INFLATION AND ITS RELATIONSHIP WITH THE EXPORT SECTOR AND ITS PERFORMANCE

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Significance of the Macro Policy Variable of Inflation in the Economy

Curbing inflation, has been traditionally considered as one of the most important macro policy objectives in the western economies after World War II. But the phenomena of stagflation has added a new dimension to this problem. They no longer validated the traditional stop-go policies (in which one macro economic objective was sacrified in order to curb inflation temporarily in taking the problem. In a developing open economy like Sri Lanka the inflationary process assumes a special significance, partly because of its inability to mitigate the transmission of imported inflation originating in the western developed countries (Atapattu 1982) and partly because of its tremendous negative effect on all the macro variables in the economy. In Sri Lanka, before the seventies, inflation was not generally considered a major problem, at least by the policy-makers as in the two decades preceding 1972, price increases have been moderate except in 1950/1951. (Central Bank 1975). However, in the seventies the first and second oil shocks brought into reckoning inflation as a considerable problem to non-oil developing countries like Sri Lanka, which experienced a sudden outburst of the rate of inflation. For example, the rate of inflation of these countries rose from 24% in 1977/1978 to 32.5% during the period 1979–1983 (Colombage 1986). Therefore, early in the seventies the Sri Lankan Government opted for price stability and payment equilibrium even at the expense of growth (Colombage 1986). In any event, achieving price stability along with monetary stability is the major short-run objective of the monetary authority in the country. (Karunasena 1988).

Inflation and the Export Sector

The country's inflationary process is the outcome of a number of indigenous and exogenous causal factors associated with the openness and the internal financing problem in the country.

In this setting, export performance is directly related to inflation as certain properties of export performance could either trigger the inflationary tendencies or act as a deflationary or counter-inflationary force. It is the net effect of these properties along with other more important factors like import price increases, increased money supply, budget deficits, inter alia, that determine levels of inflation in the country. With regard to inflation-induced factors on the export sector, export prices and earnings trigger price increases via exogenous mechanisms, while the wage increases of the plantation sector and devaluation in the export incentive package, transmit their influence through endogenous mechanisms. The export prices transmit global inflation via prices in international markets (price effect) while export earnings fuel inflation by creating an excess

demand in the economy through improved current balances (demand effect), augmenting the money income through increase of money supply (liquidity effect) and providing necessary purchasing power for the community for the realisation of other global linkages such as international inflationary expectations and demonstration effects. (Atapattu 1982).

On the other hand, export earnings are deflationary to the extent they can bridge the demand gap through export financed imports, and contribute to internal revenue sources, which otherwise have to depend on the expansionary banking sources. In fact, the inflationary pressure generated by export earnings in the early stages of the Korean boom is not solely due to expansion of the economy's income per se, but also due to the authorities' inability to remove the import (exchange) control restrictions, thereby to mitigate the strong pressure on demand on the limited supplies of imported goods as well. (See Corea of 1975, p. 294). Nevertheless, at later stages of the boom the Government resorted to import liberalisation to prevent inflation (Sirisena, N. L., 1976, p. 15). However, even if exports can act as a counter-force to the increasing inflationary pressures by making available necessary imported goods and reducing the impact of expansionary sources, one can hardly doubt the greater inflationary impact generated by the export performance in the abovementioned ways. In the following, an attempt is made to demarcate the influence of these export performance-related inflationary effects separately.

Export Price Effect on the General Prices in the Country

World market prices of the major traditional exports of tea, rubber and coconut may directly influence the local market prices of these commodities and thereby affect the general price level in the country. These price increases are reflected in the Colombo Consumer Price Index and Wholesale Price Index which have weightage for export commodities 5% and 22.5% respectively. Export price may influence these prices indices negatively or positively, depending on the world market prices of these commodities. By and large, continued upward pressure was generated by the higher export prices from the end of the 1960s when the world primary commodity boom was in full swing. Only in very rare years was there a dampening effect on the cost of living indices owing to the lower market prices of exports. Of the 23 years during the period 1967–1989 export price decreases were registered only for 9 years. (Central Bank reports) However, owing to the low weightage given to exports, the impact of export prices on the cost of living measured by the Colombo Consumer Price Index is marginal. On the other hand, one of the major causes of the increase of prices at primary marketing level (which is measured by the Wholesale Price Index) during the period 1967–1978 was the increased export prices of the major commodities owing to higher relative weightage given to export commodities in this index. (The weights assigned to tea, and coconut in the sectoral sub-index for exports in WPI is 48, 29.9 respectively.) (See Central Bank Reviews.) Therefore, the above evidence suggests that by and large, there was a certain amount of inflationary influence from export prices during this period.

Export Earnings Effect on the General Price Level Throught Demand and Liquidity Effect

It is generally argued that export earnings have a positive relationship with inflation, owing to the export receipts ability to create an excessive aggregate demand (when the supply of goods and services is less elastic with respect to price) — demand effect — and expansion of money supply via augmenting external assets of the banking sector — liquidity effect (Atapattu, 1981).

