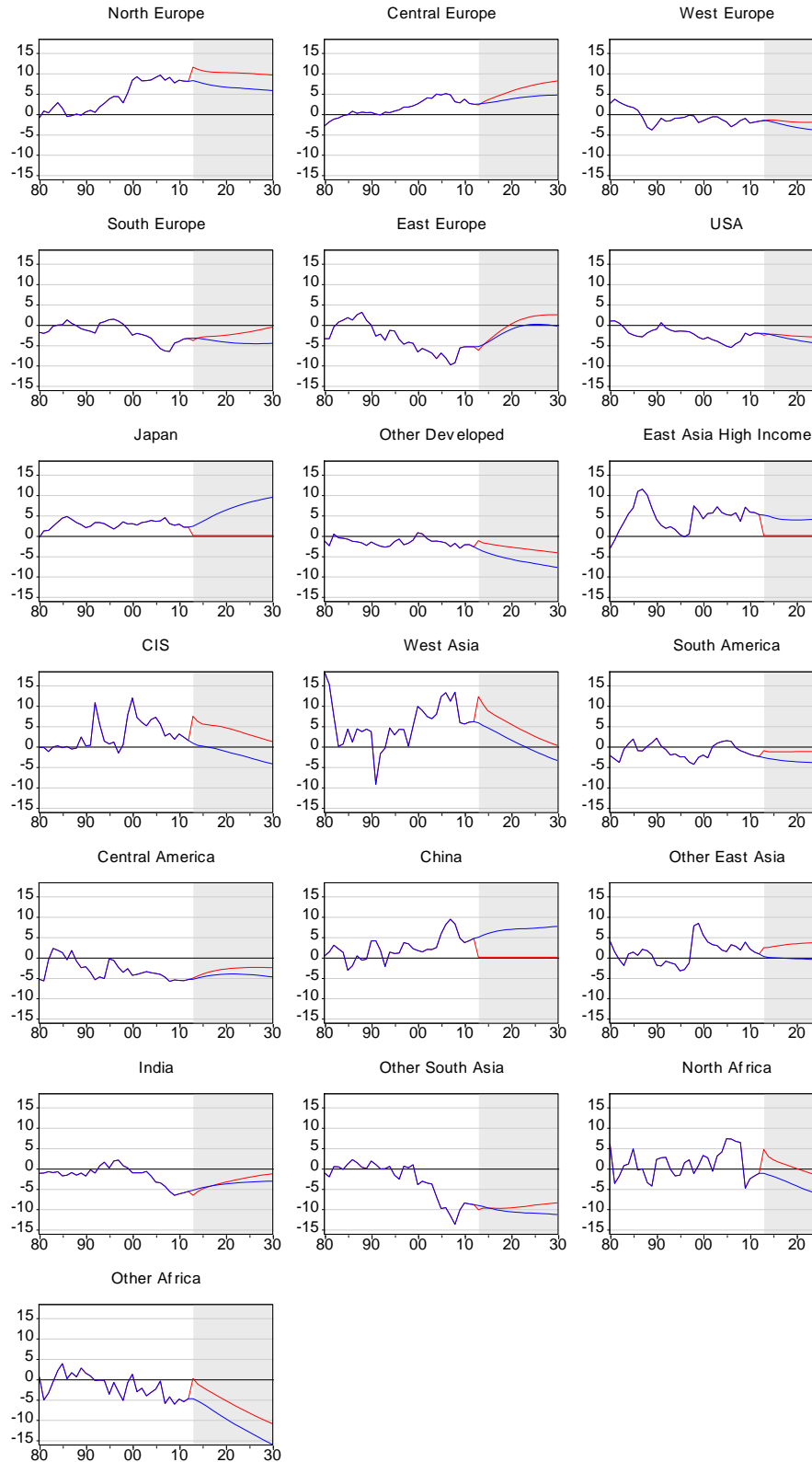


Fig. 6: Net External Assets as a ratio to GDP

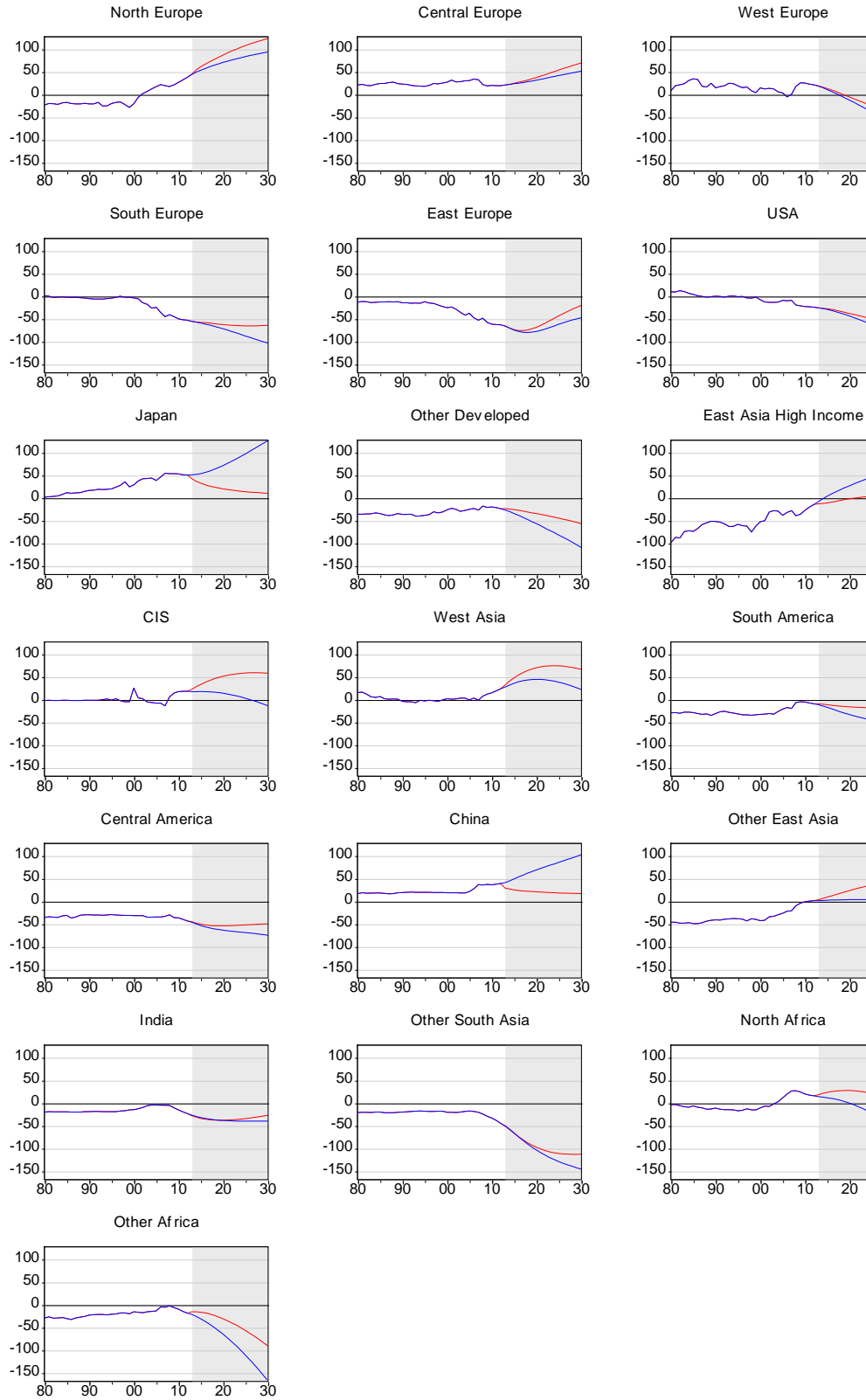


Fig. 5 shows the CAB Ratio for all the blocs corresponding to the baseline as well as Alternative Scenario.1. As expected, the CAB Ratio of China, Japan and EAH falls to zero for the period of the simulation. This leads to a definite improvement in the CAB Ratio of the US, which stabilizes at about 3% of GDP. However, as noted earlier, the extent of the global imbalance is also determined by the size of the net external liabilities of the US economy. Fig. 6 shows the net external asset position of all blocs corresponding to the baseline and Alternative Scenario 1. We find that although the CAB Ratio for the US has stabilized following the reduction in East-Asian surpluses, the size of its net external liabilities increase continuously in the long run without showing signs of stabilization. This clearly shows that the East-Asia-centric approach to global rebalancing is not sufficient to solve the problem.

In order to understand more clearly why the East-Asia-centric approach is not sufficient, we generate alternative scenario 2, where we assume that China, Japan and EAH again bring down their current account surplus to zero, but only the US economy gains from this (i.e., the US deficits reduce by an equal amount). Thus in this scenario, the change in the current account balance, trade balance, and Net invisibles of the US is exactly equal to the sum of the changes in each of these variables for the three East-Asian blocs. Next, we compare the Current Account Balance of the US corresponding to the baseline to those corresponding to Alternative Scenario 1 and Alternative Scenario 2. Fig. 7 shows these variables for the simulation period. It is clear that if the reduction of the East-Asian surpluses had resulted in gains only for the US economy (alt. scenario 2), then the US economy would have ended up with a large Current Account surplus. However, due to the interaction of the global economy (Alt. Scenario 1), the Current Account deficit of the US remains very significantly large. This clearly implies that a reduction in the East-Asian surpluses leads to increase in surpluses or reduction in the deficits of other blocs as well. Fig. 8 shows some of the major gainers in term of Current Account balances as a result of the reduction of the East-Asian surpluses. It shows that the two blocs comprising former Soviet countries and West Asia gain almost as much as the US while Central Europe gains much more as a result of structural changes in East Asia. As a result, although the combined surplus of the East-Asian blocs in the baseline scenario is

larger than the US deficit, bringing them down to zero does not solve the problem of global imbalances.

