Institutional Reform In Tax Enforcement: An Analysis Of The Mauritius Revenue Authority Following The Tax Reform Of July 2006

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ABSTRACT

Over the years Mauritius has been emerging as one of the strongest economies in Sub-Saharan African countries. The Mauritian Government, as part of its initiatives to craft Mauritius as a more diversified, open and internationally integrated economy, has updated its tax system. The objective of the Mauritius Revenue Authority (MRA), as an agency of the State for revenue collection and the administration of revenue laws, is to transform revenue administration in Mauritius so as to meet international standards. The main aim of this study is to assess the effectiveness of the MRA following the tax reform of July 2006. Relevant literatures were included in this study providing an understanding of the issues and alternatives involved in the tax reform. A modified questionnaire was developed dividing into two parts, covering the eight aspects to measure the effectiveness and efficiency of the MRA. Data collected was analyzed using the Statistical Package for the Social Sciences Software, specifically the Cronbach's Alpha, the Pearson's Correlation analysis and the Cross Tabulation analysis. Based on our findings this study has found that the MRA has been successful in implementing different reform strategies and has brought a clear understanding of the Tax reform to which it brought positive results to the MRA.

Keywords: Mauritius Revenue Authority (MRA); Tax Reform and Tax system

1. INTRODUCTION

In recent years developed countries have shown huge interest in the restructuring of the public sector functions since governments aim to deliver more efficient services at a lower cost to citizens. Traditional Government structures have not been able to respond effectively to the rapidly-changing needs of the public and to the challenges public services face from an ever evolving economic and social environment. Therefore, an emerging trend for governments in developed countries has been to delegate powers to agencies acting on their behalf. Mauritius, no exception to this general rule, has chosen to address these problems and embark upon the path to tax administration reform by setting up a Revenue Authority, which became operational in July 2006. The Mauritius Revenue Authority was established under the MRA Act of 2004. The MRA, as an agency of the State for revenue collection and the administration of revenue laws, enjoys the full support and commitment from Government in its objective to transform revenue administration in Mauritius so as to meet international standards. Moreover, the tax reforms are designed not only to improve revenue collection, but also to bring about greater fairness in the tax system, increase transparency and facilitate tax payers' compliance.

Many developing countries implemented an array of major economic reforms during the 1980s and the 1990s. Tax reforms shaped these reforms. During the 1990s tax reforms became part of the larger structural adjustment programmes and incorporated in the economic restructuring agreements with the International Finance

Institutions (Obwona & Muwonge, 2002b; Tanzi & Zee, 2000; Thirsk, 1993). Another reason for the reforms was due to increased awareness of the extensive administrative problems and constraints connected with tax systems in many developing countries, resulting in widespread tax evasion and enforcement problems. Thus, developments brought the issues of simplification, tax administration and tax enforcement to the core of central government tax reforms. Until recently, these reforms have almost entirely focused on the central government tax system.

Despite important differences in their economic and cultural background, developing countries have attempted to modify their tax systems in roughly the same direction as argued by Olson, P (2002). Among other factors which motivated tax reforms was the desire to maintain or enhance international competitiveness as more and more developing countries sought to participate in the process of globalization as claimed by Everson, Mark W (2005). Rationally, discussion of issues in tax reforms should include an assessment of the role of taxation as a macroeconomic tool. In the past, tax systems were used in developing countries to serve multiple objectives. These included, in addition to mobilization of resources to finance government expenditure, promoting savings and investment; inducing savings in particular forms to facilitate the process of channeling savings into investment; directing investment into desirable activities; encouraging the use of labour-intensive production techniques; bringing about greater equity in the distribution of income; and correcting externalities.

Taxation was viewed as a powerful policy instrument to serve “the dual role of securing resource transfers to the public sector for application to planned uses and inducing the private sector to operate in conformity with plan objectives” (ESCAP, 1983, p.405). There appears to have been a fundamental shift in the perception of the role of taxation during the last two decades. The view that has gained wide acceptance in both academic circles and international institutions is that the tax system should be assigned a much narrower role; it should focus on raising revenue. To illustrate, Burgess and Stern (1992) maintained that the key purpose of taxation is to raise resources to finance government expenditure. They perceived the problem of tax design as a way of raising resources in a manner which is administratively and politically feasible and which promoted equity and efficiency as far as possible. A recent publication by the International Monetary Fund (IMF) notes that taxation creates distortions and the main object of tax policy is to design a system that raises enough revenue to meet a Government’s revenue target while minimizing the level of associated deviations as explained by Mackenzie, Orsmond and Gerson, (1997).

