Financial Liberalization – 'The Correct Sequence': A Sri Lankan Experience

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Abstract

Financial repression that existed for a period of two decades prior to the 1977 economic reforms led to a reduction of the economic growth to the lowest possible level that Sri Lanka has ever experienced. This dismal performance of the economy, which could be witnessed by 1977, paved the way for introducing a set of far reaching economic reforms including financial reforms (financial liberalization). The financial liberalization that was followed starting from 1977, were mainly based on the McKinnon-Show hypothesis, calling for more liberal financial sector reforms which should precede economic development. Empirical Studies done in the late 1980s and 1990s with financial liberalization experience in the world as well as in Sri Lanka lent support to the McKinnon-Shaw hypothesis. But, the later evidence shows no clear relationship between financial liberalization and the achievement of desired outcomes in recent years, thus the current literature is more to identifying and explaining the reasons for non-achievement of the objectives of financial liberalization. The main factor that has been identified by majority of recent research for eroding the outcomes of financial liberalization is the incorrect policies being followed in implementing financial liberalization (sequential problem). Therefore this study attempts to empirically test whether financial liberalization undertaken in Sri Lanka has followed the correct sequence of policies for financial liberalization or not. The hypothesis is tested, by constructing three financial liberalization indices for the three sequences (viz., real sector liberalization should precede domestic financial sector liberalization and that domestic sector financial liberalization should precede the external sector liberalization.) identified as most desirable to make financial liberalization a success. Finally it was found that, last sequence has been implemented at a fast pace than that of its desired sequential predecessors during the initial years of financial liberalization in Sri Lanka. Even after the initial period the real sector liberalization, which is seen as the stabilizing force under financial liberalization process has not been reformed adequately.

Keywords: Financial liberalization, Economic growth, Sequential problem, Macroeconomic problems

1. Introduction

The relationship between financial development and economic growth has received a great deal of attention throughout the modern history of economics. Proponents argue that a more developed financial system is likely to increase economic growth. In this setting, McKinnon (1973) and Shaw (1973), building on the work of Schumpeter, supported the 'financial liberalization' thesis, arguing that government restrictions on the financial system restrains the quality and quantity of investment (Arestis 2005).

This new consideration was highly taken by majority of less developed countries (LDCs) including Sri Lanka which experienced dismal economic consequences by following more controlled policies during the decades of 1960s and 1970s. In many countries, interest rates became significantly lower than inflation, not just temporarily, but on a sustained basis for decades. The resulting negative real interest rates penalized savers and encouraged the public to hold a larger proportion of their savings in non-financial assets (non-tradable assets) such as real estate, consumer durables, precious metals, gems, art works, and wherever possible foreign currency deposits (Agarwala, 1983). This phenomenon reduced the amount of funds channeled to banks and restricted the supply of loan-able funds. Consequently, the financial sector became repressed and shallow, requiring credit to be rationed. Credit rationing at artificially low interest rates together with real exchange rate overvaluation, and the preferential treatment accorded to capital goods imports in control trade regimes limited employment generation and economic growth.

In this background, many LDC governments with the influence of donor agencies such as World Bank and International Monetary Fund embarked on 'financial reforms/liberalization' to ease financial repression in their economies. As such, financial liberalization as a basic component of their economic reform framework was carried out to accelerate economic growth in these countries (Chandrasekhar, 2004). Like in many LDCs, Sri Lanka also followed highly interventionist economic policies for a period of two decades before 1977 during which its financial market became exceedingly repressed by the creation of monopoly power for state commercial banks and other public sector financial institutions following a regulated interest policy. This policy basically led to channel available credit to sub-optimal projects mainly in the public sector at the expense of high-return ventures of the private sector reducing the efficiency of resource allocation and thereby limiting the economic growth of the country. Consequently, financial reforms carried out in association with trade liberalization in 1977 aimed at improving resource allocation in the economy.

A detailed analysis of financial liberalization thesis also leads to the identification of a number of offshoots to the original thesis mainly stemming from the 'Southern Cone experience' leading to 'First and the Second generation' models, then 'East Asian currency crisis' leading to 'Third generation' model of financial liberalization (Gemech and Struthers 2003).

Now a period of three decade has passed after these reforms, particularly in Sri Lanka. Many researchers in Sri Lanka as well as in other countries have carried out studies on the consequences of financial liberalization, leading to the repeated conclusion of 'inconclusive evidence' to support financial liberalization. Accordingly, many writers have concluded that financial liberalization has failed to achieve its desired outcomes. Meanwhile, there are many other researchers who have identified some possible reasons for the failure of financial liberalization. The main factor that has been identified by majority of recent research for this is the incorrect policies being followed in implementing financial liberalization (sequential problem) but they are yet to be substantiated against empirical evidence. Thus, this study now attempts to empirically test the significance of the main reason (sequential problem) cited in the recent literature for the failure of financial liberalization based on the Sri Lankan experience.

2. Literature Review

The importance of finance for achieving a higher economic growth from a modern point of view has been, first, recognized from the beginning of the 20^{th} century. Schumpeter (1911) Keynes, (1936) Gurley and Shaw (1955), Patrick (1966), Goldsmith

(1969), Patrick and Park (1994) and Levine (1997) have strongly pointed out that finance can play a positive role to achieve economic growth. But contrary to the above view points, there are many others who disagree partly or sometimes even in full with the viewpoints expressed in support of the relationship between finance and economic growth and development. Robinson (1952), Lucas (1988) Stem (1989) Andres et al. (1999) and Arestis (2005) argues that financial development is primarily followed by economic growth, and the financial system does not matter.

