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Impact Evaluation of Structural Adjustment Program: A Case of Pakistan

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Abstract

We analyzed the effect of Structural Adjustment Program (SAP) on macroeconomic variables of Pakistan using annual time series data for the years 1981-2001. The impact of four policy instruments of SAP, i.e. reduction in budget deficit, increase in indirect taxes, adjusting the exchange rate and sliding down of subsidies, on employment, income distribution, per-capita income and inflation has been analyzed. It is found that the first policy instrument, i.e. decrease in budget deficit has affected employment, income distribution and inflation adversely. The second policy instrument of imposition of indirect tax negatively affected the employment, income distribution, per capita income and positively affected the inflation. The third policy instrument of SAP was adjustment of exchange rate. It is estimated that adjusting exchange rate has resulted into increased unemployment and inflation. The fourth policy instrument of shrink in subsidies augmented the unemployment, unequal distribution of income and inflation and dwindled the per-capita income. It appears that SAP has adversely affected the major socioeconomic variables of the economy. Currently the government is considering for loan from IMF, so it is proposed to avoid such type of policy directives from IMF.

Keywords: Structural Adjustment Program, Budget deficit, Indirect taxes, Exchange rate, Subsidies, Employment, Income distribution, Per-capita income, Inflation, Pakistan.

JEL Classification Codes: D73, D80, C33, E62.

Introduction

The rationale for the lending from IMF was that a temporary IMF program should give breathing space to countries facing macroeconomic imbalances so they can achieve a smooth adjustment without resorting to drastic actions that could harm long-term growth prospects. The World Bank and the IMF argued that Structural Adjustment Programs (SAPs) were necessary to bring a developing country from

crisis to economic recovery and growth¹. Economic growth driven by domestic resource mobilization and foreign investment were assumed as the key to development by these two major donor agencies. They argued that the resulting national wealth will eventually trickle down and spread throughout the economy and eventually to the poor². IMF structural program, however, have been widely criticized to restore economic growth. Barro and Lee (2005) estimation based on a panel of all 725 IMF loans between 1970 and 2000 explained that a typical country would be better off economically if it is committed itself not to be involved with IMF loan programs. Redelet and Sachs (1998) asserted that IMF programs do not improve expectations about the health of the economy³. Critics of SAP argued that policy recommendations with their emphasis on fiscal adjustment through a combination of tax increases and drastic reductions in public expenditures have had a devastating effect on the poor. Naiman and Watkins (1999) have argued that there was an urgent need for the increased attention to the provision of basic social services in developing economies. However, IMF adjustment program restrict access to health services and public education in two key ways: by reducing household incomes and by reducing public (government) spending. Similarly, Bretton Woods Project (2004) noted that in the face of public exhortations to greater spending on social services, low-income country governments however, find themselves trapped by Fund diktat on budget balances, inflation and interest rate.

On the other hand, Mody and Debucci (2006) concluded that policy adjustment by the debtor country restored investor's confidence and lending therefore stopped destructive runs. Subramanian (1997) discussed the Egyptian stabilization experiences and found that there was successful practice in the country. The fiscal adjustment and exchange rate manipulation were main driving forces supported by prudent monetary policy and liberalized interest and exchange market reforms. The analysis showed positive impact of stabilization policies⁴. The success of the lending programs is also determined by political economic factors within the country attempting reforms and factors under the control of lending institutions. The political economic factors may be ethnic, factionalization (social division), whether the leaders are democratically elected, length of tenure, credibility, political stability, income inequality, area of crisis (terms of trade, shocks prior to lending or during implementation of adjustment programs and budget deficit, etc.) and others. The variables under the lending institutions control include resources devoted to preparation and supervision of adjustment loans, loan size, the number of conditions and the sequencing of conditions (prior action versus first, second or third tranche conditions)⁵. Anyhow the divergent views on the effect of IMF programs in part reflect the different methodologies and data sets⁶.

Pakistan, like many other LDCs faced a large fiscal deficit, rapid monetary expansion accelerating inflation, an unsustainable current account deficit, deterioration in the terms of trade, and a large stock of external debt during the 1970s and early 80s. Pakistan was among those few countries that have received six or more adjustment loans since 1980s. The first Structural Adjustment Loan (SAL) was granted to Pakistan in 1982. An export development loan was provided to the country for extension of industrial export. The first energy loan was approved in 1985 and the second in 1989. These loans were to support the government energy strategy. The Structural Adjustment Facilities

¹ Structural Adjustment Program has touched all the countries at one time or other, except Botswana, Kuwait and Malaysia (Barro and Lee 2005).