The study shows very appealing results that is it is confirmed that the Tax reform of July 2006 has undeniably proven to be positive in relation to the effectiveness of the MRA. The methodology used for this study includes a survey questionnaire. The questionnaire is addressed to the staff of the MRA in view of collecting qualitative as well as quantitative data. Besides, an econometrics analyses has also been conducted based on primary data collected from the survey. The analysis of the questionnaires have been carried out using the Statistical Package for the Social Sciences (SPSS), which takes into account the possibility of dynamics feedbacks among the variable in the model. The remainder of the paper is organized as follows. Section 2 provides a brief on taxation as an essential ingredient for development, Section 3 explains the recent reforms and the level of taxes worldwide, Section 4 describes the methodology and the econometric analysis. In section 5, we provide discussion and analysis on the results. We conclude in section 6.

2. TAXATION AS AN ESSENTIAL INGREDIENT FOR DEVELOPMENT

Most sub-Saharan countries face a trilemma with respect to taxation: Firstly there is an imperative need for more revenues to enable resource for poor states to provide and maintain even the most basic public services. Secondly the reality is, however, that those with political power and economic ability are few and do not want to pay tax. Thirdly those without political power have almost nothing to be taxed, and do also resist paying taxes. The trilemma is amplified by three trends common to many African countries as explained by Fjeldstad *et al*., (2000). To begin with, a recent process of democratization will have profound implications for taxation. Secondly, there are aid flows, which presently constitute more than half of state budgets in some countries are declining, making tax revenues even more important for state incomes. The third trend is that globalization leads to increasing integration of the world’s goods and capital markets.

According to the National Commission on Economic Growth and Tax Reform (1996), these developments impose severe constraints on the ability of developing economies to choose their own tax policy directions. It follows that the challenge for taxation is to raise domestic revenues from consenting citizens in poor and increasingly open economies. It should be added that most of these economies are not growing rapidly. Elected governments in African countries are therefore facing hard choices about taxation. These decisions will most likely have profound impacts on the future of democratization itself and on public service provision. They will also have considerable implications for the politics and sustainability of aid. The tax policies now recommended for African countries are much the same as those which are advocated for developed countries. In most cases this involves the introduction of measures to broadening the tax base while simultaneously flattening the tax rates (Heady, 2002; Bebi, 2001). Modern democratic societies need a modern, independent public administration which will satisfy the public's requirements in the best possible manner. On one hand, it must be effective and efficient and on the other, it must satisfy the self-governing requirements, fairness and justice and defend the achievements of the general public. According to Tanzi and Pellechio (1995), tax administration must collect revenues in accordance with the law and, at the same time, provide an optimum public service. It must also pay attention to the administrative and compliance costs of taxation. In an attempt to meet these requirements, tax administrations are resorting more and more often to the implementation of principles and methods.

An aspect that has lately become increasingly prominent is the need for greater independence and privatisation in tax administration. Autonomy in tax administration can be achieved by making tax administration financially and administratively independent of the ministry of finance, following the example of the central bank. As discussed in Koprić (1997) the final goal is to offer a better service both to the state and to taxpayers.

3. RECENT REFORMS AND THE LEVEL OF TAXES WORLDWIDE

It is interesting to note that none of the reform guidelines mentions any "ideal" level of taxation. This exclusion may be because of three interrelated, but somewhat distinct reasons.

First, it is impossible to lay down any specific amount or proportion of GDP that should be raised as tax revenue by the Government. In the past, efforts were made in this direction through estimation of "tax capacity" by applying cross-sectional parameter values of explanatory variables such as per capita income, sectoral distribution of income and openness of the economy. Raja Chelliah has been one of the pioneers in this line of investigation (Chelliah, and others, 1975). However, there is an increasing recognition that tax capacity depends not only on tangible economic characteristics, but also on a variety of non-economic factors such as political will, administrative efficiency and culture of tax compliance.