But in the midst of all the above arguments in 1973, a path breaking contribution was made by McKinnon and Shaw (McKinnon-Show hypothesis) calling for more liberal financial sector reforms (here after referred to as financial liberalization) which should precede economic development. McKinnon (1973) and Show (1973) provided a theoretical basis as well as empirical evidence of the benefits of a liberalized financial regime in developing countries. McKinnon-Show hypothesis was developed taking into consideration the situation prevailing in financial markets of most of the developing countries in the 1950s and the 1960s. In the initial stages of the process of development, the financial sector in developing economies was characterized by policies such as deliberate credit allocation, interest rate restrictions and lending criteria based on social needs. It is argued by many studies that these policies have heavily retarded the nature of financial intermediation and, in turn, economic growth in developing countries. For instance, Agarwala's (1983) study on 31 Developing Countries found that there was a negative relation between economic growth and degree of factor market distortions for the 1970s.

In keeping with the world trend Sri Lanka embarked on a process of financial liberalization starting from 1977. Most of the early studies as cited by Paudel (2007) clearly show that financial liberalizations have brought about positive results. For example; Athukorala and Rajapatirana (1993) said that private investment in Sri Lanka became more profitable after liberalization and found evidence to support the McKinnon-Shaw hypothesis, which states that high real interest rate motivates financial savings in the overall economy. Ghatak (1997) has made a similar conclusion based on the McKinnon - Shaw hypothesis showing the positive and significant effects of financial liberalizations on the economic growth of Sri Lanka during the 1980s. Furthermore, Venlla (2001) analyzed the results of financial liberalisation in Sri Lanka from 1977 to 1997 with quarterly data, and found significant growth in the number of financial institutions, financial instruments and financial markets. Perhaps the only exception seen among the early studies conducted is Kelegama's (1989) study, which recognizes the financial liberalization in Sri Lanka as a 'failure', sighting the lapses in the sequence of financial liberalization and the ad-hoc policies followed by the government.

After a considerable laps of time there is also some series studies done with regards to financial liberalization in Sri Lanka. Aluthge (2000) acknowledges that financial liberalization was a success story to a greater extent with regard to the increasing diversity and scope of the Sri Lankan financial system, but is a failure in many other respects. Especially they identified that there is no strong evidence to suggest that the positive real interest rate is per se strongly and positively correlated with capital accumulation, savings, investment, efficient allocation of financial resources, and real economic growth. The study also identified that in the second half of the liberalization the government gradually tightened its capital expenditure in order to reduce the fiscal deficit to a manageable level. As a consequence, growth declined because government investment has been a key factor in economic growth in the post liberalization period. From all these findings the study concludes that it is very difficult to attain the long term economic promises of a McKinnon-Shaw type financial liberalization unless it is well supported by a carefully structured programme of liberalization that considers the countries own specific scenario into account.

In addition Dhakal et al (2002) study titled McKinnon's Complementary Hypothesis: Empirical evidences from India and Sri Lanka, using augmented Dickey-fuller and Phillips-Perron tests concludes that there is some support for McKinnon's complementary hypothesis for India, but little support for Sri Lanka. Even Cooray (2003) identifies that there is a substantial development in the financial structure expansion and deepening of financial markets after liberalization in Sri Lanka, but also notes that it is still incomplete, emphasizing that financial reform only could do nothing to promote efficiency in an economy unless policies and financial liberalization infrastructures are made supportive; therefore the study concludes that, substantial development of the financial sector is required for sustainable financial reform and development to support the economic growth of the nation.

Further, Paudel (2007), after studying the financial liberalization in Sri Lanka using a profligate of econometric analysis, has concluded that financial liberalization has contributed in some issues positively but not as expected in most other instances. The study also finds that real gross domestic product helps widen the financial sector, which proves that economic growth fosters the financial sector better than financial liberalization in the long term even though financial liberalization assists in the short term. The author also questions the findings of Ghatak (1997) that financial liberalization has been playing a significant role in enhancing the economic growth in Sri Lanka. As well as Aluthge (2000), Paudel also highlight that the policy implementations were not done well to reap the benefits of financial liberalization, arguing that liberalization along is not enough if not followed with proper strategies with suitable sequential procedures.

When looking at the plethora of research evidence presented above, there lays a telltale of financial liberalization experience with respect to Sri Lanka, with most early research showing lot of promise with financial liberalization and the later literature is more in to identifying and explaining the non-achievement of the objectives of financial liberalization. So, most of the evidence been looked at allows one to conclude that the ‘promise of financial liberalization had not been delivered’.

After identifying financial liberalization has failed to deliver the objectives expected the researches started to analyze the causes for the failure. Firstly as cited by Arestis (2005), Lucas (1988) argues that economists ‘badly over-stress’ the role of the financial system, thereby reinforcing the difficulties of agreeing on the link and its direction between finance and growth.

But, the proponents of financial liberalization thesis argue that if failure is there that is because of the existence of inadequate banking supervision and macroeconomic instability. McKinnon (1973 & 1993), Krueger (1986) and Edwards (1989) saw nothing wrong with financial liberalization but they emphasize that the way in which financial liberalization was implemented and the certain other factors, eroded the effectiveness of financial liberalization. In this regard, we can now explore number of latter writings that highlight a gamut of issues as reasons for the failure of financial liberalization. Chandrasekhar (2004) identifies seven reasons for the failure of financial liberalization in his seven Asian country study as outlined below:

i) The belief among depositors that government would protect their deposits in the event of financial intermediary failure leading to typical moral hazard problems in the financial sector.

ii) Financial liberalization was not accompanied by the creation of adequate supervisory and prudential regulatory system.

iii) With imperfect markets strengthening of oligopolistic power through the association of financial intermediaries and non-financial corporations, leading to improper distribution of funds.

iv) Despite short term booms, there was little mobilization of new capital or capital for new ventures.

v) While financial liberalization did encourage new kinds of financial savings, total domestic savings did not increase in many cases.

vi) 'Southern Cone experience' suggesting that deregulation in those countries did not lead to stable interest rates, that interest rates on the whole remained very high.

vii) Combination of free capital movements, and domestic and external systems characteristics by the moral hazard and other imperfections.

