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GROWTHLESS JOBS

The Paradox of Rising
Employment and
Stagnant Output



Growthless Jobs

The Paradox of Rising Employment and Stagnant Output

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Acronyms

BOJ	Bank of Jamaica
BPO	Business Process Outsourcing
CARICOM	Caribbean Community
ETC	Employment Tax Credit
GDP	Gross Domestic Product
GNP	Gross National Product
HEART	Human Employment and Resource Training Trust
IDB	Inter-American Development Bank
ILO	International Labour Organisation
IMF	International Monetary Fund
JETC	Jamaica Education Transformation Commission
LAC	Latin America and the Caribbean
NIS	National Insurance Scheme
ODIN	Open Data Inventory
OECD	Organisation for Economic Co-Operation and Development
SEZ	Special Economic Zone
STATIN	Statistical Institute of Jamaica
SNA	System of National Accounts
TAJ	Tax Administration Jamaica



Executive Summary



Higher value-added employment contributes to higher economic growth because it is more productive.

Jamaica's unemployment rate is at a historic low, but meaningful economic growth remains elusive. The unemployment rate fell to 6.2 percent in April 2022, but economic growth which averaged around 1 percent for the last three decades, has improved only marginally to 1.2 percent in the four years preceding the pandemic. What appears to be happening is that employment is rising substantially while the increase in economic growth is negligible, a phenomenon termed "growthless jobs." The shortfall in growth, "the growth gap," stands at 8.6 percent of its 2015 GDP. This growth gap exists in the context of years of reforms aimed at stabilising the macro-economy, reducing unemployment, and increasing economic growth, and thus requires close examination. The limited literature that exists on the phenomenon suggests that growthless jobs may potentially arise from shortfalls in how GDP is measured, limited access to private sector credit, or because new jobs are low in quality or are labour-intensive.

This study found that the GDP methodology used by Jamaican authorities likely represents an accurate and consistent account of the Jamaican economy, including the value of digital transactions. Production by small businesses and informal activities, are also measured in the system using multiple sources of primary and secondary data. Nevertheless, the Jamai-

can system is dated, and the global system from which it derives does not classify digital transactions optimally. This has triggered a revision of the GDP due for 2025.

Credit availability can directly impact capital accumulation and overall economic performance, and thus could influence growthless jobs. Credit enables entrepreneurs to invest in capital which improves the worker-capital ratio and increases total output. Jamaica's credit to GDP ratio averaged 27 percent between 1991 and 2020. This is far lower than that of other upper middle-income countries at 84 percent. This means that Jamaican firms are limited in their ability to expand through credit (accessibility). The lack of sufficient financial depth and the accompanying shortage of credit may be a structural factor that has contributed to the stubborn growth dynamic.

Economic growth that correlates with increased employment is most likely to come from decent jobs. Between 2015 and 2022, there was an 18 percent decline in the number of people working part-time, and a simultaneous 14 percent increase in the number of persons working full time. Moreover, the formal share of employment grew from 40 to 44 percent of the employed labour force while the share of informal and agricultural employment declined to 40 and 16 percent respectively. Additionally, the number of private

sector employees expanded by 18 percent over the last seven years, accounting for 78 percent of new jobs. The second largest growth came from employers, growing by 59 percent, and representing 16 percent of new jobs. Taken together, the data indicate that employment growth has been largely due to an increase in decent, full-time, formal sector jobs, and confirms that growthless jobs is not arising from growth in low quality jobs.

There has been sustained growth in low value-added, labour-intensive employment. This caused employment and productivity to move in opposite directions resulting in a 7.8 percent decline in national productivity since 2015. Productivity declined in seven industries with the greatest declines being in Real Estate/Business Activities (43 percent) and Construction (27 percent). Meanwhile, four major industries registered increases in productivity, but in only two of these industries did employment simultaneously increase. These were Wholesale and Retail Trade, and Manufacturing with 2.3 and 0.3 percent productivity growth respectively.

The strong inverse relationship between productivity and employment is thus a result of diminishing returns when increasingly less skilled workers become employed. The positive relationship between skill level and output means that higher-skilled workers contribute more,

Falling from **6.3%** to **4.2%** from 2015 to 2021, skilled workers experience lower rates of unemployment than less skilled workers.

on average, to output. However, these workers are more employable and they are preferentially employed. A sustained demand for additional labour will eventually draw less skilled, less productive workers into the workforce. That is, the economy's most productive human resources are already nearly at full employment, and have been since seven years ago. Additional production has been taken up by less productive workers, as that is all that is available. These factors thus comprise structural issues in the labour force that serve as an explanation for growthless jobs.

Resulting in part from a weak education system and emigration, the low-skilled labour force has lowered growth potential because of its low productivity and, therefore, low economic growth. The obvious solution is to improve Jamaica's education

and training levels; this is underway, but slowly, and from a low starting point. An adjacent policy concern regards the incentives that were introduced to attract labour-intensive investments, particularly through Special Economic Zones (SEZs). They have been successful in reducing unemployment. However, since employment expansion in these industries has not been matched by increased output, and given the current tightening of the labour market, it is appropriate now to reassess the net benefit of retaining these incentives.

The decline in unemployment, and the associated growth experienced, however meagre, is a positive development in the Jamaican economy. Growthless jobs is an area of significant policy concern because, as the country approaches full employment, the Jamaican economy is

in reach of its productive limits. The level and quality of workers' human capital is the critical variable in understanding Jamaica's growthless jobs phenomenon. The policy options available to Jamaica are centred around increasing the quantity and quality of human capital through improving education and training, and allowing non-Jamaican workers to work in the country. Other policy "tweaks" include revising tax incentives to increase formal sector business and employment, and to reduce the unfair advantage enjoyed by certain low-value added, labour-intensive sectors.



Recommendations

Labour Market Competition



1

Reduce the financial and bureaucratic barriers for workers seeking access to the Jamaican labour market. Work permit approvals should be dependent solely on demonstrated qualifications, sufficient financial resources to cover living expenses before finding work, and a clean criminal record, similar to the requirements for the CARICOM Single Market and Economy skills certificate.

Shift investment incentives away from subsidising labour intensive production by reducing the tax benefits that are available exclusively to enterprises in these industries.

