

Economic Growth of 4.2% in 2016-2017

: Who will be the drivers?

Abstract. The Government of Mauritius is targeting a GDP growth rate of around 4.2% in the coming year. In a context where FDI is not forthcoming it implies that growth needs to be fuelled from local enterprises. Accordingly, enterprises in our various Industry Groups need to achieve an output growth of 4.2%, assuming other things constant. But who will be the drivers of this growth? This article looks at the past performance of Mauritian enterprises, more specifically the performance of the Top 100 companies, in order to assess whether a 4.2% GDP growth target is feasible in the current state of the economic environment.

Based on the past trends in economic productivity performance, it would appear that achieving 4.2% growth would not be likely unless there is a strong focus on enhancing economic productivity by 2.7%. It is also noted that the Top 100 companies operating in the various Industry groups, have not provided sufficient attention to productivity improvement. The avenues to be investigated in the coming national budget hence are: (a) urgent attention to new growth sectors, (b) enhance performance of existing sectors by providing more support for productivity improvement, and (c) revisiting SME development initiatives to develop high performance clusters with a global reach.

Keywords. Economic Productivity, Growth forecasting, Top 100 companies .

1.0 Setting the scene

As the Finance minister looks forward to set the economy back on the growth trend, various scenarios may unfold to help the Mauritian economy to generate 4.2% growth or higher.

- Firstly: Existing businesses may find greater market opportunities locally or abroad and increase their output by 4.2% or more; assuming cost increases remain under control.
- Secondly: The budget may come up with strong support measures that instigate an additional and immediate dynamism into new growth sectors, spinning investment, higher income and employment creation in new areas of activity that have not been able to emerge strongly in the past (e.g. creative industries, ocean economy, organic or green industry etc.)
- Thirdly: Less thought of but equally important, an improvement of economic productivity. Indeed if prospects for industry or market expansion are limited and if new areas of growth take time to materialise, a low hanging fruit would be to do away with inherent inefficiencies, inconsistencies, and muda, i.e. wasteful activities that clog operations. Productivity gains would hence, be a 'manna' for short term but sustainable progress, helping to improve output, preserve jobs and reinforce competitiveness across the board.

2.0 Is 4.2% GDP growth in 2017 achievable?

Simulations using the latest trends in input growth and economic productivity have been realised at national level. Accordingly:

- A forecast GDP growth rate of 2.9% – 3.5% would be expected in 2017. GDP will essentially depend on the reaction of the sector operators to the budget, its relevance to address expectations and the speed with which proposed measures are implemented. GDP growth will be on the lower side if investment (government, local and foreign) does not pick up, consumer demand takes a declining trend, if there are other regional and international shocks or if Some black swan occurs (one has already happened with Brexit).
- If a performance of 4.2% GDP growth is to be achieved, the simulation model indicates that Economic productivity (TPM) has to increase by at least 2.7%, from its current levels. It is to be noted that Economic Productivity has been falling at the average rate of 0.35% for the 2008-2013 period. Hence, moving from a downward trend to an increase of 2.7% within a year seems improbable.

The low performance on economic productivity (TPM) from the topmost enterprises of Mauritius is also a cause for concern. In fact both GDP (Output) and economic productivity need to be on the rise in order to make a difference. An increase in GDP which is accompanied by a commensurate increase in the cost of inputs, will have a reduced impact on progress for all.

3.0 The Drivers ?

The largest corporations of Mauritius have made significant progress in the recent years, diversifying locally, taking interests into the banking sector for example and getting involved into projects related to the African region. The turnover of the top 100 companies in year 2010 stood at approx. Rs 283 bn, increasing to reach approx. Rs 365 bn in 2014.

