

The informal economy in Jamaica: Is it feasible to tax this sector?

Chantal Wedderburn
Florida Atlantic University

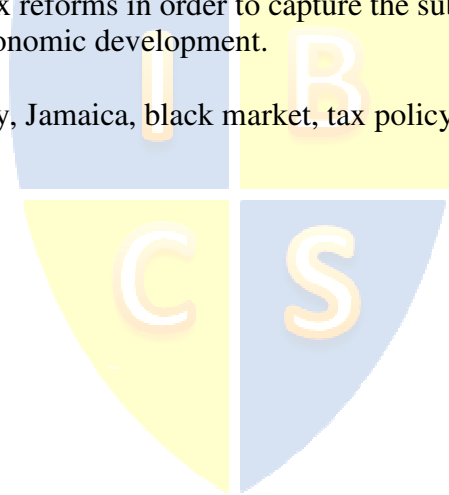
Eric P. Chiang
Florida Atlantic University

Rupert Rhodd
Florida Atlantic University

ABSTRACT

This paper presents an overview of the informal market economy in Jamaica, a sector that represents approximately 40% of total GDP output. Specifically, we focus on the impact of the informal economy on productivity, economic growth, and social welfare. We present a discussion in favor of a transition from the informal to formal markets, with an analysis of the feasibility of implementing tax reforms in order to capture the substantial amount of uncollected tax revenues necessary for economic development.

Keywords: Informal economy, Jamaica, black market, tax policy



INTRODUCTION

The informal sector has long been an integral part of the culture and economy in Jamaica. Included in this sector are such economic activities as family farming, domestic serving, street hustling, casual vending and drug dealing. Many participants operate within this sector because of limited education, lack of proximity to urban areas, limited formal employment opportunities or family requirements. However, it has been found that a significant characteristic of citizens participating in the informal economy do so in order to evade taxes and government regulations (Andreoni et al., 1998; Feige, 1979).

This issue of tax evasion, whether intentional or not, has a significant impact on fiscal spending in Jamaica. Since it is estimated that the informal sector amounts to approximately 40% of current GDP (De La Roca et al., 2006), the loss of potential tax revenue is significant. In addition, Loayza (1997) has found that in countries with disproportionate tax burdens combined with weak compliance structures, the increase in the size of the informal economy leads to a decline in overall economic growth. It is for this reason that political efforts have recently intensified to devise a mechanism to identify, monitor, tax, and enforce compliance on individuals and businesses operating in the informal sector. Such a volatile issue with implications on growth and development has sparked intense debate among Jamaican scholars, politicians and citizens for a viable resolution.

This paper addresses the possibility of imposing an enforceable income tax on earnings in the informal sector. It is believed that increased tax revenue captured from this expansive, untapped tax base will contribute to Jamaica's GDP, alleviate poverty, and improve its citizens' standard of living. It is important to conduct this analysis for the following reasons: 1) Establishing an enforceable tax system will provide tax revenues to address current macroeconomic obstacles such as debt repayment, international competitiveness, economic growth, and provision of domestic programs; 2) Understanding the approach to alleviating poverty consists of developing useful economic as well as social programs which, when funded by an improved tax system, can also improve confidence in Jamaica's social, economic and political institutions; and 3) Revealing the size of the informal economy, along with its impact on the Jamaican economy, will expose the deeper, more pervasive issue of corruption and bribery. Countries with higher levels of corruption have larger unofficial economies, smaller governments, and are unable to sustain high tax rates (Friedman et al., 2000).

It is essential to first understand the size of the informal economy and the sources of its growth in order to develop a rational, enforceable tax system. The next section provides a description of the informal sector including participants and industries. Next, the article outlines previous studies on measuring informal sector activities in Jamaica. The following section analyzes the process of transitioning informal markets into the formal economy and the subsequent implementation of tax reforms and collections, and then discusses the feasibility of imposing taxes on this sector within the framework of Jamaica's informal economy. Lastly, the article concludes with policy implications.