Fig. 7: Current Account Balance of the USA

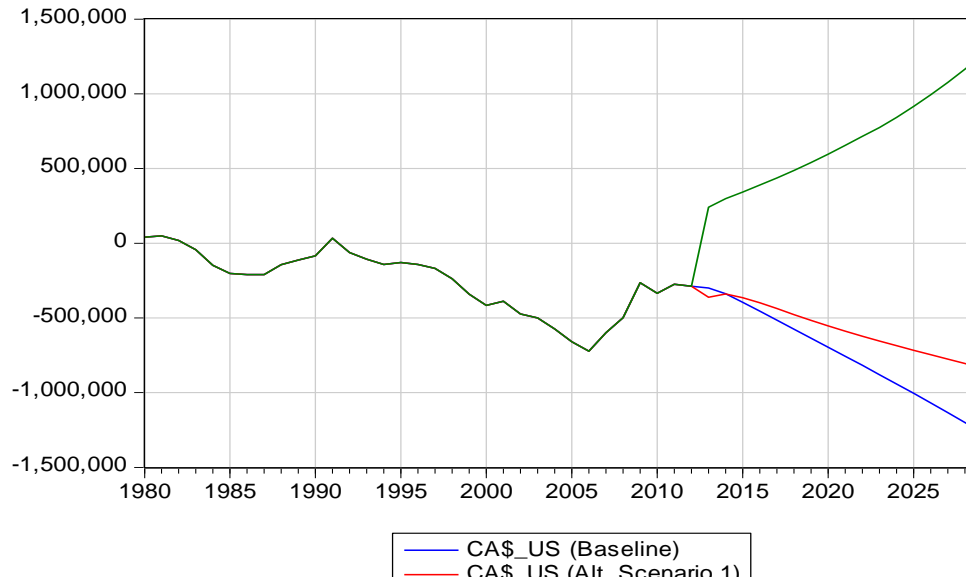
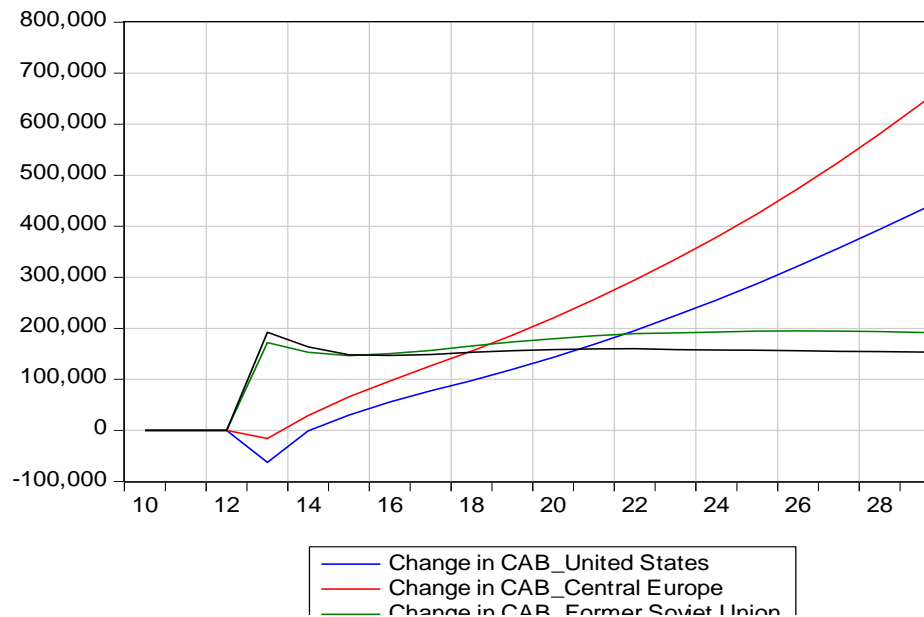


Fig. 8: Major Gainers (CAB) from a Reduction of East Asian Current Account Surplus



Next, we have carried out the same analysis for the Trade Balance and Net Invisibles separately. Fig. 9 shows that in order to achieve zero Current Account Balance, the East Asian economies end up with increasing trade deficits. Although this leads to improvements in the US trade deficits, the size of the US deficits continues to increase throughout the period. Fig 10 shows that this is again due to only a partial gain for the US corresponding to the reduction in East Asia surpluses. Fig 11 and 12 shows similar trends for Net Invisibles.