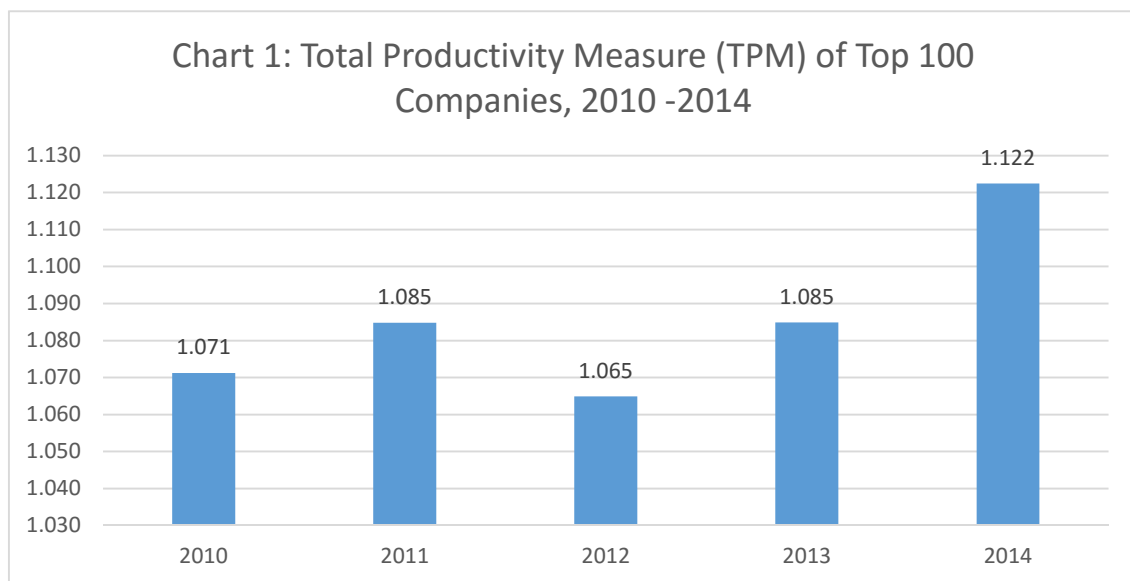
Table 1: TPM growth performance over 2010-2014, figures from Top 100 Companies, various issues

Top 100 Companies in Mauritius	Amount	Period 2010 to 2014 (%)	Average Annual Growth (%)
Increase in Turnover 2010-2014	Rs 81.9 Bn	28.9	6.56
Increase in Costs 2010- 2014	Rs 60.90 Bn	23.1	5.32
Increase in Profit before Tax 2010-2014	Rs 21.0 Bn	111.6	20.62
Increase in Total Productivity Measure (TPM)	-	4.8	1.18

Source: Computed from Top 100 Companies, a Publication of Business Magazine, various issues

The Total Productivity Measure (TPM) is based on the Ramsay Productivity Modelling System (RAPMODS). It is computed by dividing the monetary value of an enterprise's output over a specific period by the monetary value of the enterprise's inputs. Since monetary values are used, it provides a better measure of productivity performance. The TPM computes how much turnover has been obtained for every rupee spent in the enterprise. The model has been applied in Mauritius in the context of the Textile Emergency Support Team (TEST) in 2002-2003 by the National Productivity and Competitiveness Council (NPCC)¹.

From the above table it can be noted that over the 2010-2014 period Turnover has increased by Rs 81.9 Bn, i.e. some 6.56 % on average, on an annual basis. However, costs have been on the increase as well, increasing by 5.32%, leading to a growth in Economic Productivity performance (TPM) of only **1.18%** per annum for this period, indicating that progress in terms of productivity has been very slow.



The above chart illustrates the Economic Productivity performance of the Top 100 companies from 2010 to 2014 (Ed. 2011 to Ed 2015 of the Top 100 companies). From an Economic Productivity perspective, the average performance of the top 100 companies has been falling from 2010 to 2012, reaching 1.065. This implies that for every rupee of cost, the enterprise was generating on average 1.065 as turnover for these enterprises. Thereafter, from 2013 onwards, TPM on average adopted a slowly improving tendency to reach 1.122 in 2014. Hence for every rupee spent in 2014, on average the Top 100 companies were generating and output of 1.122, representing a 5.3% improvement over the 2012 performance.

