

**The Impact of Structural Adjustment Program (SAP) on Economic Growth in Sri
Lanka 1957-2000.**

By

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1. Introduction

A number of developing countries have run large and persistent balance of payment deficits in both the late seventies, early eighties and in the early nineties. Balance of payment difficulties and higher foreign debt were common major constraints for economic growth of many developing nations. During the 1970's Latin America, Africa and Asia faced such constraints that slowed their economic growth. The IMF (International Monetary Fund) played a major role in most developing countries last three decades. To overcome major constraints for economic growth of developing nations, the IMF had to be involved in the economic activities of developing countries. Sometimes IMF had to identify the macro economic problems of its member nations by itself and provide the appropriate solution for them.

To overcome constraints on economic growth the IMF tried to provide a solution for these countries by offering a policy package. They introduced the Structural Adjustment Program (SAP). This program usually offered several conditions, including devaluation, trade liberalization, and exchange rate liberalization, privatization, banking sector reforms, price liberalization and government sector reduction programs. By implementing this reform package, IMF hoped to help developing nations to overcome the constraints on their economic growth.

Like other developing nations, Sri Lanka also suffered from higher balance of payment deficit and low economic growth. In 1977, the main reason for higher balance of payment deficit in Sri Lanka was due to the persistent current account deficit of the country. Balance of payment consists of current account balance and the capital account balance. Sri Lankan

historical economic statistics show that Sri Lanka was experiencing a persistent current account deficit from the date Sri Lanka obtained independence in 1948 to 1977. Less competitiveness of exportation of products from Sri Lanka to the world market was the main reason for its persistent current account deficit. Till 1977 Sri Lanka was highly dependant on its traditional export products of tea, rubber and coconut. Those traditional exports were less competitive in the world market due to the overvalued Sri Lankan rupee. As a result, there was a persistent current account deficit in Sri Lanka till 1977. On the other hand, Sri Lanka's capital account balance was also not in a favorable situation. During that period, Sri Lanka was not an attractive place for foreign investors. At the same time, there were some restrictions on foreign investment in the Sri Lankan economy before 1977. As a result, the country was unable to finance its current account deficit from its capital account. This led the persistent balance of payment problems in the country. Athukorala and Jayasuriya (1994) mentioned that the current account balance of Sri Lanka was -91 SDR millions and the basic balance of balance of payment account was -43 SDR million by 1975. A domestic and external debt was 19 percent of the GDP.

There was a new government appointed by the general election in 1977. This newly elected government found that it was difficult to manage the economy with these prior economic imbalances. Under this situation, the new government of Sri Lanka implemented the IMF program. The first international visit of the foreign minister of the new government invited IMF for assistance. Right after his invitation, Sri Lanka received a total of SDR 93 million standby credits from the IMF.¹ With this loan, IMF provided its structural adjustment reforms

¹ Jayewardene & Radhakrishana (1988) p.16

package to Sri Lanka. The main objective of the policy package was to reduce the balance of payment deficit of the country and increase the economic growth. To provide the solution for the Sri Lankan balance of payment problem, the IMF introduced devaluation as the first prescription. The main purpose of devaluation was to improve current account balance by improving export earnings. To improve the capital account balance IMF wanted the country to relax all the restrictions on foreign investments and liberalize the interest rate of the country. Before 1977, the interest rate was not determined by the market force. Higher interest rates as determined by the market would attract larger foreign investment.

The year 1977 was a crucial year and a main transitional point in the economic history of Sri Lanka. This paper attempts to analyze the impact of IMF SAP on real GDP (Gross Domestic Product) growth rate of Sri Lanka. The study covers the period from 1957 to 2000, which is two decades before and after 1977. The period 1957-1976 represents the economy prior to the IMF structural adjustments. The period 1977-2000 represents the economy after the IMF reforms.

The paper is organized as follows. Section 2 provides a brief introduction about Sri Lankan economy before 1977. Section 3 describes the nature of the IMF policy package and the intervention of IMF to Sri Lankan economy. The literature survey comes under section 4 and reviews the empirical results of the reforms in developing countries. Section 5 provides a brief analysis of the available variables, which relates to the real GDP growth rate of Sri Lanka to see the behavior of those variables before and after the transition. Finally the section 6 provides some concluding remarks.

2. Sri Lankan Economy Before 1977

Sri Lanka is a small island on the Indian Ocean with a land of 65 thousand square kilometers. The country is a home to a multi-ethnic and multi-religious community. Population is around 20 million. According to the World Bank Classification, Sri Lanka is considered a lower middle income country². It was a colony of the Portuguese (1505-1658), the Dutch (1658-1796) and the British (1796-1948). It gained independence from the colonial rule in 1948. At that time, the economy was based on agriculture and nearly three-fourths of people were involved in production, processing and trading of paddy, whereas the rest of the population was involved in the service sector in both private and public organizations. Sri Lanka inherited dualistic export economy from its colonies. After 1948, Sri Lanka continued the same dualistic export system which comprised of export oriented modern plantation economy and a traditional subsistence, agricultural economy. Plantation agriculture consists of tea, rubber and coconut. The plantation industry helped the country to improve service activities such as transport, communication, commerce and banking. The manufacturing sector comprised of a few state owned industrial ventures for import substitution. Sri Lanka's export earnings were highly dependent on tea, rubber and coconut and those cash-crops were inherited from the colonial masters. The annual average GDP growth rate of Sri Lanka was 2.8 percent during 1970-1977.

The economic history of Sri Lanka can be described under two major eras; from independence in 1948 to 1976 and after 1977 to today. Historically, there have been two major political parties in the country, namely the United National Party (UNP) and the Sri

² http://devdata.worldbank.org/AAG/lka_aag.pdf

Lanka Freedom Party (SLFP). According to the present constitution of Sri Lanka, a government is elected for a period of six years by the vote of the people. From 1970 until 1977, the country was ruled by the SLFP under the leadership of Mrs. Bandaranaike. The government of Mrs. Bandaranaike was more in favor of economic policies that would make Sri Lanka more autonomous. Sri Lanka was mostly characterized as a self reliance economy. That is, an economy in which the necessities of life are provided through self-provisioning.³This kind of economy depends heavily on its own resources. Country was mostly counting on its own resources to satisfy citizen's requirements.

The state played a major role in the economy in terms of ownership and management. Market mechanisms did not play a major role in Sri Lankan economy till 1977. Most of the economic decisions, such as what sort of goods and services to produce, and how they were to be priced and allocated, were taken by the government. From 1957 to 1977, the Sri Lankan economy remained a closed economy. The degree of the openness was only 10.5⁴ percent in 1977. The government had imposed a number of barriers to international trade, restricting imports by using high tariff rates and quotas. Therefore, importation was discouraged by the government. The government wanted to keep a constant exchange rate against the US dollar. The exchange rate of the rupee against US dollar was 8.87 in 1977 and GDP per capita was 824.49 US dollars in 1977. There were high restrictions on foreign exchange market before 1977.

“Exchange control Act of 1971 made it compulsory for residents of Sri Lanka to declare any asset owned abroad within one month of acquisition. The act also prohibited residents from having overseas bank accounts and from

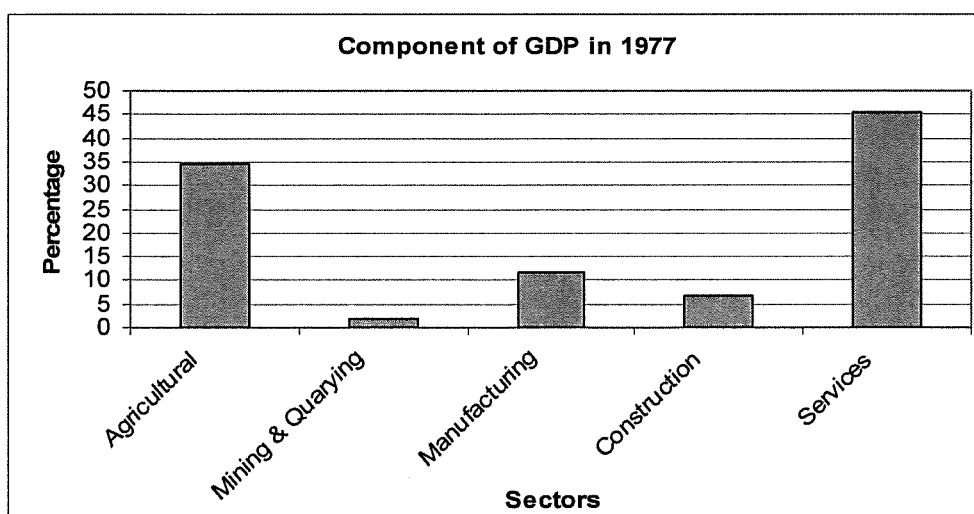
³ See http://en.wikipedia.org/wiki/Subsistence_economy for details

⁴ Degree of openness = [(export + import)/GDP]

disposing of foreign funds without the permission of the Exchange Controller”.⁵

This shows that the economy was subjected to high controls within this period, the residents did not get a chance to work in other countries and to make remittances home. Because of high government intervention and capital controls, Sri Lanka was not a very attractive investment place for foreigners. The sectoral composition of GDP is shown in graph 1. It shows that till 1977, the agricultural and service sectors largely contributed to the GDP of the country, while manufacturing and construction sectors were minor components.

Graph 1: Components of GDP in 1977



Source: Central Bank of Sri Lanka 2000

Before 1977, the government played a major role in the social sector, such as health, education and food subsidies. In 1977, education, health and food government expenditure, as a percentage of GDP were 32.9, 16.7 and 37.8 percent respectively. Till 1977, there was a social safety net for local farmers. The government policies were favorable to domestic

⁵ Athukorala and Jayasuriya (1994) p. 19

production. The government gave priority to the paddy cultivation and therefore introduced a guaranteed price for rice and gave subsidies for fertilizer to encourage farmers and increase the domestic production of the agricultural sector. The Sri Lankan Marketing Board guaranteed prices for local farmers. Under the Rural Development Bank, farmers obtained credit to produce their harvest. Government policies were favorable to local producers. Before 1977, the economy of Sri Lanka was probably not an efficient economy. Prices were not determined by the market forces. Government used price ceiling that leads to excess demand. Excess demand encouraged black market activities. As a result of inward oriented economic policies of the SLFP government, the economy was unable to become an efficient economy.