Fig. 9: Trade Balance of Some Major Deficit and Surplus Countries/Blocs

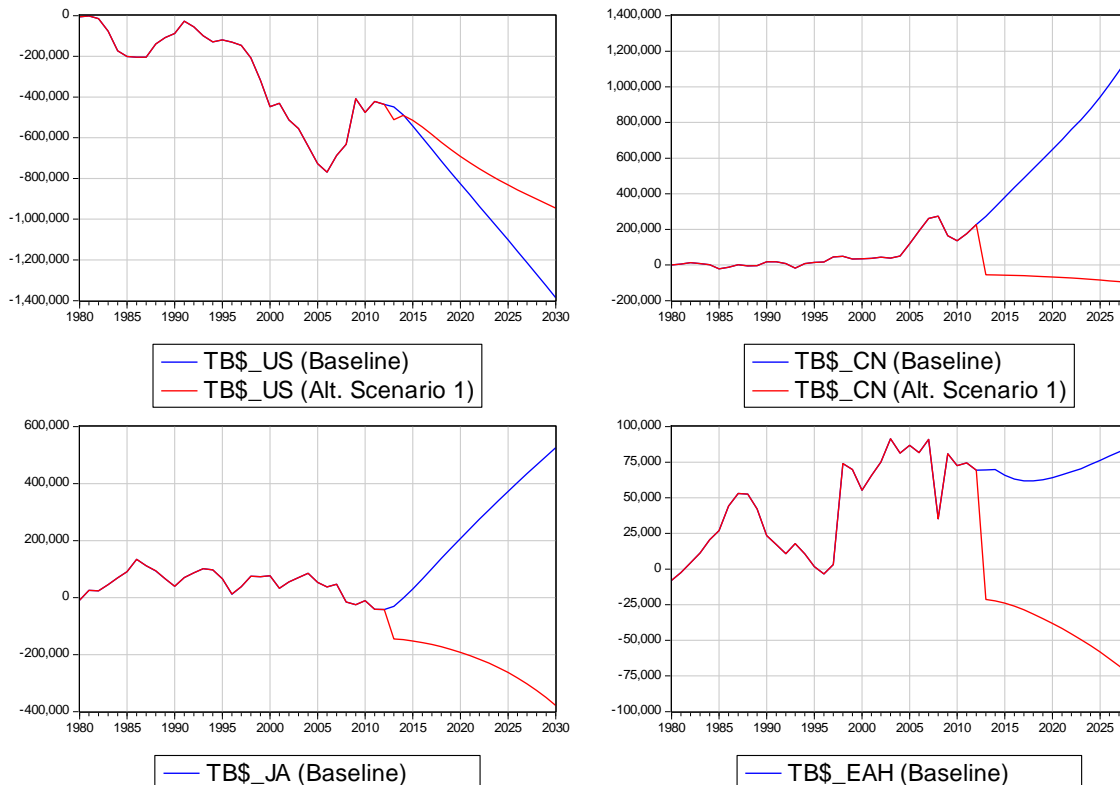


Fig. 10: Trade Balance of the USA

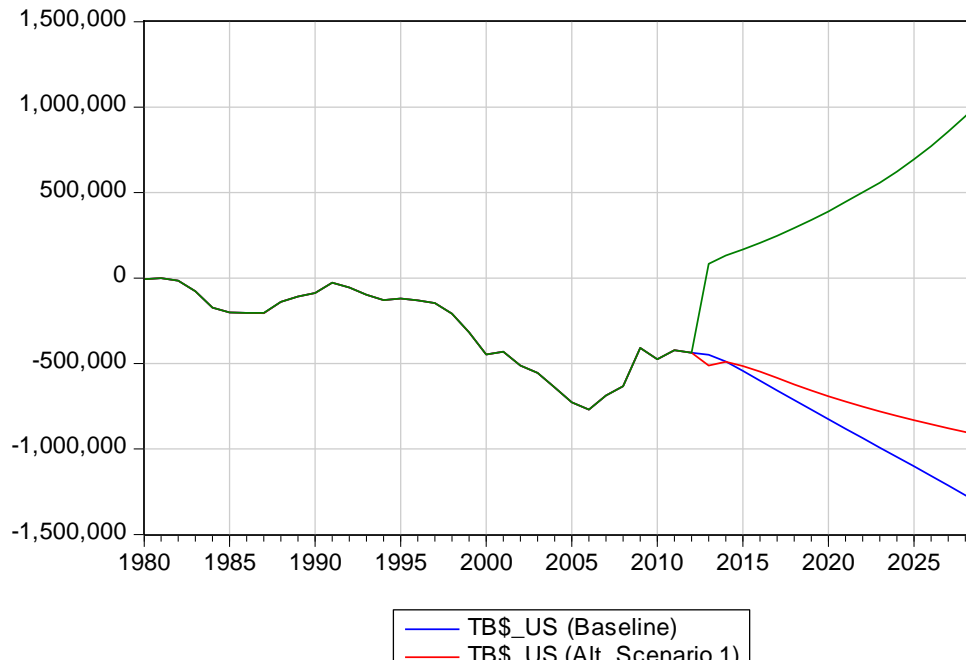


Fig. 11: Net Invisibles of Some Major Deficit and Surplus Countries/Blocs

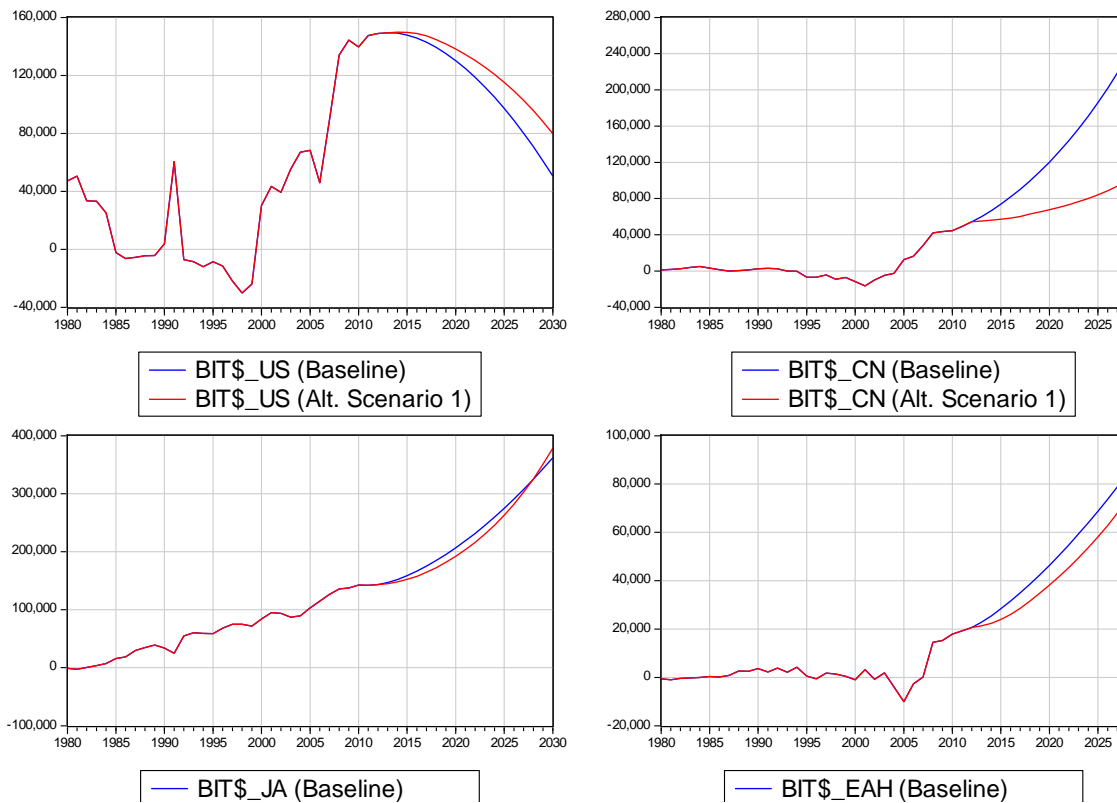
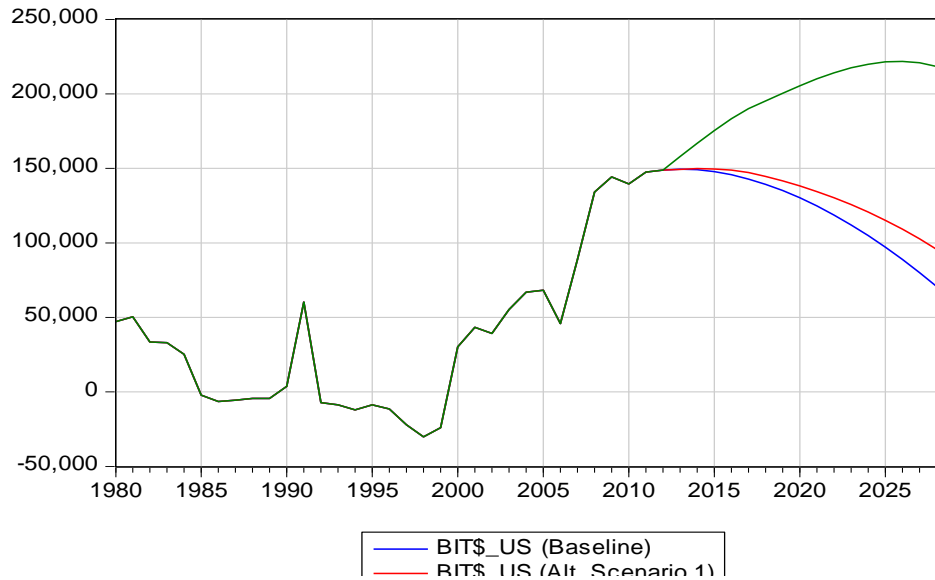


Fig. 12: Net Invisibles of the USA



What other regional blocs can play important roles in solving this problem?

Since an East-Asia centric approach is clearly not sufficient for the resolution of global imbalances, global policy coordinators like the G20 will have to include other blocs to play a significant role in their attempts to rebalance the global economy. An ideal candidate for such an endeavor should have two characteristics. First, it should be a bloc with a sufficiently large current account surplus so that it has the policy space to increase domestic demand. Second, the bloc should be a major trade partner of the US so that a reduction in its surplus would lead to a reduction in the US current account deficit. Fig. 13 shows current account balances for all blocs corresponding to the baseline and alternative scenario 1. It shows that the Central European bloc has large surpluses even in the baseline scenario. It also shows that these surpluses increase substantially following the policy-induced reduction of East-Asian surpluses. Since the US still has very large deficits, this indicates that the Central European bloc substitutes the East Asian blocs as the dominant trading partner of the US. Thus the Central European bloc fulfils both the conditions.