When looking at the above points given by Chandrasekhar (2004) one can argue that he had given reasons for the failure of financial liberalization based on the events that led to financial liberalization failure of Latin Americas' doomed financial liberalization experience ('Southern Cone experience') in the seventies and 'East Asian currency crisis' in the late nineties, in which all most all above cited points were rampant in leading to the financial crisis in those countries. However, Edwards (1989), Dooley (1997), Arestis (2005) and Mokhtar and Fatemah (2007), questions the validity of those seven reasons in the context of other developing countries. They attribute the failure of financial liberalization to incorrect policy procedure being followed in implementing (sequential problem) financial liberalization during the reforming periods distorting the financial liberalization outcomes. However, it should be noted that these research findings have not been sufficiently empirically tested, and substantiated. Thus, this study now attempts to empirically test the significance of the main reason (sequential problem) cited in the recent literature for the failure of financial liberalization based on the Sri Lankan experience.

3. Research Methodology

This study draws the attention to the sequential incorrectness of financial liberalization process which has been attributed repeatedly by many writers to the failure of financial liberalization. Thus, the study form the following hypothesis and testing them based on the Sri Lankan experience.

"Financial liberalization undertaken in Sri Lanka has not followed the correct sequence of financial liberalization".

3.1. Theoretical Framework

For this study we will use the model developed by Mokhtar and Fatemah (2007). In the model they state that "the majority of the authors (Edwards 1986, 1990; McKinnon 1982, 1991; Krueger 1986), with the rare exceptions (Lal, 1987), agree on the existence of four great sequences in the process of liberalization (Table 1). Accordingly it is identified that in liberalizing, domestic financial liberalization (sequence 2) must follow domestic real liberalization (sequence 1) and precede liberalization of foreign trade (sequence 3), like that of the capital movements (sequence 4).

Table 1: Optimal Sequence of Liberalization

Sector	Domestic	External
Real	**01.** - fiscal discipline (stability) - elimination of implicit and explicit taxes and subsidies - privatization	**03.** - liberalization of current transactions - creation of foreign currency exchange market and currency convertibility
Financial	**02.** - restructuring/privatization of the domestic bank system - creation/reactivation of the money market	**04.** - control elimination on capital movement - total currency convertibility

Source: Mokhtar and Fatemah (2007)

The important justifications available regarding the sequences highlighted by Mokhtar and Fatemah (2007), before adopting this sequence as the most widely accepted sequence in testing the hypothesis.

- McKinnon (1993) sighting the infamous ‘southern cone’ experience states that trade liberalization should only take place after the fiscal deficit is eliminated, emphasizing that government will face no need to borrow from abroad to finance (which leads to the over-borrowing syndrome[3]) its expenditure and, thus, the need for capital inflows during the transition will be minimum.
- McKinnon (1993) also states that second in order should be to get the domestic financial markets in line with the McKinnon-Shaw hypothesis (as sated under the literature review).

- Edwards (1989) extracting the comments of Frankel (1982) states that goods and asset markets clear at different speeds. While asset markets clear almost instantaneously, the attainment of equilibrium in the goods market usually takes some time. Thus, Frankel argued, a synchronization of the structural reform process will call for the goods markets (i.e., the current account) to be liberalized before the capital account.

- McKinnon (1993) and Edwards (1989) states that financial liberalization will result in capital inflow, and it will result in a real exchange rate appreciation which, in turn, deprotects the tradable sector. It is argued that in order to ensure success of the trade reforms, it is crucial to avoid real exchange rate overvaluation; hence opening up external financial sector should be the last in an optimal sequence of liberalization.

3.2 Conceptual Framework

Based on the above theoretical rationale a conceptual frame work for testing the hypothesis, 'The financial liberalization undertaken in Sri Lanka had not followed the correct sequence of financial liberalization.' is developed as shown below (Figure 1).

Based on conceptual framework (Figure 1), now, we can investigate into the sequential procedure of liberalization to determine whether Sri Lanka has followed the optimal sequence of liberalization or not in determining its success.

Thus, the study first looks at whether there is evidence to suggest that real sector liberalization has taken place for creating conducive environment for financial liberalization. Then, the study tries to find out evidence to decide whether the domestic financial sector has been liberalized. Next, evidences are collected to see whether the external sector has been liberalized. Finally, all three stages are looked together in substantiating the hypothesis, 'Financial liberalization undertaken in Sri Lanka has not followed the correct sequence of financial liberalization'.