Table 2: Average Economic Productivity Performance - Top 100 companies and National TPM

	Average	Growth
TPM Top 100 Companies 2010-2014	1.086	1.18%
National TPM 2008-2013	1.475	-0.35%
Overall Productivity Measure (Value Added / Input Resources) at National level (2008-2013)	0.793	0.0 %

Source: Computed from Top 100 Companies, a Publication of Business Magazine, various issues; Statistics Mauritius, Digest of Productivity and Competitiveness Statistics, 2014

Table 2 compares the average performance of Top 100 companies in terms of TPM, with that of the overall economy as computed by Statistics Mauritius for the period of 2010-2013. Does it mean that our larger enterprises are in a comfort zone, being reasonably profitable to leave aside the potential gains that could be harnessed by becoming more productive? Does it mean that policy measures to boost productivity and competitiveness have been missing, ineffective or misused?

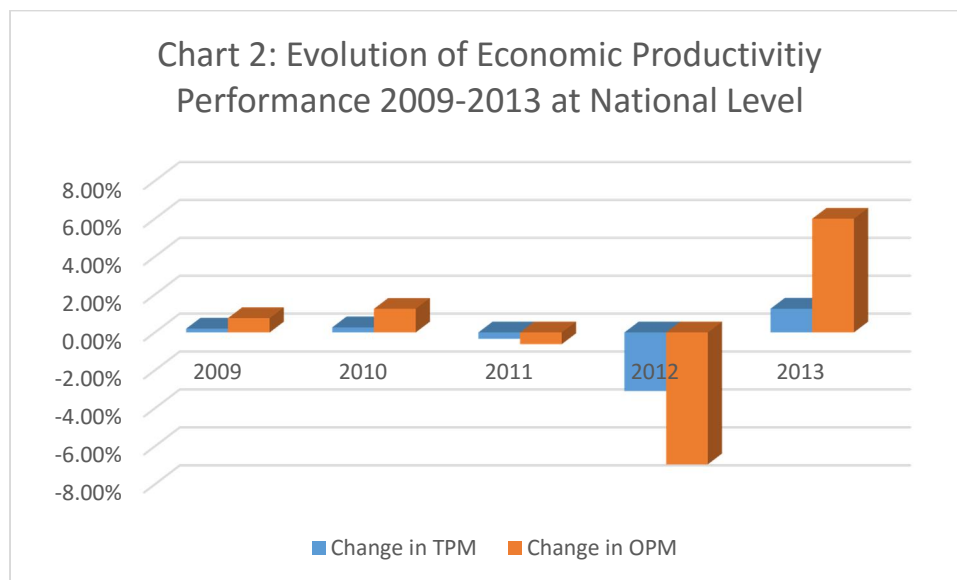
¹ At Enterprise level, $TPM = \text{Output} / \text{Inputs}$; At National Level, $\ln \Delta TPM = \ln \Delta GDP - \ln \Delta (\text{All inputs})$; inputs being represented by Intermediate inputs and Compensation of Employees at national level.

This data may also indicate that there could be many other enterprises (SMEs or the informal sector for instance) that are performing well and need to be further reinforced in order to make their contribution visible and recognised at national level.

Table 3 below shows the evolution of national economic productivity performance through Total Productivity Measure (TPM), which is based on Output and OPM, which is a sharper measure, based on Value Added. The best economic productivity performance of the period under consideration was recorded in 2013, when OPM growth reached as high as 6%. The high variability of OPM, moving from -6.95% to 6.00% from 2012 to 2013 also needs to be analysed further.