Second, the new reform paradigm looks upon taxes primarily as a means to finance government expenditure. As already noted, containment of government expenditure has also been an important feature of fiscal policy reforms. Nevertheless, it is acknowledged that a minimal level of government expenditure is inevitably required in every country in order to enable the Government to fulfill certain inescapable responsibilities, including preservation of territorial integrity, maintenance of law and order, provision of public/merit goods and regulation of certain undesirable activities. These imperatives differ from country to country. The acceptance of taxation primarily as an expenditure-financing instrument implies that the capacity to contain government expenditure is a major determinant of the level of taxation. The other determinants would be the limits to alternative ways of financing (for example, non-tax revenues, monetizing deficit and domestic or external borrowing) as argued by Dubin, J., M. Graetz, and L. Wilde (1990).

From the above view the notion that the level of expenditure is autonomously determined. An alternative view is that the level of expenditure adjusts to receipts. The positive relationship between increased tax revenue and increased current expenditure was noted much earlier. The nature of the relationship between tax revenue and government expenditure is significant because of differences in policy implications. The policy implication of the line of causation running from tax revenue to government expenditure is that effort to contain government expenditure has to start by cutting receipts as argued by Koren and Stiassny (1998).

The third reason for not prescribing any guidelines for the overall level of taxes may be the perception that policy makers should not make any conscious effort to reach any particular tax target; reforms in tax structure would simultaneously determine the level. In general, one of the important motivations behind tax reforms in most countries has been to increase the share of tax revenue in GDP. This is a major rationale behind the introduction of a broad-based VAT. Even in the case of income taxes, one of the justifications provided for reductions in the tax rates, number of tax brackets, degree of progressivity, top marginal rates and exemptions and allowances has been the potential for higher yield, particularly because of the presumed validity of the so-called "Laffer curve" phenomenon.

4. METHODOLOGY

The main objective of this research study is to provide an understanding of the issues and alternatives involved in the Mauritian tax reform while investigating on the effectiveness of the MRA following the tax reform. Besides, this study seeks to shed lights on the MRA officers' perceptions of the measures advocated through the reform. The methodology used for this project includes a survey questionnaire. The analysis of the questionnaires have been carried out using the Statistical Package for the Social Sciences (SPSS), which takes into account the possibility of dynamics feedbacks among the variable in the model.

The questionnaire consists mostly dichotomous and thirty-two close ended questions. It is divided into two parts. The first part covers the basic information about the respondent. The second part of the questionnaire comprise of the eight indicators that have been used to assess the effectiveness of the new tax reform. Prior to using the survey questionnaire a pilot testing has been conducted in order to ascertain the objectives of study, the questionnaires were modified accordingly and were distributed at the MRA. The following indicators have been used to assess the effectiveness of the new tax reform (2006) at the MRA as per American Institute of Certified Public Accountant (2009).

Simplicity

Tax laws should be designed to facilitate taxpayers to understand the rules in accordance with their conditions and comply with them in the most cost effective manner. Simplicity help in reducing the number of errors, improves compliance, and increases value for the system. Even if a strictly simple tax system may not be realizable, the level of complexity should be appropriate enough for the taxpayer or the transaction concerned. Tax laws that have an impact on multinational corporations are more complex compared to those affecting an average person. Simplicity helps in accomplishing many of the remaining tax policy goals, including transparency, minimizing noncompliance, cost effective collection, and payment convenience. When a tax system is simple, the taxpayers are in a better position to anticipate the tax consequences of their economic choices.

Fairness and Equity

Fairness states that alike situated taxpayers should be taxed similarly, which can be challenging to define. Some people would consider an income tax system with few exclusions and deductions as fair while others might view a single-rate income tax as fair. A fair tax system is usually judged by simply looking at the horizontal and vertical equity. According to the AICPA there are the following seven dimensions of equity and fairness that should be assessed when considering tax law proposals: Exchange equity and fairness, Process equity and fairness, Horizontal equity and fairness, Vertical equity and fairness, Time-related equity and fairness, Inter-group equity and fairness, Compliance equity and fairness. Generally, since taxpayers are subject to a range of different types of taxes, equity is most likely to be best measured by considering the full range of taxes imposed, rather than looking at a single tax.

Economic Growth and Efficiency

A tax system should not hold back or reduce an economy's productive capacity. The tax system should promote the taxing jurisdiction's economic goals, for instance economic growth, capital formation, and international competitiveness. In most cases, one industry or type of investment should not be favored at the expense of others under a tax system. By deciding what to tax and at what rate, policymakers can bring about the intended economic results and avoid unintended consequences.