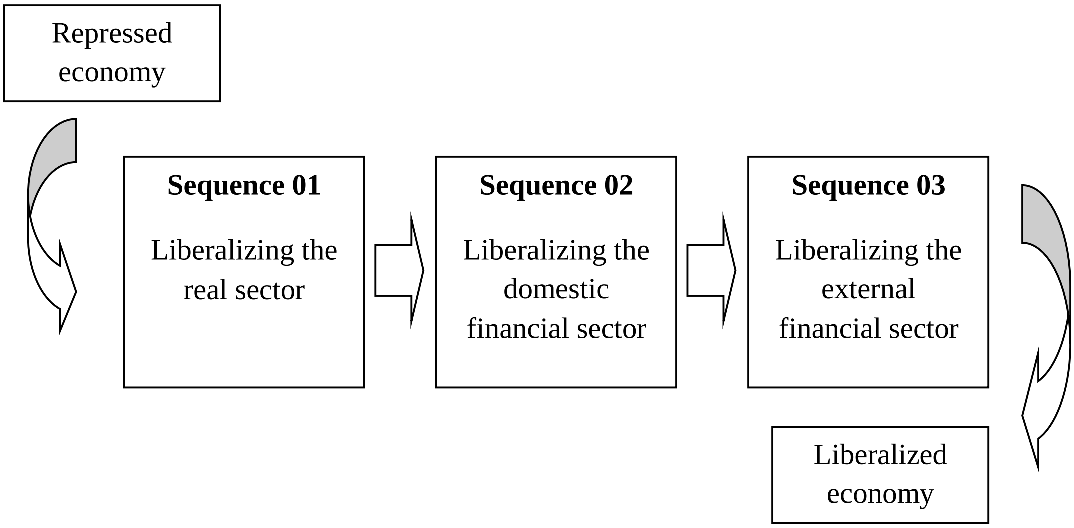

Figure 1: Conceptual Framework - Optimal Sequence of Liberalization

3.3 Procedure for Testing

In testing the hypothesis, the first challenge is the quantification of each liberalization sequence, allowing the comparison of sequence from 1977 up to know, in a chronological order as identified in the conceptual framework.

In this regard, for each liberalization sequence, a liberalization index is calculated, for which an inductive methodology is used, looking at events in liberalization during the period following 1977. So, for the three sequences identified (Liberalization of the real sector, Liberalization of the domestic financial sector, and Liberalization external sector), representative policy variables are firstly identified, and for each of those variables a value from 0 to 1 is assigned over time, with 0 indicating no liberalization (which is as at 1976) and 1 representing fully liberalized. Such assigning of values is based on the historical events of liberalization in Sri Lanka identified in chapter three and also supplemented with more information. But with some policy variables, liberalization done in phases and in some other cases more required for full liberalization, in-between values are assigned ranging from 0 upwards to 1.

But to take out any biasness in the values assigned, this study is to normalize each data set, thus leading to the reduction in variability, and then equal weight is applied to each variable under a given sequence in creating the individual indices. Once the individual indices are constructed for each sequence, descriptive statistics is used, keeping 1976 as the base year in testing the hypothesis.

3.4 Data

In calculating the a liberalization index for the first sequence (i.e., Liberalization of the real sector), four policy variables are looked at;

01. Balancing of central government finances (budget deficit)
02. Balancing of central government finances (government expenditure to per capita)
03. Privatization
04. Restructuring the tax system

In all four variables above, the data used includes two types, i.e. individual and time series data. The individual data are those used in identifying the policy changes identified through various writing with regard to Sri Lankan financial liberalization and the time series data used are extracted from the annual Central Bank Reports (various). Both the types of data mentioned above are looked at from post 1977 to 2008, where 1976 is kept as the base year.

In calculating the liberalization index for the second sequence (i.e. liberalizing of the domestic financial sector data) again four policy variables are looked at, viz;

01. Interest rate deregulation
02. Banking system reforms
03. Money market reforms
04. Capital market reforms

In all four variables above taken in constructing the domestic financial market liberalization index, the data used is individual data, identifying the policy changes through various writing with regard to Sri Lankan financial liberalization.

As for the last index calculation, for the third sequence (i.e. liberalization of the external financial sector), the following policy variables are taken;

01. Exchange rate deregulation
02. Current account liberalization
03. Capital account liberalization

In all above three variables taken in constructing the external financial market liberalization index, the data used is individual data, identifying the policy changes through various writing with regard to Sri Lankan financial liberalization.

4. Data Analysis

In this section, attention is drown in constructing the data to be used in calculating the liberalization indices for each sequence identified in the conceptual framework (i.e. liberalization of the real sector, liberalization of the domestic financial sector, and liberalization external sector).

4.1. Assigning of Values for Liberalization of the Real Sector – Lib. Real Index

Under 'liberalization of the real sector' four policy variables are used, viz., balancing of central government finances (i.e. budget deficit), balancing of central government finances (i.e. government expenditure to per capita), privatization, and restructuring the tax system.

4.1.1 Balancing of Central Government Finances (Budget Deficit) - BDF

Successive governments in Sri Lanka, through their budget speeches have emphasized, and declared budget discipline (i.e. narrowing down the budget deficit). But such claims are unlikely to allow us to assign values, knowing that the reality is farfetched from that of rhetoric. So, in order to identify whether there has been a real narrowing down of budget deficit, the budget deficit as percentage of GDP is taken, keeping 1977 as the base year (this is because the financial liberalization was officially declared during the budget speech made in November 1977, with policy implementation expected in the subsequent years), to which each subsequent years budget deficit/GDP is compared (See Figure 2).

When analyzing this data, there is not a single year during 31 years of post-financial liberalization that budget deficit as a percentage of GDP had gone down than that of 1977, indicating the non-achievement of the this policy variable (i.e. balancing of central government finances, meaning reduction of budget deficit). Hence, a score of 0 is assigned for this policy variable.