² Pakistan's experience does not support the trickle down effect. Despite high growth in 1960s, poverty increased and slowing down growth in 1970s was accompanied by a sharp reduction in poverty (Amjed and Kemal 1997; see also Kakwani 2001)

³ See also Beneria (1995) for Mexico; Iqbal and Rizwan (1998) for Pakistan and Gardezi (2004) for Pakistan.

⁴ See also Ramakrishnan and Zalduendo (2006) who concluded that IMF program were critical for emerging market economies for crisis prevention; World Bank (1995) for Bangladesh; Martin and Segura-Ubierzo (2004) for developing countries for which study concluded that IMF-supported programs either maintained or increased social spending in health and education; Jamal (2003) for Pakistan to show a significant improvement in domestic savings, ratio of private investment in GDP and slower growth in debt servicing.

⁵ See also Dollar and Svensson (2000) and Martin and Segura-Ubiergo (2004) for such type of factors.

⁶ See Goldstein and Motiel (1985) for characteristics that a methodology should have to measure the impact of IMF-supported program; Haque and Khan (1998) for summary of methodologies for assessment of IMF programs.

(SAF) were created by the IMF in 1986 and the country received the largest share. The SAF supported program focused on four essential areas, (i) raising price incentives for agricultural producers, (ii) increasing domestic savings, (iii) easing bottleneck on supply and fiscal management, and (iv) liberalizing exchange and trade system.

In Pakistan the GDP growth rates as well as sectoral growth rates fell slightly over the period of adjustment. Ali (2003) argued that macroeconomic factors such as economic recession, the debt crises, globalization, structural adjustment and stabilization policies have affected the lives of poor seriously. We will examine the impact of SAP on the economy of Pakistan for the time period of 1981-2001 on socio-economic indicators of employment, income distribution, per-capita income and inflation⁷. The current study in this way is a supplement to the previous ones.

Literature Review

In the literature, for Pakistan the studies attempted to explore the effect of SAP on socio-economic indicators like income disparity, industrialization, rural and urban socioeconomic status, GDP growth rate, unemployment, private investment, women' exploitation, real wages, women wages, domestic savings and debt servicing, etc. For developing countries, the impact on social spending and private capital flows has also been discussed. Similarly, the determinants of success or failure of IMF-supported programs have also been probed. We will see the chronological review of these studies. In the earlier studies Iqbal (1994) has analyzed the macroeconomic effects of adjustment lending in Pakistan by comparing the macroeconomic indicators like real GDP growth, export and import growth, current account balance, budget-deficit, domestic inflation and growth in capital formation of the decade before lending and the decade with lending.

To trace out changes in the structure of protection, tariff rationalization and trend of fiscal deficit and inflation in the economy and their impact on efficiency, during the SAP period 1985-86 to 1992-93 Kemal (1994) analyzed the impact of structural adjustment on employment, income distribution and poverty. The study concluded that tariff rationalization and import liberalization have shown positive impact on efficiency but there came out a little contribution of SAP towards the stabilization of the economy. The study explained that structural adjustment increased unequal income distribution and poverty⁸ due to three major reasons. Firstly, reduction in employment was caused by reduction in employment cost. Secondly, tax incidence enlarged the lowest income group and reduced the highest income group in the economy. Thirdly, elimination of subsidies on inputs was hypothesized to low the incomes of both rich and poor but output price compensation benefited bigger landlords more than the poor.

The effects of structural reforms on industrialization in Pakistan have been explored by Rafi and Shaheen (1996). The industrial sector was successfully promoting the exports of the country since the onset of SAP. The study found that structural reforms resulted into sharp increase in the cost of production as a result of stabilization of currency which slided down the exports. It further estimated the contribution of domestic demand, import-substitution and export promotion to industrial growth and concluded that cheaper imports had declined local industrialization.

