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THE PRODUCTIVITY PROBLEM IN THE JAMAICAN ECONOMY: WHAT ROLE FOR "PRODUCTIVITY INCENTIVE SCHEMES"?

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WHAT ROLE FOR "PRODUCTIVITY INCENTIVE SCHEMES"?

Addressing the problem of productivity in the Jamaican economy is critical to improving both the international competitiveness of Jamaica-based producers and the growth-performance of the Jamaican economy. Identifying the specific factors which impact directly and indirectly on productivity and adopting measures to improve the productivity of domestic producers are the crucial policy challenges.

In this context, "productivity incentive schemes", intended to take the specific form of tax relief on performance-based compensation to workers, have been promoted by both employer and employee representatives as offering significant potential for productivity improvements.

In evaluating the desirability of such schemes, two fundamental questions must be addressed: (1) Do performance-based pay schemes in fact induce productivity improvements? (2) If they do, do they merit tax concessions? This paper offers some perspectives on both questions.

I. Do performance-based compensation schemes raise productivity ?

Instead of simply paying for time spent on the job, performance-based compensation schemes (PBCS) establish an explicit link between compensation and performance. In so doing, they offer an incentive for workers to step up their effort levels. PBCS therefore represent an important potential mechanism through which to effect overall productivity improvements.

A growing body of empirical evidence confirms that carefully designed and managed performance-based compensation schemes can, and often do, induce employees to "work both harder and smarter and to use even existing technologies in new and better ways that enhance their productivity." This has led some researchers to conclude that: "In the short run at least, and perhaps even longer term, this may be the most effective instrument for raising productivity..."[1]

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[1] Nalbantian, H.R. and A. Schotter (1997), "Productivity under Group Incentives: An Experimental Study," *American Economic Review*, vol 87(3), 314 - 41. For a detailed review of the empirical evidence on the performance effects of various alternative payment systems see Blinder, A., ed. (1990), *Paying for Productivity: A Look at the Evidence.* Washington: The Brookings Institution.

Notwithstanding numerous studies attesting to the positive effects of PBCS, the choice of such schemes is not as clear cut as it may seem at first sight. There are, in fact, complex issues involved which require further consideration. Some of these are discussed below. A schematic review of the issues is presented in the accompanying matrix (see Appendix: "Evaluation of Alternative Payment Systems").

1. Choice of specific scheme

In the first place, it is necessary to distinguish between various types of payments-by-results schemes. These are as follows:

(a) simple incentive plans which link pay to performance for individual workers or small
groups (e.g. piece-rate systems, commissions);
(b) profit or gain sharing plans which cover entire plants or firms; and
(c) employee ownership plans.

These schemes differ in a number of respects, most importantly in the nature and strength of the monetary incentive effect, the nature of motivational effects stemming from non-financial considerations, and in their implications for organizational structure.

Clearly not all systems are equally suitable to specific organizational contexts. Simple incentive plans, for instance, work best in situations where the nature of the work is simple, stable, repetitive, easily measurable, and designed for individuals or small groups with a minimum need for integration.

2. Non-financial incentive effects

Performance-based compensation schemes affect worker motivation and productivity not only through the financial inducements that they offer but also, and perhaps more importantly, through their effects on the nature of workplace relationships. Depending on the specific circumstances, these effects may reinforce or offset each other in their impact on individual worker morale and effort.

Profit- or gain-sharing plans, for instance, weaken the link between individual performance and compensation as compared to simple incentive plans, thereby diluting the monetary reward effect and introducing a free-rider problem. On the other hand, they foster a certain commonality of interest (frequently reinforced by explicit mechanisms for shared decision-making) among all members of the firm, and correspondingly have potentially positive effects on motivation and productivity.

In contrast, simple incentive plans, while featuring a strong link between individual effort and reward, often lead to the development of adversarial workplace relationships and frictions between different groups of employees or between employees and management, causing a hostile, non-productive environment.