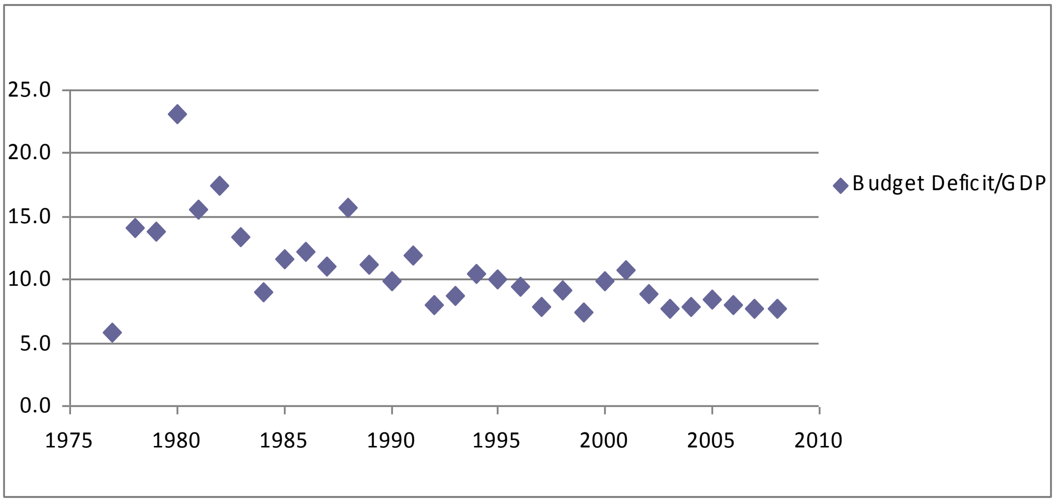

Figure 2: Budget Deficit (Percentage of GDP)

Source: Central Bank of Sri Lanka, Annual Reports (various)

4.1.2 Balancing of Central Government Finances (government expenditure as a percentage of GDP) - GEP/GDP

As for this policy variable, the expectation is that government expenditure (GEP) increase should be at a lesser pace than that of GDP growth. To identify whether this is the case, government expenditure is calculated as a percentage of GDP (Figure 3). Figure 3 shows that this desired outcome has appeared only from 2003 and even that is roughly a reduction of one forth to that of 1977, so from 1977 to 2002 the values given for this policy variable is zero (indication the non-achievement of this policy), but from 2003 a score of 0.25 is assigned to indicate the proportionate reduction of government expenditure to that of GDP.

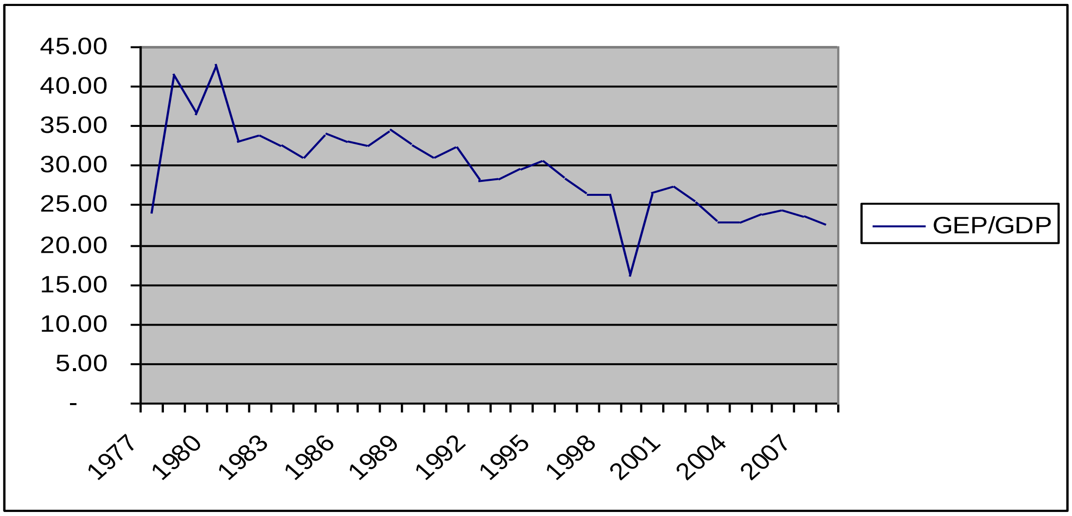

Figure 3: Government Expenditure (Percentage of GDP)

Source: Central Bank of Sri Lanka, Annual Reports (various)

4.1.3 Privatization - PVT

Privatization as a policy was announced clearly in 1987, and acceleration was commenced from 1994. But from 2006 privatization was impeded, clearly mentioning that it is one of present government's policies. Further, the sequence of privatization can be substantiated making reference to less revenue from privatization before 1994, and more after that, and then no revenue since 2006. So, a score of 0 is assigned from 1977 to 1986, 0.25 is assigned from 1987 to 1993, 0.5 is assigned from 1994 to 2005, and after 2005 again 0 is assigned in tracking the privatization policy variable.

4.1.4 Restructuring the Tax System - TBR

Restructuring of the tax system is evident with immediate action taken in 1977 to remove the quantity restriction, and replacing them with a tariff system (six-band duty system ranging from zero per cent to 500 per cent). Further amendments were done during the latter part of 1980, with regard to the tariff system. It should also be noted, that there have been a number of adjustments done to the tax system through amendments to the Tax Act by successive governments, but those amendments are not directly related to liberalization. Under this policy variable, it is also expected that tax-base in the post liberalization period should be widen so as to compensate for the revenue lost by privatization to the government. One way to measure this is to compare the total government revenue with that of tax revenue (Figure 4), and if the gap between the two has narrowed down, one can argue that tax-base has broadened. This indicates that the gap between the total income and tax income had narrowed by 1980 but subsequently the behavior at best looks erratic.