The impact of SAP on income distribution has been estimated by Iqbal and Rizwan (1998). They used a simple static fixed price Social Accounting Model (SAM) to scrutinize the distributional outcomes of incomes for rural and urban households. The effects of reduction in subsidies, reduction in overall public current spending and reduction in public spending of health and education on incomes of

⁷ There is a variety of other variables which are directly or indirectly attached with SAP program. They are balance of payments, the sectoral disparity in the economy, health and education provision, productivity of different sectors, gender dimensions of labor force participation and export and import composition of items, etc.

⁸ See also Jaffery and Khattak (1995); Anwer (1996) for devastating effect of SAP on poverty status in Pakistan; Bengali and Masood (2001) for adverse affects of SAP on growth, employment and poverty and Jamal (2003) for inequality and poverty in Pakistan.

urban and rural households have been estimated. The study concluded that the reduction in subsidies has adversely affected the incomes of riches of rural and urban households⁹. Reduction in government spending also negatively affected incomes of all groups. Finally all joint policies have shown considerable negative impact on incomes of all groups of rural and urban household. However, the poorest income group was affected more than other income groups.

Pakistan was committed to the set of conditionalities under SAP since 1988. Bengali and Masood (2001) probed fiscal and monetary policy packages for Pakistan. The target variables of the policies were current account deficit and budget deficit while the outcomes were GDP growth, poverty, unemployment, inflation and private investment. The study concluded that the important feature of the reform policy was the dominance of stabilization objective at the cost of growth. The stabilization targets were achieved in a way in which they should not be achieved. The budget deficit should be achieved through increase in revenue or reduction in current expenditures, but it was achieved by reduction in development expenditure.

The impact of SAP on poverty in Pakistan has been probed by Kemal (2003). The study explained that SAP was aimed to improve economic efficiency and growth rate without affecting poverty. The study remained successful in achieving economic stability by successfully implementing SAP. However investment and growth rates slided down and unemployment and poverty increased. The study further concluded that poverty was negatively related with per-capita availability of food grains and subsidies, and positively with unemployment and inflation.

The dynamic aspects of poverty and inequality over the period of 1988-99 under SAL program from World Bank and IMF have been examined by Jamal (2003). The study analyzed the impact of the program on household welfare and poverty in Pakistan. The results have shown an increase in both the Gini-coefficient and poverty. The study revealed that increase in poverty especially in rural areas can be attributed to low economic growth during the decade. It was further concluded that after SAP Pakistan has performed poorly in all the stabilization indicators except nominal reduction in budget deficit and a slight increase in total revenues and share of exports in GDP.

The women's exploitation as a result of SAP has been seen by Ali (2003). The study explained that devaluation and trade liberalization combine with removal of subsidies encourage producers to increase the production resources to tradable from non-tradable items. The men work for tradable sector such as cash crops, while women produce non-tradable goods to provide food for households. The transformation of resources from non-tradable to tradable items created inequality between the men and women's income, although the cut in real wages and employment has affected both men and women. Due to privatization under SAP, in some countries female labor force participation rate had tended to rise but their employment in informal sector has grown as a proportion of total employment and reduced the average earnings of female labor. It was due to privatization through SAP. To control this poverty and inequality the government adopted programs such as Poverty Reduction Support Credits. The study suggested that Poverty Reduction Growth Facilities and Enhanced Structure Adjustment Facilities must be gender sensitive. All development projects in all sectors including agriculture, health and water, etc. must be gender sensitive to promote women rights and achieve poverty reduction goals.

The impact of IMF-supported programs on social spending (public health and education spending) has been probed by Martin and Segura-Ubierno (2004) for 146 countries over the period 1985-2000. Using the Auto-regression Integrated Moving Average (ARIMA) model technique and a two-stage estimation method, the study concluded that the presence of IMF-sponsored programs tends to either maintain or increase social spending in health and education, measured as either a share of GDP, total expenditures or in real per-capita terms¹⁰. The effect was relatively small and short-lived and particularly significant for countries which were continuing (but not necessarily chronic) clients of

⁹ See also, Kemal (1994); Jaffery and Khattak (1995) and Anwar (1996) for negative impact of SAP on income distribution in Pakistan.

¹⁰ However, the study did not include indicators of actual health or educational outcomes.

the IMF. The study found no significant differences between concessional and non-concessional programs as well as no evidence of whether the programs affected the efficiency of delivering of these services or their targeting.