3. Organizational requirements and repercussions

Performance-based compensation schemes are neither necessary nor sufficient for achieving productivity improvements. Ryan, in reviewing simple incentive systems that were operative in parts of Jamaican industry in 1991/92, points to appropriate managerial support and effective organization of work measurement, materials supply, and maintenance as necessary conditions for a successful incentive regime. He advances that incentive systems are frequently used to compensate for deficiencies in these regards. By serving as a substitute for, rather than a complement to, improved management, incentive systems may actually deter productivity improvements.[2]

Alternative pay systems have wider implications for overall organizational structure and efficiency and must therefore be considered within the context of a holistic approach to enterprise development and restructuring. They are most effective if viewed as complementary to other innovative aspects of a firm's human resource management system, such as flexible job design, employee participation in problem-solving teams, training and open labour-management communication.

In this regard, evidence on the motivational status of the Jamaican workforce implies that, within many Jamaican enterprises, performance-based pay systems are not likely to be very effective unless coupled with measures specifically designed to redress motivational deficiencies. This is true the more so as the conditions underlying this state of demotivation have been found to be not so much financial in nature but primarily a function of the quality of human relations at the workplace.[3]

4. Indirect costs

In evaluating the overall impact of performance-based compensation plans on firm profitability, consideration must also be given to the fact that they may be costly to administer and bear the risk of encouraging the substitution of quantity for product quality. These are important concerns especially with regard to simple incentive plans.

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[2] Ryan, Paul (1991), *Incentive Systems in Jamaican Industry.* JAMPRO Productivity Centre Report.

[3] Carter, Kenneth L. (1997), *Why Workers Won't Work. The worker in a developing economy. A case study of Jamaica*.

In sum, carefully designed and administered performance-based compensation schemes can, and often do, result in significant productivity gains. However, the potential of any specific plan to generate such improvements is directly related to the environment in which it operates. It depends especially on whether it is coupled with other innovative human resource management practices. For that reason, each plan has to be evaluated on a case-by-case basis. This poses difficulties for policy formulation and implementation.

II. Should tax relief be granted on bonus-related pay?

A proper evaluation of whether performance-based compensation schemes (PBCS) merit promotion by way of tax relief on bonus-related income to workers requires first an understanding of the role of fiscal incentives.

Fiscal incentives serve a number of important economic objectives. Those include:

(1) the promotion of activities which generate benefits for the economy over and above those that are captured privately by the parties engaged in the activity (the externality argument);
(2) serving as an offset to existing distortions;
(3) the pursuit of societal objectives, for instance redistributional goals.

The question then is whether tax concessions on performance-based pay are justifiable on any of those grounds.

1. The externality argument

Empirical studies have shown that properly designed and managed performance-based compensation schemes generate not only productivity improvements but also higher wages for workers and greater profits for firms. From the perspective of the firm, they offer the additional advantage of making labour costs more flexible and reflective of output. This reduces the incentive to lay off workers during periods of low product demand and dampens the employment effect of cyclical variations.

As a result, workers in turn enjoy greater job security throughout the business cycle. This greater stability does, however, not come without a price: while limiting unemployment, wage flexibility also renders workers' income more unstable. Whether performance-based wage contracts are perceived by workers to be more risky on balance depends on their relative risk aversion to employment versus income fluctuations.[4]

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[4] See Ramos, J.R. (1994), "Employment, Human Resources and Systemic Competitiveness," in Bradford, C.I. (ed.), *The New Paradigm of Systemic Competitiveness: Toward More Integrated Policies in Latin America.* Paris: OECD.

The private parties involved in PBCS stand to benefit directly from their adoption in form of productivity gains, greater profits, higher (though admittedly more variable) wage income, and more stable employment. They, therefore, have a vested interest in the implementation of such schemes. In order to justify the use of fiscal incentives in this setting, a compelling case would have to be made that PBCS yield societal benefits that exceed those accruing to the private parties involved.

2. Tax incentive to offset existing distortions

The argument that fiscal incentives are necessary to offset distortions existing in the Jamaican environment has been advanced by the garment industry. It alleges that the tax-free gratuity scheme in the hotel sector has had adverse effects on labour availability for apparel firms operating in the Montego Bay area. To offset this distortion, the industry has called for tax incentives to be granted on productivity incentive schemes for apparel workers. However, rather than strengthen the garment sector's case for tax concessions, this argument points to the risk of introducing labour-market distortions and unintended spillovers into other sectors when singling out particular industries as beneficiaries of tax incentives.