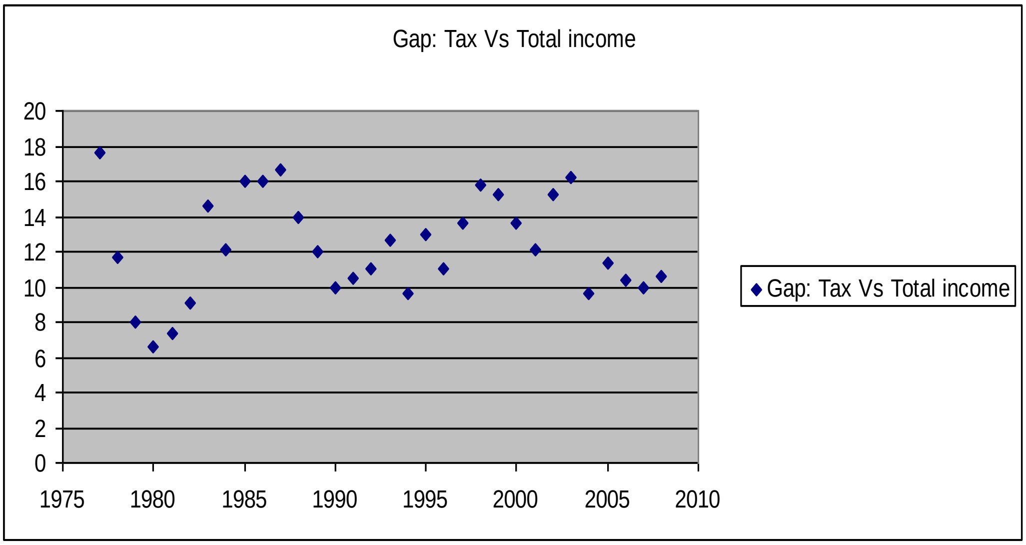

Figure 4: Gap between Total Government Revenue and Tax Revenue

Source: Central Bank of Sri Lanka, Annual Reports (various)

So, considering mainly the tariff changes done, 1977 to 1980 a score of .25 is assigned, and from 1981 to now a score of 0.5 is assigned, with no clear relationship seen as for tax reforms leading towards liberalization, the scores after 1981 is kept as it is continuously. With all four policy variables, data now looked at; under liberalization of the real sector, following scores are assigned to each policy variable as explained in detail above (See Table 2).

Table 2: Liberalization of the Real Sector – Scores Assigned

Year	BDF	GEP/GDP	PVT	TBR
1977	0	0	0	0.25
1978	0	0	0	0.25
1979	0	0	0	0.25
1980	0	0	0	0.25
1981	0	0	0	0.5
1982	0	0	0	0.5
1983	0	0	0	0.5
1984	0	0	0	0.5
1985	0	0	0	0.5
1986	0	0	0	0.5
1987	0	0	0	0.5
1988	0	0	0.25	0.5
1989	0	0	0.25	0.5
1990	0	0	0.25	0.5
1991	0	0	0.25	0.5
1992	0	0	0.25	0.5
1993	0	0	0.25	0.5
1994	0	0	0.5	0.5
1995	0	0	0.5	0.5
1996	0	0	0.5	0.5
1997	0	0	0.5	0.5
1998	0	0	0.5	0.5
1999	0	0	0.5	0.5
2000	0	0	0.5	0.5
2001	0	0	0.5	0.5
2002	0	0	0.5	0.5
2003	0	0.25	0.5	0.5
2004	0	0.25	0.5	0.5
2005	0	0.25	0.5	0.5
2006	0	0.25	0	0.5
2007	0	0.25	0	0.5
2008	0	0.25	0	0.5

Source: Assigned by the researcher based on data & evidence

4.2 Assigning of Values for Liberalization of the Domestic Financial Sector – Lib. Domestic Index

Under liberalization of the domestic financial sector there are four policy variables, viz., interest rate deregulation, banking system reforms, money market reforms, and capital market reforms. Under each sequence values are now assigned using the methodology explained in chapter four. But unlike in the previous section time series data is not looked at because it is assumed that individual data explains the policy variables here sufficiently.

4.2.1 Interest Rate Deregulation - IRD

As one of the key policy variable of financial liberalization, Sri Lanka started the deregulation of interest rates for the first time in 1977, further revisions were made in 1980, and there is clear evidence as outlined in chapter 03 that after 1988, interest rates were predominantly determined by the markets. But one can argue that a full deregulation of interest rates is still not there, looking at the level of Central Bank intervention in deciding interest rates even now, but one can also argue that interest rate deregulation is a sufficient condition for financial liberalization, but strong regulatory requirement is a more necessary condition. So, scores are now assigned to deregulation of interest rate in three trenches, viz., 0.33 for the 1977 first deregulation, 0.66 for the 1980 further deregulation, and starting from 1988 a score of 1 is assigned for the full liberalization of this policy variable.

4.2.2 Banking Reforms - BSR

By 1979, foreign banks were allowed to open branches, credit ceiling were removed, FCBUs were permitted, and inter-bank market for forward exchange transactions was introduced in 1983, and 1995 commercial banks were permitted to obtain foreign loans up to 5% of their capital and reserve. With number of significant reforms in 1979 a score of 0.5 is assigned starting from 1979, and from 1983 another 0.25 score is added. Full liberalization is envisaged from 1995 as for banking reforms policy variable.

4.2.3 Money Market Reforms - MMR

As for money market, discount and re-discount windows were opened by the Central Bank in 1981, which enhanced the secondary market for treasury bills. Weekly primary auctions for treasury bills were started in 1986, making the market more reliable. Reverse repurchase market was setup in 1995. As for this policy variable, score of 0.33 is assigned from 1981, with the development in 1986 a further score of 0.33 is added (taking the total score to 0.66), and with the reverse repurchase market setup in 1995 fully liberalization of this policy variable is assumed leading to a score of 1 assigned from 1995.