3. The IMF Intervention and Sri Lankan Economy After 1977

The IMF is an international organization which consists of 184 member countries. It is the central institution of the international monetary system. It was established to promote international monetary co-operation, exchange rate stability and the expansion of international trade, by acting as a lender of last resort when a member country faced an economic crisis. The IMF has a unique mandate to promote global macroeconomic and financial stability. The main instruments that the IMF uses to achieve its objectives are surveillance, lending and technical assistance. Under the surveillance function, member countries have to accept and support the role that has been given to the IMF, including taking its advice and recommendations seriously. The second instrument is to provide lending to member countries to assist with balance of payments problems. The IMF claims to have a unique competence, through its ability to combine scientific knowledge and institutional

skills with longstanding experience of work in individual countries. Under technical assistance IMF provides advice and support regarding how to manage a crisis.

The IMF provides different kinds of lending facilities. Stand-By Arrangement is one of the IMF's lending facilities.⁶ It provides assurance to the member country that it can draw up to a specified amount, usually over 12-18 months, to deal with a short-term balance of payment problems. An Extended Fund Facility helps countries to tackle structural economic problems that are causing serious weaknesses in its balance of payments. Poverty Reduction and Growth Facility provide loans at a low-interest to help the poorest member countries facing protracted balance of payment problems. The cost to borrowers is subsidized with resources raised through past sales of IMF-owned gold, together with loans and grants provided to the IMF for the purpose by its members. Supplemental Reserve Facility (SRF) provides additional short-term financing to member countries experiencing exceptional balance of payment difficulty. The interest rate on SRF loans includes a surcharge over the IMF's usual lending rate. Emergency Assistance was introduced in 1962 to help members cope with balance of payment problems arising from sudden and unforeseeable natural disasters.⁷

If a country wants to get the loan from IMF, the debtor countries have to submit a Policy Framework Paper (PFP), along with the letter of intent. The PFP is written under the supervision of the IMF and IBRD according to a pre set format. This document shows the set of policies that the debtor country should implement in order to qualify for the IMF loan. At the beginning, the IMF provides a part of the loan to the country. In order to get the whole

⁶ Przeworski and Vreeland (2000) p.388

⁷ See <http://www.imf.org/external/pubs/ft/exrp/what.htm>

amount of the loan, the debtor country has to satisfy all or part of the policy conditionality according to the IMF. The policy package which attaches to IMF lending is named as SAP.

According to the IMF, the purpose of SAP is to provide a long term solution for developing countries to achieve economic stability and higher economic growth. SAP is designed for individual countries, but has common guiding principles and features. This includes export-led growth, privatization, financial sector reforms, trade liberalization and the efficiency of the free market.

In 1977, the UNP government assumed power after the general election in Sri Lanka. At the time, the country faced unsustainable budget deficits, a balance of payment crisis and low economic growth. During 1970 to 1977 the average growth of budget deficit as a percentage of GDP was 2.8 percent and the average growth of current account balance, as a percentage of GDP was -1.2 percent. The average economic growth was 2.8 percent.⁸ Unable to agree on a majority of the economic policies implemented by the former government, the new government introduced a series of drastic measures to transform the economy of Sri Lanka into a more of a market-oriented one. The new government realized the importance of utilizing the IMF program to reestablish the Sri Lankan economy.

“The Cabinet, at its first meeting held on 19 August 1977, released Rs.700 million in foreign exchange for liberalized imports. The new Foreign Minister, Ronnie de Mel, visited a number of foreign countries to seek aid. In an address to the British press in October 1977, he outlined the economic policies of the UNP government as follow; my government welcomes trades, aid and foreign investment. These are the cornerstones, the very foundation of our economic policy. We accept support from World Bank IMF and also from the countries of the Aid Group”⁹

⁸ Dunham and Kelegama (1997) p.170

⁹ Ponnambalam (1980) p.144

In November 1977, Sri Lanka received SDR 93 million Standby loans from the IMF. It was extended to 260.3 million in 1979.¹⁰ The purpose of a Standby loan is to deal with the short term balance of payment problems in a country. This facility was tied to a set of market reforms and structural adjustments which in turn required the implementation of a series of new economic policies.

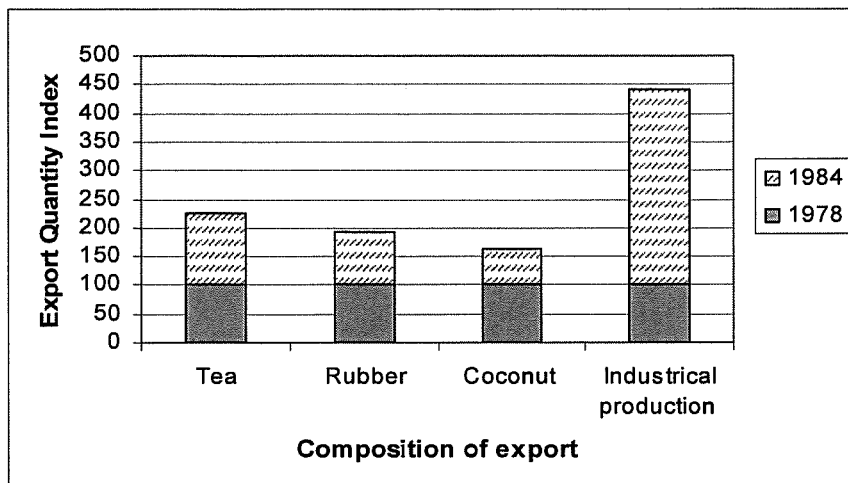
The main elements of the IMF policy reforms announced in 1977 can be listed as follows:

3.1 Liberalization of Trade

The main objective of liberalization of trade was to integrate domestic market with the international markets and allow market forces to work freely in the economy. By doing so, government wanted to improve export trade of the country. Instead of depending on traditional export such as tea, rubber and coconut, the government promoted non traditional exports such as industrial products. Graph 2 shows the changes of composition of export trade after new export trade policies were introduced in 1977. It shows a higher proportion of industrial products in comparison to other three traditional exports by 1984.

Graph 2: Export Volume Index (base year 1981=100)

¹⁰ Jayewardene and Radhakrishna (1988) p.26



Source: Central Bank of Sri Lanka, Annual Report, 1985

Relaxation of restrictions on import trade was also among the features of trade liberalization. In the pre reform period there were many barriers on import trade to protect local import substitution industries. A new six band tariff structure was replacing the previous tariff structure in 1977 by reducing most of the tariffs on essential goods, intermediate goods and investment goods. The most important changes in import controls were elimination of the quantitative restrictions on most of import.

According to Athukorala and Jayasuriya (2004),

“All tariffs are removed step by step. In 1980’s import tariffs are further reduced with the aim of moving towards a three-band tariff structure involving rates of 10, 20 and 35 percent. In 1997 tariffs on textile were abolished and tariffs on clothing imports were substantially reduced”.¹¹

Increasing imports was due to increasing demand for intermediate and consumer goods. Under FTZ (Free Trade Zones), there were many intermediate inputs imported from other countries. The government provided tax incentives for import intermediate goods of FTZ. This led to a higher demand for imported intermediate input. Another reason for increasing

¹¹ Athukorala and Jayasuriya (2004) p.4

imports was due to the increasing demand for consumer goods. Before 1977, there were higher restrictions on imported consumption good. Due to quotas, there was a rationing system in the Sri Lankan economy for imported consumption goods. With the liberalization of trade, demand for consumption goods increased rapidly (Table 1).

Table 1: Indicators of Import dependence

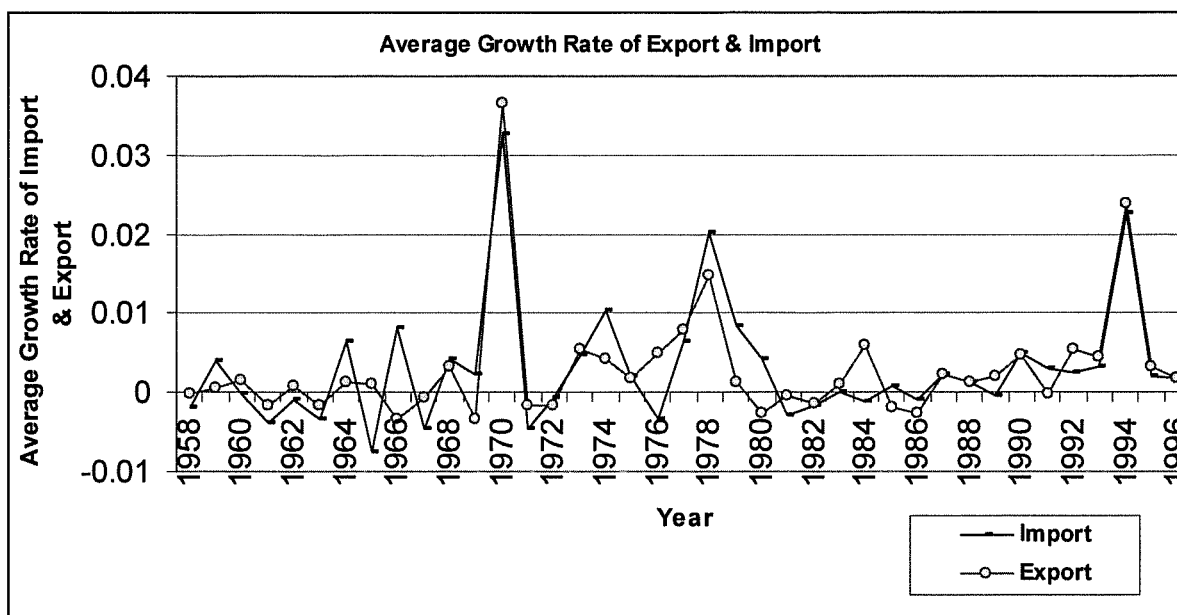
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Intermediate imports as % of GDP	7.1	7.5	7.3	13.1	17.5	23.3	22.7	21.8	17.9	15.6
Import component of private consumption	19.4	18	13.2	23.7	24.4	25.5	24.6	24.3	23.1	19.5

Source: Central Bank of Sri Lanka, Annual Report, 1985

Graph 3 shows the average growth rate¹² of real import expenses and real export earnings during 1957 to 1996. Real export earnings and import earnings are calculated by dividing import and export figure in million rupees from consumer price indices for relevant years. The graph shows that average growth rate of export earnings was higher than average growth rate of import expenses in 1977. Both average growth rates of imports as well as exports increased between 1977 and 1980. But this trend slows down in the 1980s. In 1980, average growth rate of export earnings took a higher value than import expenses. This trend continued till 1985. After 1985 average growth rate of import expenses started to increase. In 1994 there was a dramatic increment in both average growth rates of imports and exports.