In Sri Lanka's case, the primary effect of the export receipts on inflation is generated via the stimulation of external assets in the banking sector and creation of an expansionary impact on the broad money supply. It appears that the demand effect of inflation is also connected with money supply effects through increased liquidity. Therefore, in this discussion, demand and liquidity effect of export earnings can be treated together. It has to be noted that most of the theoretical and empirical work on inflation has identified monetary expansion as a major causal factor inflation in the country. (Karunatilake, 1974, Rathnaweera, P., 1988, Karunasena 1988, Ranaweera, 1974 and Silva, K. E. A., 1974). [Among the factors identified for monetary expansion, the increase of external assets was considered a major cause of inflation. (Atapattu, *op cit*). The recent monetary survey had also identified the changes in net external assets, along with the net credit to the Government as the two major causal factors of change in domestic monetary aggregates (Karunasena, A. G., 1988). The impact of the country's external assets brought about by higher export prices on money supply and inflation is sometimes argued on the lines of traditional monetarist theory. Thus, it is claimed that under the fixed on managed floating exchange rate system an increase in external assets resulting from higher export prices will cause exports and imports to move in opposite directions, thereby enlarging the initial gap. In this scenario owing to a new trade surplus generating from artificially undervalued domestic currency, the initial increase on monetary aggregates will push to a higher level, resulting in excess liquidity an inflationery Pressures. (Karunasena, A. G., 1988).

The most recent model developed to examine monetary policy responsiveness to exogenous shocks for the period 1978–1987, also re-established the high sensitivity of export prices to money supply and the significance of changes of net external assets in effecting money supply. (Karunasena, *ibid).*

However, in Sri Lanka there is one specific factor originating from the export sector itself that mitigates the expansionary influence of money supply. This is the ability of the Government and the plantation corporations to increase their revenue during periods when the export prices of the plantation corporations (particularly tea) are higher and reduce their credit needs from the banking sector. For example, during the recent tea export boom in 1984–1985, the Government was able to reduce the bank borrowings due to the high income received from tea levies and the two plantation corporations also decreased their credits from the banking sector by using a part of unexpected income to repay their outstanding debts. (Karunasena, A. G., 1988). Therefore, the net impact of the increase of export earnings on broad money supply should include changes in external banking assets, and both changes in net credit to the Government and changes in domestic credit corporations.[1] However, the

recent experience relating to the 1984 tea boom has clearly demonstrated the inability of the Government and plantation sector borrowings to overcome totally, the expansionary effects of the money supply. For example, in a recent estimate it was shown that the export earnings increase of about Rs. 512 million in 1978, would only decrease domestic credit by Rs. 207 million (through reduction of changes in net credit to Government and corporations), leaving Rs. 305 million excess money for inflationary pressures (Karunasena, *ibid*). In any case, expansionary effects generated by export earnings have necessarily a direct impact on the money supply of the economy, albeit with a time lag, as external assets brought about by export earnings is a part of the money supply in the country. Therefore, on the whole, the export earnings contribution to inflation through demand and liquidity effects, are evident.

Given the above evidence, regarding the export price and earning ability to contribute to inflation, following Atapattu (1982) one can further verify the statistical significance of export performance and general price level (domestic) by estimating the coefficient of determination between domestic price level and export earnings/prices. In addition, export volumes are also included as independent variables to the equations.The results obtained are given below:

TABLE 1

The Effect on the Export Sector on Domestic Price Level, 1978–1989

Independent Variable	*Dependent Variable*	*Constant*	R^2
(i) Pt	Pt	9.9	0.03
(ii) Xt	Pt	7.5	0.38
(iii) Vt	Pt	9.5	0.04

Where R^2 — the coefficient of determination
X — rate of change of export earnings
P — rate of change of export price index
V — rate of change of export volume index
T — time period
P — rate of change of GNP deflator

The above results indicate insignificant relationship between the variables of export prices and volumes with domestic price level. However, the R^2 for export earnings and domestic prices being 0.38 is relatively significant although not high compared with the Attapattu's coefficient of 0.74 for the period 1960–1977. Therefore, export earnings ability to contribute to inflation in the recent period appears to be moderate. On the whole, the regression results suggest the marginal contribution of export price effect on inflation and the export earnings moderate influence on inflation.

TABLE 2

Wage Rate Indices in Organised Private Sector and Government Employees (1980–1989) 1978 December o 100

	Organised Workers in Agriculture		*Private Workers in Industry & Commerce*		*Sector Workers in Services*		*Central Government Employees*	
Year	*Minimum Wage Rate Index*	*Real Wage Rate Index*	*Minimum Wage Rate Index*	*Real Wage Rate Index*	*Minimum Wage Rate Index*	*Real Wage Rate Index*	*Minimum Wage Rate Index*	*Real Wage Rate Index*
1979	123.1	116.0	111.3	105.2	113.9	107.8	117.2	111.2
1980	153.6	115.9	138.8	105.4	130.5	98.9	129.1	97.2
1981	153.9	98.3	151.0	96.2	146.4	93.2	146.1	93.2
1982	181.2	104.2	161.0	92.6	169.7	97.7	187.8	108.0
1983	198.7	100.4	163.1	82.5	177.8	89.7	215.7	109.0
1984	250.3	108.0	183.3	79.3	190.7	82.6	246.6	106.0
1985	273.5	116.6	203.9	86.9	190.7	81.3	284.3	121.2
1986	288.1	113.8	224.3	88.6	190.7	75.3	297.4	117.5
1987	302.3	110.8	256.3	93.9	196.6	72.0	297.4	109.1
1988	378.4	121.6	271.7	87.4	229.5	73.8	390.0	125.4
1989	435.9	125.7	334.9	96.6	245.9	71.0	421.8	121.9
% Increase between 1979-1989	254	8.3	200	—8.2	115	34	259	9.6
% Increase between 1984-1989	74.1	16.3	82.7	21.8	28.9	—14	71.0	15

