*The Pakistan Development Review*
31:4 Part II (Winter 1992) pp. 857–869

# External Shocks and Domestic Adjustment in Pakistan 1970–1990

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A large current account deficit and an escalating external debt burden have been the characteristic features of Pakistan's economic performance during the decades of the seventies and eighties. The poor performance stemmed largely from the severity of the external shocks – large changes in external variables caused by sharp swings in the behaviour of international goods and capital markets – and the difficulty in adjusting to a worsening external scenario.

Some perspective of the magnitude of the shocks that Pakistan's economy had to suffer may be obtained from the following: the dollar denominated unit value of imports increased by 23 percent in 1973, by 72 percent in 1974 and by another 13 percent in 1975. Import unit value rose again, on an average, by 17 percent during 1979–1981; remittances increased dramatically during the second half of the seventies amounting to as much as the total value of exports during 1978–1986; debt service payments have risen sharply since 1982 averaging over 40 percent of exports; capital flows have declined to around 35 percent of exports after reaching a peak level in 1975-1976; economic growth in trade partner countries has slowed to around 3 percent per annum during 1982–1987 after a long period of fast expansion.[1,2]

Despite the importance of quantifying the impact on the current account deficit of external shocks and of domestic response as empirical analysis of the issue for Pakistan has not yet been attempted.[3] Such analysis is necessary to answer questions as what is the nature of the external shocks? Which domestic expenditure categories were effected most in the process of adjustment? What was the

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[1]Annual average percentage growth in income of thirty-four trading partners of Pakistan weighted by exports.

[2]In addition, in the seventies, there were internal shocks as well manifested in a high inflation rate of 25 percent during 1973-74 and gyrating GDP. The period began with political disturbances, war with India and breakup of the country; collapse of agricultural output in 1971; floods in 1973 followed by drought in 1973; nationalisation of key manufacturing industries and continuing political disturbances.

[3]For developing countries, in general, this issue is fairly well researched see e.g. Balassa (1981); Killick (1981); Khan and Knight (1982); Helleiner (1987); Nuqui *et al.* (1987) etc.

response of the main institutional sectors? Answers to these questions are essential for a proper understanding of the economy's behaviour and for the design of effective policies for sustaining an equilibrium compatible with the new external conditions. Such analysis would also shed light on the controversy about the source of the current account deficits in developing countries. As can be expected, radically different policy prescriptions follow from the position that one takes in the controversy e.g. Balassa (1981); Killick (1981); Khan and Knight (1982); Helleiner (1987) etc. emphasise the role of excess domestic demand and trade policy and argue for adjustment through demand contraction. Dell (1980); FitzGerald and Sarmad (1990), on the other hand, hold, mainly, external factors responsible and underscore the need for compensation arrangements.[4]

This paper investigates these issues on the basis of a methodology introduced initially by Balassa (1981) and refined in UNCTAD (1981) and FitzGerald and Sarmad (1990). The analysis focuses on changes in the main macroeconomic aggregates, decomposed into price and quantity changes, between a 'shock' period (period I) from 1970 to 1977, which saw the clustering of large external and internal shocks, and two subsequent periods – a 'remittance' period from 1978 to 1986 (period II) when current account deficit improved significantly due largely to remittance inflows, and a 'crisis' period (period III) from 1987 to 1990, when the fiscal deficit rose sharply, remittances declined and the mounting current account deficit had to be narrowed in the face of further decline in terms of trade, a large debt overhang and slower world trade growth. Within period II two sub-periods can be identified: the first, from 1978 to 1981 was marked by deteriorating terms of trade and slow demand growth in partner countries; and the second, from 1982 to 1986 saw further deterioration in the terms of trade, declining long-term capital inflow and sharp rise in debt service payments.