Graph 3: Average Growth Rate of Real Export Earnings and Import Expenses (1957-1996)

¹² Average Growth rate (r) calculate as $r = (Y_t/Y_0)^{(1/t)} - 1$

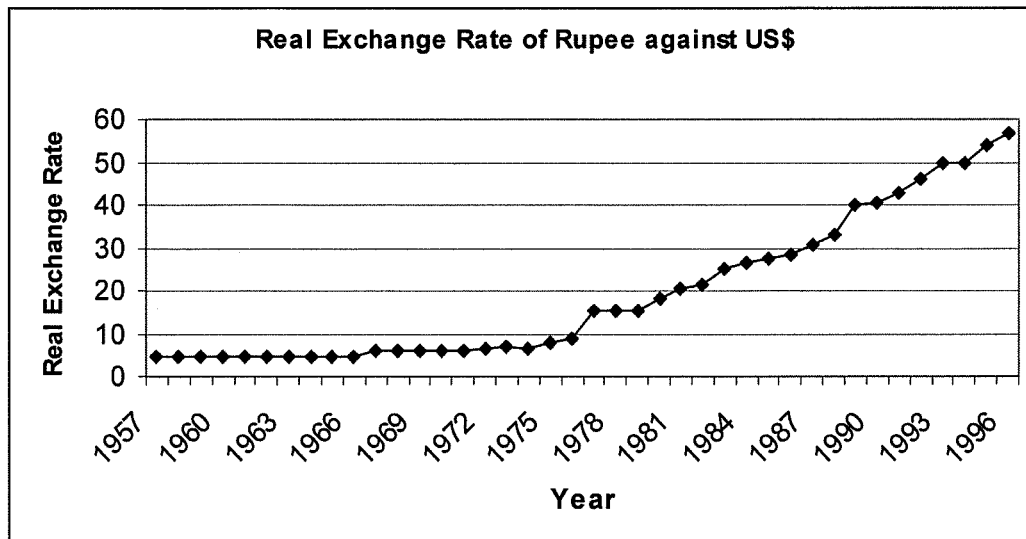


Source: Mitchell (1993), International Historical Statistics Africa, Asia & Oceania 1750-1993

3.2 Liberalization of Exchange rate

Under SAP, the Sri Lankan government introduced floating exchange rate to the economy in 1977. The exchange rate between US dollar and Rupee was 8.83 in 1976. It went to 56.71 in 1996 due to floating exchange rate. Graph 4 shows a lower real exchange rate till 1977 against US dollar. It started to increase from 1977 due to introduction of floating rate, which indicated real depreciation of the domestic currency.

Graph 4: Real Exchange Rate of Rupee against US dollar (1956-1996)



Source: Mitchell (1993), International Historical Statistics Africa, Asia& Oceania 1750-1993

3.3 Increasing Foreign Direct Investment (FDI)

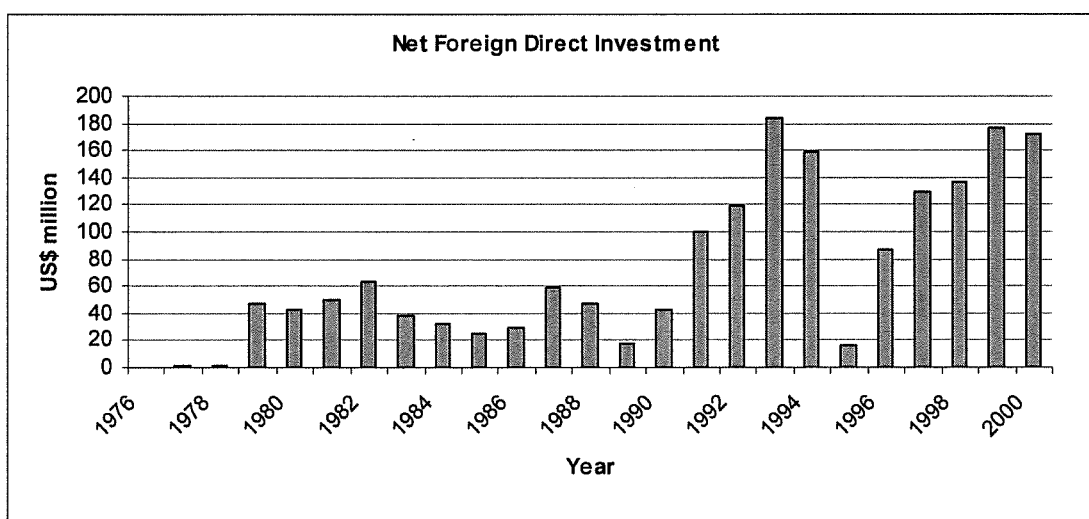
There were many restrictions on foreign exchange movement till 1977 in Sri Lankan economy. Introduction of new economic policies related to SAP encouraged foreign investment into the private sector in Sri Lankan economy. In 1992, the Greater Colombo Economic Commission established the Board of Investments (BOI). The purpose of establishing BOI was to encourage export oriented and high technology industries within the Sri Lankan economy. Under BOI, the government introduced Free Trade Zones (FTZ). These zones provided concessions for export production, free access to intermediate input and duty rebate scheme. It provided attractive environment to foreign investors, such as tax holidays, tax exemptions for remuneration of foreign personnel employed and duty exemptions for importation of input. The first FTZ established near Katunayake International Airport in 1979. The number of FTZ has increased to 6 in 2003. The foreign collaborators in the

projects are United States (US), United Kingdom (UK), West Germany, Switzerland, Belgium, India so on.

“FTZ has attracted 116 foreign companies by 1985; 96 firms operating in the zone, chiefly clothing manufacturers, employed 35 786 workers and make capital investments with a total valued of Rupees 286 million during that year”.¹³

Graph 5 shows the NFDI flows to Sri Lankan economy after IMF reforms. NFDI were very low in period of 1977 and 1978. After 1978, it started to increase. The highest figure occurred in 1994.

Graph 5: Net Foreign Direct Investment (NFDI) in US\$ million. (1976-2000)



Source: Athukorala & Jayasuriya (2004) p.26

3.4 Privatization

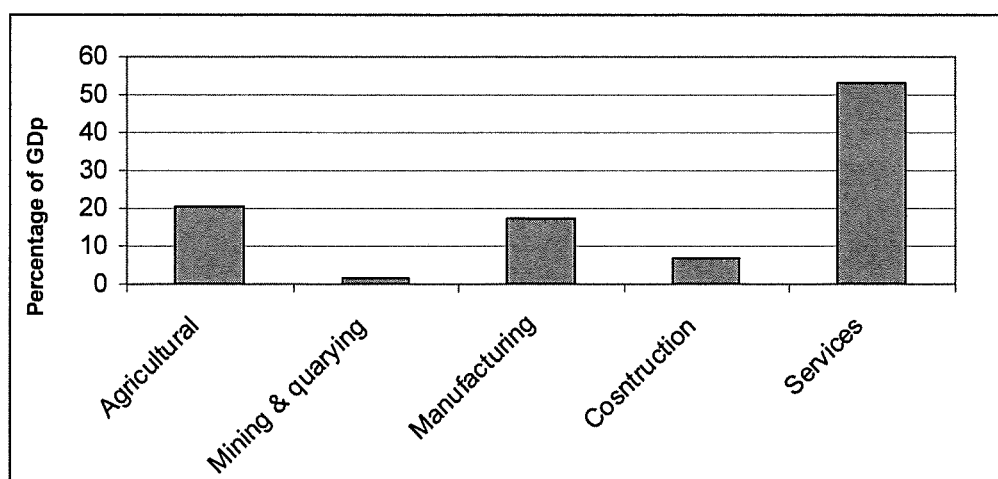
Some of the public enterprises became loss making entities in 1977 due to overstaffing, mismanagement and corruption. To provide a solution for inefficiency of state owned enterprises (SOE), IMF policy package introduced privatization programs to Sri Lankan economy. The primary objective of privatization program was to reduce the fiscal burden on

¹³ <http://www.nationsencyclopedia.com/Asia-and-Oceania/Sri-Lanka-FOREIGN-INVESTMENT.html>

government budget. In 1987 a second wave of privatization policy was announced as part of the IMF reforms in Sri Lanka. In Sri Lankan economy privatization took different forms. One way of privatizing SOE was sell more than 50 percent of share to private owners. Ceylon Plywood Corporation is one of the examples. Other way of privatization was to transfer the management of SOE to private sector for some years. Plantation sector privatization is an example of this type of privatization.

With the new market friendly economic policies, the structure of the economy started to change as shown in graph 6. Before 1977, the higher percentage of the GDP composition was represented by the agricultural sector. After the IMF reforms, the agricultural sector contribution to the GDP declined by 14 percent, while the manufacturing and service sectors increased by 5.8 and 7.9 percent in 2000 in comparison to 1977, shown in graph 1 on page 8.

Graph 6: Components of GDP in 2000



Source: Central Bank of Sri Lanka 2000

4. Evaluation of the IMF Intervention

A number of scholars have investigated the importance of the economic transition of developing countries. Those studies can be analyzed under two major methodological approaches such as time series cross sectional studies and time series single country studies. This section consists of an evaluation of both approaches in terms of their methodologies, results and conclusions.