Export Sector Wage Increases and Inflation

The recent developments in the plantation sub-sector among other export sub-sectors, clearly, show the export sector tendencies to contribute to the wage price spiral. It is estimated that there are at least 600,000 people employed in the plantations are under trade unions. (Fernando, N. *op cit*). The Employment Guarantee Act, equalisation of male and female estate wage rates, along with the upward revision of wages in the plantations from 1984, in fact increased the purchasing power for a considerable segment of the population, and thereby strengthened the wage price spiral in the country. Therefore, wage increases in the plantation sector may further fuel inflation by increasing total demand on the one hand, and money supply on the other. In an inflationary situation high domestic prices would further cause wages to increase. It should not be forgotten that wage increases have already become an inflationary source in the country. (Atapattu, *op cit*, also Rodrigo 1991). In fact minimum and real wage rate indexes of the agricultural workers on Wages Board trades in which plantation workers' wages consist of a considerable proportion had a tendency towards upward revision compared with other wage rates in the eighties, especially after the 1984 wage revision. The following table shows the increased wage rate indices of the agricultural workers compared with other sectors:

Inflationary Consequences of "Devaluation" in the Package of Export Incentives

A devalued exchange rate which is sufficient to compensate the export endeavours through a high Rupee rate has been considered as one of the major strategies in the National Export Development Plans in the country (National

Export Development Plans 1983-1987 and 1990-1994). Subsequently, it is argued that the country's exchange rate devaluations should be realistic in terms of the Trading Partner Weighted Exchange Rate or Competitor Weighted Exchange Rate, in order that this rate could contribute significantly towards export development (Yapa, L. F., 1988). While advocating devaluation for export development, the inflationary effects of devaluation were also accepted by the First National Export Development Plan. Thus, the Plan states "that a 25% devaluation would result in a 10-12 per cent domestic price increases" (National Export Development Plan 1983-1987, p. 12). Although the empirical basis of this statement (calculation) is not clear, the impact of devaluation on general price level increases through imported prices is widely recognised. One can clearly see the impact of devaluation on imported prices by comparing the differences between import price indices based on local currency and on foreign currency. The following table shows the import unit value indices in Rupee and SDR terms.

TABLE 3

Unit Value Indices of Imports in Terms of Rupees and SDR

	Consumer Gods		*Intermediate Goods*		*Capital Goods*		*Total Imports*	
	Rs.	SDR	Rs.	SDR	Rs.	SDR	Rs.	SDR
1978	100	100	100	100	100	100	100	100
1979	139	135	163	158	162	157	153	144
1980	181	164	277	252	241	220	231	203
1981	164	103	344	297	236	204	249	208
1982	153	131	387	329	344	293	285	235
1983	207	161	388	301	358	279	310	234
1984	196	147	424	318	358	271	323	235
1985	186	132	524	371	308	218	368	252
1986	218	130	512	304	313	186	371	214
1987	246	126	619	317	336	172	412	205
1988	310	142	721	329	359	164	483	214
1989	373	158	809	343	356	151	546	224

Note: Indices were calculated based on Central Bank figures.

In recent times, on the basis of declining inflation rates in 1985 and 1986 (which were 1.5% and 6% respectively), it was suggested that there is a possibility of manipulating devaluation for export promotion without affecting prices, through a package of policies which includes downward adjustment of the import tariff and a check on credit expansion. Nevertheless, as mentioned earlier, inflation in the country is a function of a number of variables, inter alia, import prices, budget deficits, money supply, export earning, export prices, wages devaluations, etc. Therefore, a conclusion based on a limited number of variables for a certain period would not permit us to agree with the above view. On the other hand, even if all these variables were considered together, it is difficult to isolate the impact of devaluation on inflation. While independently affecting the inflationary process through imports, devaluation affects the above-mentioned other inflationary properties as well. Therefore, it is doubtful whether the effect of devaluation on inflation can be suppressed by manipulation of the other inflationary properties.

Hence, while admitting the incentive effect of devaluation it is realistic to accept its inflationary tendency and the consequences of devaluation on the present export incentive package. As mentioned earlier, the only way available in the export sector to mitigate the inflationary tendencies generated by devaluation is via the importation of necessary goods to fill the demand gap in the economy. On the other hand, there has to be a continuous increase of exports to mitigate the inflationary consequences merely because devaluation has been accepted as a necessary policy incentive for export development.