The following external shocks and domestic responses or 'policy actions' are identified: deterioration in the terms of trade, rise in debt accumulation burden and changes in direct investment income, remittances and unrequited transfers; and the interaction effects between changes in import replacement and price, world demand and export price, and debt stock and interest rate. The 'domestic response'

[4]The possibility that the choice of the sample could account for the differences in the results cannot be ruled out. It is now clear that within the developing countries there are sub-groups with contrasting external shock and adjustment experiences see e.g. FitzGerald and Sarmad (1990). Developing countries that relied on the international banking system for external finance – the 'private borrowers' – experienced external shock of a larger scale and magnitude than the 'official borrowers' i.e. countries that rely mainly on official development assistance. Towards the end of the eighties the private borrowers were also able to adjust rapidly and even registered a surplus on the current account, while the official borrowers experienced wider trade gaps. Even within the sub-groups individual countries show heterogenous adjustment behaviour.

variables are consumption contraction and investment reduction; import replacement and export penetration; and interaction terms between changes in domestic absorption and imports, and export-penetration and price.

The next section outlines the methodology, followed by a section on results and the last section presents the summary and conclusions.

## METHODOLOGY

Following FitzGerald and Sarmad (1990) we set out here the decomposition methodology which improves upon the 'UNCTAD methodology' as developed by Helleiner and Bacha by fully identifying the 'interaction effects' represented in the latter as a 'residual'. Further, we provide a disaggregation of the domestic absorption variable to identify the scale and magnitude of the domestic response by public and private sectors.

The methodology is based on the decomposition of the current account deficit ($D$) in any one year ($t$) between imports of goods and non-factor services ($M$), net payments of factor services to abroad ($V$), exports of goods and non-factor services ($E$) and unrequited public transfers ($T$):

$$D_t = M_t + V_t - E_t - T_t \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (1)$$

The following two relationships define the linkage between import volume ($J$) and domestic absorption ($A$) and export volume ($X$) and world trade ($W$):

$$J_t = J_t \cdot A_t \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (2)$$

$$X_t = x_t \cdot W_t \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (3)$$

where $M_t = P_{mt} \cdot J_t$; $A_t = C_t + I_t$, $E_t = P_{xt} \cdot X_t$ and $C_t$ and $I_t$ are consumption and investment $P_m$, $P_x$ are the import and export price indices. Further, factor services to abroad ($V$) are written as a sum of their components i.e net interest payments to abroad ($V_i = r_t \cdot F_{t-1}$, where $r_t$ is the interest rate and $F_{t-1}$ is the debt stock in the previous year), net investment income payments to abroad ($V_d$) and net workers' remittances from abroad ($R$).

$$V_t = V_{it} + V_{dt} - R_t \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (4)$$

Substituting (2) to (4) into (1) and dividing through by national income at current prices yields the complete decomposition formula:

$$D_t / Y_t = p_{mt} \cdot j_t (C_t + I_t) / Z_t + r_t - F_{t-1} / Y_t + (V_{dt} - R_t) / Y_t - p_{xt} \cdot x_t \cdot W_t / Z_t - T_t / Y_t \quad \ldots \quad (5)$$

where national income at current prices $Y_t = P_{yt} \cdot Z_t$ i.e. the product of national income at constant prices ($Z_t$) and the implicit GNP deflator ($P_{yt}$) and $p_{mt} = P_{mt} / P_{yt}$ and $p_{xt} = P_{xt} / P_{yt}$.

Finally, a base period ($s$) is chosen in order to separate out the partial derivatives ($d$) of the variables, which then define the separate effects.

$d[D_t / Y_t] =$

| | |
|---|---|
| $[J_s \cdot A_s / Z_s] dp_{mt} - [x_s \cdot W_s / Z_s]\, dp_{xt}$ | terms of trade effect |
| $+ [F_{s-1} / Y_s]\, dr_t$ | interest rate shock |
| $- x_s - p_{xs} - d\,[W_t / Z_t]$ | world trade effect |
| $+ r_s \cdot d\,[F_{t-1} / Y_t]$ | debt accumulation burden |
| $+ d\,[(V_{dt} - R_t - T_t) / Y_t]$ | other external variables |
| $+ j_s \cdot p_{ms} \cdot d\,[A_t / Z_t]$ | domestic absorption |
| $+ [p_{ms} \cdot A_s / Z_s]\, dj_t$ | import replacement |
| $- [p_{xs} \cdot W_s / Z_s]\, dx_t$ | export penetration |
| + interaction effects = | |
| $[A_t / Z_t - A_s / Z_s]\,[j_t \cdot p_{mt} - j_s \cdot p_{ms}]$ | domestic demand and unit imports |
| $+ A_s / Z_s\,[j_t - j_s]\,[p_{mt} - p_{ms}]$ | displacement and import price |
| $- [W_t / Z_t - W_s / Z_s]\,[x_t \cdot p_{xt} - x_s \cdot p_{xs}]$ | world demand and unit exports |
| $- [W_s / Z_s]\,[x_t - x_s]\,[p_{xt} - p_{xs}]$ | penetration and export price |
| $+ [r_t - r_s]\,[F_t / Y_t - F_s / Y_s]$ | debt stock and interest rate |

The absorption effect is further decomposed into private and public consumption and investment effects.