Fig. 13: Current Account Balance

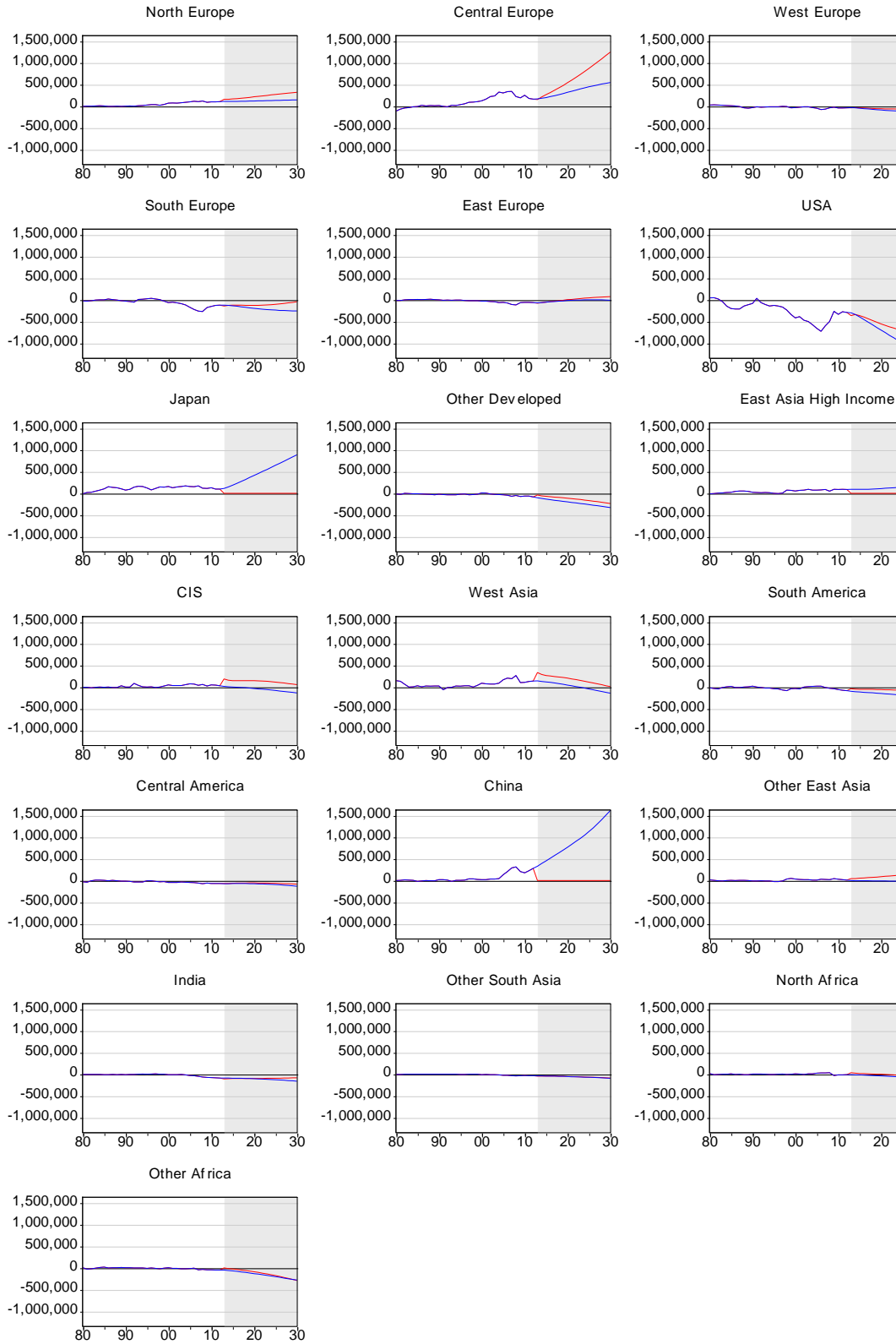


Fig. 14: Current Account Balance