Gardezi (2004) has taken SAP as dilemma of development for Pakistan. The study narrated that sharp increase in foreign debt created great dependency on SAP loans, which caused the state assets privatization, devaluation of currency and increase in prices of petroleum and electricity. General sales tax was imposed, and import duties were further reduced. The IMF came up with the new and novel idea of Poverty Reduction Growth Facility (PRGF). It focused on more progress in the sale of state assets, improved investment environment for both foreign and local investors, reduction of budgetary deficit, and tax concession and subsidies to eliminate poverty. PRGF was directed to improve the position of workers in the labor market through privatization and deregulation but it made virtually impossible for workers to climb out of poverty.

Methodology

In literature, different methodologies have been adopted for the assessment of programs like SAP. The first methodology is the before-after approach, which compares macroeconomic variables before and after a program was implemented¹¹. The idea of measuring the counterfactual is problematic, however the before-after approach unrealistically assumes that all else is equal. A second method is the without approach. The method compares the macroeconomic performance of countries with program to those without programs. This approach assumes that countries requiring IMF program are similar to countries that do not require them. It is also a problematic assumption, especially because selection bias may be involved in determining which countries require IMF program (see Goldstein and Montiel 1986). Third, the generalized evaluation approach aims to compare countries with a program and those without program by adjusting the exogenous influence, such as different growth rates, sectoral composition of the economy and stock of capital and resources. The generalized evaluation approach requires researcher to gather information on many exogenous variables that are difficult to quantify or approximate making it hard to arrive at robust conclusions (see Khan 1990). Finally, the simulations approach compares the situation under an IMF program to that under a simulate counterfactual without an IMF program. The model used under this approach covers a range of policy measures used in IMF program, and requires assumptions that cannot be tested in practice to be formulated (Khan, et. al. 1991).

In our analysis impact of SAP on macroeconomic variables like unemployment, Gini coefficient, GDP per-capita and inflation has been evaluated using annual time series data from 1981-2001 through Ordinary Least Square (OLS) estimation. The data has been taken from Pakistan Economic Survey by State Bank of Pakistan (SBP), Labor Force Survey by Federal Bureau of Statistics (FBS) and 50 Years of Pakistan in Statistics by FBS (1999). The deficit financing, indirect taxes, exchange rate and subsidies have been taken as explanatory variables which are assumed to be connected with SAP. We have constructed a series of models. The first model to estimate the effect on unemployment has been explained below.

$$UNE = f(BDF, ITA, EXR, SUB) \quad (1a)$$

Where,

UNE = Unemployment

BDF = Budget Deficit

ITA = Indirect Tax

EXR = Exchange Rate

SUB = subsidies

The functional form of the model is as:

¹¹ Iqbal (1994) and Jamal (2003) have adopted this approach for Pakistan.

$$\text{UNE} = \beta_0 + \beta_1 \text{BDF} + \beta_2 \text{ITA} + \beta_3 \text{EXR} + \beta_4 \text{SUB} + e \quad (1b)$$

Where $\beta_1, \beta_2, \beta_3,$ and β_4 are the linear coefficients, β_0 is the autonomous estimate and e is the random error term. In the same way linear coefficients for same explanatory variables have been shown in the coming models. The second model evaluating the impact on Gini coefficient from the same set of explanatory variables is given as:

$$\text{GCO} = f(\text{BDF}, \text{ITA}, \text{EXR}, \text{SUB}) \quad (2a)$$

Where,

GCO = Gini Coefficient

The functional form of the model is as:

$$\text{GCO} = \beta_0 + \beta_1 \text{BDF} + \beta_2 \text{ITA} + \beta_3 \text{EXR} + \beta_4 \text{SUB} + e \quad (2b)$$

The third model estimating the impact of same explanatory variables on GDP per-capita income is given as:

$$\text{PCI} = f(\text{BDF}, \text{ITA}, \text{EXR}, \text{SUB}) \quad (3a)$$

Where,

PCI = GDP per-capita

The functional form of the model is as:

$$\text{PCI} = \beta_0 + \beta_1 \text{BDF} + \beta_2 \text{ITA} + \beta_3 \text{EXR} + \beta_4 \text{SUB} + e \quad (3b)$$