The variable derivations are as follows: GNP and components (consumption and investment, exports and imports of goods and non-factor services) are in domestic currency units at current and constant 1981 prices. The sources of data are the Pakistan Economic Surveys and State Bank Annual Reports; Workers'

remittances are the balance of payments figures and external debt in US dollars is from the World Tables of the World Bank. Net Direct Investment income to abroad is calculated as a residual (i.e. $Vd = V - Vi + R$). World Exports at 1981 constant prices are calculated from the *International Financial Statistics* by dividing world exports in current US dollars by the world export unit value index converted to 1980 base. Dollar constant prices are converted to constant domestic currency prices by multiplying by the dollar exchange rate for 1980.

In all cases a positive sign indicates a contribution to an increase in the external deficit ($D$) and a negative sign signifies a decrease.

## RESULTS

Table 1 shows the broad contours of adjustment in Pakistan. For the whole period 1978 to 1990 the current account improved by 2.8 percent of GNP as compared with the base period 1970–1976, implying that some adjustment did take place though the current account deficit still remained large. Structural characteristics of Pakistan's economy – a low per capita income of US $ 340 in 1985 and the predominance of primary and semi-processed goods in total exports – did not allow potential flexibility in adjustment. Nevertheless, the negative impact of external shocks on the current account was not as significant in Pakistan as in developing countries in general.[5] The reason is that in Pakistan the process of adjustment was underwritten by the dramatic increase in remittances – its effect on the current account deficit amounted to 4.3 percent of GNP – and, by large shifts in trade ratios (with import substitution effect dominant) while in the other developing countries, particularly the official borrowers, the effect of remittances was not substantial and adjustment efforts were delayed until the early eighties.

Recession in industrial market economies during 1979-1980 and the sharp rise in interest rates stemming from restrictive anti-inflationary monetary policies in the industrial countries did not have a sizeable effect on Pakistan's current account because: (a) the recession induced effect of slow-down in industrial economies was offset by the rising share of the booming middle east market in the country's exports – between 1974 and 1982, the share of the countries of the Organisation of Islamic Countries (mostly oil-exporting countries) increased from 14 percent of Pakistan's exports to 24.4 percent; and (b) the external debt acquired was mostly in the form

[5]Developing countries experienced deterioration in the current account amounting to, on an average, 2.6 percent of GNP during the period 1977 to 1982, but a relative improvement in the current account deficit of a similar magnitude during 1982–1988. The 'official borrowers' – the group of developing countries which rely mainly on multilateral sources of external finance – experienced a similar adjustment path though the magnitude of the effect of external shocks and of domestic response was much less.

Table 1

*Decomposition of Current Account Deficit (Percent of GNP)*
*Period Averages for (1978 to 1986), (1978 to 1981),*
*(1982 to 1986), (1987 to 1990) and (1978 to 1990)*