as a ratio to GDP

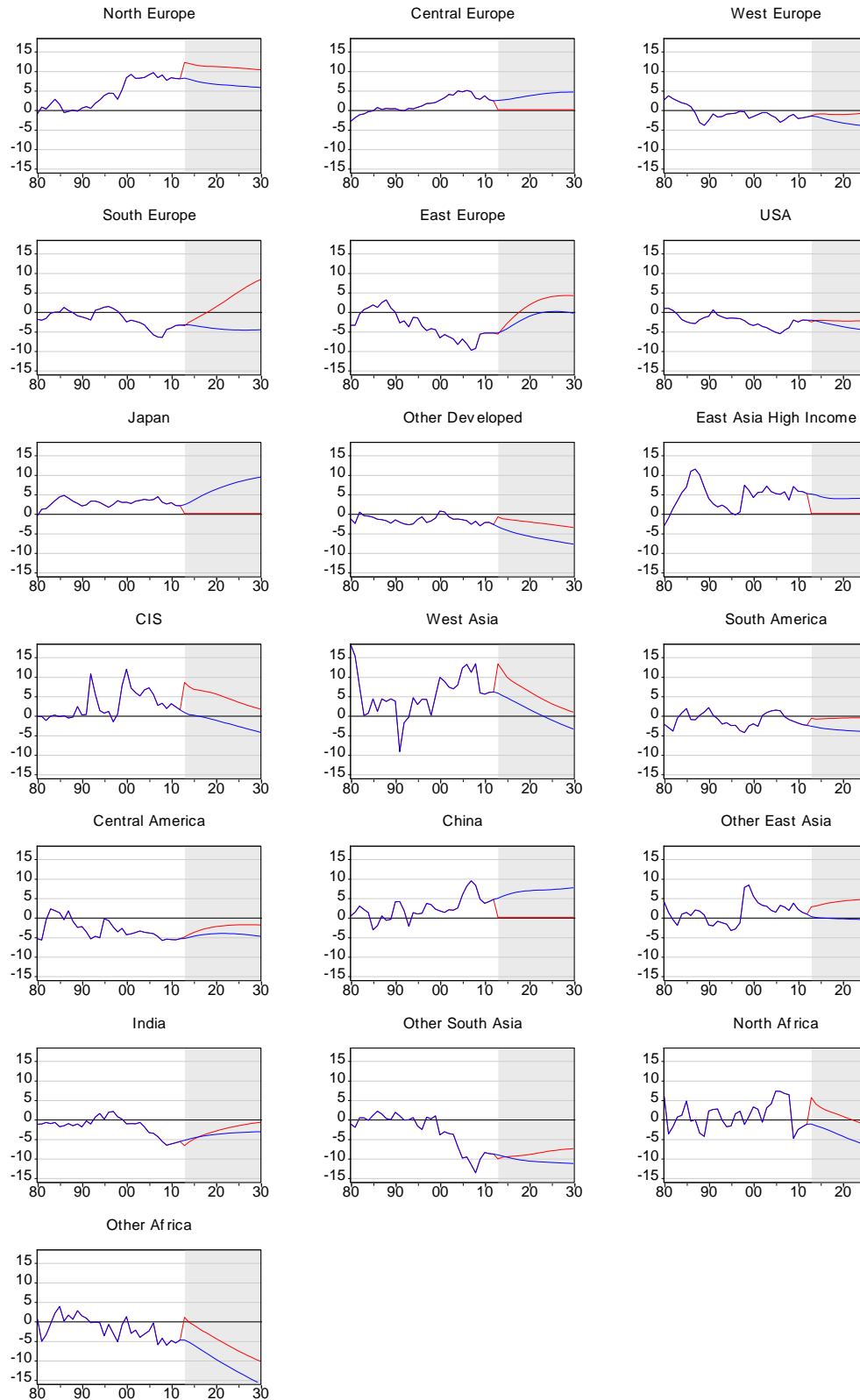
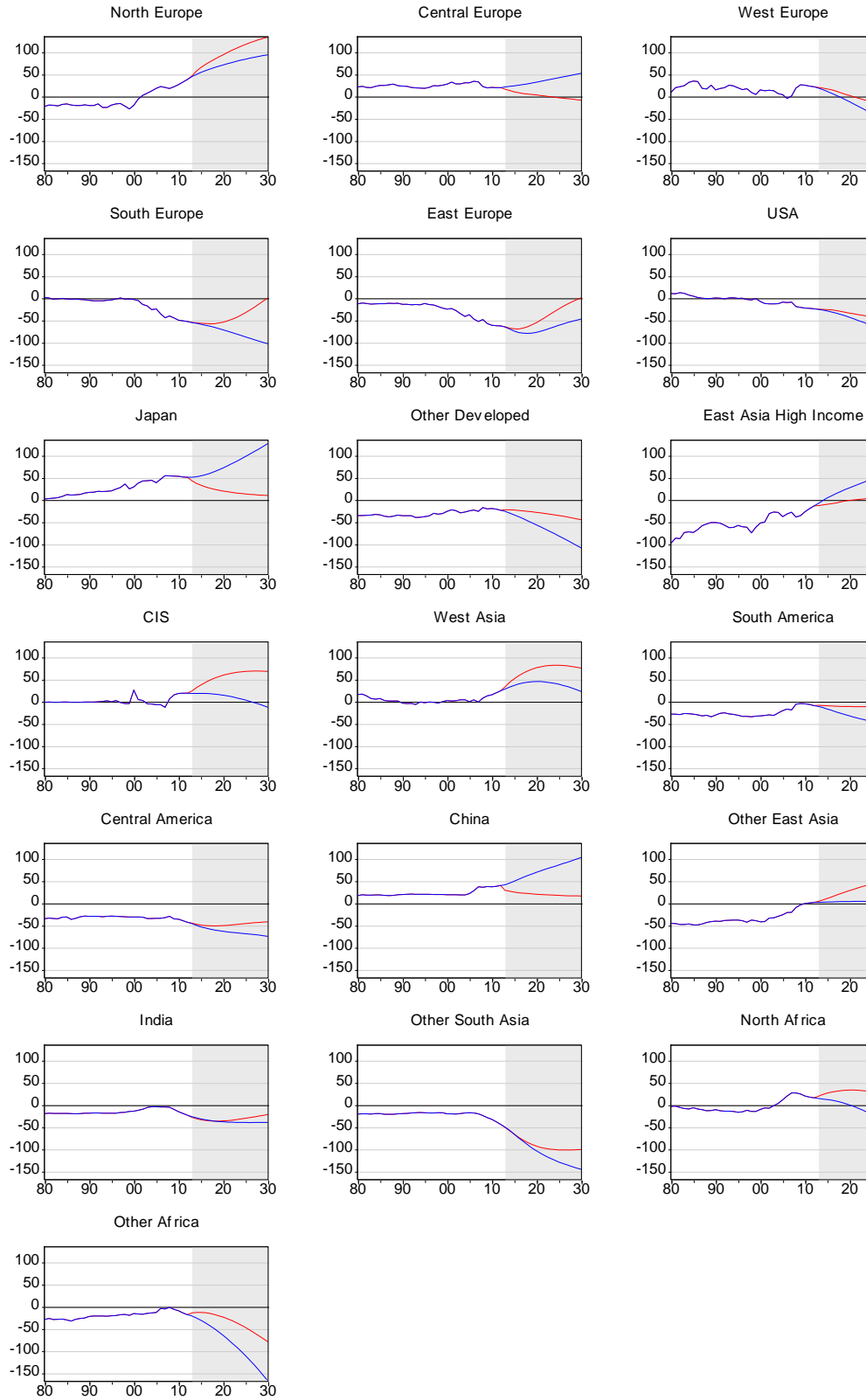


