Implications of Income Tax Reforms in 2011, on Revenue and Equity in Sri Lanka[1]

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Introduction

The need to reduce budget deficits by increasing government revenue was a challenge facing the Sri Lankan government over a long period of time. With the intention of increasing tax revenue while keeping the tax rates competitive, 2011 tax reforms, was proposed to remove the tax exception given to the public sector employees. At the same time tax rates have been reduced with the aim of improving tax compliance of PAYE tax payers.

"The assessment of tax systems draws on two fundamental principles; efficiency and equity. The former relates to the presence of distortions in the economic behavior of agents, while the later focuses on distributive justice" (Duclos and Araar, 2006: p127). The available literature on the efficiency and equity of income taxes in the country are mainly descriptive (see for example, Presidential Commission on Taxation, 2009). This study uses Household Income and Expenditure Survey (HIES)-2006/07 data[2] to examine how 2011 tax reforms affect tax revenue and redistribution of income.

Objectives

1. To examine the impact of 2011 tax reforms on tax revenue, tax base and redistribution of income.
2. Tax simulation analysis to project possible tax reforms.

Methodology

In this study, monthly gross salary was calculated based on the monthly salary received by individuals as reported in HIES data. Then to assess implications of 2011 tax system when compared to 2007 tax system, proxy income for the year of 2011 was constructed

by inflating gross income of 2006/07 data[3]. To examine the impact of 2011 tax revisions, 2007 (TS-2007) and 2011 (TS-2011) tax systems were applied for 2011 proxy income.

The literature gives two main ways of assessing progressivity; Tax Redistribution (TR) approach, and the Income-Redistribution (IR) approach (Duclos and Araar, 2006). Using Lorenz (L) and Concentration curves (C) the following rules were used to asses progressivity at the global level.

If gross income is denoted by X and the tax associated with that income is denoted by T(x), the income net of taxes will be given by $N(X) = X - T(X)$.

Tax is TR progressive if: $0 < L_X(p) - C_T(p)$ for all $P \in \left]0,1\right[$

Tax is IR progressive if: $0 < C_N(p) - L_X(p)$ for all $P \in \left]0,1\right[$

Results

Under the 2011 tax reforms the tax revenue has fallen far below the 2007 tax system (Rs.12.2 billion to Rs.6.3 billion). This is due to two main reasons. Under the tax system introduced in 2011, the per annum tax free thresholds was increased (to Rs.600,000 from the previous Rs.300,000) and the tax rate was reduced to 4%-24% (from 5%-35%).

Table 1: Annual PAYE Tax Revenue and Their Distribution

|	TS-2007	TS-2011
Tax Revenue (Rs. in millions)		
Government		1,332
Semi-government	1,160	247
Private	11,000	4,728
Total	12,160	6,307
Distribution of PAYE Tax (%)		
Income quintile		
poorest	0.4	0.2
2nd quintile	0.3	0.0
3rd quintile	0.8	0.1
4th quintile	5.7	3.2
richest	92.8	96.5

Source: Own calculations using HIES-2006/07 data.

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[3]Prices adjusted using CCPI January 2007 to January 2011, as survey period was July 2006-June 2007

Distributions of two tax systems are alike. Around 93 percent of the PAYE tax is paid by the richest quintile while 3%-6% is paid by the formal sector workers of 4th income quintile. Further, 4th income quintile PAYE tax contribution is higher under TS-2007, due to the lower threshold level compared to TS-2011 tax system.

Both tax systems are progressive in terms of Income-Redistribution (IR) as well as Tax-Redistribution (TR). In other words, under the considered tax systems, poor pay less taxes than the non-poor, relative to their gross income while poor's net income share is higher than their share of gross income. TS-2007 is more progressive under IR approach (see Figure 1).