Transparency

A taxpayer should be aware the tax policy governed by his country. Transparency allows taxpayers to identify the true transaction costs and to realize the impact of the tax system. As an essential partner, transparency helps in tax simplification as taxpayers find it difficult to assess whether and when they will be taxed due to complex provisions.

Cost-Effective Collection

Collection of tax costs should be kept to a least amount for both the government and taxpayers. Closely associated to the principle of simplicity, consideration should be provided to both the number of revenue officers needed to administer the tax and to the compliance costs for taxpayers.

Impact on Government Revenue

With certainty, the government should be able to establish, the amount and timing of tax collections. As expected, policymakers need to constantly achieve a desired level of revenue within a sensible range. Normally, a steadier source of revenue can be achieved through a tax system that mixes a variety of tax sources.

Certainty

Taxpayers should to be able to compute their tax liability. The amount of tax owed and when and how the tax must be paid need to be spelled out clearly in the tax rules. Uncertainty may occur if taxpayers can hardly measure the tax base, identify the applicable tax rate, or predict the tax consequences of a transaction.

Payment Convenience

Convenient tax payment guarantees compliance. The optimal payment mechanism would consider the liability amount, the best tax collection point, and the frequency of collection.

Data analysis

For the data analysis, the reliability of the scales is evaluated using Cronbach's alpha[1], which measures the consistency with which respondents answer questions within a scale. It consists of estimates of how much variation in scores of different variables is attributed to chance or random errors (Selltiz, Wrightman and Cook. 1976). As a general rule, a coefficient greater than or equal to 0.7 is considered acceptable and a good indication of construct reliability (Nunnally, 1978).

Limitation of the study

This research was unfortunately subject to certain limitations. First of all, it was impossible to analyze 100% of the data. The data set consisted of thirty-five observations only and the sample size directly affects the correctness and the statistical result of the regression exercise to be carried out. Besides, some of the MRA staffs could not completely respond to the questionnaire for the reason of having a tight agenda.

5. ANALYSIS AND DISCUSSION

The aim of the survey was to gain the opinion of the staff of the MRA. The majority of the respondents are in the age group of 40-50. This can be explained by the fact that this age group being more experienced at the MRA, is in good position to really give their view concerning the extent to which the MRA has been effective following the reform since July 2006.

[1] See Cronbach, L.J. (1951). "Coefficient alpha and the internal structure of tests" *Psychometrika*, 16(3), 297 -334

The questionnaire was distributed in almost all departments at the MRA. This was done to have differed views from different departments to test our hypothesis of whether MRA has become more effective due to the tax reform of July 2006. Hence, most of the response came from the Fiscal Investigation Department which is 31.4%, followed by the Human Resource Department with 20% response rate. The overall Cronbach's alpha for the eight aspects is (0.897) and Cronbach's alpha based on standardized items equals to (0.937), see Table 1.

Table 1 : Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on standardised items	N of Items
0.897	0.937	32

The Econometric model

Efficiency of the MRA= f (simplicity + equity and fairness + economic growth + transparency + cost efficient + Government revenue + certainty + tax evasion)

$$E = S + EF + EG + T + CE + GR + C + Ev + \lambda$$

In order to test the effectiveness of the MRA following the July 2006 Mauritian Tax Reform, we have used more than one variable to examine the contribution of independent variables concerning the regression may suggest multicollinearity problem among these variables. A multicollinearity test was carried out to assess the degree of correlation among variables and finally Pearson's correlation was used to analyze correlations among the independent variables, namely (S), (EF), (T), (CE), (GR), I and (Ev). Pearson's Correlation Coefficient is being used to measure the strength of the linear relationship between the variables. The use of a two-tailed test shows that if the two means are different from each other (i.e. from different populations), or from the same population. (Refer to correlation table in appendix D)

According to Anderson, Sweeney and Williams (1990) the "rule of thumb" states that any correlation coefficient of more than (0.7) indicates a potential problem. However, both Gujrati and Judge (1988) consider (0.8) to be the critical threshold for serious problems of multicollinearity. Pair wise correlation between two variables in our sample varies from -0.006 to 0.385. Multicollinearity is possible if the correlation between two variables is very high. High multicollinearity increases variances of OLS estimator and lowers the significant levels of estimates. In sum, the results of correlations presented in correlation table suggest that there is no problem of multicollinearity among the independent variables.