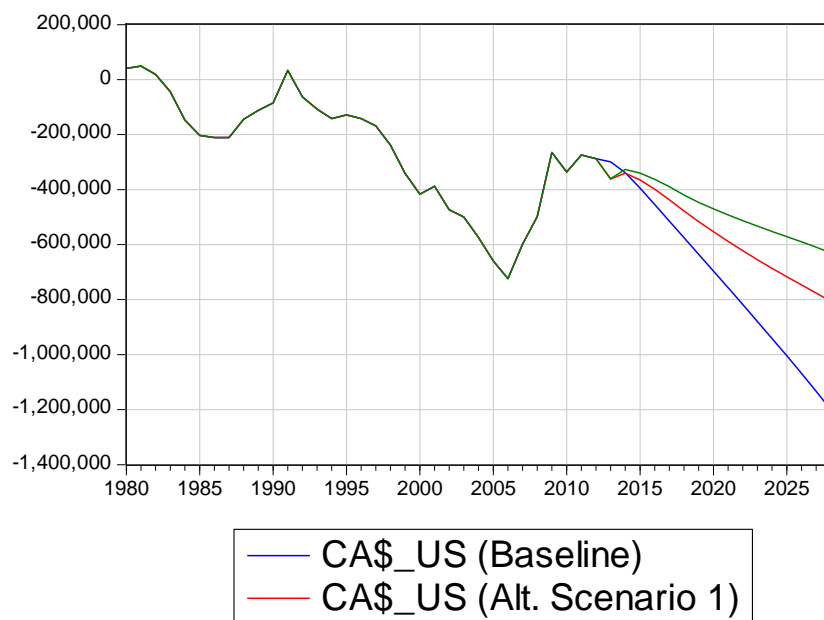
Fig. 15: Net External Assets as a ratio to GDP



In order to assess the role that Central Europe can play in global rebalancing, we generate Alternative Scenario 3. This scenario assumes that Central Europe adopts structural policies that bring down the Current Account surplus of the bloc to zero. Fig. 14 and Fig. 15 presents the CAB Ratio and the net external assets position respectively for all blocs of the model corresponding to the baseline and Alternative Scenario 3. They show that with the current account balance of central Europe coming down to zero, the US deficit improves even further and even in the long run, they do not exceed pre-meltdown levels. This point is made clearer by Fig 16, which shows that the US deficits diminish significantly when central Europe also reduces its surplus (Alt. Scenario 3) compared to a situation where only the East Asian blocs reduce their surplus (Alt. Scenario 1).

It is, of course, a matter of judgment whether the US current account deficits and net external liabilities position corresponding to Alternative Scenario 3 are sufficiently low in order to be acceptable by global policy makers as “safe”. If not, then more blocs will have to be involved in the rebalancing process. From Fig. 14, North Europe looks like a possible candidate. This is a call, however, that only policy makers can take.

Fig. 16: Current Account Balance of the USA



4. CONCLUDING REMARKS

Global policy coordinators, including the G20, have identified global imbalances as a major threat for the stability and sustainability of the world economy. This has led to a consensus that concerted effort must be made to rebalance the world economy. The voluminous literature in this area has identified the significant current account surpluses of the large east-Asian economies as the major factor driving these imbalances. Correspondingly, a large number of contributions have prescribed structural policies to increase domestic consumption in these east-Asian economies, as a panacea for global imbalances. In this study, we argue that this approach has major limitations. In particular, using a global macroeconomic model, we show that even in the extreme case where these economies are forced to bring down their current account surpluses to zero, the net external liability position of the US economy keeps increasing, reaching historically high levels in the long run. Thus, any attempt at global rebalancing has to involve other countries and regions that can contribute significantly to this exercise. Using scenarios generated by the global macroeconomic model, we show that central Europe needs to play an important role in this process. Other parts of Europe, particularly northern Europe, can also play significant roles. These results underline the truly global nature of the world economy, where outcomes are not determined by one or two countries or blocs. It also implies that any corrective policy program for global growth and stability would need to be multilateral in nature, instead of focusing on a few countries and regions. In order to be successful, global rebalancing has to involve a genuine partnership between the US, Asia and Europe.

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