Table 3: Trends in Economic Productivity at National Level

	2009	2010	2011	2012	2013
Change in TPM	0.20%	0.27%	-0.34%	-3.09%	1.25%
Change in OPM	0.75%	1.25%	-0.62%	-6.95%	6.00%



Source: Computed Statistics Mauritius, *Digest of Productivity and Competitiveness Statistics, 2014*

4.0 Conclusion

This paper clearly indicates the urgency for Government to come up with policy measures to improve the productivity of existing enterprises, fostering both innovation and creativity through value addition. Enterprise Associations and Industry groups should set higher performance targets and try to reach overarching goals e.g. target a growth rate of 8% or higher (as has been realised by some Industry groups in the 2006-2015), which could potentially be achievable if enterprises prove to be dynamic and competitive. In the event enterprises on their own cannot manage to achieve such levels of growth, key constraints need to be identified and addressed through technical support, knowledge transfer, training, global networking, or investments.

Also, in the case of sectors that are on the decline, such sectors need to be restructured, reorganised and possibly reinvented to build their resilience. The possibility of assisting these sectors to gain back a competitive edge through new products/ services in new market segments has to be investigated.

Every single enterprise needs to develop measures to target both higher turnover growth / value added and higher productivity performance. Both are essential components of a micro based strategy to drive the economy forward and achieve both sectoral and national growth targets.

Annex 1: Methodology

TPM is one of the Economic Productivity measures developed by Dr M. R. Ramsay, world renowned expert in Productivity Science. The Total Productivity Measure (TPM) assesses how effective, on the overall, an enterprise has been in the use of all resources that was utilised in the production of a good or service. Whereas traditional measures focus on labour and capital, the TPM encompasses ALL resources used. These include materials, intermediate products, services outsourced, direct and indirect labour, utilities, support services, finance etc. Hence TPM is a more complete measure than traditional measures that focus on only a few factor inputs (e.g. labour or capital).

Dr M. R. Ramsay defines an Economic Measure as a measure or indicator computed using a currency in both the numerator and denominator. It is observed that common measures of productivity which have based on factors of production i.e. units of output per hour or units of output per person. For instance the productivity or production capacity of a machine would be e.g. number of chips per machine hour or for labour it could be number of shirts per man-day. The limitation of such measures is that they can only be compared across Industry Groups.

To overcome this constraints, National Statistical bodies use productivity indices to measure Labour inputs, capital inputs and also multi-factor productivity. However these indices are also factor related (e.g Output expressed in Rupees, but Inputs expressed in number of persons employed). These indices generate problems related to aggregation and disaggregation. That is, the labour productivity of one enterprise within a sector cannot be aggregated to provide an Industry perspective, which is a constraint for formulating policies linked to Industry categories, companies operating various plants, or various enterprises belonging to the same shareholding entity.

This novel approach to productivity measurement is also known as the Ramsay Productivity Modelling System (RAPMODS). In this method, monetary values are used both for outputs and inputs. Hence we get Economic Productivity measures, as one will compare the monetary value of the output (turnover from sales of shirts per month expressed in MUR) to the wages paid for labour resources, also expressed in MUR. This measure will give the Factor Productivity Measure (FPM) for Wages, which can be compared over time, across enterprises in the same sector. Similarly, Factor Productivity Measures (FPMs) can be computed for all other inputs, tracked over different periods of time and used for both benchmarking, budgeting and forecasting,

Statistics Mauritius, in its Annual Digest of Productivity Statistics (2014) includes a section where Economic Productivity Measures are presented at national and sectoral level. Detailed description of the computation of measures is also included, on page 8 of the Digest:

<http://statsmauritius.govmu.org/English/StatsbySubj/Documents/PRODUCTIVITY%20and%20COMPETITIVENESS/Digest%20of%20Productivity%202014%20final.pdf>

ⁱ From a sample of 31 companies, providing detailed financial data (management accounts for some) from 2000-2002, around 50% of enterprises were not productive (TPM<1) and were experiencing a negative return on investment. Areas of poor performance were found to be: Materials utilisation and procurement, Productivity planning and budgeting, Human resource management, Financial

management, Inventory management, Technology enhancement, International marketing, Competitive pricing. The report recommended enterprise level improvements measures as well as proposal across value chain (e.g. clustering). It was estimated an average Return on Investment (ROI) of 15% of the industry would be achievable if all areas for improvement were to be addressed.

References:

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