The last model explaining the impact of same explanatory variables on inflation is given as:

$$\text{INF} = f(\text{BDF}, \text{ITA}, \text{EXR}, \text{SUB}) \quad (4a)$$

Where,

INF = Inflation Rate

The functional form of the model is as:

$$\text{INF} = \beta_0 + \beta_1 \text{BDF} + \beta_2 \text{ITA} + \beta_3 \text{EXR} + \beta_4 \text{SUB} + e \quad (4b)$$

The definitions of dependent and explanatory variables used in the model are as:

UNE (Unemployment) = Unemployment Rate

GCO (Gini Coefficient) = Gini Coefficient

PCI (GDP per-capita) = Growth Rate of GDP per-capita

INF (Inflation) = Consumer Price Index

BDF (Budget Deficit) = Budget Deficit as Percentage of GDP

ITA (Indirect Taxes) = Growth Rate of Indirect Taxes

EXR (Exchange Rate) = Rupees/Dollar

SUB (Subsidies) = Subsidies as Percentage of GDP

Our analysis is based on time series data so stationary properties of the variables would be taken in to account. A regression of one non-stationary series on another non-stationary series can generate the so-called spurious regression and lead to incorrect statistical inference. An important indicator of spurious regression is that Durbin Watson statistics remain less than coefficient of determination. If such problem does not arise we will be comfortable to use OLS model rather than complex co-integration technique. In all the four models $D > R^2$ so we have used OLS model. To get the model auto-correlation free, we have used AR and MA process. The high values of R^2 for each model indicate good fit of the model. The Durbin-Watson values have rejected the existence of auto-correlation in all the models. The fall in area of no-autocorrelation justify the model specifications.

Results and Discussion

For econometric analysis Ordinary Least Squares (OLS) estimation techniques has been applied. The effects of lending institution's policy instruments on unemployment, income distribution, GDP per-capita and inflation through model 1, 2, 3 and 4 respectively has been shown in table-1.

Table 1: Results of Models

	Model 1	Model 2	Model 3	Model 4
Variables	Beta (T value)	Beta (T value)	Beta (T value)	Beta (T value)
(Constant)	2.843 (1.364)	1.007(11.247)	3.962(6.147)	2.645(2.541)
BDF	-0.194 (-1.764)**	-0.043 (-2.317)**	0.004 (0.016)	-0.725 (-1.968)**
ITA	0.743 (2.815)**	0.824 (3.164)**	-0.675 (-3.267)**	0.319 (2.587)**
EXR	-0.463 (-2.169)**	-0.275 (-1.175)	0.164 (1.097)	-0.678 (-1.785)**
SUB	-0.513 (-2.459)**	-0.063 (-2.319)**	0.142 (1.963)*	-0.362 (-1.647)**
Dependent Variable	UNE (Unemployment)	GCO (Gini Coefficient)	PCI (GDP Per-capita Income)	INF (Inflation Rate)
R²	0.710	0.716	0.693	0.731
Durbin Watson Stat	2.13	2.01	2.32	2.11

No of Observations = 20

* Denotes significant at 5 percent level and ** denotes significant at 10 percent level

Impact on Employment

The impact evaluation of SAP in our study is concerned with the time period of 1981-82 to 2000-01. During this period the unemployment has been increased from an average of 3.5 percent in the 1980s to 5.7 percent in the 1990s further to 6.7 percent in 2000-01. The reduction in budget deficit has remained one of the objectives of SAP. Reduction of the budget deficit is a laudable macroeconomic stabilization instrument. However, the way in which it is achieved has different implications. In model 1 our results have shown that reduction in budget deficit has increased unemployment. There exists a range of policy options to achieve the objective of reduction in budget deficit, some are pro-poor and others are not. For example, raising revenues or reducing expenditures can lower the budget deficit. Revenues can be raised through direct taxation or through indirect taxation. The former impacts the rich, while the latter largely impacts the poor. Expenditure reduction can be attained through cuts in current expenditure or through cuts in development expenditures. The former impacts existing employment, while the latter impacts employment generation. However, while development expenditure is likely to create assets and a future stream of income, current expenditure is likely to be consumptive. Generally, labor productivity and employment generated through development expenditures is likely to be higher than employment generated through current expenditure. While employment on account of development expenditure may be productive and employment on account of current expenditure may be non-productive. As such switching expenditure from current to development heads may increase employment and incomes, and reduce poverty in the future.