4.2.4 Capital Market Reforms - CMR

Colombo stock exchange Ltd. was established in 1982, Central depositary system was introduced in 1991, automated trading commenced in 1997. Commercial banks were allowed to issue certificates of deposits from 1991, Treasury bond market was established in 1997. But it should also be noted that, it is widely accepted that Sri Lankan capital market is not developed enough, the particularly highlighted factor is that even though the government bond market is very active, the corporate bond market is not active. It is also argued that a very limited number of companies active in the stock market also indicate that capital market reforms had not attracted the majority participation. In the light of the above information, from 1982 a score of 0.25 is assigned, and in 1991 and 1997 a further 0.25 each is added. This brings the assigned score values to a maximum of 0.75, keeping in line with the deficiencies highlighted under capital market reforms. With the above detail analysis, under liberalization of the domestic financial sector, following scores are conferred to each policy variable (Table 3).

Table 3: Liberalization of the Domestic financial Sector – Scores assigned

Year	IRD	BSR	MMR	CMR
1977	0.33	0	0	0
1978	0.33	0	0	0
1979	0.33	0.5	0	0
1980	0.66	0.5	0	0
1981	0.66	0.5	0.33	0
1982	0.66	0.5	0.33	0.25

Year	IRD	BSR	MMR	CMR
1983	0.66	0.75	0.33	0.25
1984	0.66	0.75	0.33	0.25
1985	0.66	0.75	0.33	0.25
1986	0.66	0.75	0.66	0.25
1987	0.66	0.75	0.66	0.25
1988	1	0.75	0.66	0.25
1989	1	0.75	0.66	0.25
1990	1	0.75	0.66	0.25
1991	1	0.75	0.66	0.5
1992	1	0.75	0.66	0.5
1993	1	0.75	0.66	0.5
1994	1	0.75	0.66	0.5
1995	1	1	1	0.5
1996	1	1	1	0.5
1997	1	1	1	0.75
1998	1	1	1	0.75
1999	1	1	1	0.75
2000	1	1	1	0.75
2001	1	1	1	0.75
2002	1	1	1	0.75
2003	1	1	1	0.75
2004	1	1	1	0.75
2005	1	1	1	0.75
2006	1	1	1	0.75
2007	1	1	1	0.75
2008	1	1	1	0.75

Source: Assigned by the researcher based on data & evidence

4.3 Assigning of Values for Liberalization of External Sector - Lib. External Index

Under Liberalization of external sector there are three policy variables, viz., Exchange rate deregulation, Current account liberalization, and Capital account liberalization

4.3.1 Exchange Rate Deregulation - ERC

Exchange rate determination has been gradually entrusted with the market forces by moving to a managed floating exchange system since 1977. Prior to this the dual exchange rate system which was functioning since 1968 was unified in 1977. A floating / flexible exchange rate system has now been in place since January 2001. For this policy measure a score of 0.25 is assigned in considering the managed floating system introduce in 1977, and a score of 1 is assigned starting from 2001, as this policy variable was fully liberalized by 2001.

4.3.2 Current Account Liberalization - CUL

The process of current account liberalization in Sri Lanka was started from 1977, with the declaration of open economic policies by the government (as explained in chapter three), and it was accelerated since 1993. At present, foreign exchange transactions in the current account are free and the authorized dealer banks have been permitted to use their discretion to engage in buying and selling foreign exchange in designated currencies with the customers, on the basis of documentary evidence on the need for such transactions. Thus, for this policy variable considering 1977 immediate level of liberalization undertaken a 0.5 score is assigned and a further 0.5 is added in 1993 considering the fact that the current account was fully liberalized after 1993.

4.3.3 Capital Account Liberalization – CAL

Another important part of the external account liberalization is that of capital account which started with deregulation of share investment external rupee account in early 1990s. And from the year 2000 further measures were taken to liberalize the capital account by allowing the non-nationals to invest in the Colombo Stock Market. At present, foreign capital inflows in equity is largely free while deposits in foreign currency are permitted under specific schemes. With respect to the early 1990s development, as for this policy variable a score of 0.25 is assigned, and then a further 0.25 is added from 2000. But considering the fact that, the debt capital and other capital transactions fall within the control where the prior approval is required, capital account is taken as still not fully liberalized.

With the above detail analysis, under liberalization of the external sector, following scores are assigned to each policy variable (see Table 4).

Table 4: Liberalization of the External Sector – Scores assigned

Year	ERC	CUL	CAL
1977	0.25	0.5	0
1978	0.25	0.5	0
1979	0.25	0.5	0
1980	0.25	0.5	0
1981	0.25	0.5	0
1982	0.25	0.5	0
1983	0.25	0.5	0
1984	0.25	0.5	0
1985	0.25	0.5	0
1986	0.25	0.5	0
1987	0.25	0.5	0
1988	0.25	0.5	0
1989	0.25	0.5	0
1990	0.25	0.5	0.25
1991	0.25	0.5	0.25
1992	0.25	0.5	0.25
1993	0.25	1	0.25
1994	0.25	1	0.25
1995	0.25	1	0.25
1996	0.25	1	0.25
1997	0.25	1	0.25
1998	0.25	1	0.25
1999	0.25	1	0.25
2000	0.25	1	0.5
2001	1	1	0.5
2002	1	1	0.5
2003	1	1	0.5
2004	1	1	0.5
2005	1	1	0.5
2006	1	1	0.5
2007	1	1	0.5
2008	1	1	0.5

Source: Assigned by the researcher based on data & evidence

4.4 Liberalization Index

This computation now gives three indices, indicating the progress of the three optimal sequences required, as undertaken in converting the repressed Sri Lankan economy to a liberalized economy.