Table 2: Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	1.875	1.200	4.600	3.400	3.833	.799	32
Item Variances	.606	.200	2.300	2.100	11.500	.296	32
Inter-Item Covariance	.130	-1.300	1.400	2.700	-1.077	.110	32

The table 2 above shows the mean of responses on the eight aspects of efficiency and effectiveness of the MRA following the Tax reform (2006) is 1.875. The respondent's answers on these eight aspects indicate that the MRA staff understands the effectiveness of the reform at The MRA, since there have been positive answers. The highest mean is (4.60) and the lowest mean is (1.20).

R^2 (R square) value

The Table below provides a further analysis of the eight aspects that were considered to measure the efficiency and effectiveness of the MRA after the tax reform (2006).

Table 3: Summary model of regression result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.082[a]	.007	-.024	.889	
2	.109[b]	.012	-.052	.901	
3	.129[c]	.017	-.082	.913	
4	.185[d]	.034	-.099	.920	
5	.269[e]	.072	-.093	.918	
6	.278[f]	.077	-.128	.932	
7	.306[g]	.094	-.150	.942	
8	.314[h]	.098	-.190	.958	2.101

$H_{o:}$ There is no significant relationship between the Tax reforms (2006) and efficiency at the MRA.

$H_{1:}$ There is significant relationship between the Tax reforms (2006) and efficiency at the MRA.

Brooks (2002) argued that R^2 (R square) is the "most common goodness of fit statistics". It measures how much of the variation in Y, being the dependent variable is explained by X, the independent variable. Here the dependent variable is the Efficiency which has been denoted as E and the independent variables are simplicity + equity and fairness + economic growth + transparency + cost efficient + Government revenue + certainty + payment convenience which have been denoted as $S + EF + EG + T + CE + GR + C + Ev + \lambda$. The value of R^2 should lie between 0 and 1. If the value of R^2 is one or higher, it means a perfect fit that is the model fits the data well. On the other hand, an R^2 of zero would mean that there is no relationship between the regressand and the regressor. It can be seen from the above table that the R^2 for each of the independent variable is 0.007, 0.012, 0.017, 0.034, 0.072, 0.077, 0.094, and 0.098 respectively. This indicates that the eight independent variables explain 0.7%, 1.2%, 1.7%, 3.4, 7.2%, 7.7%, 9.4% and 9 .8% of the variations in the efficiency at the MRA and since R^2 can be at most one, the observed R^2 suggests that the independent variables fits the data very well.

Durbin Watson Test

A test of significance (t-test) according to Gujarati (2003) is a procedure by which sample results are used to verify the truth or falsity of a null hypothesis. The Durbin Watson linear regression was used to test the hypothesis. It can be seen in table 3 that the Durbin Watson is 2.101. According to Gujarati (2003), the DW statistic[2] is a test statistic used to detect the presence of autocorrelation in the residuals from a regression analysis. The estimated coefficients of the eight independent variables were as expected positive and statistically significant at 5 % level. It can be concluded that H1 of our research hypotheses is confirmed. Furthermore, the results indicate that all the aspects were influencing variables on whether MRA is efficient.

Cross Tabulation Analysis

Cross tabulation analysis, also known as contingency table analysis is most often used to analyze categorical (nominal measurement scale) data. Cross-tabulation tables provide a wealth of information about the relationship between the variables. Cross-Tabulations are used to show relationships between responses made for two survey questions.

[2] See Durbin, J. ,and Watson, G.S. (1951) " Testing for Serial Correlation in Least Square Regression"

Effectiveness and Simplicity

An essential precondition for the reform of tax administration is to simplify the tax system in order to ensure that it can be applied effectively in the generally low compliance contexts of developing and transitional countries. Mauritius also introduced a major simplification of its tax system in July 2006.