| Period Average Weights | 1978–86 1970–77 (1) | 1978–81 1970–77 (2) | 1982–86 1970–77 (3) | 1987–90 1970–77 (4) | 1978–90 1970–77 (5) |
|---|---|---|---|---|---|
| Observed Deficit Increase | | | | | |
| External Shocks | −3.080 | −2.493 | −0.587 | −0.278 | −2.802 |
| TOTAL | 8.907 | 3.522 | 5.385 | −1.511 | 7.396 |
| Terms Trade Deterioration | 6.274 | 2.540 | 3.734 | −1.284 | 4.989 |
| Import Price Effect | 8.157 | 4.945 | 3.212 | −0.688 | 7.468 |
| Export Price Effect | −1.883 | −2.405 | 0.522 | −0.596 | −2.479 |
| Interest Rate Shock | 0.607 | 0.240 | 0.367 | −0.042 | 0.565 |
| World Trade Retardation | 2.027 | 0.743 | 1.284 | −0.185 | 1.842 |
| Other External Variables | | | | | |
| TOTAL | −6.351 | −5.139 | −1.211 | 1.909 | −4.442 |
| Debt Accumulation Burden | −0.139 | −0.139 | 0.000 | 0.066 | −0.073 |
| Change Direct Inv Income | −0.023 | −0.035 | 0.012 | 0.266 | 0.242 |
| Change Remittances | −5.928 | −4.964 | −0.964 | 1.647 | −4.280 |
| Change Public Transfers | −0.261 | −0.002 | −0.259 | −0.070 | −0.331 |
| Domestic Policy Actions | | | | | |
| TOTAL | −4.367 | −0.677 | −3.690 | −0.408 | −4.774 |
| Domestic Spending | −0.317 | 0.159 | −0.476 | −0.059 | −0.376 |
| Consumption Contraction | −0.024 | 0.446 | −0.470 | −0.085 | −0.109 |
| Private Consumption | −0.250 | 0.395 | −0.644 | −0.183 | −0.432 |
| Public Consumption | 0.226 | 0.051 | 0.175 | 0.098 | 0.324 |
| Investment Reduction | −0.293 | −0.287 | −0.006 | 0.026 | −0.267 |
| Private Investment | −0.243 | −0.309 | 0.067 | 0.075 | −0.168 |
| Public Investment | −0.050 | 0.023 | −0.073 | −0.049 | −0.099 |
| Trade Ratios | −4.050 | −0.836 | −3.214 | −0.348 | −4.398 |
| Import Replacement | −3.417 | −1.867 | −1.550 | 0.250 | −3.166 |
| Export Penetration | −0.633 | 1.031 | −1.664 | −0.599 | −1.232 |
| Interaction Effects | | | | | |
| TOTAL | −1.270 | −0.199 | −1.071 | 0.288 | −0.982 |
| Import Shock | −1.573 | −0.480 | −1.093 | 0.224 | −1.349 |
| Demand/Unit Imports | −0.056 | 0.022 | −0.078 | −0.006 | −0.062 |
| Displacement/Price | −1.517 | −0.503 | −1.015 | 0.230 | −1.288 |
| Export Shock | 0.396 | 0.318 | 0.078 | 0.017 | 0.413 |
| Demand/Unit Exports | 0.510 | 0.081 | 0.429 | 0.195 | 0.705 |
| Penetration/Price | −0.114 | 0.237 | −0.351 | −0.178 | −0.292 |
| Debt Shock | −0.093 | −0.037 | −0.056 | 0.047 | −0.046 |
| Stock/Interest | −0.093 | −0.037 | −0.056 | 0.047 | −0.046 |

of low-interest long-term official assistance, which amounted to an average of 94 percent of total debt till 1984. Only in subsequent years did commercial debt begin to assume increasing importance. Consequently, for the years 1978 to 1990 the combined effect of the increase in interest rates and slow-down in world trade growth amounted to 2.4 percent of GNP. The effect of export demand was reversed in later years because of faster growth in trade partner countries. The interest rate effect remained below half a percent of GNP though it rose a little during 1982–1986 which reflected an increasing share of short-term variable interest loans in the total debt portfolio.

The behaviour of the current account deficit was driven largely by external factors, mainly terms of trade deterioration and world trade retardation, whose combined impact on the deficit amounted to 6.8 percent of GNP. Domestic response was in the form of large shifts in trade ratios i.e. through import replacement (3.2 percent) and export penetration (1.2 percent). By comparison, changes in domestic absorption have not been very significant: public and private sector investment reduction have contributed only in a small way to deficit reduction. The fall in investment rates has resulted from a number of factors: macro-economic instability linked to the severity of external shocks and worsening political stability problem; decline in saving rate; deterioration of fiscal conditions and acceleration in inflation. The investment decline was accompanied by slow-down in growth which adversely effected sustainability of the adjustment process.

Private consumption also made a small contribution to deficit reduction but a relatively higher public consumption level negatively effected the deficit. The decomposition of the residual term shows a significant interaction effect between import displacement and price (1.3 percent) highlighting the non-marginal nature of incremental changes in external variables.