2



Formality



3

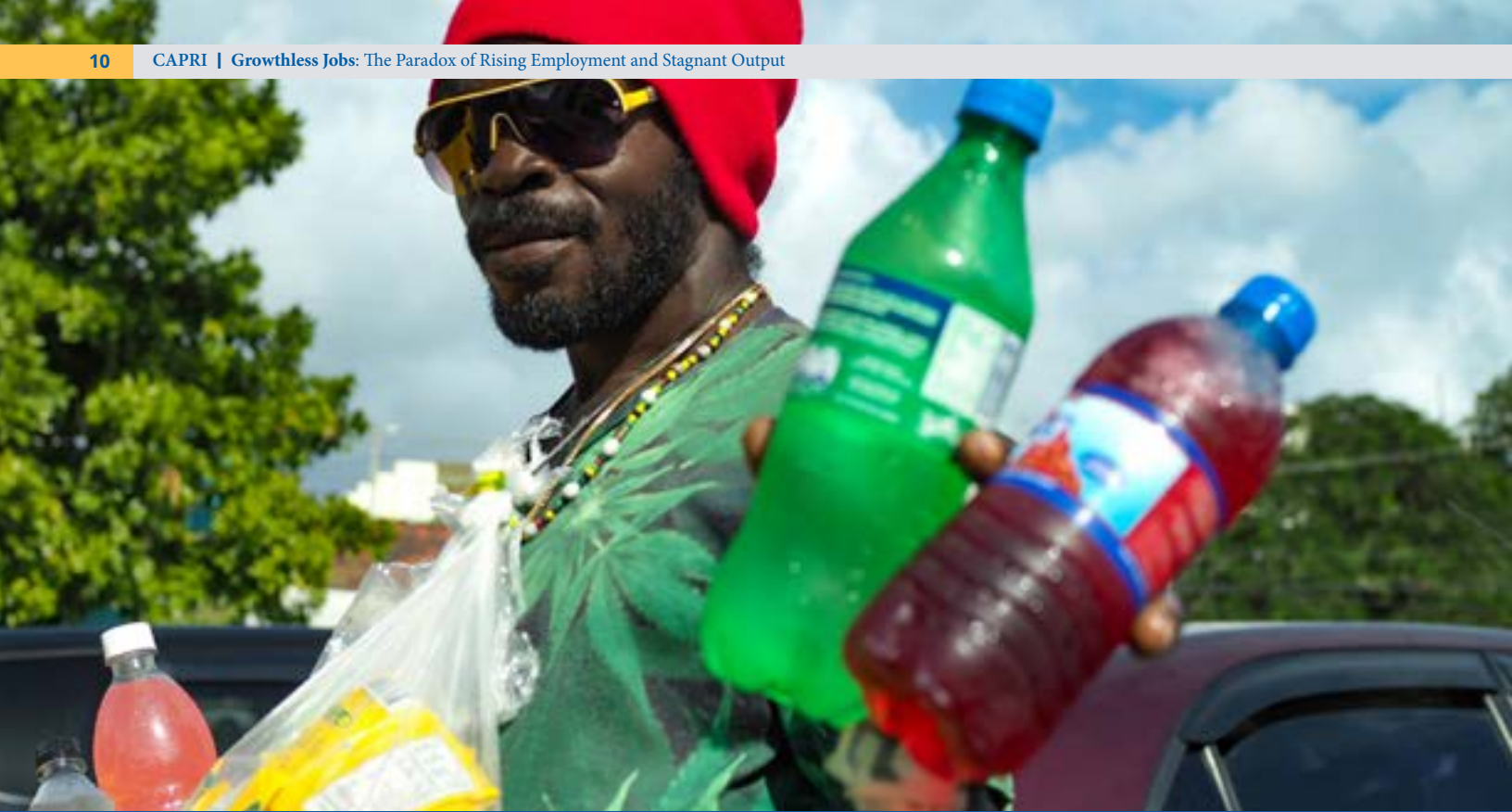
Eliminate mandatory statutory deductions not including NIS (HEART, Education, NHT) for incomes ranging from minimum wage to 2x minimum wage (equivalent to J\$ 1,248,000 as of June, 2023).

Increase the Employment Tax Credit (ETC) cap from 30 percent to 100 percent when payable income taxes are J\$1.5 million or less.

4







1

Introduction



While the number of people employed increased by almost **11%** between January 2015 and July 2022, GDP increased by only **2%** during that time.

Jamaica's unemployment rate is at a historic low, but meaningful economic growth remains elusive when considering total annual economic output (Gross Domestic Product or GDP). The unemployment rate, which had averaged 17 percent from independence in 1962 up to 2017, and never went below 9.7 percent, was 6.2 percent in April 2022.¹ At the same time, economic growth has historically been and continues to be low, averaging around 1 percent for the last three decades, including throughout the high unemployment era.² The growth rate improved only marginally to 1.2 percent in the four years preceding the pandemic. As of January 2023, GDP is estimated to be just about where it was

pre-pandemic at US\$15.83 billion.³

These growth and employment dynamics present a paradox given the expected correlation between increased employment and measurable economic growth. What appears to be happening instead is that employment is rising substantially while the increase in economic growth is negligible. This phenomenon has been termed "growthless jobs" and stands in contrast to the more popular anomaly of jobless growth, where economic output increases without a commensurate rise in employment.

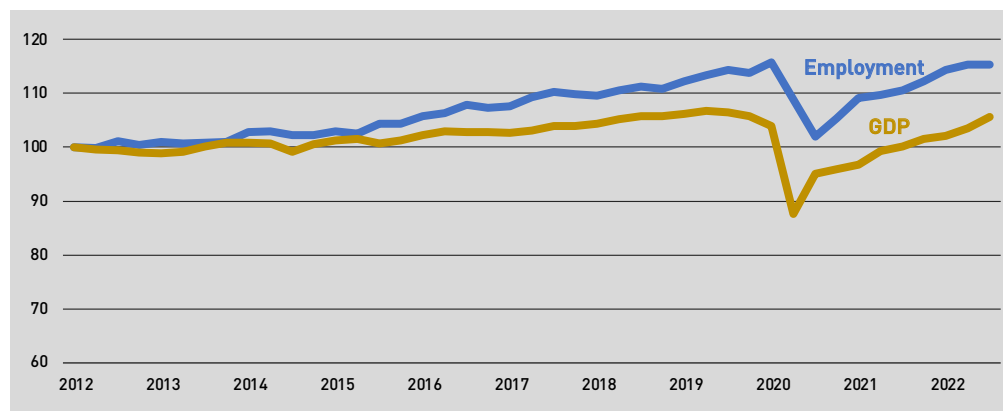
The problem of growthless jobs is linked to low productivity. While the number of

people employed increased by 10.5 percent between January 2015 and July 2022, GDP increased by a mere 1.9 percent during that time (Figure 1). This implies that labour productivity, or the average amount of output produced by each worker, has fallen. Had labour productivity remained constant at 2015 levels with the same growth in employment, GDP would have increased by 10.5 percent. The shortfall in growth, what can be considered "the growth gap," thus stands at 8.6 percent of the 2015 GDP.⁴ This means that between 2015 and 2022, 82 percent of the economy's growth potential was not realised because of falling productivity.

GDP growth has not matched the employment increase.



Employment and Output



Source: Author's calculations based on employment and value-added GDP data from STATIN.

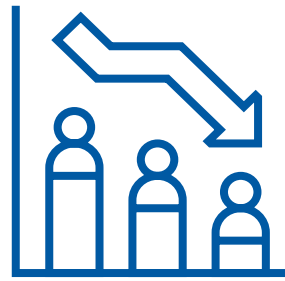
The unemployment rate, which had averaged **17%** from independence in 1962 up to 2017, and never went below **9.7%**, was down to **6.2%** in April 2022.

This report seeks to identify the cause or causes of Jamaica's growth gap. It does this by first reviewing the relationship between employment and economic output, including the unusual but not unheard of incidence of growthless jobs. The report then analyses trends observed in seven years of labour force data and evaluates the robustness of the national accounting methodology in estimating total GDP, emphasising the valuation of digital transactions and small business output.⁵ Based on this examination, the report will posit evidence-informed recommendations for relevant policymakers regarding what is impeding Jamaica's economic growth, and how those impediments might be mitigated.

This study makes use of Labour Force Survey data from 2014-2022, published annually by the Statistical Institute of Jamaica (STATIN). This data was anal-

ysed to identify trends in employment, especially with respect to employment growth, type, industry, and demographic characteristics of the labour force. STATIN was also the source of economic data and technical documents detailing

Jamaica's national accounting methods. Additionally, the analysis was supported by research done on related issues by other organisations.



Between 2015 and 2022, 82 percent of the economy's growth potential was not realised because of falling productivity.



Normally, the relationship between unemployment and output follows a pattern where a decline in unemployment is correlated with an increase in GDP, and vice-versa.

Generally, the sectors with higher employment growth experienced more significant reductions in productivity.





2 The Correlation of Growth and Employment



In the 1980s, several Latin American countries experienced high employment levels despite flat or negative GDP growth.

Normally the relationship between unemployment and output follows a pattern where a decline in unemployment is correlated with an increase in GDP, and vice-versa.⁶ Economists call this “Okun’s Law.” Though it is the usual course of events, correlation is not necessarily perfectly synchronised. A change in unemployment or GDP typically begins to have an impact on output within three to nine months.⁷ This occurs since firms take time to adjust their levels of employment to increase or decrease their output to match a change in demand.