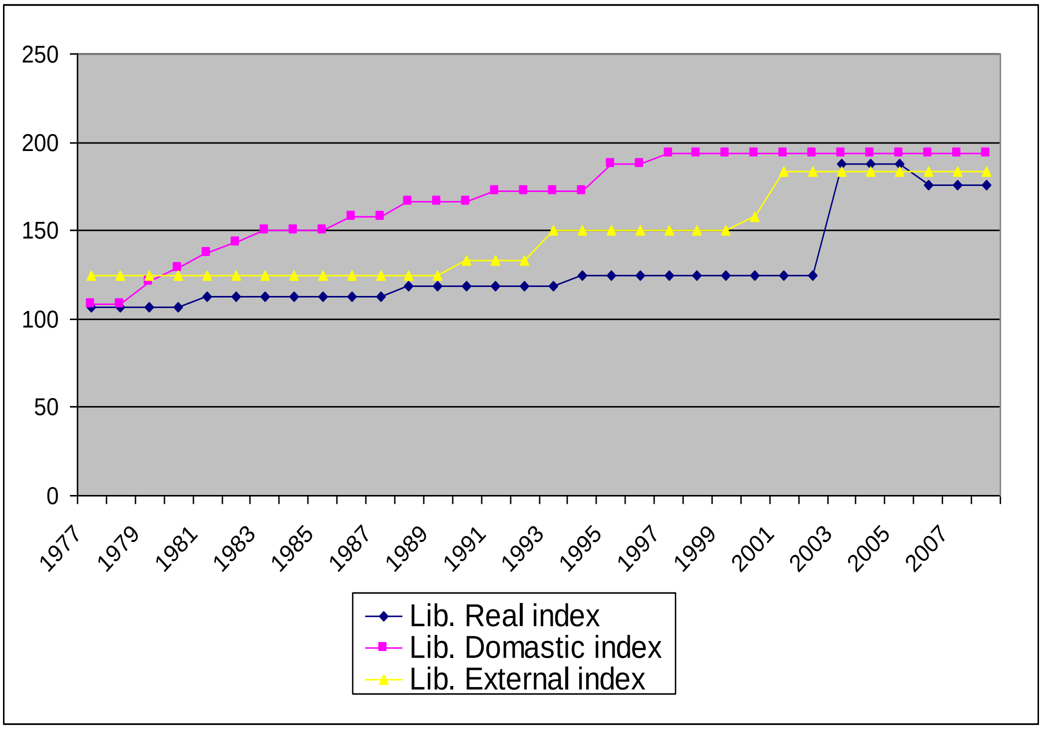

Figure 5: Sri Lankan Liberalization Index - Real Sector /Domestic Sector/ External Sector

Source: Calculated by the researcher based on data & evidence collected

5. Conclusion

As for the conceptual framework, real sector liberalization should precede domestic financial sector liberalization, and domestic financial sector liberalization should precede the external sector liberalization.

The evidence provided here (Figure 5 / Appendix 01), through the liberalization indices calculated under each sequence, clearly show that, Sri Lanka from the onset of liberalization has not followed the widely accepted sequence of liberalization. And, not only at the onset, for 31 years subsequent to the financial liberalization except for handful of years, there has been no evidence of policy makers even attempting to achieve the correct sequencing. Thus, allowing the study to accept the first hypothesis, 'financial liberalization undertaken in Sri Lanka has not followed the correct sequence of financial liberalization'. Thus, it is possible to conclude that non-following of the correct sequence in liberalization in Sri Lanka has considerably contributed for non-achievement of the desired outcomes of financial liberalization.

Further, it should be noted that after 1980 there is a clear indication that the domestic liberalization has overcome that of external sector liberalization. However, it seems that real sector liberalization (sequence one) has not liberalized sufficiently throughout the time although it should be the very first condition to be met for stabilizing the post liberalized economy. But there is some encouraging signs starting from 2003 where real sector liberalization for the first time had overtaken the external sector liberalization (See Figure 5).

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Appendix 01

Table 01: Liberalization Indices - Final Values

Years	Lib. Real index	Lib. Domestic index	Lib. External index
1976	100.00	100.00	100.00
1977	106.25	108.25	125.00
1978	106.25	108.25	125.00
1979	106.25	120.75	125.00
1980	106.25	129.00	125.00
1981	112.50	137.25	125.00
1982	112.50	143.50	125.00
1983	112.50	149.75	125.00
1984	112.50	149.75	125.00
1985	112.50	149.75	125.00
1986	112.50	158.00	125.00
1987	112.50	158.00	125.00
1988	118.75	166.50	125.00
1989	118.75	166.50	125.00
1990	118.75	166.50	133.25
1991	118.75	172.75	133.25
1992	118.75	172.75	133.25
1993	118.75	172.75	149.91
1994	125.00	172.75	149.91
1995	125.00	187.50	149.91
1996	125.00	187.50	149.91
1997	125.00	193.75	149.91
1998	125.00	193.75	149.91
1999	125.00	193.75	149.91
2000	125.00	193.75	158.16
2001	125.00	193.75	183.16
2002	125.00	193.75	183.16
2003	188.04	193.75	183.16
2004	188.04	193.75	183.16
2005	188.04	193.75	183.16
2006	175.54	193.75	183.16
2007	175.54	193.75	183.16
2008	175.54	193.75	183.16

Source: Calculated by the researcher based on data & evidence collected