Frenkel and Khan (1990) investigate the empirical relationship between macroeconomic stability (lower the rate of inflation, restore international competitiveness, reduce the current account deficits) and long run growth in a sample of 101 developing countries, between 1973 and 1988. From their empirical results, they draw some lessons on the role of the IMF policies in economic development. They conduct a purely statistical analysis of the relationship between long run growth and macroeconomic stability by running a regression with the growth of real GDP as a dependent variable using cross section data for 101 developing countries. The independent variables include inflation, variance of inflation, fiscal balance (as a percentage change of GDP), percentage change in the real exchange rate and the variance of the real exchange rate over the period 1973 to 1988 as explanatory variables. The regression model generates low Adjusted R square. Adjusted R square provides the proportion of the variation in the dependent variable accounted for by the explanatory variables. Having Lower adjusted R square shows that the model has not explained much of explanatory variables or that some important explanatory variables have been omitted from the model. Despite this, regression results suggest that growth and the alternative measures of macroeconomic stability are positively related in this large sample of

developing countries. The results of the estimation show that the countries with higher average growth rate also tended to have lower average rate of inflation, lower variance of inflation rates, better average fiscal position, larger average depreciation of the real effective exchange rate, and lower variance of real effective exchange rate. After drawing conclusions regarding the dependent variable and explanatory variables, the paper attempts to explain the IMF impact on those explanatory variables. The paper explains that one of IMF conditionality is monetary restraint. This aims to reduce the growth of aggregate domestic demand. The reduction in aggregate demand would tend to improve the current account balance and put downward pressure on inflation. The second conclusion drawn from the regression result is that countries with higher growth tend to have larger average depreciation of the real exchange rate. One of the IMF policy conditionality is to devalue the domestic currency to improve international competitiveness. By doing so, IMF helps countries to achieve higher growth by expanding production of internationally tradable goods. The paper concludes that some IMF reform packages help to eliminate internal and external imbalances, stimulate economic growth, while others do not. They claim that long lasting adjustment is feasible only if the economy is expanding. The main lesson that emerges from their analysis is:

“Without macroeconomic stability, economic growth can flatter and not be sustained. Furthermore, without broad based economic growth, the basic structural and social transformations which comprise the process of development will not occur. Other objectives of development policy are unlikely to be met. This does not mean that adequate growth will automatically follow if the country achieves macroeconomic stability. But the chances are greatly improved. In this sense, IMF policies can be thought of as improving these chances and thus the basic conditions for economic development”.¹⁴

¹⁴ Frenkel and Khan (1990) p.819

Doroodian (1993) examines the impact of the IMF stabilization program on main macroeconomic variables such as growth rate of real output, inflation and the current account balance. He tries to illustrate the impact of IMF programs through regression analysis. The analysis covers 43 developing countries, of which 27 are countries that used IMF financial resources in 1977. Due to unavailability of data, the period of study is limited to 6 years (1977-1983). The data are composed of time series cross sectional observations. In his study he takes a vector of three IMF objectives as a dependent variable (growth rate of real GDP, domestic inflation rate and current account balance as a ratio of imports). He develops three models by using the above mentioned three dependent variables. Explanatory variables in the model are lagged dependent variable, current account balance, nominal interest rate, consumer price index, fiscal position (revenues – expenditure), changes in nominal interest rate, nominal import, real GDP. He introduces the dummy variable value 1 if the country is in the IMF SAP. The regression estimations show that the coefficient on the real devaluation is statistically significant at the 10 percent level. Real devaluation appears to have expansionary effects on the level of economic activities, coefficient of the real devaluation is positive in the growth model. Fiscal deficit is significant and positive in the growth model and negative and significant in the inflation model. Fiscal deficit indicate that the estimate is positive and statistically significant in the growth model. It is negative and significant in the inflation model. The coefficient of the dummy variable is significant only in the current account model. According to the paper this significant variable shows that the program countries are better able to control their current account problems than are the non program countries.

Finally, the paper mentioned that in general, IMF reforms improve the inflation rate moderately and the current account balance significantly. Moreover it says changes in the real interest rate have significant impact on key macroeconomic variables. Final conclusion of the paper is “On the basis of these results and the existing studies in the literature, one certainly cannot say whether adoption of the IMF programs would lead to an improvement in the rate of inflation and economic growth.”¹⁵

Greenaway, Morgan and Wright (1998) explain the relationship between trade reforms and growth. The purpose of the study is to model the impact of liberalization on growth. The study period is 1975 to 1993. This is based on 69 countries. To analyze the impact of trade liberalization on economic growth the paper uses the new growth theory model. In addition to initial human and physical capital variables, the paper includes terms of trade variable to the model. The paper regresses GDP per head on level of secondary school enrolment in 1965 (initial level), initial GDP per head (1965), population, terms of trade index, the ration of gross domestic investment to GDP. The study introduced dummy variable to capture liberalization effects and the lagged dependent variable. The model includes Sachs – Warner proxy, which is introducing zero prior to reforms and one after reforms.

The regression results show that all independent variables have the predicted signs. Lower initial GDP per capita and high initial level of schooling are associated faster growth in GDP per capita. Faster population growth is associated with slower GDP per capita. Liberalization has average favorable and substantial impact on growth in years following liberalization. The

¹⁵ Doroodian (1993) p.860

paper concludes that liberalization and openness do impact favorably on the growth of GDP per capita.

Przeworski and Vreeland (2000) develop a model on the effect of IMF programs on economic growth. The study was conducted on 79 countries and covers the period between 1951 and 1990, for a total of 1024 of annual observations. The analysis shows that the countries participating in IMF programs grew at the rate of 2.04 percent (N=465), while the growth of countries not under the programs was 4.39 percent (N=559). A difference of -2.35 percent. The question is whether this difference is due to the conditions the countries faced or due to program participation and commitment. They found that 97 countries remained under the IMF programs even though they had decent currency reserve and low balance of payment deficits. But even countries with low currency reserves and high balance of payment deficit did better by not participating in the IMF programs. The study runs two regressions separately for countries under and not under the IMF program. They consider changing output ratio ($\Delta Y/Y$) as a dependent variable and changing capital stock ($\Delta K/K$), the changing labor ($\Delta L/L$) and two instrumental variables. Regression result shows that if all countries are under IMF program, they would have grown at the average rate of 2. If none of the countries ever had an agreement, they would have grown at the rate of 3.53. The difference -1.53 is due to IMF program. The paper concludes that:

“Our results indicate that countries that do not enter into IMF programs grow faster than those that do even when both groups face high domestic deficits or foreign reserves crises. Hence, if soliciting IMF conditionality is just a way to impose domestically unpopular austerity policies, then the culprit is austerity policies per se, rather than the fact that they result from IMF agreement “Political will” may just lead governments astray.”¹⁶

¹⁶ Przeworski and Vreeland (2000) p.19

The final conclusion of the paper is: if the economic growth is the primary objective, then IMF programs are badly designed.

After reporting on those four cross sectional analysis of IMF reforms, I now turn to the literature from time series single country analysis.

Athukorala and Jayasuriya (2004) investigate the relationship between industrial growth, trade and FDI liberalization by using the qualitative method. They identify two major waves of liberalization in Sri Lanka. The first wave came in 1977 and the second wave popped up in 1991 and 1992. They use different kinds of data to see the impact of liberalization on export trade, foreign direct investment and employment. The data sets are import duty collection rates, real exchange rate and its components, key indicators of manufacturing performance, total factor productivity growth, sectorial composition of manufacturing output and employment, growth of merchandise export, sectorial composition of employment and net foreign investment. They claim that as a result of liberalization, exports and FDI went up. This is due to Export Processing Zones (EPZ). These zones provide concessions for export production, free access to intermediate input and duty rebate scheme. They provide attractive environment to foreign investors such as tax holidays, tax exemption for remuneration of foreign personnel employed and duty exemption for importation of input. The paper reports that

“During 1978-2000 manufacturing output grew at an average annual rate of 8.5 percent, compared to 4.8 percent during the decade preceding the reforms. As a result, the manufacturing share in GDP increased from 11 percent in the early 1980’s to 18 percent by late 1990.”¹⁷

¹⁷ Athukorala and Jayasuriya (2004) p.9

Moreover the paper mentions the civil war and its impact to the country during the study period. The paper reports that the manufacturing sector has grown due to export and FDI liberalization under reforms. The sectorial composition of real GDP of the country consists of agricultural, manufacturing, construction and services. The paper explains that IMF reforms increase the manufacturing growth rate through export and FDI. This shows that IMF reforms contribute to the economic growth of Sri Lanka through improving the manufacturing sector growth.

A recent working paper written by Murnthail (2004) tries to explain the impact of SAPs on manufacturing growth in Malawi. He tries to use regression analysis to explain the situation in Malawi, analyzing the quantified impact of each individual variable on the manufacturing sector growth, both before and during the SAPs. He uses the following simple linear regression model.

$$MVA = f(AVA, FDI, GDP, IFS, EXC, RIR, PEA)$$

where MVA is the manufacturing value added growth rate, AVA the agriculture value added growth rate, FDI the foreign direct investment, GDP the gross domestic product, IFS the industrial insurance and financial service growth, EXC the exchange rate changes, RIR the real interest rate changes and PEA the growth in levels of public enterprise economic activity.

He runs the regression, for both pre and post SAP with dummy variable, for 1981, 1982 and 1992 being drought years. Due to the small number of observations (20) and a large number of explanatory variables (7), the model has few degrees of freedom. Therefore any inference

from this regression is questionable. His regression results show higher standard errors and lower t-values of coefficients, and the negative value of Adjusted R – square due to low degrees of freedom. As a result of that, he uses descriptive analysis to see the performance of the manufacturing sector in Malawi. From his descriptive analysis, he found that the manufacturing sector improved and agricultural sector decreased due to IMF reforms. Further he explains that decline in savings and investment negatively affected the industrial sector of Malawi. Due to the higher rate of bank borrowing, there were fewer leading industrial firms in the market.