Okun’s Law serves as a model for economists to analyse the relationship between economic output and unemployment levels. It obtains across many countries, particularly in advanced economies such as those in the Organisation for Economic Co-operation and Development (OECD). Okun’s Law has also been observed in developing countries. One such country is Malaysia where a 1 percent decline in unemployment was found to increase economic output by 1.75 percent.⁸ The strength of the relationship may vary depending on factors such as whether employment is rising or falling, the duration of the shock, structure of the economy, employment structure, and the extent of informality.⁹



Studies of the 2008 recession found that the economic downturn had mixed effects on employment in different countries.¹⁰ There were variations in the extent to which unemployment increased relative to the decrease in GDP. In the United States, a 2.6 percent economic contraction led to a 5.2 percent increase in unemployment.¹¹ Meanwhile, in Germany, a 4.7 percent economic contraction increased unemployment by a mere 0.2 percent.¹² For the most part, these variations can be explained, and have been attributed to factors such as employment protection initiatives that buffered the effect of the downturn in countries that had such programmes, suggesting that social safety nets may impact how unemployment levels respond to shocks. Notwithstanding, the relationship between unemployment and GDP was generally weaker in developing countries

than in wealthier countries.¹³

Okun’s Law has been observed not to have held true in several instances. While jobless growth is the more common manifestation of a divergence, growthless jobs has been observed in a diverse group of countries, comprising developed and developing economies, including India, Ireland, Italy, Argentina, Chile, Colombia, and Uruguay.¹⁴ In the 1980s, several Latin American countries experienced high employment levels despite flat or negative GDP growth.¹⁵ In Greece, following the 2008 financial crisis, employment and output decoupled as employment recovery was much stronger than output recovery.¹⁶ Despite these instances of growthless jobs, the phenomenon and its causes have not been widely explored in evidence-based research.

Okun’s Law serves as a model for economists to analyse the relationship between economic output and unemployment levels.

The Growth Gap

Jamaica should be experiencing stronger growth, and greater prosperity, considering the reforms that have been implemented over the past decade. Beginning with the first of two International Monetary Fund (IMF) programmes in the 2010s, Jamaican policymakers embarked on an ambitious effort to reduce the public debt, stabilize the economy, and promote economic growth and resilience.¹⁷ The expectation was that more investment and economic growth would follow. In 2018, the national debt fell to less than 100 percent of GDP for the first time in nearly two decades. While monthly inflation has mostly been kept below the independent central bank's upper boundary of 6 percent, it climbed above this level during the pandemic, spiking to 11.8 percent.¹⁸ This spike came in the wake of the disruptions caused by COVID-19 and the Russia-Ukraine conflict, and was comparable to inflation in major economies.¹⁹ Fiscal consolidation has remained on track with non-interest, government expenditure exceeding revenue. This "primary surplus" has been greater than 5 percent of GDP.

Low interest and unemployment rates along with robust business and consumer confidence should have led to a positive response to the policy reforms, but the expected gains have not been realized. Economic growth averaged just 1.2 percent annually from 2015 to 2019.²⁰ This is nearly the same as the 1.1 percent average growth rate observed from 1993 to 2007, and only twice the 0.6 percent growth observed from 2008 to 2014, during which the global financial system crashed.²¹ Understanding the root cause of this growth gap is crucial for ensuring that the benefits of employment are fully realized, and achieving sustainable and inclusive economic growth.

Explanations of the Growthless Jobs Phenomenon

The paradox of growing employment without a commensurate reflection on an economy's total output can have a num-



Low interest and unemployment rates along with robust business and consumer confidence should have led to a positive response to the policy reforms, but the expected gains have not been realized.

ber of explanations. Among the various explanations proffered, the literature suggests that growthless jobs may arise from shortfalls in how GDP is measured, including a failure to sufficiently capture digital transactions. There could also be limited access to the credit necessary to promote business productivity growth. Additionally, it could be a result of real output not keeping pace with employment growth because of the type of new jobs being created, for example with increased production in low productivity, informal employment or labour-intensive sectors. It is also possible for some combination of these to be happening simultaneously.

Measuring National Output

One explanation for growthless jobs concerns the methodology for measuring GDP and its potential weaknesses in accurately capturing the total economy. This includes digital transactions and the activities of informal producers and small businesses. In particular, the emergence of digital platforms has led to new forms of economic activity, such as online retail sales, peer-to-peer transactions, and gig work, which may not be captured accurately by traditional GDP data-gathering techniques. Digital platforms such as Instagram and WhatsApp may be used to do business even when the product is delivered and paid for offline. This can make it difficult to track business activity. Accurately measuring the output of the digital economy, including transactions on digital platforms, requires national

statistical agencies to develop new methods and indicators to keep pace with the changing nature of economic activity.

Access to Credit

Entrepreneurship is key to increasing labour productivity. New businesses in particular tend to be more innovative than existing firms and so are a key driver of economic growth.²² Credit is required for the growth of new and existing businesses, and the jobs they provide. A lack of access to sufficient credit may contribute to growthless jobs since it could prevent small businesses from exploiting increased demand (often itself associated with a rise in employment).²³ These point to a possible explanatory role for entrepreneurship in the problem, which in this case is that there isn't enough credit available to entrepreneurs.

Employment Quality

Growth in poor quality employment is another potential explanation of growthless jobs. The "quality" of a job takes into consideration the number of work hours, work formality, and job status. Working for only one hour in a given week is sufficient to classify someone as employed.²⁴ Therefore, in theory, a rise in part time work would not be expected to produce significant output growth, and could thus cause growthless jobs. For example, a rise in temporary and part-time employment was seen in Greece between 2013 and 2020 as that country experienced growthless jobs, suggesting that a rise in



part-time employment was a potential explanation.²⁵

Beyond low-quality, formal jobs, informal employment is associated with structural economic shifts that may reduce the impact of rising employment on output growth.²⁶ This explanation implies that much of the rise in employment may not be brought about by a rise in good quality, full-time jobs. As such, the expected positive impact on output growth would not be realised.

Growthless jobs may also be explained by increased employment in labour-intensive industries with thin margins which add little to GDP on a per-person basis. In these instances, additional workers do not contribute substantially to GDP as their jobs do not add as much value as the previously employed. An example of

this correlation has been thought to occur in Ireland where growthless jobs has been attributed to a contraction in output in capital intensive sectors which led to a significant fall in GDP, but which had no significant impact on employment (the same number of people were producing less).²⁷ Moreover, the relatively low wages of these employees may not be able to satisfy the level of private consumption that could stimulate further economic growth.²⁸

An unskilled workforce may be a cause of growthless jobs, but this angle has not been widely studied since the other countries which have documented the phenomenon (Italy, Greece, Ireland) have well-educated populations, with between 28 and 63 percent of 25-34 year olds with tertiary education.²⁹ The Greek study reviewed human capital in the context of its high rate of emigration of young, productive workers, but

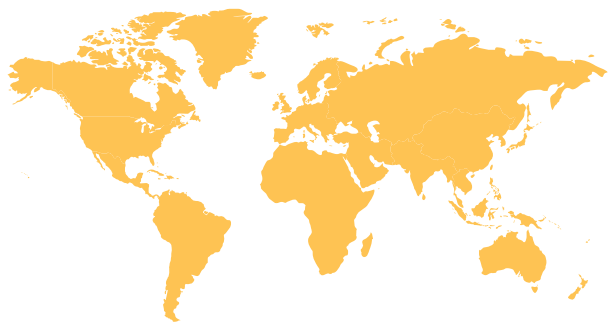
did not disaggregate the impact by workers at different skill levels.³⁰ A World Bank study of growthless jobs in Latin America and the Caribbean (LAC) identified the share of highly skilled workers in the economy as a possible contributing factor, but did not draw a conclusion.³¹ More generally, skilled workers are critical to driving productivity growth, and thus their lack, conversely, is likely a factor correlated with the growthless jobs problem.³²

All of the factors above are present in Jamaica, and each play a role in several other economic and social dynamics and domains. The extent to which any of them might be correlated with Jamaica's experience of growthless jobs, however, is not known, but will now be explored.