BACKGROUND OF THE INFORMAL SECTOR

Studies analyzing the informal sector involve many disciplines and have produced a variety of names for this sector, such as hidden, shadow, underground, unofficial, and black, amongst others. The informal sector includes small businesses, microenterprises, self-employed

individuals, and participants in drug-trading and other illegal activities. The broad range of activities conducted in the informal sector can be condensed to identify several common characteristics including all employment that is not bound by contract or other legal regulations, very small scaled operations, unregistered businesses, and all activities which generate revenue that is not reported to tax authorities with the express purpose of evading payment of income taxes. In the informal sector workers are most often not professionals, rather they are self-employed, paid or unpaid help in family enterprises, or workers in domestic settings such as housekeepers and gardeners. Finally, the informal economy includes those activities which are not reported or underreported in national economic statistics such as the GDP.¹

Participants in the informal sector include individual workers such as small-farm workers, retail salespeople, street vendors, domestic helpers, taxi drivers and owners of small businesses and microenterprises. There are low entry barriers into the informal sector in terms of skill, capital, and organization. Approximately 45 percent of the agriculture sector of Jamaica's economy is conducted by informal operations (Manning, 2008). Workers on small farms are generally self-employed or unremunerated employees of family farm operations; their produce is used for personal and family consumption or sold in local marketplaces. Retail salespeople purchase goods wholesale in markets, import them into Jamaica as personal property, and sell these products in unregistered shops, market stalls, or to tourists directly on the streets and beaches; their activities, and their revenues, are unreported, unregulated and untaxed. Domestic helpers including housekeepers, cooks, and gardeners are commonly paid in cash with no income taxes deducted from their pay. Finally, drug dealers, producers and transporters must be included in consideration of informal economy revenues. Although their volume of cash transactions is estimated to be robust, it is not an easy task to either measure or tax these revenues; therefore, this paper will not address the impact of these activities.

Some demographics are useful in understanding the participants of the informal sector. Statistics obtained from De La Roca et al. (2006) show that the majority of individual workers in the informal sector are women, comprising 57% of the self-employed.² In small firms, however, 80% of the entrepreneurs are men, indicating that male informal sector agents are more likely to operate small businesses, while women are more likely to operate solely. The average age of these workers is 45 years, which is seven years older than formal sector workers. In addition, the average worker in the informal sector has 8.5 years of education, compared with 10.5 years for formal sector workers. The primary reasons for entering the informal sector are a desire for independence and to earn a higher income, along with a lack of jobs in the formal sector. Wholesale/retail trade and agriculture account for nearly 60% of the informal sector workforce, while manufacturing accounts for only about 9%. Indeed, most participants in the informal sector hold labour-intensive jobs characterized by low productivity. Their work is usually part-time and almost never includes a formal employment contract (over 70% do not). Consequently, informal sector participants generally receive lower pay than those in the formal sector (De La Roca et al., 2006). It has been estimated that for every Jamaican dollar earned by a worker in the informal sector, an employee in the formal sector earns JA\$1.50.

Informal economies exist in all nations, and have existed in Jamaica throughout history. However, the informal sector is believed to have experienced more rapid growth than the formal sector in Jamaica during the past two decades. Although Schneider and Enste (2000) list the

¹ Official GDP figures in Jamaica do include some elements of pure tax evasion and some illegal activities in their calculations.

² In contrast, 50% of workers in the formal sector are female.

causes of growth in the shadow economy as an increase in the burden of taxes and social security contributions along with an increase in regulations and restrictions in the labour market, these conclusions are based on OECD, Eastern European transition economies and developing economies dissimilar to Jamaica's. The recent significant growth of the informal sector in Jamaica can be attributed to high unemployment in the formal sector, personal economic survival in a stagnant economy and conscious or subconscious opposition to inefficient tax systems. Further, lackluster economic performance along with increased global competition has shifted the Jamaican economy from capital intensive industries such as bauxite and alumina mining to labour intensive industries such as clothing and tourism which created greater opportunities for workers in the informal sector. Many financial sector workers experienced displacement following that sector's implosion in Jamaica during the late 1990s.³ Cuts in education, health care and other social programs exhibited the greatest negative impact on the rural poor who became the largest group to enter the informal sector.

Although entry into the informal sector may initially be a survival mechanism for many individuals in response to poverty, choosing to remain in this unofficial sector may center on one common factor: tax evasion (Andreoni et al., 1998). Many Jamaican citizens have a negative view of tax structures and taxing authorities in general. Paul Lai, Deputy Financial Secretary of Taxation, claims that Jamaicans have a "tax me if you can" attitude (Jamaica Information Service, 2008). The perception is that the government is riddled with inefficiencies, favouritism and corruption, taxes are unfairly levied, and tax breaks are unfairly distributed. In addition, tax rates are so burdensome⁴ that workers often conclude that it is worth the risk to operate in defiance of tax laws and other regulations. Labour market regulations are overbearing to entrepreneurs who expect to increase human capital but are faced with complex and expensive restrictions such as minimum wages, social security, and fringe benefits. Disadvantages to operating in the informal sector are lack of access to capital for business growth, lack of access to business development opportunities, no property right protection, and lack of employment contracts (Loayza, 1997).