The overall improvement in the current account deficit during 1978 to 1990 conceals divergent behaviour during sub-periods. For example, period II (1978–1986) saw significant improvement in the deficit stemming largely from remittance flows. Import replacement and price interaction effects (4.9 percent) were large and along with the remittance effect more than off-set the impact of declining terms of trade and world trade retardation. Terms of trade deterioration persisted throughout the period, though during sub-period 1978 to 1981 its effect was off-set by a favourable export price effect (2.4 percent). Loss of export momentum exacerbated the deficit by a percentage point.

The declining world market share resulted from a combination of different factors: slow private investment growth and inflation and upward pressure on the wage rate caused real exchange rate to appreciate undermining export competi-

tiveness; the export sector was further squeezed by the boom in non-tradeables resulting from accelerating remittances. A fixed exchange rate regime heightened the country's vulnerability to slower export demand growth. Nevertheless, the higher fall in the import coefficient (effecting the deficit by 1.9 percent) reinforced by the interaction effect between import price and displacement (0.5 percent) ensured a net positive impact on the deficit. Remittance flows allowed upward movement of absorption variables: consumption, private and public, expanded, causing deficit deterioration by half a percentage point. But private investment continued its decline which narrowed the deficit though not without adversely effecting growth prospects.

In sub-period B (1982–1986) the total external shock effect was large as compared with the shock during the period from 1978 to 1981 because of higher import prices and the compounding effect of lower export prices. Adjustment resulted mainly from expenditure switching rather than reduction. Faster export growth was helped by devaluation and changes in incentive structure. World recession effect grew in importance and remittances made a much smaller contribution to deficit reduction (1.0 percent) forcing a sharper domestic response. Import replacement, its interaction with price, and faster export growth narrowed the deficit by 4.2 percent.

Adjustment impact on institutional agents was varied: the brunt of reduction in absorption was borne by the private sector – restraint in private consumption because of slower growth of real wages relative to the consumer price index contributed 1 percent to deficit reduction. It appears that the deflationary consequences of this were avoided by switching demand away from imports and shifting resources to production of exportables and importables. Public consumption increased even more than during the previous period – widening the deficit by 0.2 percent – largely because of higher debt service obligations and rising non-development expenditure. Government financial performance deteriorated significantly and the budget deficit rose to 8 percent of GDP. The structure of government current expenditure was not amenable to easy change forcing public investment down in response to pressure to contain the deficit while private investment increased. Yet, the net effect of the divergent movements was minimal.

During the last period (1987–1990) the anatomy of adjustment contrasts sharply with previous experience. External shocks were favourable and export demand grew rapidly causing a net effect amounting to 1.5 percent improvement in the deficit. However, the period was marked by deterioration in payments problems stemming largely from declining remittances and growing debt burden. Gross official reserves fell to a low level and the government had to resort to short-term

borrowing to strengthen external reserves. Export penetration increased further, reflecting the effect of real exchange rate depreciation and higher export incentives, though the relative impact on the deficit was small. Private consumption and public investment have continued to fall. But public consumption has increased further weakening the fiscal position: the deficit rose to 9 percent of GDP, domestic debt to 42 percent of GDP and external debt to 42 percent of GDP. By 1988 the current account deficit had become unsustainable which prompted the adoption of a medium-term adjustment programme.

## SUMMARY AND CONCLUSIONS

The decomposition analysis of the current account shows that the behaviour of the deficit during 1978–1990 was driven primarily by external factors – terms of trade deterioration, which persisted throughout the years from 1978 to 1986, remittances and slow-down in export demand. The improvement in current account deficit resulted from the effect of higher remittance inflows and favourable shift in trade ratios. The effect of absorption variables was, by comparison, not very significant i.e. adjustment came about mainly from expenditure switching rather than expenditure reduction. The magnitude of external shock and scale of domestic response has varied over time: during 1978 to 1981 remittance inflow more than off-set the effect of external shocks while the effect of import replacement was largely cancelled out by loss of export markets. During 1982 to 1986, the effect of declining terms of trade was compounded by decline in export demand. As a result, the overall external shock effect was much larger. Remittance flows were relatively smaller and though transfers to public sector increased in importance the squeeze in external resources forced a sharper domestic response.