3

Examining the Explanations for Growthless Jobs



STATIN's transparent methodologies are guided by international standards, and are employed in dozens of countries globally.

Exploring the existing explanations of growthless jobs as they relate to Jamaica requires a better understanding of three main areas. The first relates to the process of national accounting, and in particular the measurement of GDP, which is reviewed here with a focus on the digital economy. The second area is the capability of small businesses to compete, innovate, and grow, given their access to sufficient financial resources. Finally, there is the quality and productivity of the types of jobs being created.

Measuring National Output

In theory, growthless jobs may emerge from an underestimation of actual GDP growth by the national statistical agency. Concerns about gaps in the measurement of national output largely concern production related to digital transactions, small businesses, and informal activities.

Digital Transactions

The System of National Accounts (SNA) is a set of international guidelines and standards developed by the United Nations to provide a framework for measuring the economic activity of countries. It sets out a standardized method for measuring a country's Gross Domestic Product (GDP), which is the total value of goods and ser-

vices produced within the country's borders during a specific period of time. It is periodically revised; the most recent is the 2008 SNA. Jamaica uses the SNA for its own national accounting. Jamaica utilizes the 1993 SNA, as do 103 other countries (up to 2017).³³

As the digital economy has grown and expanded, new types of transactions and ways of doing business have to be accounted for. However, the suggestion that Jamaica's current methodology, the 1993 SNA, does not accurately capture digital economy-related transactions is not borne out by the research. While digital economic activities are classified at a lower level of detail in STATIN's current methodology (as compared to the 2008 SNA), the 1993 SNA nevertheless appears to capture the value of digital transactions adequately. The standard approach to measuring traditional transactions also covers most digital transactions which are included in conventional production statistics.³⁴ That is, large companies report the value of their activities facilitated by digital platforms, while this value for small businesses or informal producers is estimated using data from STATIN's surveys and secondary sources. Special methods of estimating the digital economy using satellite accounts have not detected any meaningful misrepresentation of the value of digital transactions.³⁵ Further, while Jamaica's internet use

has grown substantially in recent years, there is evidence that there has been no meaningful increase in undetected digital transactions.³⁶ As such, there is likely no meaningful underrepresentation of growth due to the failure of national accounting methodology to capture the value of digital transactions.

The Rise of Small Businesses

The robust growth in total employment, increased liquidity in the financial sector, and the surge in new business creation over the last seven years indicate substantial shifts in the business environment in Jamaica.³⁷ There has been a tripling of the annual number of new company registrations in Jamaica.³⁸ The increase in new businesses is generally thought to be a positive development. Entrepreneurship promotes innovation, competition, employment, productivity, and economic growth.³⁹

How the national accounting system measures the output of small businesses is an area in which an undercounting of economic activity might be occurring, leading to lower growth being recorded than is actually happening. As a basic premise, many small businesses do not get registered in the first place, so it might be argued that the true pace and extent of new business creation is not known.⁴⁰

Special methods of estimating the digital economy using satellite accounts have not detected any meaningful misrepresentation of the value of digital transactions.

However, the output of small businesses is indirectly measured as an estimate using financial and consumer data obtained from the Labour Force Survey, the Survey of Living Conditions, the Household Expenditure Survey, TAJ records, and other sources.⁴¹ This method is used due to the difficulty in measuring directly the output of Jamaica's thousands of small businesses and self-employed operators, many of which experience substantial variability in their output and income. A similar approach is taken to estimate the informal economy.

In any case, the growth of new business registrations does point to a positive trend in the Jamaican economy but does not necessarily predict robust growth for two main reasons. First, there may be delays between registration and operation. There may be a time factor between the creation of a new business, the creation of jobs for that business, and the production of goods or services. When new businesses register with the Companies Office of Jamaica, they are added to STATIN's registry of local enterprises.⁴² However, many companies register well before they begin operations, which may cause a lag in the observation of meaningful economic activity.⁴³ Secondly, small businesses tend to have a lower value-added than larger companies.⁴⁴ Therefore, a significant rise in the number of new small businesses is not always indicative of large increases in national output.

Notwithstanding the question of how accurately data on new businesses is being captured, where rising entrepreneurship has been associated with growthless jobs, the relationship between them remains unclear.⁴⁵ Further, an empirical study using data from over 100 countries found no significant relationship between total entrepreneurship and economic growth.⁴⁶ This indicates that growthless jobs is probably not arising from an underestimation of new business activity growth.

Credibility of the National Accounting System

Jamaica ranks well in data openness measures, which is a positive indicator for data reliability. STATIN's transparent methodologies are guided by international standards, and are employed in dozens of countries globally. The credibility of output estimates also rests on the competence and integrity of the statistical agency. The Open Data Inventory (ODIN) assesses countries based on the coverage and openness of national statistics across three broad categories: social statistics, economic statistics, and environmental statistics.⁴⁷ ODIN ranks Jamaica seventh in the Americas and 70th globally.⁴⁸ Moreover, STATIN is widely trusted across the Jamaican society because of its record of remaining politically unmotivated and transparent, while

delivering on its mandate.⁴⁹

STATIN collects data in frequent and extensive surveys using standard, publicly available methodologies. Missing or hard-to-measure data—such as that pertaining to informal economic activities—are estimated using robust statistical approaches with STATIN's own data, and data from other credible public entities such as the BOJ, Jamaica Customs, and the TAJ. STATIN has indicated that adoption of the most recent edition, the 2008 SNA, has not proceeded due to cost constraints. However, this is unlikely to significantly impact GDP estimates since the substantive changes from the 1993 version concern activities which are quantitatively insignificant in Jamaica.⁵⁰

These facts indicate that measurement of Jamaica's GDP is not significantly inaccurate by currently accepted standards and practices, but there may be areas of improvement, particularly with capturing digital transactions in more detail. We can conclude then that STATIN's data is consistent, verifiable, trustworthy, and impartial, and miscalculation of national output is unlikely to be the source of the growthless jobs phenomenon. Nonetheless, the ongoing 2025 revision of the SNA should improve on the 1993 and 2008 editions, and its timely implementation would ensure STATIN's methods remain in line with global standards.



Access to Credit

The relationship between domestic credit and economic growth could be considered in an attempt to understand the causes of growthless jobs, as credit availability can directly impact capital accumulation and overall economic performance. Domestic credit to the private sector refers to the financial resources provided by financial institutions to consumers, entrepreneurs, and businesses.⁵¹ The observed relationship thus far is that there is a positive correlation between credit supply and labour productivity.