Finally he concludes that:

“SAP has not very significantly contributed to changes in manufacturing growth in Malawi. The data shows that annual growth rate declined 4 percent from 6 percent after SAP. Further, in the economy there was not much significant production shift from agriculture to industry. The structural adjustments have helped to reduce the share of agriculture in GDP from 46 percent before SAP to 41, in the SAP period while increasing the share of manufacturing from 16 percent to 23 percent during similar period.”¹⁸

Lorie and Zafar (2005) have written a paper regarding Pakistan’s Macroeconomic Adjustment and Resumption of Growth; 1999-2004. The objective of the paper is to analyze the macroeconomic adjustment and resumption of growth over the past four years. The paper considers both the demand and supply factors which relates to the impact of ongoing structural reforms in Pakistan. Under the demand side, it considers consumption, investment, import and export. Under the supply side it identifies three main sectors of the economy, which are agriculture, services and industry. The paper breakdowns the GDP growth rate into these sectors. The paper uses a descriptive analysis to conduct the study. The paper explains the behavior of demand and supply side factors. By analyzing it, the paper concludes that

¹⁸ Murnthail (2004) p.41

Pakistan achieved a higher economic growth through export led and improvement of investment. Further it explains how IMF reforms help to improve the productivity of the country through technology transfer. Out of all factors, the paper pointed out that net exports were the key driving force behind economic growth. But the paper did isolate the IMF impact on economic growth of Pakistan. This is one main limitation in this paper.

Feeny (2005) attempts to explain the impact of foreign aid on economic growth in Papua New Guinea (PNG). According to the study, the country has undertaken IMF SAP in 1990. This program was implemented under three main periods. The first was in 1990. The program consists of reduction of government spending, trade liberalization, increased tax effort and wage control. The second SAP reform was undertaken in 1995 which included the floating of the Kina, increased tax effort and further trade liberalization. The third time SAP was undertaken in 2000 in PNG which include public sector reforms and privatization. The main objective of this paper is to examine whether aid effectiveness is conditional on levels of economic policy and governance. As a by product of the main study, the paper want to investigate whether aid is more effective at increasing growth during structural adjustment. He runs the following regression:

$$GDP = \beta_0 + \beta_1 Investment + \beta_2 Trade + \beta_3 Goverance + \beta_4 SAP + \beta_5 Trend + \beta_6 Aid + \beta_7 Crisis + u$$

Growth in GDP is the dependent variable in the model. Explanatory variables are the ratio of investment to GDP, ratio of exports plus imports to GDP (nominated *Trade* in the equation above) and an index for governance. He assumes that level of good governance important for

aid effectiveness, private investment and economic growth. The governance index considers corruption in government, the rule of law, bureaucratic quality, ethnic tensions, repudiation of contracts and the risk of expropriation. Experts were asked to provide a score from 1 to 10 for each component of the index for each year. Higher scores indicate better value. He introduces the SAP variable which takes the value 1 when PNG undertook SAP. The *Trend* variable is introduced to capture proxy for the labour force and technological progress. The equation also contains two more dummy variables which are foreign aid to GDP and Crisis to capture the shock which are not covered by other explanatory variables in the model. The study covers the period 1965 – 1999. The model adopted autoregressive distributed lag (ARDL) approach to avoid the unit root. He uses the ARDL model to estimate long run coefficients. The model is tested for all other econometric issues such as serial correlation, functional form and heteroskedasticity. At the same time the model is tested for exogeneity of variables such as investment and economic growth using the Hausman test. He runs the regression under 8 different versions of the model, in order to use eight different components of aid. Model A consider total foreign aid to PNG. Model B disaggregates foreign aid into aid grants and loans. Model C disaggregates foreign aid into project aid and aid provided in form of budget support. Model D disaggregates foreign aid into aid provided by Australia (PNG is Australia's only former colony) and aid provided by all other countries. Model E, an aid governance interaction term is introduced to investigate whether aid work better during periods of better governance. Model F to investigate whether aid is more effective at increasing growth during structural adjustment. He wants to analyse the impact of different aid variables on the economic growth rate of the country. He expects a positive coefficient for investment and a negative coefficient for the crisis dummy variable.

By examining the entire coefficient under different models, he provides the following conclusion. There is a positive impact on growth from some types of aid but not all. There is no significant impact from investment on economic growth in the long run. Trade is consistently found to be an important determinant of growth in PNG. There is no evidence that governance has an impact on growth. Crisis dummy variable meets expected signs. SAP parameter estimation, which represents the reforms, is significant and positive in the model. This shows that there is a positive impact on economic growth from the structural adjustment program. The researcher found a positive and significant coefficient on SAP coefficient. This means there is a positive contribution from the IMF structural adjustment program on economic growth. However, in the case of PNG, increasing economic growth due to SAP interacts with foreign aid. That means the SAP has a greater impact on economic growth of PNG when donors increase aid to the country.

Arthur (2002) discusses Ghana's economic and industrial development efforts in the post structural adjustment period. SAP was implemented in Ghana in the 1980s and 1990s. IMF offered the following policy package to Ghana. It includes currency devaluation, limited state involvement in the economy and retrenchment of government workers. In addition to quotas, high tariff rates and import licenses were abolished under trade liberalization. To open up the economy the government had to implement different programs such as tax holidays and tax exemption for dividends arising from free zone investments. In this paper, the author has tried to analyze the impact of SAP on Ghana's economy using descriptive analysis. He explains the economic indicators of Ghana after the SAP was implemented. The average GDP growth rate and gross domestic investment as a percentage of GDP increased 5

percent and 6.9 percent respectively during 1984-2001. In 1983, inflation reached 122.4 percent and it was reduced to 4.2 percent by the end of 2001.

The paper gives more attention to the manufacturing and industrial sectors impact from the SAP program. The manufacturing sector showed a 10 percent growth rate within the first five years after the implementation of SAP, but it was short lived. In 1988, it went down to 5.1 percent. The initial success of the manufacturing sector was due to the improved utilization of installed capacity that resulted from the easing off of the foreign exchange restrictions. The paper mentioned that the reason for the subsequent decline of the manufacturing sector was due to declining domestic savings, higher interest rates of credit and lack of physical infrastructure. The author explains liberalization of trade in a different perspective. Even if it increases exports, import liberalization negatively affected the small scale local farmers as local producers were unable to compete with imported goods due to higher cost of production. As a result of that Ghana's domestic production was replaced by foreign goods. The rice mill industry is one of the best examples. The paper points out that it is one of the most adverse effects to Ghana's economy resulting from the SAP. Further it explains that the reduction in public sector workers wages was another adverse impact of SAP. The reduction of health and education negatively affects the welfare of the society. With the above mentioned analysis, the paper concludes that Ghana's economy continues to decline even after the SAP implementation. Further the paper mentioned that the country gets debt relief from its creditors and the government decided to opt for the Heavily Indebted and Poor Country (HIPC) status in 2001. The paper concludes that the SAP neglected the

manufacturing sector in Ghana. As a result of that country had to seek debt relief under the HIPC initiative.

Foulo & Grafton (1998) evaluate the SAP in Lesotho by using the Computable General Equilibrium Model (CGEM). The study period is between 1988 and 1990. The deteriorated balance of payment and reduction of foreign assets of the Central Bank is the main reason for implantation of the SAP in Lesotho. The country joined the ranks of SAP implementing countries in 1988 to provide the solution for the above mentioned balance of payment problems. With the introduction of the SAP, the IMF introduced the government expenditure reduction program. As a result of that the public sector wage bills was reduced and transfer payments were eliminated. In addition to that, tight monetary was implemented through credit control. The first task of building the model is to define relevant sectors of the economy and collect data on those factors using a Social Accounting Matrix (SAM). The second step of the researcher is to define the economic relationship between various sectors of the economy. Finally, the model is closed through market equilibrium conditions. Through simulations, he calculates that the current account balance of Lesotho's worsened after implementation of the SAP. The current account balance went down from -18.87 in 1987 to -112.3 in 1990. The changing the composition of the government expenditure is the main reason for the reduction in the current account balance. The SAP program reduces real recurrent expenditure and promotes capital expenditure. Increasing capital expenditure has a direct impact on increasing import. The study found that a unit increase in capital expenditure increases imports by 0.57. At the same time the study shows that SAP widened the income distribution gap between agricultural household and business owning household.

Due to the SAP income of agricultural households increased by only 4.72 million, while business owing households income increased by 30.51 million. This affects balance of payment because agricultural households and business owing households have different import propensities. According to the above analysis, the researcher found that the SAP is not good for poor. Further it says that balance of payment problems may be achieved by reducing recurrent government expenditure other than wages.

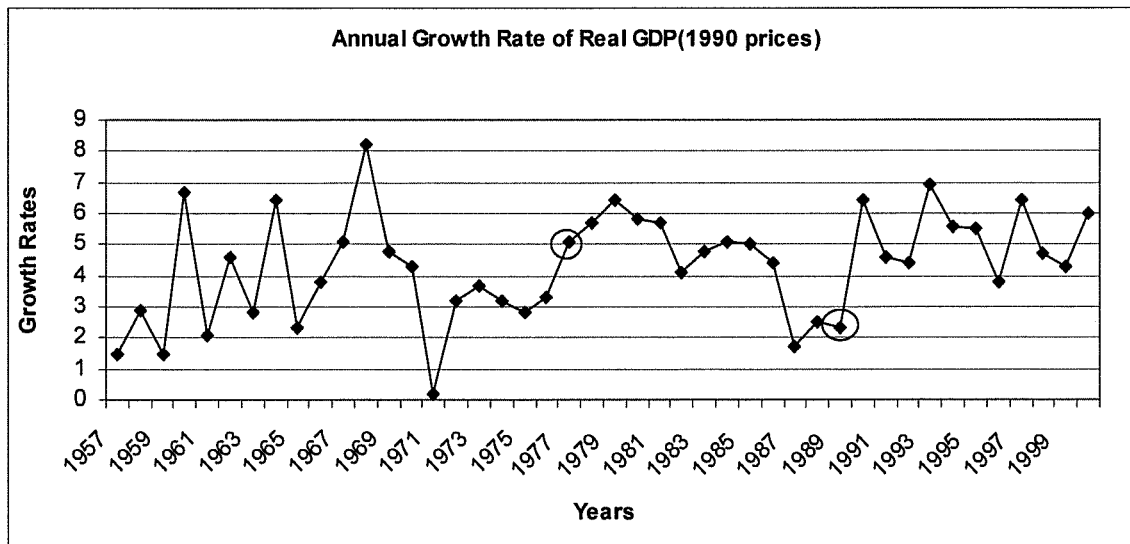
The results of past discussions about IMF reforms and economic growth in single country studies have some contradiction about their results. Athukorala and Jayasuriya (2004) conclude that IMF reforms contribute to the economic growth of Sri Lanka through improving the manufacturing sector growth. On the other hand Murnthail (2004) conclude in his study that "SAP has not very significantly contributed to changes in manufacturing growth in Malawi. Arthur (2002) also came to same the conclusion like Murnthail (2004) from his study. He concludes that the SAP neglected the manufacturing sector in Ghana and did not experience many gains from SAP. Foulo & Grafton (1998) concludes that SAP has a negative impact on current account of Lesotho. Lorie and Zafar (2005) conclusion is similar to Athukorala and Jayasuriya (2004). Both studies conclude that there is a positive impact from IMF reforms on economic growth of a country. Feeny (2005) conclude that the SAP has a greater impact on economic growth of PNG when donors increase aid to the country.