Table 4: How would you rate the overall effectiveness of the new tax reform? * After the tax reform 2006 the tax law at the MRA has become simple enough for taxpayers to understand it. Cross tabulation

			After the tax reform 2006 the tax law at the MRA has become simple enough for taxpayers to understand it.				Total
			strongly agree	agree	neutral	disagree	
How would you rate the overall effectiveness of the new tax reform?	excellent	Count	1	4	0	0	5
		% of Total	2.9%	11.4%	.0%	.0%	14.3%
	good	Count	1	11	3	3	18
		% of Total	2.9%	31.4%	8.6%	8.6%	51.4%
	neutral	Count	1	6	0	1	8
		% of Total	2.9%	17.1%	.0%	2.9%	22.9%
	fair	Count	0	3	1	0	4
		% of Total	.0%	8.6%	2.9%	.0%	11.4%
Total		Count	3	24	4	4	35
		% of Total	8.6%	68.6%	11.4%	11.4%	100.0%

Thirty one decimal four percent (31.4%) of respondent agreed that by making the tax system has become more effective by making it simpler and easier to understand. Only a minimum rate of 8.6% of respondent disagrees with this fact that making the tax system simpler could actually lead to more effectiveness at the MRA.

Effectiveness and Fairness and Equity

MRA is said to be committed to apply revenue laws impartially and objectively and treat everyone in an equitable manner.

Table 5: How would you rate the overall effectiveness of the new tax reform? * Has the new tax system brought fairness, that is are all taxpayers taxed similarly? Cross tabulation

			Has the new tax system brought fairness, that is are all taxpayers taxed similarly?		Total
			Yes	No	
How would you rate the overall effectiveness of the new tax reform?	excellent	Count	4	1	5
		% of Total	11.4%	2.9%	14.3%
	good	Count	10	8	18
		% of Total	28.6%	22.9%	51.4%
	neutral	Count	6	2	8
		% of Total	17.1%	5.7%	22.9%
	fair	Count	3	1	4
		% of Total	8.6%	2.9%	11.4%
Total		Count	23	12	35
		% of Total	65.7%	34.3%	100.0%

Table 5 above clearly shows that there is a positive response concerning the issue of fairness and equity in the tax reform. 28.6% of respondent agreed that by considering the aspects of fairness and equity has indeed made MRA more effective and efficient. However there is also a huge rate of 22.9% of respondent who does not agree that the tax system is fair and that all taxpayers are taxed similarly. However most of the respondent agreed that the tax system is fair and equitable and this eventually would lead MRA to be more effective.

Effectiveness and Economic Growth

The tax system should not hinder or reduce an economy's productive capacity. A Tax System should encourage the taxing jurisdiction's economic goals, such as economic growth, capital formation, and international competitiveness. In general, the tax system should not favor one industry or type of investment at the expense of others.

Table 6: How would you rate the overall effectiveness of the new tax reform? * Has the new tax system increased or reduced the productive capacity of the economy? Cross tabulation

			Has the new tax system increased or reduced the productive capacity of the economy?		
			Increased	decreased	**Total**
How would you rate the overall effectiveness of the new tax reform?	excellent	Count	5	0	5
		% of Total	14.3%	.0%	14.3%
	good	Count	17	1	18
		% of Total	48.6%	2.9%	51.4%
	neutral	Count	8	0	8
		% of Total	22.9%	.0%	22.9%
	fair	Count	4	0	4
		% of Total	11.4%	.0%	11.4%
Total		Count	34	1	35
		% of Total	97.1%	2.9%	100.0%

48.6% of the respondent agrees with the statement above concerning Economic growth since most of them agreed that the new tax system has undeniably increased the productive capacity of the economy (table 6). Following the reform of July 2006 Mauritius has been progressing in its economic status. With this the effectiveness of the MRA is also proven.

Effectiveness and Transparency

Taxpayers should know that a tax exists and how and when it is imposed upon them and others. Transparency enables taxpayers to know the true cost of transactions and to better understand the impact of the tax system. Once more table 13 is showing very positive response for our analysis. 45.7% of respondent do agree that taxpayers do agree that they do understand how the tax is imposed and calculated. Yet again these prove the fact that MRA has really been more effective since after its reform of July 2006.

Effectiveness and Cost Effectiveness

The MRA's success in promoting voluntary compliance and addressing non-compliance is largely dependent on a high-quality taxpayer service and an efficient taxpayer education strategy. To reach these objectives, the MRA is trying to understand taxpayer characteristics and requirements, and build strong communication channels with the various groups of taxpayers, so that it can adapt and deliver services in a cost-effective manner. The MRA is continuously striving to identify measures that reduce compliance costs, without undermining the quality or availability of information needed to enforce compliance. The aim is to get the necessary information from taxpayers in the easiest possible way and reduce taxpayer costs, whilst retaining effective control over a tax system largely based on self-assessment.