Credit enables entrepreneurs to invest in capital which improves the worker-capital ratio and increases total output. A more favourable worker-capital ratio makes each worker more productive. When entrepreneurs lack sufficient financial resources to invest in necessary capital, the growth of their businesses is restrained. This was seen in the UK, where a 10 percent fall in credit supply was associated with a 5-6 percent fall in capital per worker, and a 5-8 percent fall in labour productivity.⁵²

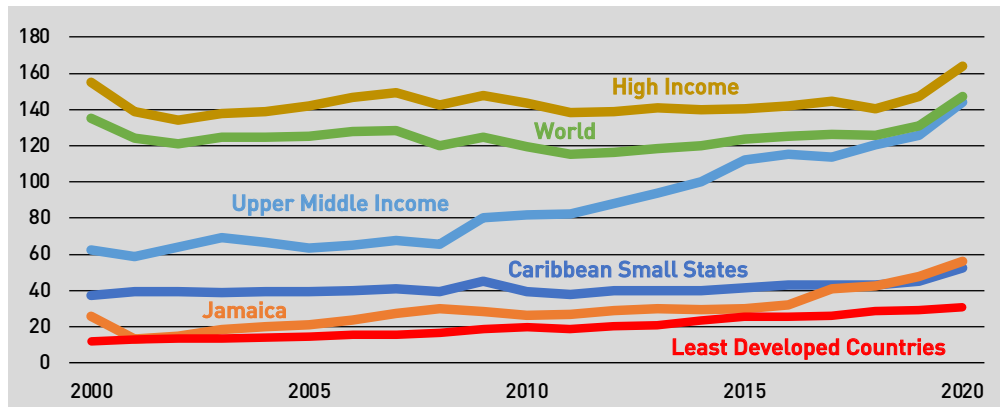
Businesses in Jamaica may be stymied by insufficient access to affordable capital. Jamaica's credit to GDP ratio is far lower than

that of other upper middle-income countries, and not much higher than what is reported for least developed countries. From 1991 to 2020, Jamaica's private credit to GDP ratio averaged 27 percent, compared to 84 percent for other upper middle-income countries (Figure 2). Jamaica's rate was not much higher than the 17 percent reported for the least developed countries and was five times less than the 142 percent reported for high income countries.⁵³

Jamaica has lagged behind other Upper Middle-Income countries and the Caribbean in credit going to the private sector.



Ratio of Private Sector Credit to GDP



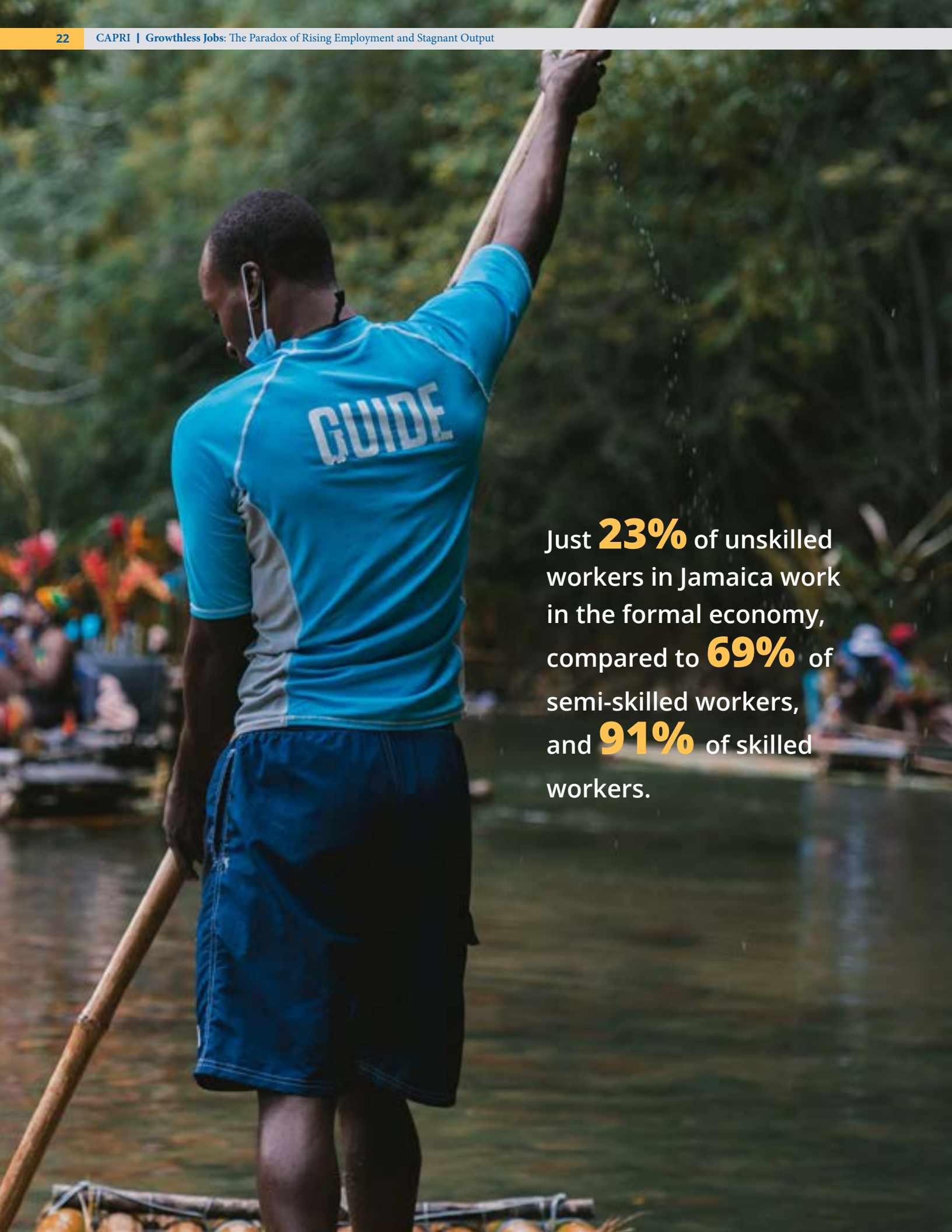
Source: The World Bank, 2022.

Credit supply in Jamaica has always been weak, and the local capital market lacks sufficient financial depth. The credit to GDP ratio never climbed above 40 percent, between 1960 and 2016.⁵⁴ The long period of fiscal indiscipline in Jamaica contributed to general macroeconomic instability including high and volatile

interest rates which led to a distortion of saving and investment incentives.⁵⁵ Recent reforms have helped to reduce and moderate interest rates and the domestic private credit to GDP ratio is rising, reaching a peak of 56 percent in 2020. The lack of sufficient financial depth and the accompanying shortage of credit may be a structural

factor that has contributed to the stubborn growth dynamic.⁵⁶ However, the recent upward trend in credit due to lower and more stable interest and inflation rates is indicative that, while important, credit may not be a central contributing factor to growthless jobs in the current Jamaican case.

When entrepreneurs lack sufficient financial resources to invest in necessary capital, the growth of their businesses is restrained.



Just **23%** of unskilled workers in Jamaica work in the formal economy, compared to **69%** of semi-skilled workers, and **91%** of skilled workers.

Employment Quality

In evaluating the nature of jobs that are accounting for the increase in employment, a distinction is made between formal and informal, and between part-time and full-time jobs. In accordance with international standards, an informal worker is defined as someone who is doing neither domestic nor agricultural work, but who is self-employed in an unregistered enterprise, or an employee who doesn't pay NIS deductions. A job in the formal sector would be one in a registered entity where employer and employee pay all requisite taxes, deductions, and contributions. Also, in line with international standards, anyone who works formally or informally for cash or kind for at least one hour in a week is classified as employed. Economic growth that correlates with increased employment is most likely to come about when the new jobs are formal, full-time jobs. Thus, examining the quality of the new jobs being created in Jamaica may yield some answers as to why we are not seeing the economic growth we expect.

Full-time or Part-time

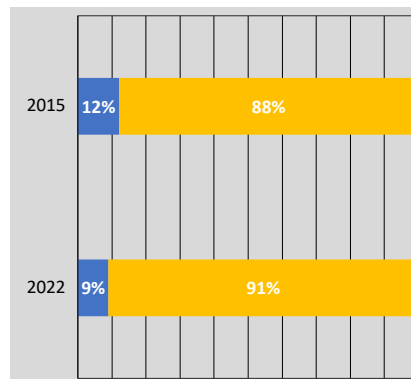
Employment data from the Labour Force Surveys between 2015 and 2022 shows that most of the newly created jobs have been full-time jobs. In Jamaica, the number of employees working more than 35 hours has risen substantially alongside a simultaneous, but less dramatic fall in those working fewer than 35 hours, indicating a shift towards full-time jobs (Figure 3).