LITERATURE REVIEW

Measuring the informal sector is a challenge, but several methods have proven useful. Direct approaches such as voluntary surveys or tax audits can be beneficial, though there is no assurance that respondents provide accurate information when asked to reveal the extent of illegal, tax evasive economic activities (Schneider and Enste, 2000). Therefore, several indirect approaches are useful for estimating the size of the informal economy, including two methods which use observed economy-wide variables, such as electricity usage and money.

A simple approach is the electricity consumption method (ECM), in which increases in energy use are compared with movements of GDP during the same period. Kaufmann and Kaliberda (1996) note that the electricity to overall GDP elasticity is close to one, therefore, measuring the difference between the growth of electricity use and the growth of official GDP is a reliable indicator of the growth of the informal economy. Using this physical input method, De La Roca et al. (2006) found that growth in the informal sector in Jamaica more than tripled from 12.9% in 1991 to 40.9% of the overall economy in 2000. This method, however, fails to capture those informal sector activities that do not require increased electricity consumption or that use

³ As a result, many informal sector entrepreneurs are highly educated with one third having university educations.

⁴ GCT (General Consumption Tax) alone is currently 17%.

other sources of energy. There are also possible downward biases with improved efficiency in electricity consumption or energy price increases and upward biases from decreased technological efficiency resulting from poor maintenance; researchers manipulate the output elasticity values to compensate for these possible biases. Feige and Urban (2008) developed a modified electric consumption method (MEC) which compensated for some of the downward biases and allowed for changes in input factors such as electricity price increases.

Another approach to estimating the size of the informal economy is the currency demand approach (the monetary or transaction approach) that observes the increase in the demand for cash. Although Ahumada et al. (2008) indicate that the monetary method has become extremely popular over the years because of its presumed simplicity, they also indicate that the wide diversity of results obtained when this model is applied has generated skeptical views on its applicability. This method was pioneered by Gutmann (1977) who proposed measuring the currency component of the money stock, M_1 , which grows relative to the growth of the informal economy, as contrasted with demand deposits which grow with the development of the formal economy. The model is based on the assumption that because agents intend to keep some transactions hidden from official records, they conduct their trades using cash. If the amount of currency that is used to make these hidden transactions can be estimated, and if the income-velocity of money is known, it would be possible to get a measure of the size of the informal economy. Gutmann's (1977) approach is very appealing to monetarists who believe that money is used for transaction purposes and not for speculative purposes.

Feige (1979) provided an extension to Gutmann's (1977) analysis. Feige (1979) focused on the relationship between the volume of total transactions and observed income, or GDP. Beginning with Fisher's quantity equation as shown in equation 1 in which M represents the money supply, V the velocity of circulation, P the general price level, and T the total transactions, Feige (1979) included the identity shown in equation 2 which assumes that there is a constant relationship between the money flows related to transactions and the total value added (official and unofficial). He then modified Fisher's quantity equation to include the informal sector as shown in equation 3.

$$MV = PT \quad [1]$$

$$PT = k (\text{official GDP} + \text{informal economy}) \quad [2]$$

$$MV = k (\text{official GDP} + \text{informal economy}) \quad [3]$$

Given the size of the money supply (M), the velocity of money (V) that is assumed to be the same for the formal and informal economies, and the official GDP, the informal economy can then be measured choosing a benchmark year and assuming the size of the informal economy as a ratio of the formal economy is known that year. The current value of the informal economy is then calculated from the remainder of the sample (Vuletin, 2008). In fact, as noted by Ahumada et al. (2008), if the ratio of the value of transactions to nominal income remains constant through time (assuming no hidden transactions), the size of the shadow economy is equal to the difference between estimated total nominal income and observed nominal income. A key drawback to using this approach is that it is questionable to assume that k remains constant over time. Another criticism is that the velocity of money could be misinterpreted by the effect that credit card and check usage could have over the amount of cash held.