Furthermore, proponents of tax incentives for performance-based compensation schemes argue that workers' take-home pay is so excessively low that they have no incentive to do their job well. Tax relief should be granted on labour income so as to elevate wage levels and give workers an incentive to improve their effort.

This argument is confusing in that it lumps together a number of separate issues, thereby failing to make a convincing case for tax incentives on PBCS as the optimal policy tool:

(1) It is not clear that the wage levels are indeed excessively low and can be held primarily responsible for any observed deficiencies in effort and productivity. The causal factor may be not so much the wage level but the lack of a clear link between effort and compensation. The introduction of a true performance-based compensation scheme would establish such a link while at the same time raising workers' wage income (even if taxed).

(2) Even if wages are shown to be low and the primary cause of low productivity, it would have to be established that income taxes are responsible for that state of affairs. Again, bonus-payments tied to performance, even if taxed, would raise workers' income and benefit all private parties involved.

(3) To the extent that there is valid concern over the disincentive effect of income taxation, steps should be taken to address that concern in a way that does not introduce any further distortions and complications into the tax structure and economises on administrative cost while being mindful of the severe trade-offs associated with any tax revenue loss. It is doubtful that

tax relief on performance-related pay is the optimal policy instrument in this context.

3. Other objectives

Tax concessions on performance-based pay may be considered in pursuit of objectives other than productivity improvements. In particular, there may be a concern that productivity gains do not necessarily translate into higher real wages but may instead be entirely captured by the owners of productive capital. Again, it is questionable that tax incentives for PBCS are the optimal policy instrument to address distributional concerns since there is no guarantee that income tax relief on bonus pay ends up benefitting labour. Firms may simply "pocket" the benefits by paying a lower gross wage rate. Even if justified, these equity concerns do not invalidate a strategy that seeks to maximize productivity improvements (size of the pie) through the most efficient policy. Instead they point to a need to supplement productivity promotion with policies that ensure an "equitable" sharing of the returns to productivity gains.

Even if it can be established that Government promotion of performance-based compensation schemes is justified on the basis of the arguments outlined above, a number of additional issues need to be considered in making a determination whether tax incentives should be granted. Those pertain most importantly to the cost effectiveness and choice of the optimal policy instrument.

4. Magnitude and cost effectiveness of incremental productivity gains

One might argue that a performance-based pay scheme augmented by tax concessions would, at the margin, lead to productivity improvements over and beyond those realised without such tax relief, since the disincentive effects typically associated with income taxes would be avoided, presumably leading workers to further increase their efforts. It would have to be established, however, that the magnitude of the *incremental* productivity gains to be derived as a result of the tax concession could justify the foregoing of tax revenue, the complication of the tax system owing to the introduction of a differential tax rate on one type of income, and the significant administrative cost that it would entail.

Depending on the initial conditions prior to the introduction of the policy intervention, the incremental productivity gains to be had from raising the incentive pay rate (whether through tax relief or otherwise) may be quite negligible. Especially in sectors like the garment industry where incentive systems in form of piece-rate pay are already in place, it is questionable whether the "topping off" of such incentive pay via tax relief will induce significantly greater effort. (1. physical and mental limits as to how much more effort can be exerted; 2. backward-bending effort supply curve).

5. Opportunity cost of the foregone tax revenue and administrative expenses

In view of Government's tight budgetary constraints, the desirability of tax incentives for

PBCS cannot be evaluated in isolation but has to be assessed in comparison with competing uses of scarce tax dollars, in particular as they relate to alternative policies concerned with productivity improvements and economic growth.

6. Alternatives to a policy of fiscal incentives

To the extent that Government perceives a need to encourage specifically the adoption of performance-based pay schemes, what is the optimal, least-cost way to achieve this objective? Are there alternatives to a policy of fiscal incentives?

7. Plan design and measurement issues

If a decision is made to grant tax incentives for productivity incentive schemes, each company's plan has to be examined to assess whether it does indeed qualify as such. Issues to be addressed include: Does the proposed PIS indeed target *productivity* (output per unit of input(s)) as opposed to simply production (output) levels? How are productivity improvements measured and how can one isolate the factor(s) that drive(s) any observed productivity gains? Since factor productivity is a function of a variety of influences, it will be difficult in a dynamic, changing environment to attribute any observed productivity improvements to any one specific factor of production. The issue then is: why reward labour (or, in the case of simple incentive plans, more specifically production line workers) for productivity gains that may just as well have originated in managerial or organizational improvements or more efficient capital equipment?