Out of six studies three of studies proved that there is a positive impact from IMF reforms and rest of the studies proved that there is a negative impact from IMF reforms on economic growth. There is some contradiction among findings related to IMF reforms and manufacturing sector growth of a country. Due to these disagreements among findings, my research interest went to impact on IMF reforms in economic growth of Sri Lanka.

5. Data Analysis

The six time series single country studies analyze the impact of IMF reforms on Sri Lanka, Pakistan, PNG (Papa New Guinea), Lesotho, Ghana and Malawi. Out of the six studies, only one study used regression analysis for their methodology, which was performed by Foulo & Grafton (1998). The others used descriptive analysis. In this paper, I follow Murnthail's (2004) methodology and apply it to Sri Lanka. Sri Lanka is a small open economy similar to Malawi. Running a regression analysis is the best way to see the relationship between IMF reforms and economic growth. Even if there is data on real GDP and other related explanatory variables, there is no clear method to capture the IMF impact of economic growth. This is the main limitation I faced in my study. Due to this limitation, I used a descriptive analysis to see the relationship between IMF reforms and economic growth rate of Sri Lanka. In practice, the economic growth rate can be measured by the rate of change of real Gross Domestic Product (GDP). In my paper I used the real GDP changes from one year to another. In the next section of the paper, I analyze the behavior of real GDP growth rate from 1957 to 2000. At the same time, I try to examine the relationship between real GDP growth rate and the IMF economic reforms.

Graph 7: Annual Real GDP Growth Rate (1990 prices)



Source: United Nations Statistics – Common Database for 1976-2000 data. Central Bank of Sri Lanka – Data from 1957 to 1975

Graph 7 shows real GDP growth rate of Sri Lanka during the period 1957 to 2000. There are peak and trough points of real GDP growth rate which can be seen during the last three decades. Highlighted points in Graph 7, the two main economic reforms in Sri Lanka in 1977 and in 1990. From 1950s to 1960s there is a positive trend of real GDP growth rate of Sri Lanka. In 1965, the GDP growth rate decreased suddenly. Between 1965 and 1977, there was a strict control on resource transfers of international boundaries due to import quotas, tariffs and other limitations on foreign exchange payment. The economy was heavily dependent on traditional export during this period. Earnings from traditional export crops depended highly on weather and world market prices. The combination of these factors led to a reduction of export earnings. A fluctuation of the world market price and changes in weather conditions were some of the main reasons for fluctuations of real GDP growth rate during 1965-1977. A major breakthrough of growth occurs after 1977 with the implementation of new economic

policies. With the implementation of IMF economic reforms, trade liberalization and restrictions on foreign exchange payments were removed. The economy was no longer dependant on traditional exports. The export structure was diversified. This is the reason for sudden increase in real GDP growth rate from 1977 to 1979. Within two years, real GDP growth rate increased by 4 percent. It is agreed upon that, this growth came from IMF reforms, because within that period of time there was no other external shock to the Sri Lankan economy. After 1980, the real GDP growth rate started to go down. The main reason for this decline was the political instability of the country. "It is obvious that ethnic conflict has been one of the most important factors which led to the reduction of economic growth (and of economic development more broadly) in Sri Lanka, particularly since 1983."¹⁹ Due to civil unrest and ethnic problems the government had to spend large amounts of money for defense spending. For that government had to sacrifice large amounts of investment programs. This is the reason for sudden decline in real GDP growth rate after 1980. The data shows that after 1977, real GDP growth rate increased suddenly till 1979. However, it did not stay for a long period of time due to civil unrest and the political instability of the country.

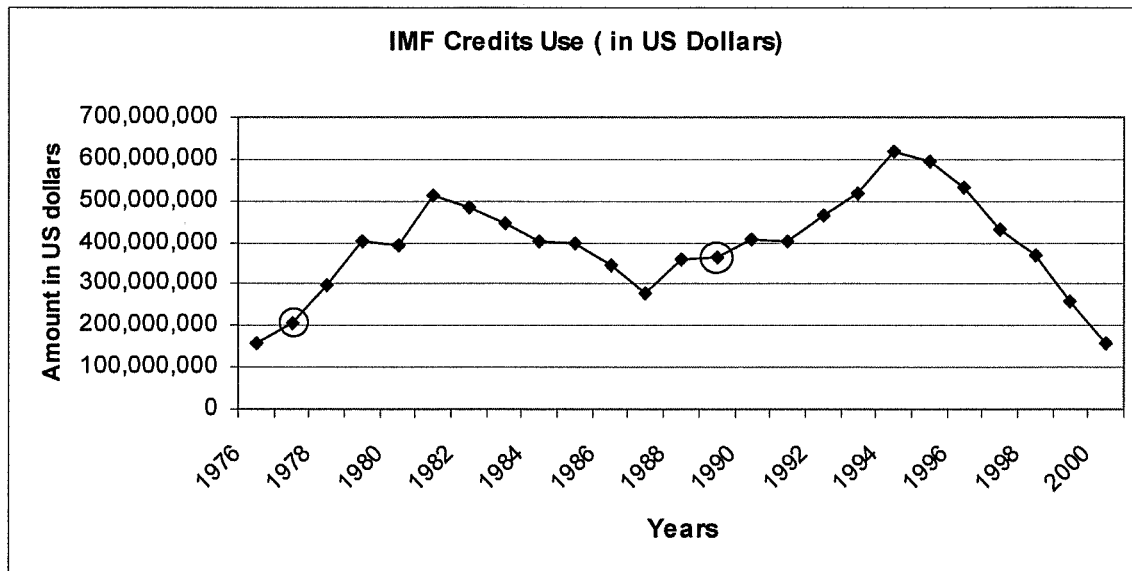
Second wave of SAP came to Sri Lanka in late 80's. The main focus of the second wave of SAP was privatization of inefficient State Owned Enterprises (SOE). By doing so, the government wants to improve the efficiency of the economy and reduce the government expenditure for inefficient SOE.

The IMF provided financial facilities to Sri Lanka to achieve higher economic growth by providing solutions for balance of payment problems of the country. Graph 8 shows the amount of money Sri Lanka received from IMF during 1976 – 2000. That money came with

¹⁹ Snodgrass (1998) p.28

some economic reforms. Again the highlighted points in the graph show the two main economic reforms of Sri Lanka during that period. The graph shows that IMF has helped Sri Lanka during the last three decades continuously. However, economic changes are still continuing in the Sri Lankan economy.

Graph 8: IMF Credit Use (in US dollars)



Source: United Nations Statistics – Common Database

According to Graph 7, the real GDP growth rate of the country in 1976 and 1989 was 3.3 percent and 2.3 percent respectively. With the implementation of IMF reforms and funds, real GDP growth rate increased suddenly. The increase in growth has been attributed to both demand and supply side factors. To examine the IMF impact on real GDP, I began by examining the supply side factors. The supply side factors represent the composition of real GDP by sectors. The purpose of the examination of composition by sectors is to see whether

the country has achieved a higher economic growth through structural changes in production activities.

5.1 Enlargement of the Manufacturing Sector

This section examines the relationship between manufacturing sector growth and real GDP growth rate of the Sri Lankan economy.

Under the manufacturing sector, the economy tries to make or process goods, especially in large quantities and by means of industrial machines. Before IMF reforms, the Sri Lankan economy was more close to the agricultural sector. The manufacturing sector involvement is very low before 1977. IMF reforms helped the economy to liberalize trade. With trade liberalization and devaluation, there was higher demand for Sri Lankan export from the rest of the world. To satisfy increasing demand, the country developed two strategies. These include EPZ and the establishment of the Sri Lanka Export Development Board (SLEDB). “The first Investment Promotion Zone was established near Katunayake International Airport in 1979”.²⁰ EPZ provides numerous benefits for foreign investors to invest within the zones. The SLEDB introduced a duty rebate scheme, direct cash subsidies and manufacturing in bonds for export production. As a result of these strategies the export production in Sri Lanka increased after 1977. The increase of the real export earnings of the country are illustrated in Graph 9. The enlargement of the manufacturing sector directly came from improvement of industrial exports such as clothing, food and beverages. Table 2 shows the value, volume and units of garments exported from Sri Lanka from 1985-2000.