Table 7: How would you rate the overall effectiveness of the new tax reform? * Do taxpayers understand how tax is imposed and calculated? Cross tabulation

			Do taxpayers understand how tax is imposed and calculated?		
			Yes	No	**Total**
How would you rate the overall effectiveness of the new tax reform?	excellent	Count	4	1	5
		% of Total	11.4%	2.9%	14.3%
	good	Count	16	2	18
		% of Total	45.7%	5.7%	51.4%
	neutral	Count	8	0	8
		% of Total	22.9%	.0%	22.9%
	fair	Count	2	2	4
		% of Total	5.7%	5.7%	11.4%
Total		Count	30	5	35
		% of Total	85.7%	14.3%	100.0%

Table 8: How would you rate the overall effectiveness of the new tax reform? * Have less expensive alternatives been considered? Cross tabulation

			Have less expensive alternatives been considered?		
			Yes	no	Total
How would you rate the overall effectiveness of the new tax reform?	excellent	Count	0	5	5
		% of Total	.0%	14.7%	14.7%
	good	Count	11	6	17
		% of Total	32.4%	17.6%	50.0%
	neutral	Count	7	1	8
		% of Total	20.6%	2.9%	23.5%
	fair	Count	1	3	4
		% of Total	2.9%	8.8%	11.8%
Total		Count	19	15	34
		% of Total	55.9%	44.1%	100.0%

Therefore, following the survey it could be noticed that a majority, that is, 32.4% of respondent do agree with the fact that less expensive alternatives have indeed been used and they also agreed that this actually has lead to more effectiveness at the MRA. Table 14 above clearly shows the results.

Effectiveness and Government Revenue

Taxation is a necessary devil imposed to support Government in funding of public expenditure and welfare. The provision of public services and infrastructure is a key factor for economic development and growth. Government decision on the choice of the right tax system relates to the distribution of the tax burden – who will pay taxes, how much to pay, how taxes collected will be redistributed.

Table 9: How would you rate the overall effectiveness of the new tax reform? * Has the changes affect current revenue source of the government Cross tabulation

			Has the changes affect current revenue source of the government		Total
			Yes	no	
How would you rate the overall effectiveness of the new tax reform?	excellent	Count	4	1	5
		% of Total	11.4%	2.9%	14.3%
	good	Count	18	0	18
		% of Total	51.4%	.0%	51.4%
	neutral	Count	7	1	8
		% of Total	20.0%	2.9%	22.9%
	fair	Count	4	0	4
		% of Total	11.4%	.0%	11.4%
Total		Count	33	2	35
		% of Total	94.3%	5.7%	100.0%

According to our survey 51.4% of respondent which forms the majority agreed that the change in the tax system has undoubtedly had a positive effect on the revenue of the government. This has been shown in table 9 respectively. If the government revenue has increased this also mean that the MRA has become more effective since it has been able to adopt more efficient and effective tax system.

Effectiveness and Certainty

Taxpayers need to be able to calculate their tax liability. Tax rules should clearly specify how to determine the amount of tax owed and when and how the tax must be paid. Uncertainty results if taxpayers have difficulty measuring the tax base, determining the applicable tax rate, or anticipating the tax consequences of a transaction.

Table 10: How would you rate the overall effectiveness of the new tax reform? * Do the new tax rules clearly specify when the tax is to be paid? Cross tabulation

			Do the new tax rules clearly specify when the tax is to be paid?		Total
			Yes	no	
How would you rate the overall effectiveness of the new tax reform?	Excellent	Count	4	1	5
		% of Total	11.4%	2.9%	14.3%
	Good	Count	18	0	18
		% of Total	51.4%	.0%	51.4%
	Neutral	Count	7	1	8
		% of Total	20.0%	2.9%	22.9%
	Fair	Count	3	1	4
		% of Total	8.6%	2.9%	11.4%
Total		Count	32	3	35
		% of Total	91.4%	8.6%	100.0%

MRA staffs were asked about whether the tax rule clearly specifies how the tax is to be paid and when is it to be paid. And also they were asked whether tax payers understand how the tax imposed on them is calculated. The responses to this were very positive. 51.4% of respondent agreed that the tax rules are in fact clear and taxpayers do understand how their tax liability is calculated. Besides, this also leads to the conclusion that the MRA is indeed efficient since with the result of certainty being positive, this resulted in lower or no compliance cost. Sandford (1995) defined compliance costs as "The costs incurred by the taxpayers in meeting the requirements imposed on them by the law and the revenue authorities, over and above the actual payment of tax and over and above any distortion costs inherent in the nature of the tax."