The main mechanism of adjustment was through shift in trade ratios i.e. import replacement and export penetration, and through the interaction between import replacement and price. The role of domestic absorption variables was small though private consumption and public investment contracted, while public consumption increased. The net result was a small improvement in the current account deficit.

During 1987–1990 adjustment was facilitated by improvement in terms of trade and expansion in export demand, yet payments difficulties were exacerbated. The decline in remittances caused a large negative effect on the current account balance. Export momentum was maintained though import volume increased; the net effect of changes in domestic absorption variables was small. Serious problems began to emerge with the fiscal deficit because of growth of expenditure unmatched by revenue gains. Yet, the net impact on the deficit of increases in public

consumption remained small. Finally, the rise in private investment, though slightly higher than the decline in public investment has been accompanied by higher imports.

In short, the estimation of the magnitude of external shocks and the scale of domestic adjustment shows that: First, the external shocks during 1978 to 1981 though large did not trigger a significant shift in domestic policy because of compensating remittance flows, which led to significant improvement in the current account deficit and even permitted higher domestic absorption. Second, the external shock effect was much larger during 1982–1986 and as remittances had levelled off, it forced a sharper domestic response manifested mainly in expenditure switching rather than expenditure reduction. But, domestic response was just sufficient to produce a small improvement in the current account deficit. Third, the decline in remittances during 1987–1990 was the single most important factor leading to deterioration in the current account deficit despite significant improvement in external variables and export expansion. The importance of debt accumulation burden, reflecting the rising share of short-term variable interest debt in total external debt portfolio has also become a cause for concern. Changes in domestic absorption variables were small though the persistent reduction in public investment and less than vigorous private investment response creates the risk of slower growth and adjustment in the medium-term.

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## Comments on "External Shocks and Domestic Adjustment in Pakistan 1970-1990"

This paper empirically analyses the impact of various external and internal shocks on the current account deficit of Pakistan using the "decomposition technique" originally proposed by Balassa (1981) and, subsequently, improved and extended by Helleiner and Bacha (1981) and FitzGerald and Sarmad (1990) covering different sub-periods between 1970 to 1990.

The topic is *potentially* important and may have significant implications, particularly in the light of recent policy changes made in the area of foreign exchange liberalisation in Pakistan and other neighbouring countries. Unfortunately, the time period considered in the paper does not include the duration (perhaps due to unavailability of data) when these important changes took place. If one accepts the "decomposition technique" seriously (and I have some reservations pertaining to the methodology, which I will discuss later) then I believe the author's research provides some interesting results, namely:

(a) External shocks in the form of (i) terms of trade deterioration, (ii) remittances and (iii) export demand were the dominant factors in influencing the current account deficit;
(b) The domestic absorption consisting of consumption and investment did not play a significant role in causing the current account deficit; and finally
(c) The impact of external shocks were much smaller in the earlier part of the period considered but became reasonably large in the latter part of 1980s.

I have a few reservations regarding the methodology used by the author to analyse the impact of external shocks on the current account deficit. First, the results reported by the author represent the averages for a given sub-period. As is well known in statistics, the averages can only present one half side of the story as the knowledge of variance or standard deviation is equally important to get the proper interpretations and understanding of the results.

Secondly, the author, on several occasions, had used the term "*significant*" to highlight the importance of a given variable in explaining the current account deficit. One would tend to assume that the term "significant" has the usual statisti-

cal meaning in probabilistic terminology. However, the results reported by the author do not indicate if these variables are significant (at the 1 percent, 5 percent or 10 percent levels) nor do they tell us whether the variables are different from zero or one etc. and more importantly they do not indicate the distribution that the methodology assumes.

In light of these limitations, I would propose that the author may consider an alternative methodology known as the *Vector Autoregression* (VAR) technique pioneered by Sims (1980) and popularised by Litterman (1979, 1984) and Doan and Litterman (1984). In the absence of complete knowledge about the true model, the VAR technique, using the impulse response function (IRF) would be a useful tool to analyse the impact of external shocks on the current account deficit. It will also provide confidence bands around the IRF whereby one can now easily analyse the statistical significance of the shocks on the target variable. Not only that, the VAR technique will also enable us to perform the decomposition analysis of the forecast error variance as well as the historical values of a set of time-series variables (e.g., current account deficit) into a base projection and the accumulated effects of current and past innovations.

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