²⁰ Snodgrass (1998) p.19

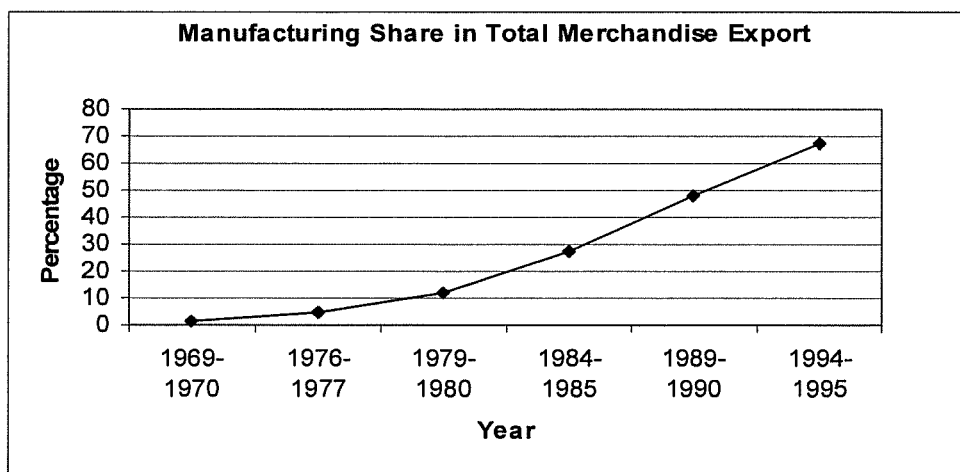
Table 2: Value, Volume and Unit Value of Garments Export from Sri Lanka

Year	Value	Volume	Unit Value
1985	47	71	66
1986	55	93	59
1987	72	103	70
1988	73	95	77
1989	84	97	86
1990	100	100	100
1991	121	110	110
1992	177	147	120
1993	201	180	112
1994	219	204	107
1994	214	195	110
1995	221	188	118
1996	250	201	125
1997	291	227	128
1998	325	249	130
1999	359	271	133
2000	337	271	124

Source: Athukorala and Jayasuriya (1994) p.24

Graph 9 shows there is a sudden increase in manufacturing share of total merchandise after IMF reforms.

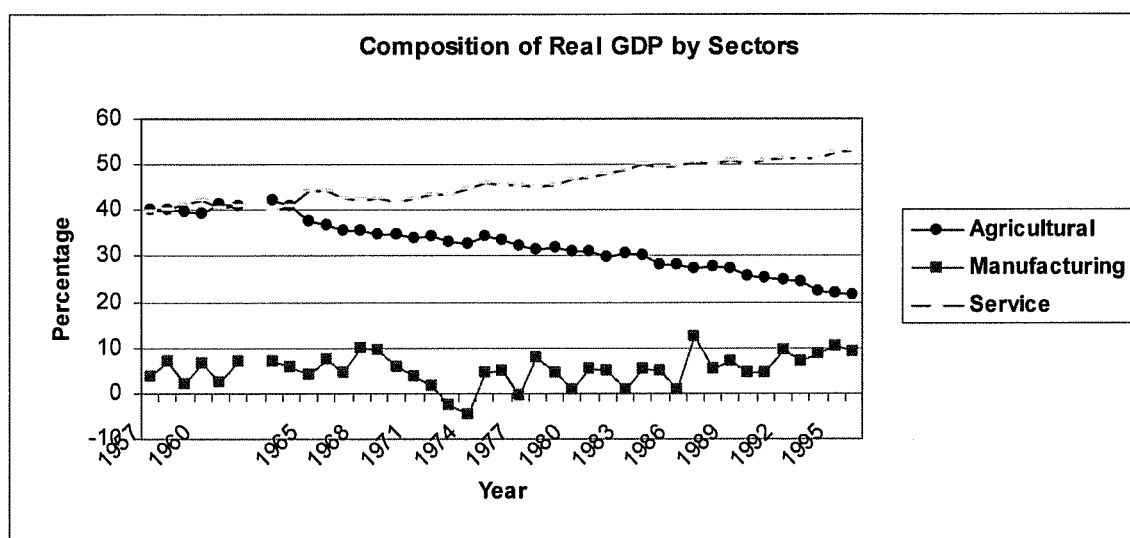
Graph 9: Manufacturing Share in Total Merchandise Export



Source: Athukorala and Rajapatirana (2000) p.560

The above analysis shows that increasing manufacturing share in total merchandise export directly came from increasing industrial export. The composition or the structure of the GDP has undergone considerable changes during the last three decades in Sri Lanka. This is shown in graph 10. It depicts the composition of real GDP by sectors. It clearly shows that after 1977 there is a positive trend of the manufacturing sector and service sector while agricultural sector has a negative trend.

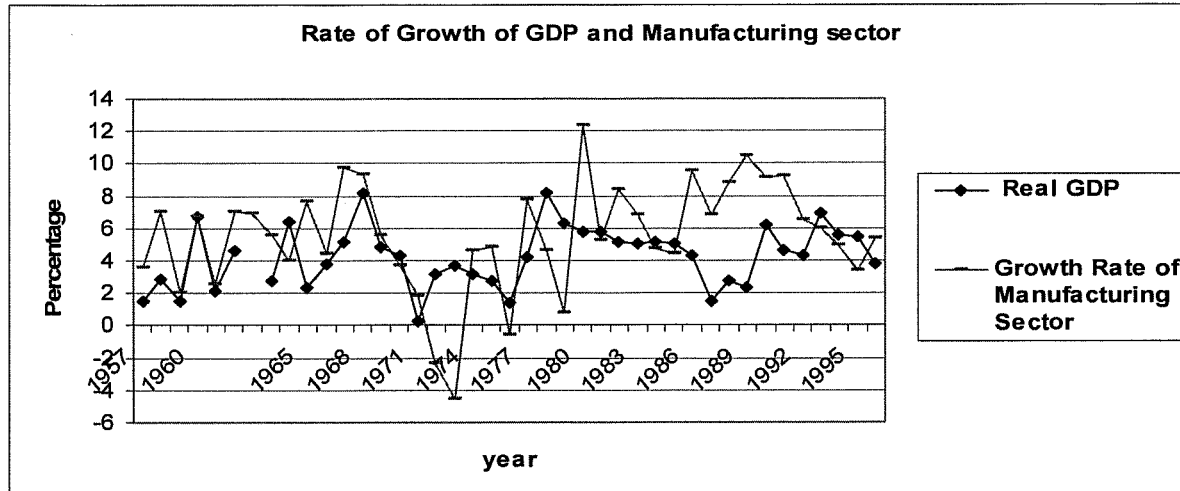
Graph 10: Composition of Real GDP by Sectors (1957-1996)



Source: Central Bank of Sri Lanka 2000

When considering the period of post reforms (1977-1996), manufacturing and service sectors increased by 9.7 percent and 7.3 percent respectively while agricultural sector went down by 10.8 percent. Graph 11 shows that, real GDP growth rate move along with the manufacturing sector growth rate.

Graph 11: Rate of Growth of GDP and Manufacturing Sector (1957-1999)



Source: Central Bank of Sri Lanka 2000

The above data analysis shows manufacturing sector growth is closely related to the economic growth of the country. To prove the relationship between the manufacturing sector growth and the economic growth rate, I used Okun's law. Okun's law says that there is a negative relationship between real GDP growth rate and the unemployment rate of the country. Table 3 shows that increasing manufacturing sector employment of the Sri Lankan economy and reduction of unemployment over the period.

Table 3: Employment and Unemployment in Selected Years.

Year	Share of Manufacturing Sector Employment (%)	Unemployment Rate (%)
1973	9.2	24
1978/79	12.5	14.8
1981/82	12.3	11.7
1986/87	13.4	15.5
1990	13.3	15.9
1992	13.1	14.6
1994	14.3	13.1
1996	14.6	11.3
1998	14.2	9.2
2000	16.8	7.7

Source: CBSL (2000)

Table 4 shows improvement of the manufacturing sector employment under Board of Investment (BOI). Employment under BOI was 261 employees in 1978. It increased to 367849 workers in 2000.²¹

²¹ Athukorala & Jayasuriya (2004) p.25

Table 4: Manufacturing Sector Employment under BOI

Year	Employment (Number of Workers)
1978	261
1979	5876
1980	10538
1981	19727
1982	24926
1983	27805
1984	32725
1985	35786
1986	45047
1987	50743
1988	54626
1989	61429
1990	71358
1991	85457
1992	104220
1993	122165
1994	205660
1995	223367
1996	241970
1997	285663
1998	294381
1999	327059
2000	367849

Source: Athukorala and Jayasuriya (2004) p.25

When we compare the numbers of table 3 and 4, we observe a close negative relationship between the manufacturing sector employment and unemployment rate of the country. Therefore I can say that increasing employment in the manufacturing sector reduced the unemployment of the Sri Lankan economy after 1977. On the other hand, I can claim that decreasing unemployment increased the real GDP of the country. The above analysis suggests that the IMF reform contributes to the development of the manufacturing sector.

5.2 Improvement of FDI and Growth

FDI may influence the long term growth rate of the country through technological transfers.

Technological progress can be explained by increment of productivity growth rate of the country. Table 5 shows Total Factor Productivity Growth²² (TFPG) rate of the country.

Table 5: Total Factor Productivity Growth Rate of the Country.

		Contribution of			TFPG	NFDI
		Labour	Capital	Intermediate		
		(S _L *G _L)	(S _K *G _K)	Inputs (S _M *G _M)		
1974-1981	4.0	0.2	3.0	1.6	-0.8	7.71667
1981-1988	14.0	0.6	3.6	8.5	1.2	38.04286
1988-1995	17.4	1.5	4.9	1.3	9.7	69.157
1995-2000	3.5	-0.1	0.7	1.8	1.2	119.733

Source: Athukorala and Jayasuriya (2004) p.20

$$TDPG = G_0 - S_L G_L - S_K G_K - S_M G_M$$

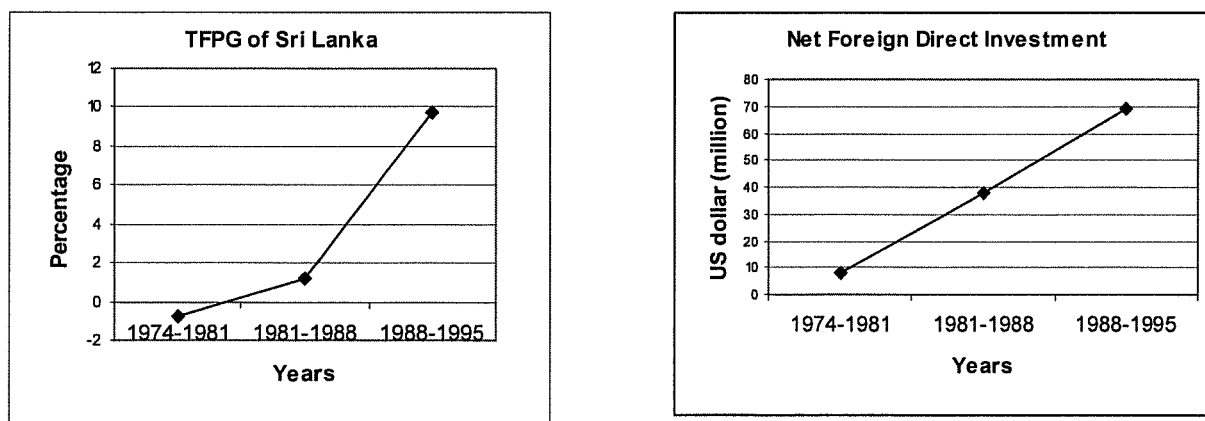
Where G_0 , G_L , G_K , G_M denotes annual compound growth of output, labour, stock of capital and intermediate input between the two given years and S_L , S_K and S_M denote the average

²² TFPG calculation: $TDPG = G_0 - S_L G_L - S_K G_K - S_M G_M$

value shares of labour, capital and material in output. Net Foreign Direct Investment (NFDI) is in average value for two years in US dollar million.