The idea presented by Gutmann (1977) and Feige (1979) has been criticized on several fronts. Ahumada et al. (2008) report that in addition to their weak theoretical foundation, the model's quantitative accuracy has been called into question due to time series properties, structural breaks and sensitivity to units of measurement [see also Thomas (1999), Schneider and

Enste (2000), and Breusch (2005)]. Tanzi (1999) also criticizes the monetary approach claiming that the income-velocity also depends on the opportunity cost of holding cash (an assumption that was omitted from the original approach) as well as variables that induce economic agents to make hidden transactions. Ahumada et al. (2008), however, note that interest in the monetary approach is still high because of the large and growing size of the informal economy, and because other methods are not improvements over the monetary approach.

In this approach, econometric models are constructed to measure differences in the observed demand for currency and the estimated demand for currency in the official economy. Vuletin (2008) uses a time series approach to measure the excess demand for currency. Currency demand is a function of factors such as the evolution of income, payment practices and interest rates, and of factors that drive individuals to operate within the informal economy such as the tax burden, government regulation and complexity of the tax system. To estimate the size of the informal economy, the growth of currency is measured when government regulations and the tax burden are held at their lowest value. The difference between currency development at that level is compared with the development of currency at the current level of high tax burden and government regulations. The size of the informal economy is then computed and compared to the official GDP. Criticisms of this method of estimation include the possibility that not all transactions are conducted with cash, the velocity of money may not be equal in both economies, and the assumption that the size of the informal economy is zero in a base year is unlikely. In addition, since Jamaica has some degree of dollarization, it is necessary to measure not only the local currency in circulation but also the foreign currency in circulation (Feige and Urban, 2008).

The discrepancy between national expenditure and income statistics can also be computed to estimate the size of the informal economy. The gap between the income measure of GDP and the expenditure measure of GDP should lead to an estimate of unreported income, thus indicating the size of the informal economy (Schneider and Enste, 2000). Critics of this method claim that expenditures cannot be measured without error and expenditure components cannot be constructed to be statistically independent from income factors.

The Multiple Indicators, Multiple Causes (MIMIC) approach which uses real cause and indicator variables rather than monetary values is also widely used (Loayza, 1997; Schneider and Enste, 2000). The concern with monetary variables, again, is that Jamaica is a country with a high degree of dollarization which may cause an underestimation in calculating the size of the informal economy. The MIMIC method focuses on several observable causes and the observable effects of the informal economy and uses their association with the informal economy itself, an unobserved variable, to estimate the size of the informal economy. Cause variables include the tax burden, labour rigidities, the importance of agriculture, the inflation rate and the strength of the enforcement system. Indicator variables used in the MIMIC approach are contributions to the social security system, degree of unionization, and secondary school enrollment. The correlations of these cause and effect variables are then inserted into an econometric regression to convert ordinal within-sample predictions for informal economy size into absolute time-series data (Vuletin, 2008). This is seen as the most accurate approach by many, however Feige and Urban (2008) “consciously refrain” from using it because of its many flaws in data transformation, sliding and scaling in order to create suitable benchmarks. Comparing the findings of multiple measurement approaches, however, compensates for the benefits and drawbacks of each and provides a more complete representation of the size of the informal economy.

TAXING THE INFORMAL SECTOR IN JAMAICA

Jamaica has a population of approximately 2.8 million people of which about 46% comprises the labour force (Statistical Institute of Jamaica, 2011). Beginning in July 2005, self-employed individuals earning over J\$169,104 per year (about \$US 2,500) are required to file an Income Tax Return. For those that are employed, income tax is deducted under the pay-as-you-earn (PAYE) system and they are not required to file regular annual tax returns. In Jamaica, corporations pay income tax on their net income at a flat rate of 33 $\frac{1}{3}$ % and non trading income (e.g., interest) is taxed on the receipts basis. Also, firms incorporated in Jamaica are expected to pay taxes on their worldwide income. When there are no “tax arrangements” with the government or when no “tax incentives” are given, non-resident corporations in Jamaica are subject to income tax if they derive income from any source in Jamaica. Although there are no taxes on capital or wealth in Jamaica, there is a transfer tax of 7.5% on the transfer of certain assets including land and buildings.

It is clearly arguable that the increase in tax revenue received from a sector producing unreported income in the magnitude of 40% of total GDP would help eliminate Jamaica’s massive budget deficit. This would result in decreased fiscal borrowing, lower inflation rate, and through the public sector’s welfare programs, a shrinking of income inequality. However, imposing taxes on the informal sector is a daunting task requiring methods of identifying, monitoring, and reporting previously unofficial income. An even greater task may be in a campaign to educate the public of the benefits of compliance, as well as to change citizens’ perceptions of a reformed tax system assuming, of course, that the government is able to institute sweeping tax reforms.