III. Role for Government / Policy Recommendations

Why, if they offer substantial advantages to firms and workers alike, don't performance-based compensation schemes enjoy more widespread use? One answer may lie in the fact that such schemes represent a form of institutional innovation and like most innovations are not diffused instantaneously. This may be especially so in a country like Jamaica where the relative abundance of labour allows firms the luxury of being somewhat lax in administering labour resources efficiently and drawing out their full potential capacity.[5]

Labour payment systems in general tend to be fraught with historical inertia and institutional rigidity. In the case of Jamaica, the resistance to institutional innovation may be further aggravated by a largely adversarial industrial relations climate. The lack of goodwill, trust and spirit of cooperation that characterises labour-management relations in this country is clearly not conducive to organisational change.

[5] *ibid*, p. 262.

Furthermore, a firm's choice of industrial relations and human resource management system is influenced by institutional and environmental factors, notably labour, capital and product market conditions. For instance, a firm may be reluctant to implement certain innovative practices such as narrowing wage and status differentials between employee groups unless other firms do the same. Despite the potential positive performance effects of this more egalitarian approach, the firm which adopts such a policy runs the risk of having its star employees being bid away by other companies that have not opted for this approach and are thus in a position to offer higher wages.[6]

[6] Levine, D.I. and L. Tyson (1990), "Participation, Productivity, and the Firm's Environment," in Blinder, A., ed., *Paying for Productivity: A Look at the Evidence.* Washington: The Brookings Institution.

A similar argument applies to the case of performance-linked wage contracts which contribute to reducing employment fluctuations and the average aggregate level of unemployment, but at the expense of rendering workers' income more unstable. The more firms adopt such variable contracts, the greater the price and wage flexibility throughout the entire economy, and the more favourable the risk-return trade-off from the perspective of the individual firm and worker.[7]

To the extent that the sum of each firm's private choices, which are influenced by the prevailing institutional and environmental conditions, leave the economy in a socially sub-optimal equilibrium, there is a role (need) then for public policy.

Public policy should be focused on addressing the institutional rigidities and environmental factors which inhibit private agents from adopting practices that are in their own interest and at the same time foster socially optimal outcomes.

Government can act as catalyst and facilitator of productivity-enhancing performance-based compensation schemes (or more broadly, innovative human resource management practices and work organisation systems):

Take a comprehensive, integrated approach in recognition of the complementary nature of compensation policies, other human resource management practices, and work organisation systems.

Note also: "changing the way workers are *treated* may boost productivity more than changing the way they are *paid*, although profit sharing or employee stock ownership combined with worker participation may be the best system of all." [8]

* facilitate more conciliatory, trusting labour relations climate
* labour market reform: flexible contracts
* provide information not only on PBCS and their benefits in general;
* also more targeted on productivity measurement issues

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[7] Ramos (1994).

[8] Blinder (1990), p. 13.

In sum:

Properly designed performance-based compensation schemes can enhance productivity, wages and profits. As such they stand to benefit directly the private parties involved in these schemes, that is employers and employees.

To increase their chances of success, they need to be complemented by the appropriate managerial and organisational support and be embedded within a *system* of innovative human resource management practices. The need for complementing performance-based pay schemes with other initiatives is especially strong in the Jamaican environment where worker apathy and a confrontational industrial relations climate are important contributing factors to the productivity problem. This widespread status of demotivation cannot be addressed solely, or even primarily, through financial inducements as it may be in large part a function of the quality of human relations at the workplace.

Central to the policy problem is a clear understanding of the specific role that tax incentives are to play in a setting where the benefits accrue to private parties in the form of higher wages and greater profitability. Even if it can be established that Government sponsorship of performance-based compensation schemes can be justified on the basis of existing distortions or positive externalities, the policy decision still hinges on an assessment of the magnitude of the *marginal* productivity gains that could be expected from tax concessions or other interventions *relative* to the costs associated with the policy measure(s).

In making this assessment, due consideration should be given to (1) the full range of available policy tools, including but not limited to tax incentives, and (2) the opportunity cost of the foregone tax revenue and the public resources allocated to administering and enforcing the respective policy scheme.

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