Practically in the period of SAP in Pakistan the cuts in developing expenditures have been the norm to achieve the target of budget deficit. The burden of adjustment in this respect has fallen on development expenditures. So burden of managing budget deficit has affected the employment negatively. Similarly, the current account deficit has been decreased by reduction in imports of capital goods and imports of raw material but it should be reduced either by increase in exports or reduction in imports of finished consumer goods. It resulted in recessionary conditions in the economy adversely affecting employment.

Reduction in deficit financing means decrease in government spending. The reduction in government spending resulted into decrease in aggregate demand and ultimately sliding down of investment and then reduction in employment rate of labor force.

One of the policy directives of IMF was to increase taxes to generate revenues for government spending. The government imposed general sales tax and other indirect taxes such as withholding tax. It increased the ratio of indirect taxes to direct taxes. Our results have shown that unemployment is positively related with indirect taxes. The imposition of indirect taxes has directly affected the purchasing power of the consumers negatively, which reduced the real aggregate demand and investment and ultimately unemployment was increased. Our results are corroborated by Bengali and

Masood (2001) who analyzed the fiscal and monetary package of IMF which was targeted to slide down the unemployment. They concluded that conditionalities have adversely affected the employment situation in Pakistan. Ali (2003) also concluded that SAP has resulted into decrease in real wages of both male and female labor force as well as employment.

The devaluation of currency through exchange rate adjustment that is to pro-trade helps the poor in the low-income countries as it encourage export industries, which employ more workers (Bouguignon, et. al. 1989). Our results disclosed that unemployment is positively related with exchange rate. It explained the process of increase in exchange rate resulting into declining of import items. Our imports are mainly comprised of raw material, machinery and petroleum. They increased the cost of production and squeeze the output, ultimately employment is decreased¹².

Our results have further shown that the unemployment is positively related with subsidies. Reduction in subsidies was the policy directive of the IMF under SAP proposals. Massive increase in unemployment during the time period 1981-2001 may be explained due to decrease in subsidies. Subsidies in an economy play a role to augment the production at lower cost which results into increase in investment as well as employment. Secondly, subsidies give protection to the domestic industries. In the era of SAP, the phenomenon of implementation of WTO was also going on which also affected the domestic production and employment in the absence of subsidies.

Impact on Income Distribution

Generally, two measures of inequality are used in the literature, they are ratio of the top to the bottom quintiles' expenditure (per adult equivalent) and the Gini coefficient. The ratio of the top-to-bottom quintiles is a very commonly used summary measure of inequality in both developed and developing countries. The main drawback of this inequality measure is that it ignores the expenditures of the middle 60 percent of the population, and also the distribution of income or expenditure within the richest and poorest quintiles. The Gini coefficient is a measure of inequality which varies between 0 (where every one has the same expenditures or income) and 1 (where one person has everything). The close a Gini is to 1, the more unequal is the distribution. The income distribution has widened in the era of SAP, i.e. 1981-2001. By the measure of Gini-coefficient, it was 34.14 percent in 1981 and it increased to 35.74, 37.29 and 41.12 percent in the years 1985, 1995 and 2001 respectively. By the measure of ratio of highest 20 percent to lowest 20 percent it again increased from 6.1 to 6.2 and 8.6 from the years 1981 to 1985 and 1990 respectively. However, it slightly decreased to 7.3 and 7.1 in the coming years of 1995 and 2001.

The major objective of the SAP was to control the fiscal deficit. To see the effect of fiscal deficit on income distribution, we have used the Gini-coefficient¹³. The results of model 2 show that deficit financing has negatively affected the Gini-coefficient, i.e. reduction in deficit financing has increased the Gini-coefficient (see also, Kemal 1994; Iqbal and Rizwan 1998 and Jamal 2003 for increased Gini-coefficient due to SAP). SAP suggested restriction on wage increase and size of government employees to reduce the cost of government expenditures. The government of Pakistan did it by reduction in public sector employment through privatization. But it could not diminish the increase in non-development expenditures.