Most citizens and public administrators agree that extensive tax reforms are needed. Jamaica is listed by a 2008 Joint “Paying Taxes” Report by the World Bank and PwC as one of the top 10 out of 178 economies where it is most difficult to pay taxes due to the number of various types of tax, different payment dates, and complicated tax rates (Ministry of Finance and the Public Service, 2008). The current system needs revisions in efficiency, simplicity and fairness if it is expected to yield significant increases in revenue. The bureaucracy and expense required to maintain adequate records and to report and remit taxes is often prohibitive to most small businesses and microenterprises as well as self-employed individuals. Tax incentives extended to private industries based on political support pledged during elections are often riddled with corruption and inequality, and are harmful to the long-term economic health of the country. A study by Bahl and Wallace (2007) uncovered almost 200,000 different tax incentives embedded in the Jamaican tax system.

Separate agencies administer separate taxes with no coordination of efforts. It is not uncommon for different firms operating in the same industry to be subject to different taxes. The system of direct taxes in Jamaica is not only large and complex; it is embedded with various incentives, exemptions, and compliance requirements. The Corporate Income Tax (CIT) has a component of incentive schemes which permit businesses operating in certain sectors to receive exemption from the tax for periods up to 16 years. Although the initial impetus for extending these incentives may have been to promote investment, these exemptions have served to complicate tax reporting compliance and frustrate a majority of small business taxpayers. Taxpayers are also able to receive waivers for interest and penalty on late payments. This loophole allows the deferral of reporting and payment of corporate income taxes for long periods of time with no penalties. The CIT taxing authority (ITA) does not specify what constitutes

income, profits, or capital gains, but uses judicial interpretation to identify a source related to income in order for it to qualify as a tax basis. Exemptions for depreciation and allowances for capital expenditures also follow complicated schemes of sliding scales and ambiguous exceptions.⁵ In an already strapped fiscal environment, it is entirely too expensive and labour intensive for the ITA to attempt to verify income, deduction, and depreciation calculations for more than a few tax returns, so compliance enforcement is nearly impossible.

Nearly every industry in Jamaica is covered by a tax incentive plan. There are 12 such plans including the Urban Renewal Act, the Petroleum Refinery Encouragement Act, and the Jamaica National Heritage Trust Act. Other protected industries such as tourism, bauxite and alumina mining, shipping, motion picture, exporting, agriculture, and industrial finance receive generous tax holidays of up to ten years including CIT, GCT and import tariffs. In addition, they are allowed loss carry forward periods of 6 years after expiration of the tax holiday. Although these incentives were implemented to encourage investment in various industries, the revenue loss to the government may not be outweighed by the contribution these industries make to overall economic growth. Rider (2007) has found that in comparison to other CARICOM nations, Jamaica offers more generous tax incentives yet does not exhibit greater FDI-GDP ratios. Jamaica's average FDI as a percentage of GDP during the period of 1991-2003 was 4.46% compared with the median rate of 6.51% in neighbouring countries in his survey. He also estimates the revenue loss from tax incentives to be J\$18,944 million or 18.4% in total revenues. The revenue loss to the government is significant, yet the economy remained stagnant with an average GDP growth rate of 1%.

Clearly the main advantage of taxing the informal sector is the possibility of increased revenue for fiscal expenditures or reduction of the massive fiscal debt which now rests at 132% of GDP.⁶ Yet another advantage is that by legitimizing more private enterprises, Jamaica can provide greater access to education and skills training for these informal sector workers and micro business owners. The improvement in human capital has far reaching macroeconomic effects with increases in productivity and improved global competitiveness. As more informal enterprises enter the formal sector through legal registration and regulatory compliance, they will have greater access to Business Development Services (BDS) and can work towards improved productivity and improved product quality. If they are able to produce output that is globally competitive, they will be able to expand their operations, increase employment opportunities, and contribute to domestic economic growth.

Human resource development is critical in improving not only economic growth but also social conditions in Jamaica. Increased productivity resulting from improved human capital training will result in decreased levels of crime. Impoverished youth are especially vulnerable to violent acts of crime as a result of frustration from lack of legitimate employment opportunities, limited access to secondary education and occupational skills training, and a sense of helplessness and lack of vision for the future. An improvement in the legitimization of businesses and subsequent human capital training should lead to a reduction in the crime rate.