Figure 1: Income Redistribution (IR)
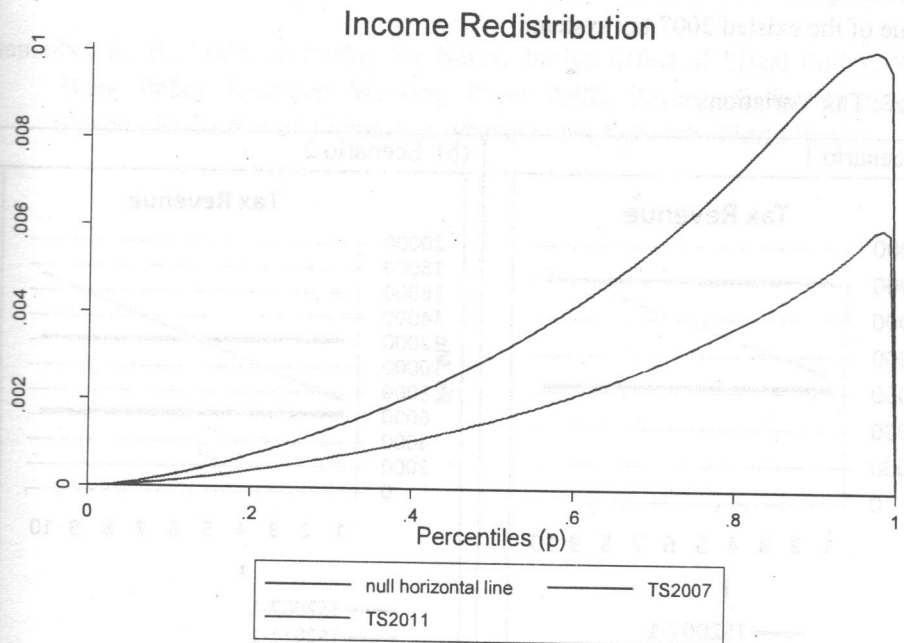
Source: Own calculations using HIES-2006/07 data.

Results have empirically shown that 2011 tax reforms reduces tax revenue and tax base attributable to increased tax free threshold and reduced tax rates. The proposed tax reforms in 2011 have no capacity to positively turn around the revenue needs of the economy as expected if not revised. Therefore, predictive findings of tax simulation analysis was carried out for 2011 tax system, to project which strategy could make the proposed reforms workable.

Tax simulation analysis was carried out, under two scenarios as described below.

<u>Scenario 1</u>

Tax rates of TS-2011 are increased by i units where i=1,2,......10 (eg. t tax rate will be t+i); while keeping the threshold level constant.

<u>Scenario 2</u>

Tax rates of TS-2011 tax system is increased by i units where i=1,2,......10; while lowering the threshold level from Rs.600,000 to Rs.400,000.

According to the findings of the tax simulation analysis, increasing the existing tax rates for each tax band by 9 units while keeping threshold level constant can achieve the tax revenue of the existed 2007 tax system (Figure 2). In this proposed method tax base remain the same tax base of TS-2011. On the other hand, increase of tax rates by 6 units and lowering the tax free threshold (from Rs.600,000 to Rs.400,000) can achieve the tax revenue of the existed 2007 tax system.

Figure2: Tax Variations
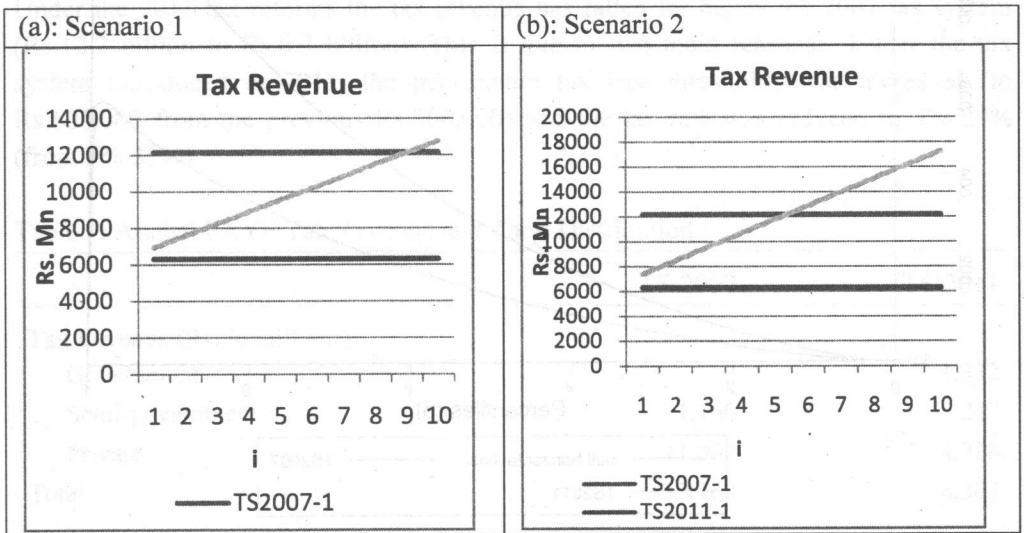
Source: Own calculations using HIES-2006/07 data.

Conclusion and Policy recommendations

Taxing the previously tax exempt, public servants was one of the key policy decisions made in 2011 reforms. This resulted correcting the long standing discrimination between public and private sectors. However, the results indicate that compared to the 2007 tax system, 2011 tax reforms reduce tax revenue. This is mainly because, under the 2011 tax system the tax rate is reduced and the tax free threshold is increased.

Tax structural changes are recommended. Revenue increase can be achieved either keeping tax base same (that is, with the revised threshold level) but increasing the tax burden or increasing both tax base and tax burden.

References

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