Our results have further shown that indirect taxes have shown positive impact on gini-coefficient, i.e. increase in indirect taxes has increased the disparity in income distribution in the economy during the structural adjustment period. Since the focus of the program has been on the indirect taxes on goods not necessarily consumed by the rich, but the tax incidence has affected most of the lower income group. Kemal (1994) argued that during the structural adjustment period the incremental burden has gone falling as income rises and for the highest income group, tax incidence, in

¹² Although during the 1990s, government had to resort to frequent devaluation making the imports expensive due to inadequate foreign exchange reserves.

¹³ Jamal (2003) has used both of the measures simultaneously.

fact has declined. This pattern of increase in tax burden is essentially a reflection of the emphasis on additional indirect tax mobilization particularly the sales tax under the structural adjustment program. The increase in sales tax has essentially gone to the products which form a relatively higher proportion in the poor consumption bundle.

In our analysis three factors have contributed to rising income inequality. Firstly there has been deficit budget which has declined employment (see results of model 1) along with income inequality. Second, the tax incidence on the poor has increased. Third, the import subsidies have been withdrawn which affected the poor and the rich alike while increase in prices of output of agricultural goods has mainly benefited the rich (see also, Kemal 1994).

Impact on Per-capita Income

The most frequently used indicator of economic welfare is per-capita income. We have used per-capita income as a proxy for poverty in the economy. The change in per-capita also represents the trend of the economic status of the country. In our results of model 3, only two variables related with SAP program, i.e. indirect taxes and subsidies have significantly affected the per-capita income. Industrial sector of Pakistan has remained one of the most important sectors affected by government policies. This sector did not prepare itself to compete with international competitors up to early 1980s. It enjoyed the low taxes on production. As for as the domestic taxes are concerned, most of the goods were exempted from sales tax and excise duty. Due to this lenient tax policy the domestic producers have not tried to be competitive internationally. In 1980s, the situation reversed in such a way that the domestic producers could not find any time or space to make themselves competitive. Almost all goods came under sales tax net. Our results in model 3 have shown that indirect taxes have negatively affected the per-capita income. To increase taxes was one of the policy directives of SAP. If we take the per-capita income as a measure of welfare, it is adversely affected by the increase in indirect taxes (see also, Bengali and Masood 2001). Mechanics of indirect taxes is interrelated with the results of previous models, i.e. it has increased the unemployment and income inequality in the economy (see results of model 1 and 2). As concerned the subsidies, there is an adverse effect of shrinkage in subsidies on per-capita income. The decrease in subsidies was a part of the conditionalities of the SAP. It may be concluded that SAP in the form of reduction in subsidies have adversely affected the per-capita income of the economy (see also, Kemal 2003).

Impact on Inflation

Inflation in an economy remains connected with macroeconomic variables in a complex way. The adjustment of any one of the variables may result into disturbing the inflation. Before SAP program it was feared that the inflation may increase due to the conditionalities, particularly like the imposition of indirect taxes and elimination of subsidies. In our fourth and final model, we attempted to see the effect of SAP on inflation. As we have discussed earlier, the budget deficit in the economy has been achieved by reduction in development expenditures. It has adversely affected the price level in the economy. Furthermore, increase in oil prices, gas and electricity charges due to imposition of surcharge were all the results of stabilization strategy which damaged the production sector mostly by increasing the cost of production enormously. So increase in ratio of indirect taxes has adversely affected the economy by shooting up inflation.

It is further found that exchange rate policies have also exacerbated inflation in the economy. The mechanics of subsidies and inflation in developing economies is focused on welfare for poor class. Elimination of the subsidies was one of the conditionalities of SAP. In the span of SAP this conditionality has increased the inflation in the country.

Conclusion

On the basis of results it is concluded that SAP did not remain favorable for the domestic goals. Various structural adjustment policies such as reduction in budget deficit, increase in indirect taxes, adjusting exchange rate and reduction in subsidies have increase economic problems during the period of adjustment in Pakistan.

One of the important policy instruments was sliding down of budget deficit. The budget deficit that should be achieved through increase in revenue or reduction in current expenditures has been achieved by reduction in development expenditures. The reduction in budget deficit has increased the unemployment, income inequality and inflation. The increase in indirect taxes has increased unemployment, income inequality and inflation. It decreased the growth of per-capita GDP income. Adjusting the exchange rate has also affected the unemployment and inflation adversely. The elimination of subsidies, that was also the part of the SAP has increased unemployment, income inequality, decreased per-capita income and boosted inflation.

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