Voluntary tax compliance in the informal sector is also advantageous in providing opportunities for financing and a supportive legal environment. As individuals and firms are required to maintain proper accounting documents, this may serve to increase their visibility in the banking sector and demonstrate provable collateral and ability to repay debt. Increased

⁵ Some companies are permitted to accelerate depreciation and can write off assets over only two years.

⁶ Interest payments on the fiscal debt amount to 49% of Government of Jamaica (GOJ) annual expenditures (Martin et al., 2006).

financing is critical to entrepreneurs in this sector which is currently characterized as highly undercapitalized. Capital infusion in these firms will lead to growth, improved productivity and competitiveness, which will also expand the tax base, providing increased revenues for fiscal expenditures and economic recovery. For these reasons, there is fervent interest in the GOJ and other international organizations to improve access to capital for informal sector enterprises. Workers in the informal sector could be protected by minimum wage laws and thereby increase their standard of living and improve the likelihood of advanced occupational training.

The primary disadvantages to taxing the informal sector are costs of administration and enforcement, and horizontal and vertical inequity. As previously described, there are numerous tax agencies in Jamaica administering many complex, intertwining taxes and thousands of possible exemptions and incentive programs. Further, the GOJ is already under pressure to trim down its fiscal expenditures, reducing the possibility of greatly increasing personnel in the ITA.

The numerous tax incentives described above also make it discouraging to tax the informal sector because they lead to great horizontal and vertical inequities. Some incentives which were developed to attract investors to particular industries may only benefit large, capital intensive firms whereas small micro enterprises in the same industries may not qualify for the same incentives. Other large firms may have received incentives and concessions in return for political support whereas their smaller counterparts in the informal sector would not benefit if they were to begin voluntary tax compliance.

In addition, the public perception of the Jamaican tax system is extremely negative. People believe that even if they were to comply with tax laws, the revenues would be inefficiently and inequitably allocated. Social programs that would benefit the rural poor where the majority of informal workers operate are the first to be eliminated when the GOJ undergoes budget cuts. One would be hard pressed to convince these workers, then, that they should pay taxes when the tax dollars are not spent improving their communities.

FEASIBILITY OF INFORMAL SECTOR TAXATION

While it is agreed by many that the tax system in Jamaica is in dire need of immediate reform, there is no consensus on the feasibility of enforcing taxation in the informal economy. The present tax structure is politically charged and embroiled with a decades-old environment of inefficiency and corruption. As a result, public sentiment towards tax compliance is critically low and much effort must be expended to alter these views and exact any substantial change.

There is great domestic as well as international support for a reformed tax system in Jamaica. The Inter-American Development Bank (IDB), which has extended millions of dollars to Jamaica in the form of grants and loans, has recently helped finance a comprehensive study of the tax system during 2004-2005. The World Trade Organization (WTO) has outlined necessary changes in the tax system as concessionary obligations. Jamaica is also obligated under GATT and CARICOM agreements to institute tariff reform. Although domestic developments in tax policy reform were introduced by the Minister of Finance during his presentation of the 2008-2009 budget, they call for implementation in tentative, progressive phases. Similar tax reform goals were introduced in the 2005-2006 budget, calling for the elimination of special treatment for certain industries and a restructuring of the CIT. Data reflecting the extent of their effectiveness is still inconclusive.

There can be even greater progress made towards improving the economy through conversion of the informal sector as discussed above, but the GOJ must implement aggressive,

sweeping reforms immediately. The major areas of weakness such as an inefficient tax administration, an unfair and overly complex tax system and a disproportionately small tax base need to be addressed simultaneously. While reforms are made to streamline the inefficiencies and inefficacies in the bureaucracy of the tax administration, concurrent reforms need to be implemented to simplify the tax system and broaden the tax base. A lower rate of PAYE tax should be implemented and applied to all wage-earners but must be equally enforced for compliance. All CIT tax rates should be reduced but the government must homogenize its system and make all businesses pay without deductions or allowances. Only with the elimination of the tax incentive regime can Jamaica broaden its tax base and reduce the complexity and inequality of its current tax system. Alleyne (2005, 2007) agrees that the impact of these reforms will result in attracting more informal sector workers into the tax net. The Irish tax system could also be used as an example for Jamaica to model its tax reform. By introducing a low 12.5% uniform income tax rate and simplified procedures and regulations the Irish government has succeeded in meeting domestic fiscal goals while maintaining international obligations (Collister, 2006).