Between 2015 and 2022, there was an 18 percent decline in the number of people working fewer than 35 hours, representing 25,000 people.⁵⁷ Simultaneously, the number of persons working 35 hours or more has grown by 14 percent, an increase of 143,600 individuals. This decline in part-time work combined with a significant growth in full-time employment indicates that most of the newly created jobs were full-time jobs. It therefore indicates a trend of transition from part-time to full-time work.

There has been a shift from part-time to full-time work.



Share of Labour Force by Hours Worked



Source: Author's calculations based on STATIN Labour Force Survey Data.

However, full-time work is not always indicative of work quality, as indicated by a study of informal workers in the Asia Pacific which found that 40 percent of informal workers compared to just 35 percent of formal workers, work 48 hours or more per week.⁵⁸ This indicates that, while positive, growth in work hours alone is not sufficient to determine either the quality of jobs being created, or their ability to contribute to economic growth.

Formal or Informal

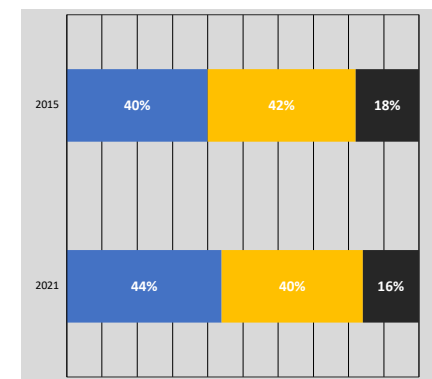
The rise of formal work is displayed by the occupation composition of employment growth. Two of the strongest occupational growth categories were "clerks", accounting for 24 percent of the new jobs, and "professionals, senior officials, and technicians", which added 21 percent (Table 1). Combined growth in those two categories represents half of the growth across occupations, and 84 percent of those were formal workers (compared to 44 percent of the total employed labour force in

2021). The other major growth occupation was service and shop sales workers, which added 23 percent of the new jobs, 48 percent of whom work formally. The rise in formal employment has been fuelled by increased employment of educated workers. A younger, more educated cohort entering the workforce in formal employment suggests that changing demographics are bringing about a change in the structure of the labour market.⁵⁹

Labour has shifted into more formal employment.



Employed Labour Force by Industry and Sex



Source: Author's calculations based on STATIN Labour Force Survey Data.

Job growth was concentrated in occupations with a high share of formality.



Job Growth by Occupation and Formality 2015-2022

	Growth	Percent of New Jobs	Percent Formal
Clerks	31800	24.3	95.5
Service, Shop, and Market Workers	30675	23.4	48.3
Professionals/Technicians	27350	20.9	70.4
Craft/Trade Workers	18900	14.4	17.8
Elementary Occupations	18100	13.8	38
Plant and Machine Workers	4150	3.2	38.8
Agriculture/Fishery Workers	-11375	-	27.8
Other	-1075	-	-
Total	130,975*	100.0	71

Source: Author's calculations based on STATIN Labour Force Survey Data.

Globally, formal work and education level are positively correlated.⁶⁰ Just 23 percent of unskilled workers in Jamaica work in the formal economy, compared to 69 percent of semi-skilled workers, and 91 percent of skilled workers. On average 44 percent of all workers are in the formal economy. Seventy-five percent of new jobs were filled by more than 89,000 semi-skilled workers gaining employment between 2015 and 2021, causing their unemployment rate (which is higher than unskilled and skilled workers) to plummet from 27 percent to just 14 percent. So many educated workers gaining employment underlines the source of growth of formal work and offer further evidence that a significant number of new jobs are decent jobs.

Decline in Self Employment, Increase in Private Sector Employment

The growth witnessed in employment,

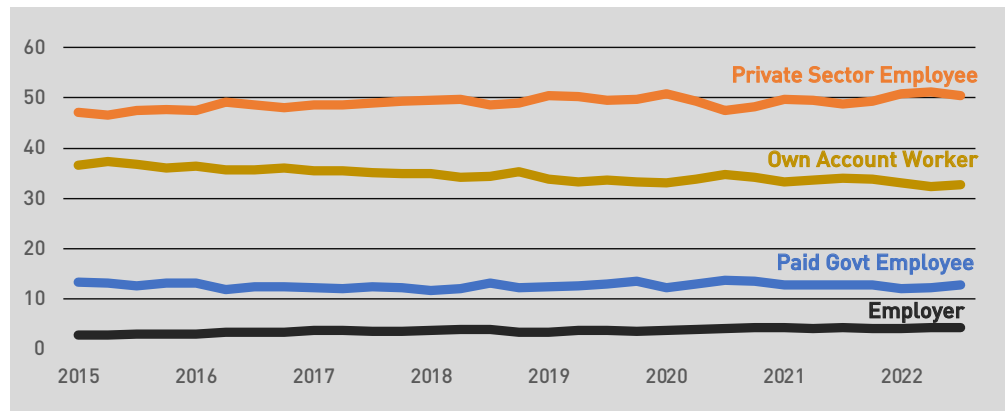
according to the labour force data, also indicates a gradual shift away from own account work (self-employment) and towards more organised business activities. The two strongest growth categories were private sector employees and employers. The number of private sector employees expanded by 18 percent between 2015 and 2022, moving from 48 to 51 percent of employed persons (Figure 5). The second largest growth came from employers, adding 19,500 workers, an increase of 59 percent, which moved their employment share from 3 to 4 percent. The growth of these groups further substantiates the idea that most new jobs ought to be good quality jobs, given that they suggest an increase in people working for a wage and as employers. New company registration data, as mentioned earlier, also shows a rise in entrepreneurship in that there was a near tripling of annual new company registrations from 1,948 in 2013 to 4,878 in 2021.⁶¹



The share of own account work declined.



Job Status of the Employed Labour Force



Source: Author's calculations based on STATIN Labour Force Survey Data.

Other elements of the trend can be seen among the self-employed (“own account workers”). This group remained stagnant, leading to a decline in their share of the employed from 36 to 33 percent. The stagnation of own account and informal work further supports the notion that wage labour accounts for most of the total job growth.

The general trend therefore emerges as one of increasing wage-labour in private commercial enterprises and of a rapidly increasing number of employers. Taken together, the data indicates that employment growth has been largely due to an increase in quality jobs in terms of being full time and in the formal sector. Thus, growthless jobs is not arising from an increase in low quality jobs. However, the job growth in certain industries has not brought about a commensurate rise in output, suggesting that they are low productivity jobs.

Productivity and Labour-Intensive Jobs

Another indicator of the quality of a job, in relation to growth, is the extent to which it adds value. The gross value added of an industry is the difference between its gross output (primarily sales) and its purchases from other industries (intermediate consumption).⁶² Higher value-added

employment contributes to higher economic growth because, by definition, it is more productive. Productivity can be understood as how well resources are used to produce goods and services that meet the requirements, needs, and expectations of the consumer.⁶³ It is calculated as the ratio of output to input.⁶⁴ Labour productivity refers to the average output per worker in an industry. “Labour intensive” production requires a relatively large amount of labour to produce a given quantity of a good or service.⁶⁵

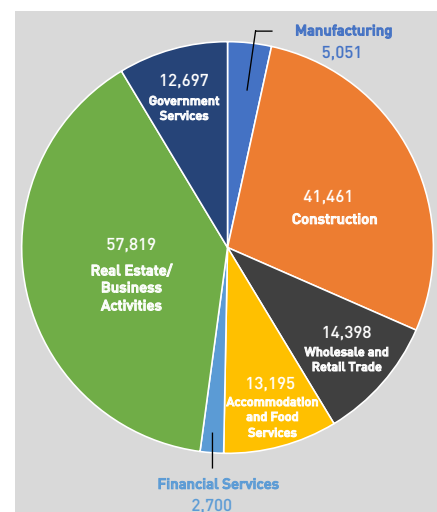
A negative relationship between employment and productivity was observed across most industries resulting in a 7.8 percent decline in national productivity between 2015 and 2022 (Table 2).⁶⁶ Of the 12 industries analysed, seven experienced declines in productivity. The greatest declines in productivity among major industries were in Real Estate/Business Services (43 percent) and Construction (27 percent). Productivity in these two industries fell when employment growth significantly outpaced output growth. In Real Estate/Business Services (which includes Business Process Outsourcing), real output grew by a mere 2.4 percent after employment increased by 80 percent (Figure 6). Similarly, in Construction, output grew by only 9.4 percent as employment grew by 50 percent. The disparity between output and employment growth reveals the dramatic reduction in productivity. Similar trends

were seen in the other industries which added jobs over the period, though not to the same degree (for job growth by industry, see Appendix I).