During 1974-1981, TFPG was -0.8 percent. It increased to 1.2 percent between 1981 and 1988. Graph 12 shows that TFPG and Net Foreign Direct Investment (NFDI) have a close correlation. FDI may have permitted the transfer of new technology from developed countries to the Sri Lankan economy.

Graph 12: Total Factor Productivity Growth Rate and NFDI of Sri Lanka

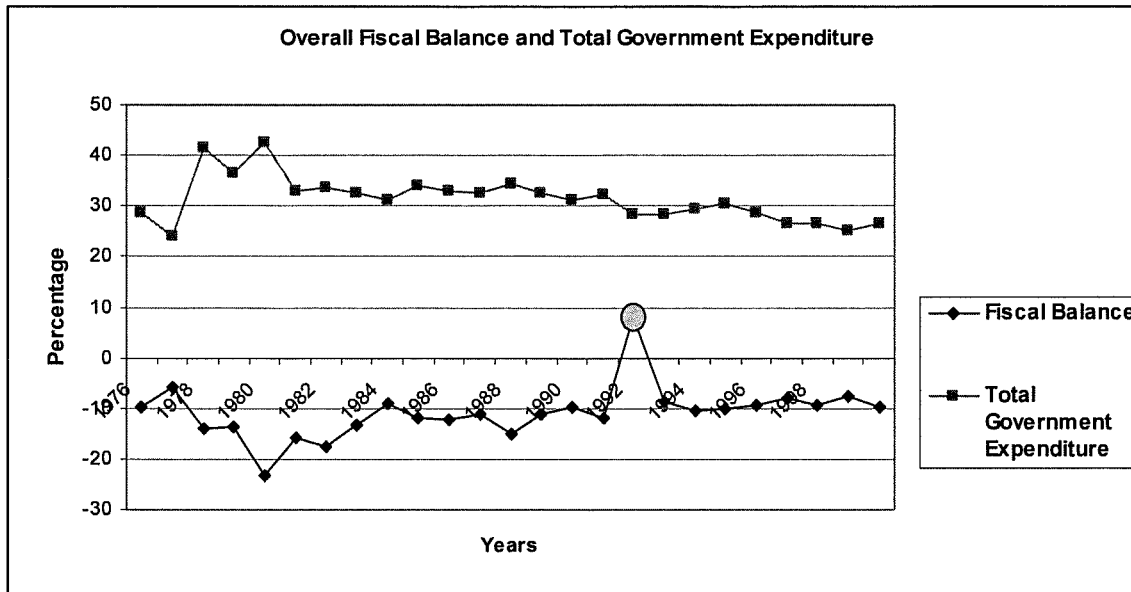


Source: Authukorala & Jayasuriya (2004) p. 20 and p. 26

5.3 Privatization

The main objective of 1989 reforms was to introduce privatization programs to the Sri Lankan economy. By doing so, the IMF wanted to reduce the fiscal burden from inefficient SOE and improve the efficiency of the economy. If privatization works well within the Sri Lankan economy, it should help the government to reduce its expenditure. The graph shows that after 1989 total government expenditure declined. The fiscal balance also improved. For the first time, in 1992 the Sri Lankan government experience positive fiscal balance in the last three decades. There was a favorable impact from privatization from the fiscal balance in Sri Lanka. This helped the government to spend money for more productive economic activities to achieve higher economic growth. In this context I can claim that the IMF reforms provided some contributions to economic growth of Sri Lanka.

Graph 12: Overall Fiscal Balance and Total Government Expenditure



Source: Central Bank of Sri Lanka 2000

6. Conclusion

Liberalization reforms introduced by the IMF in the late 1970s and 1980s resulted in a significant opening of the Sri Lankan economy. Liberalization of trade and FDI had some contribution to economic growth via employment and technological progress. IMF introduced the privatization program as a part of its policy package. Privatization helped the Sri Lankan government to at least achieve more positive fiscal balances. The above policy analysis and the behavior of real GDP growth rate shows that the economic growth of Sri Lanka increased after 1977 and 1989 post reforms period. This may be due to results of IMF reforms package. However, economic growth rate was short lived due to the civil war and civil unrest of the Sri Lankan economy.

According to the above analysis I can conclude that there is an impact on economic growth of Sri Lanka from IMF reforms. But it is difficult to say whether it is a short term or long term impact due to ongoing civil war. Therefore I can suggest that an ideal study of IMF reforms would incorporate in the discussion the ongoing civil war. This task remains, however, very challenging.

References

Arthur. (2002), *Ghana: Industrial Development in the Post-Structural Adjustment Program (SAP) Period*. Canadian Journal of Development Studies, Vol.23, No.4 (2000), pp. 717-742

Athukorala, P. and Jayasuriya, S. (1994), *Macroeconomics Policies, Crises, and Growth Sri Lanka 1969-1990*, Washington D.C, the World Bank.

Athukorala, P. and Jayasuriya, S. (2004), *Complementary of Trade and FDI Liberalization in Industrial Growth: Lessons from Sri Lanka, Australia, and Australian National University*.

Athukorala, P. and Rajapatirana, S. (2000), *Liberalization and Industrial Transformation: Lessons from the Sri Lankan Experience*. Economic Development and Cultural Change, Vol. 48, No. 3 (2000), pp. 543-572

CBSL (2000) Annual Reports (special issue for 1950-2000), Colombo, Central of Bank of Sri Lanka.

Definition of IMF and Purposes of the IMF in the Articles of Agreement,

URL: <http://www.imf.org/external/about.htm>

Details of FDI

URL: <http://www.nationsencyclopedia.com/Asia-and-Oceania/Sri-Lanka-FOREIGN-INVESTMENT.html>

Doroodian, K. (1993), *Macroeconomic Performance and Adjustment under Policies Commonly Supported by the International Monetary Fund*. Economic Development and Cultural Change, Vol. 41, No. 4 (1993), pp. 849-864

Dunham, D. and Kelegama, S. (1997), *Stabilization and Adjustment: A Second Look at the Sri Lankan Experience 1977-93*, The Developing Economies, XXXV-2. pp.166-184

Fenny, S. (2000), *The Impact of Foreign Aid on Economic Growth in Papua New Guinea*.
Journal of Development Studies, Vol.41, No. 6 (2005), pp. 1092-1117

Foulo, T. and Grafton (1998), *Structural Adjustment in Lesotho*. Journal of Policy Modeling,
Vol.20, No.6 (1998), pp. 791-814

Frenkel, J. and Khan, M. (1990), *Adjustment Policies and Economic Development*. American
Journal of Agricultural Economics, Volume 72, No. 3, pp. 815-820

Greenaway, D., Morgan, W. and Wright, P. (1998), *Trade Reform, Adjustment and Growth:
What Does the Evidence Tell Us?* The Economic Journal, Vol.108, No.450 (1998),
pp. 1547-1561

Grobar, L. and Gnaselvam, S. (1993), *The Economic Effects of the Sri Lankan Civil War*.
Economic Development and Cultural Changes, Volume 41, No. 2. pp. 395-405

IMF (International Monetary Fund)

URL: www.imf.org

IPS (Institute of Policy Studies of Sri Lanka)

URL: www.ips.lk

Jayewardene, L. Maasland, A. and Radhakrishnan, P. (1988), *Stabilization and adjustment
policies and programs*. Finland, World Institute for Development Economics
Research.

Knight. and Athukorala P. (2000), *Assessing Privatization in Sri Lanka: Distribution and
Governance*

Lorie, H. and Zafar, I. (2005), *Pakistan's Macroeconomic Adjustment and Resumption of
Growth, 1999-2004*

Malathy, K. and Athukorala, P. (2001), *Assessing Privatization in Sri Lanka: Distribution
and Governance*.

Mitchell, B. (1993), *International Historical Statistics Africa, Asia & Oceania 1750-1993*, New York: Palgrave Macmillan.

Munthali, T. (2004), *The Impact of Structural Adjustment Programmes (SAPs) on Manufacturing Growth in Malawi*, Leeds University Business School, University of Leeds.

Penn World Data:

URL: <http://pwt.econ.upenn.edu/>

Ponnambalam, S. (1980), *Dependent Capitalism in Crisis – The Sri Lankan Economy, 1948-1980*. London, Vikas Publishing House Kanpur.

Privatization Data:

URL: <http://www.cgdev.org/doc/Privatization/ch%2012.pdf>

Przeworski, A. and Vreeland, J. (2000), *The effect of IMF programs on economic growth*. Journal of Development Economics Volume 62, Issue 2, pp. 385-421

Snodgrass D. (1998), *The Economic Development of Sri Lanka: A Tale of Missed Opportunities*, HIID Development Discussion Paper No Harvard University.

Trade Policy Review, (1995), World Trade Organization, *Sri Lanka continues reforms but needs support from its main trading partners*.

URL: http://www.wto.org/english/tratop_e/tpr_e/tp17_e.htm

United Nations Statistics: Common Database 1976-2000.

Wikipedia

URL: www.Wikipedia.org

World Bank

URL: www.worldbank.org