Government officials are reluctant, however, to institute such aggressive reforms, citing not insurmountable reasons such as protection of the revenue base, avoidance of jolts in the system, allowance of time for the tax administration to adjust, and minimization of accountants' recording difficulties (Davies, 2005). It may be apparent that the first step in instituting changes in the tax administration would entail hiring a team of creative, non-bureaucratic administrators. Reform of this branch of the government would not only allow for better monitoring and enforcement of taxes, but would also improve citizens' views of the tax authorities. This enhancement in public image will lead to greater possibility of voluntary compliance as taxpayers will feel their remittances may be handled efficiently and distributed fairly.

While administrative system reforms are important, they should not be conducted ahead of tax structure reforms. Immediate measures should be taken to simplify the tax structure, eliminating overlapping payroll taxes, reducing the number of exemptions and allowances, lowering corporate income tax rates, and broadening the tax base. Although there is consensus that the reforms are necessary, there appears to be some reluctance on the part of government officials to radically alter the present system; rather, they propose to slowly phase in program changes such as income tax threshold levels and to hold onto special allowances such as the hotel gratuity scheme (Davies, 2005). While tentative reforms are studied, discussed and slowly introduced, the economy of Jamaica is experiencing losses of potential revenues for fiscal growth as well as reduced competitiveness in the global marketplace.

It is important to bear in mind that, although more aggressive reform measures are recommended, it is reasonable to assume that improvements to the economy may not be immediately realized. Similar major tax reforms implemented in Portugal in 1989 contributed to a reduction in the informal economy only after a five year transition period. The initial result of the reform was a slight increase in the shift towards the informal sector due to the frequent revisions and amendments following the reform, accompanied by a continued leniency toward tax evasion (Dell'Anno, 2007).

CONCLUDING REMARKS

This paper describes the current state of the informal economy in Jamaica as one that is growing and contributes significantly to overall output, albeit not to government tax revenues. Traditional methods to force compliance within the informal sector via tighter rules and

restrictions have proven mostly ineffective, and thus new reforms are needed in order to utilize the power of the informal economy as an asset to government objectives. While it is clear that government incentives and subsidies must be removed in order to improve global competitiveness, it would also benefit local workers by increasing their confidence in the tax system and taxing authorities. As members of an important sector unofficially producing 40% of GDP, the Government of Jamaica must begin to give the same attention to these small enterprises as large private enterprises receive with respect to tax incentives and other industry protections. This would require a fair imposition of taxes on all businesses, a reduction in tax rates, improvement of tax compliance, and improvement in social programs in neglected areas. If Jamaican citizens perceive these taxes as beneficial to their families and their island, this will eventually facilitate voluntary compliance and the potential for subsequent economic growth.

Tax structure reform is, understandably, a difficult goal to achieve not only logistically, but politically as well. Industries which may have enjoyed tax allowances and exemptions for many years are likely to withdraw political support from officials who effectively remove these exemptions in an effort towards tax reform. It is crucial, however, to simplify the exemption schemes in order to incorporate the growing population of informal sector businesses into a horizontally as well as vertically equitable tax structure. Similarly, a tax rate reduction may initially appear to reduce the tax revenue base, but it must be undertaken in an effort to include informal enterprises and, thereby, greatly expand the overall tax base. More progressive taxes need to be introduced in order to achieve vertical equity. This would improve the image of the tax system which would help lure informal workers into the formal sector. Improving social programs in areas heavily populated by informal sector workers would also improve the cultural attitude towards taxes, taxing authorities, and perceived benefits of tax compliance. Although budgetary constraints are major inhibiting factors against improving social programs, it is important to consider the potential informal sector tax revenue which, if assessed and collected, could greatly contribute to these fiscal expenses.

Informal sector enterprises can greatly contribute to the official, recorded economic growth in Jamaica if they have significant incentives to joining the formal sector. Simplicity of business registration, improvement of social programs, equity in the tax system, and confidence in the taxing administration would enhance the environment for businesses to operate formally. This would improve the official GDP statistics and more accurately reflect the economic growth of the island nation. There is likely to be a significant impact on the global competitiveness of Jamaican industries following the integration of informal enterprises into the formal sector, but there is not sufficient data available to provide an exact measure. Improved access to business development services, increased availability of commercial credit for growth, greater wage protection for workers, and enhanced social programs such as education, occupational training and health care should result in a significant improvement in human capital levels. When reliable data is available, empirical studies can then be performed to measure the actual extent of this growth and its impact on Jamaica's economic competitiveness in the global marketplace.