Job Growth was concentrated in a few labour-intensive industries.



New Jobs by Industry



Source: Author's calculations based on STATIN Labour Force Survey Data.

Generally, industries which added more jobs experienced greater productivity reductions.



Change in Employment, Output, and Productivity 2015-2021 (Percent)

Industry	Productivity	Employment	Output
Real Estate/Business Activities	-43	80	2.4
Construction	-27	50	9.4
Accommodation and Food Services	-32	15	-22
Financial Services	-10.7	10	6.7
Government Services	-6.8	8.1	0.7
Manufacturing	0.3	6.9	7.5
Wholesale and Retail Trade	2.3	6.5	9
Other Services	-4.9	-1.1	-5.8
Agriculture and Fishing	36	-5.7	28
Logistics	8.8	-7.9	0.3
Mining and Quarrying	-47	-31	-64
Utilities	87	-45	1.6
Total	-7.8	10.5	1.9

Source: Author's calculations based on STATIN Labour Force Survey Data.

Four major industries registered increases in productivity, but in only two did employment simultaneously increase. That is, in two of four industries where productivity increased, jobs were lost, not created. Productivity rose in Wholesale and Retail Trade (2.3 percent) and in Manufacturing (0.3 percent). Employment in each of those industries increased by 6.5 percent (14,400 jobs) and 6.9 percent (5,000 jobs) respectively. This makes these two industries the only two to register simultaneous increases in productivity and employment between 2015 and 2022, but even then, the productivity growth in Manufacturing is marginal.

The other two major industries which improved productivity in the period were Agriculture and Fishing (36 percent), and Logistics (8.8 percent). Productivity growth in the Agriculture and Fishing industry was driven by a 30 percent increase in real output combined with a 5.7

percent decline in employment. Meanwhile, the output growth in Logistics was minimal at 0.3 percent, but a loss of 12 percent of its workers caused productivity to rise nonetheless. The Utilities industry is another example of the relationship between marginal labour and productivity. Output in Utilities grew marginally since 2015, but a 45 percent (7,125 workers) fall in employment caused productivity to jump by 87 percent. These examples underline the role that adding or removing less skilled labour plays in productivity across industries and in the wider economy.

A low unemployment rate is an indication of a strong labour demand, even for semi-skilled and unskilled workers, which causes marginal, less productive employees to enter regular employment. Initially, the most skilled and capable workers are preferentially employed because they are the most productive.

When the demand for labour intensifies, the number of still-unemployed skilled workers gradually diminishes, and workers who are less skilled increasingly have to be taken on. However, those additional (less skilled) workers are not as productive as the previously hired ones and thereby add less value. Consequently, while production still increases with each hire, the increase is not commensurate to the increase in the number of workers because of the lower productivity of these newer workers. Conversely, when an industry sheds employment, the first to go are less skilled, less productive workers who add less value. Changes in the numbers of marginal labour employed appears, based on the data, to have been the dynamic at play in the Jamaican labour market since 2015.

The tremendous job growth seen over the last seven years has failed to deliver robust growth as productivity declined throughout the period. Productivity reductions were greatest in the industries with the greatest increases in jobs. In fact, only two industries simultaneously increased productivity and employment numbers. COVID-19 caused significant disruptions in the job market and wider economy, but the fallout did not reverse trends which were underway before the onset of the pandemic. Generally, productivity changes seem to be influenced mostly by the human or physical capital available. Where human capital was weak, job growth was not able to increase output commensurate to existing production levels. Alternatively, losing less productive human capital improved productivity, across several industries.

The phenomenon of growthless jobs in Jamaica can thus be related to the education and skills levels of its workforce. Productivity is determined by, amongst other things, the amount of capital, both physical and human, that each worker possesses. Human capital refers to the accumulated skills and professional knowledge of a worker. A poorly educated work force is one which is working with little human capital, which in turn limits the sophistication of the physical capital with which it can work. Thus, a workforce in which only a few are well educated quickly runs out of highly productive workers and any further employment expansion will add little to GDP.

Education Gaps

Better education has been shown to lead to greater productivity. The progress of certain Asian countries in education has been proffered as a reason for their outperformance over their LAC counterparts. Since the 1960s Singapore, Taiwan, China, and South Korea, have improved the average education levels of 25-year-olds from being comparable to LAC countries to 25 to 75 percent higher.⁶⁷ Between 1980 and 2000, these Asian countries improved educational outcomes by 1.4 years per decade, while the improvement in LAC was 0.75 years per decade. On average, East Asian and Pacific countries grew by 6 percent annually while LAC countries grew an average of 1 percent.⁶⁸ Achieving higher levels of education among workers may increase the labour productivity by strengthening available human capital.⁶⁹

The individual return to education has also been empirically shown to be significant. An analysis of commonly used global education data from 1950 to 2010 found that the return to each additional year of schooling ranges from 5 to 12 percent.⁷⁰ The differences in the returns to each additional year of schooling mean that a secondary school graduate is paid 77 percent more than a primary graduate, and a tertiary graduate is paid 240 percent more than the primary graduate.⁷¹ The annual return to primary educated workers is negligible.

Skilled workers experience lower rates of unemployment than less skilled workers. Unemployment among skilled workers

was as low as 6.3 percent as early as 2015, while workers with fewer qualifications were experiencing much higher unemployment (21 percent for semi-skilled and 14 percent for unskilled workers). By 2021, unemployment for each of those categories had fallen to 4.2, 12.1, and 7.8 percent respectively. This is critical to understanding the growthless jobs phenomenon as it highlights that the economy's most productive human resources were already nearly at full employment seven years ago. This means that additional production could only be taken up by marginal, less productive workers.

Higher education levels may also increase economic and social resilience, since workers who are more educated are more likely to work in the formal economy. In Jamaica, nine of ten workers with advanced post-secondary qualifications work in the formal sector.⁷² Moreover, formal sector employment provides reliable incomes which can improve the quality of life of workers and enable them to make long term investments.⁷³ Over time, a better educated workforce will facilitate a structural shift towards more productive formal sector activity.⁷⁴

Official statistics indicate that Jamaica is a leader in education in the region, but issues with education data globally and the quality of education provided in Jamaica bring that performance into question. Despite standard measures, it is difficult to report education data with accuracy and precision. One widely used education dataset ranks Jamaica favourably among regional peers with 25 percent of its workforce older than 25 having some tertiary

Emigration selectively removes highly skilled workers because they tend to be more aware of opportunities available abroad and are better able to manage the financial costs associated with migration.

The differences in the returns to each additional year of schooling mean that a secondary school graduate is paid **77%** more than a primary graduate and a tertiary graduate is paid **240%** more than the primary graduate.

education in 2010.⁷⁵ However, these numbers are contradicted by the IDB which estimated the share of workers with advanced post-secondary qualifications in Jamaica at 7 percent in 1999, ranking Jamaica third-to-last out of 15 LAC countries.⁷⁶ Moreover, STATIN 2021 data indicates that only 16 percent of the employed labour force had advanced post-secondary qualifications, while another 14 percent had certified vocational training. These varying data reports highlight the difficulty in assessing Jamaica's skill levels.