Effectiveness and Tax Evasion

The MRA gathers information from various sources, including Government and Parastatal bodies, Local Authorities and private companies. This information is then used to detect non-filers of returns and assess, through audit, the amount of tax evaded. The MRA has established a new Fiscal Investigation Department to review cases of fraud and fiscal evasion. In the first year, investigations were initiated into 170 cases, resulting in an additional tax yield of Rs 136.7 million.

Table 11: How would you rate the overall effectiveness of the new tax reform? * To what extent has MRA been able to solve the problem of tax evasion? Cross tabulation

			To what extent has MRA been able to solve the problem of tax evasion?			
			to a great extent	to some extent	very little	**Total**
How would you rate the overall effectiveness of the new tax reform?	excellent	Count	2	2	1	5
		% of Total	5.7%	5.7%	2.9%	14.3%
	good	Count	6	10	2	18
		% of Total	17.1%	28.6%	5.7%	51.4%
	neutral	Count	0	7	1	8
		% of Total	.0%	20.0%	2.9%	22.9%
	fair	Count	2	2	0	4
		% of Total	5.7%	5.7%	.0%	11.4%
Total		Count	10	21	4	35
		% of Total	28.6%	60.0%	11.4%	100.0%

The MRA has established a new Fiscal Investigation Department to review cases of fraud and fiscal evasion. In the first year of operation, investigations were initiated into 170 cases, resulting in an additional tax yield of Rs 136.7 million. Table 11 shows that 28.6% of the respondents do agree with the fact that the new tax reform do consist of a measure to eliminate tax evasion and this obviously increases the effectiveness of the MRA.

6. CONCLUSION

The intent of this research was to understand the issues and alternatives involved in the Mauritian tax reform while investigating on the effectiveness of the MRA following the tax reform of July 2006. The need for significant tax reform is a recurring theme that appears to be gaining a critical mass of support. The Government has put forward a broad and comprehensive reform program to address many long standing structural reform needs. Reforming the tax system to withstand the test of the coming decades is a challenging undertaking, economically, politically and technically. From the start of the study, there has been a clear understanding of the basic goals and priorities for reform. Without this understanding, it will be difficult, if not impossible, to identify what changes are truly needed and which one will reach the goals.

Alan Greenspan argues that today, the right choice of reforms will require assessing anew the tradeoffs between complexity, fairness and economic growth[3]. Based on our findings which were done with regards to eight

[3] Testimony of Alan Greenspan before the President's Advisory Panel on Federal Tax Reform, March 2003,

aspects of effectiveness, it can be deduced that the MRA has been successful in implementing different reform strategies. Besides, the MRA has also proven to be effective in its operations. The MRA has established a new Fiscal Investigation Department to review cases of fraud and fiscal evasion. In the first year, investigations were initiated into 170 cases, resulting in an additional tax yield of Rs 136.7 million. Furthermore, in order to ensure more efficiency and effectiveness in revenue administration, the MRA has made use of an on-line connectivity with the Registrar of Companies, which ensures that every company receiving a Business Registration Number (BRN) is automatically granted a Tax Account Number (TAN).

Through a the Cronbach's Alpha test, which is a test of reliability of measures, it was found that on overall aspects the Tax reform and the Effectiveness of the MRA variables have a positive impact on our study. According to the survey which was carried out, it has been found that most of our respondents agree with the fact that the tax reform of July 2006 has indeed been improving the effectiveness of the MRA. In addition to that, the economic condition of Mauritius has also improved following the Tax Reform of July 2006.

Moreover, the study was extended using the Cross Tabulation Analysis where the relationship between the dependent variable and the independent variables has proven to be mostly positive. Hence, as the Director General of the MRA stated that they are aiming to cover comprehensively and transparently all major operational areas, ranging from tax collection to taxpayers services, and from trade facilitation to managing staff and the performance of the entire organization, it is confirmed that the Tax reform of July 2006 has undeniably proven to be positive in relation to the effectiveness of the MRA.

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