REFERENCES

- Ahumada, H., Alvaredo, F. and Canavese, A. (2008) 'The Monetary Method to Measure the Shadow Economy: The Forgotten Problem of the Initial Conditions', *Economics Letters* 101: 97-99.
- Alleyne, D. (2005) 'The Flat Tax on Individual PAYE Income in Jamaica: What More is to be Done?' Proceedings of the 98th Annual Conference on Taxation. Miami, FL.
- Alleyne, D. (2007) 'The Evolution of Jamaica's Tax Burden', *Public Finance Review* 35: 150-171.
- Andreoni, J., Erard, B. and Feinstein J. (1998) 'Tax Compliance', *Journal of Economic Literature* 36: 818-860.
- Bahl, R. and Wallace, S. (2007) 'Comprehensive Tax Reform in Jamaica', *Public Finance Review* 35:4-25.
- Breusch, T. (2005) 'Australia's Cash Economy: Are the Estimates Credible?' The Australian National University (mimeo).
- CARICOM. (2008) *Jamaica Indicators*. The Statistics Sub-Programme, Caribbean Community Secretariat, Georgetown, Guyana.
- Collister, K. (2006, July 1) 'Why Jamaica is Failing to Grow', *Jamaica Gleaner Online*.
- Davies, O. (2005) '2005/2006 Jamaica Budget Opening Presentation', Ministry of Finance and Planning.
- De La Roca, J., Hernandez, M., Robles, M., Torero, M. and Webber, M. (2006) 'The Informal Sector in Jamaica' *Economic and Sector Study Series*, RE3-06-010, Inter-American Development Bank.
- Dell'Anno, R. (2007) 'The Shadow Economy in Portugal: An analysis with the MIMIC Approach', *Journal of Applied Economics* 10: 253-277.
- Feige, E. (1979) 'How Big is the Irregular Economy?' *Challenge* 20: 5-13.
- Feige, E. and Urban, I. (2008) 'Measuring Underground (Unobserved, Non-Observed, Unrecorded) Economies in Transition Countries: Can We Trust GDP?', *Journal of Comparative Economics* 36: 287-306.
- Friedman, E., Johnson, S., Kaufmann, D. and Zoido-Lobaton, P. (2000) 'Dodging the Grabbing Hand: The Determinants of Unofficial Activity in 69 Countries', *Journal of Public Economics* 76: 459-493.
- Gutmann, P. (1977) 'The Subterranean Economy', *Financial Analysts Journal* 33: 26-34.
- Kaufmann, D. and Kaliberda, A. (1996) *Integrating the Unofficial Economy into the Dynamics of Post-Socialist Economies: A Framework of Analysis and Evidence*. World Bank Policy Research Working Paper No. 1691. Washington, DC: World Bank.
- Loayza, N. (1997) *The Economics of the Informal Sector. A simple model and some empirical evidence from Latin America*. World Bank Policy Research Working Paper No. 1727. Washington, DC: World Bank.
- Maldonado, C. (1995) 'The Informal Sector: Legalization or Laissez-Faire?' *International Labour Review*: 705-728.
- Manning, G. (2008) 'Tax the Informal Sector, Say Financial Analysts', *Jamaica Gleaner Online*, March 30.
- Martin, D., Feinsilver, J. and Quinones, D. (2006) 'IDB Country Strategy with Jamaica (2006-2009)'. Washington, DC: Inter-American Development Bank.

- Ministry of Finance and the Public Service (2008) *Tax Policy: The Tax System*. Kingston: Government of Jamaica.
- Rider, M. (2007) 'Should Jamaica Tax Corporate Income?' *Public Finance Review* 35: 105-126.
- Schneider, F. and Enste, D. (2000) 'Shadow Economies: Sizes, Causes and Consequences', *Journal of Economic Literature* 38: 77-114.
- Tanzi, V. (1999) 'Uses and Abuses of Estimates of the Underground Economy', *Economic Journal* 109:338-347.
- Thomas, J. (1999) 'Quantifying the Black Economy: "Measurement Without Theory" Yet Again?' *Economic Journal*, 109: 381-389.
- Vuletin, G. (2008) 'Measuring the Informal Economy in Latin America and the Caribbean', *IMF Working Paper* 102. Washington, DC: International Monetary Fund.