Regardless of the challenges with the data, there are indications that the quality of education in Jamaica is sub-par. Jamaica's net enrolment rates at the primary, secondary, and tertiary levels are lower than other countries at a similar level of development, including small Caribbean states.⁷⁷ Moreover, by the end of primary school, most students are illiterate and innumerate, and by the end of secondary school seven in ten are uncertified.⁷⁸ These data show that despite favourable official rankings in certain educational criteria, the quality of education in Jamaica is weak. Therefore, even if Jamaica compares favourably to other countries in the duration of schooling, the additional years do not necessarily translate into higher returns to schooling and greater productivity.

Most of the Jamaican labour force has no formal training, and there has been a decline in the share of the most productive workers. The share of untrained persons

declined from 67 percent of employed persons in 2015 to 61 percent in 2022. While positive, this trend does little to negate the immediate drawbacks of having such a high proportion of unskilled workers. Even more concerning is that professionals with degrees, who are highly skilled workers, declined in employment share from 15 to 14 percent, despite adding 6,850 workers. This is particularly concerning given that these are, by far, the most productive workers in the economy. Growthless jobs in Jamaica may thus result from a relatively unskilled workforce with poor educational outcomes, in the context of expanding labour-intensive production among semi-skilled workers, and workers with secondary qualifications or certified vocational training.

The low proportion of highly skilled workers in Jamaica is partially caused by emigration. One study estimates that by the early 2000s, 79 percent of Jamaica's tertiary educated population lived in the diaspora.⁷⁹ Emigration selectively removes highly skilled workers because they tend to be more aware of opportunities available abroad, and are better able to manage the financial costs associated with migration.⁸⁰ The loss to the economy of the high emigration rate, the evidence suggests, outweighs the benefits of remittances.⁸¹

Despite the challenges of a declining share of skilled workers, growth among semi-skilled workers is helping to yield some growth. Workers with certified

vocational training grew in employment share from 11 to 14 percent from 2015 to 2021, an increase of 57,000 workers. Moreover, those with on-the-job training increased from 4.8 to 8.6 percent of the employed labour force, an increase of 55,000 people. With growth of 101 percent over 2015, on-the-job training was the fastest growing type of training, and is indicative of the high demand employers have for workers with requisite skills. These trends underline the likely source of the growth the economy has experienced over the last seven years as being from the output of semi-skilled workers

The level of qualifications in Jamaica's labour force has steadily improved. This bodes well for the country as higher levels of education increase financial returns to the worker and improve social dynamics. However, these advances are likely constrained by the quality of education and the country's stagnant share of highly skilled workers. Brain drain from the high rate of migration of skilled workers reduces the productive capacity of the workforce. The poor education levels of the work force in Jamaica would account for the sharp falloff in productivity as employment expands to the outer reaches of the labour force. The high proportion of unqualified workers also reduces the economy's growth prospects as they are more likely to work informally. These factors thus comprise structural issues in the labour force that serve as an explanation for growthless jobs.



In Jamaica,
9/10 with
advanced post-
secondary
qualifications work
in the formal sector.

The Trade-offs of Incentivising Labour-Intensive Sectors

Several incentives have been successfully introduced over the years to attract labour-intensive investments as a policy response to persistent, high unemployment.⁸² This is justifiable in a low wage, low skill, labour surplus economy, since expansion of labour-intensive industries, such as tourism and BPO, is a legitimate pathway to reducing unemployment. Jamaica has pursued this policy option over several decades by amending labour laws and reforming tax codes.⁸³ This policy has met with considerable success, based on the original objectives. For instance, the BPO industry has been highly effective in helping to reduce the national unemployment rate, adding up to 43,000 jobs between 2014 and 2022.⁸⁴ However, in this case, the industry's employment expansion has not been matched by its output.

The failure of the outsourcing sector to deliver substantial output growth is in large part a result of its incentive structure. Special Economic Zones (SEZs), in which most BPOs are located, are designated geographic areas in a country with special tax benefits and fiscal incentives for companies operating in these zones.⁸⁵ In Jamaica, SEZ enterprises benefit from general consumption tax and environmental levy relief, effective corporate income tax as low as 7.5 percent, and other incentives.⁸⁶ Several of these benefits are not available to companies which cannot qualify to operate in the SEZ. This allows BPOs, particularly those operating in SEZs, to use Jamaica's incentives as an avenue to minimize production costs and take advantage of favourable transfer pricing regulations.⁸⁷ As a result, very little value is added in the domestic market as companies only remit statutory deductions, income taxes, and a discounted rate of corporate taxes to the government. Given the current tightening of the labour market, it has become necessary to reassess the net benefit of retaining current incentives for this and other la-

bour-intensive industries.

Low value-added sectors receiving preferential treatment are similar to any other low value-added sector, but they have an unfair advantage in the labour market. In this instance, the BPO sector, which is part of the Real Estate/Business Activities industry, drove the decline in average productivity in that sector from JM\$ 279,000 to JM\$ 158,000 per quarter over seven years (Table 3). However, that the BPO sector is low value-added is not inherently bad since it contributes to employment, household income, government revenue, and total output growth.⁸⁸ Nevertheless, the advantages granted to the industry by the government may, in effect, distort the labour market by limiting the competitive supply of labour to other sectors facing a shortage of workers. This therefore requires, at least, a re-examination of investment incentives for labour-intensive sectors given their limited impact on economic growth and distortionary effect on the labour market.

Certain low value added industries receive special tax benefits from the government.



Average Value Added by Industry 2022

Industry	Value Added Per Worker (JM\$)
Utilities	681,671
Finance & Insurance Services	450,350
Mining & Quarrying	394,830
Logistics	284,044
Manufacturing	217,546
Real Estate/Business Activities	157,843
National Average	150,657
Wholesale and Retail Trade	151,140
Government Services	142,993
Construction	118,610
Other Services	107,751
Agriculture Forestry & Fishing	82,624
Hotels & Restaurants	82,405

Source: Author's calculations based on STATIN employment and value-added GDP data. (The values reflect 2007 prices.)

Main Findings & Conclusions

The 8.6 percent of Jamaica's growth gap over the past seven years comes in the face of far-reaching policy reforms to create a sustainable, resilient economy, conducive to economic expansion. This study asked, why have those reforms not led to higher rates of economic growth, though they are correlated with an unprecedented increase in new, quality jobs? A number of explanations were considered and tested. The research found no meaningful gaps or inadequacies in the estimates of national output. The national statistical agency's estimation of GDP and employment is not a likely source of growthless jobs. While a surge in new business registration indicates structural economic shifts, this is unlikely to be contributing to an underrepresentation of economic growth. Similarly, while existing methods of estimating GDP do not capture digital transactions in optimal detail, these methods adequately capture the absolute size of digital economic activities. One exception is the issue of free services (free YouTube videos, Instagram lives, informational webpages, etc.) which is a source of minor GDP underestimation. And so the explanation for low productivity with regard to output does not lie there.

Structural barriers in access to credit to support entrepreneurs were also explored as intersectional constraints on output growth. Jamaica's experience with high and volatile interest rates may have contributed to a depression in private sector borrowing by distorting investment incentives. This has likely reduced innovation, competition, and productivity

by restraining entrepreneurial activity. Recent economic reforms have gradually reduced interest rates and are contributing to an increase in private sector lending. Restricted access to credit may thus be a likely explanation, but confounding developments, such as the reduction in interest rates, and the general challenges in calculating this means that this is speculative.

There is a rise in decent work evidenced by the share of Jamaican workers entering full-time, formal jobs. The number of full-time employees has risen substantially while part-time employment has plummeted. There has also been a rise in the relative and absolute importance of formal work and professional occupations along with a decline in the relative importance of informal and agricultural employment. The growth of private sector employees and employers also indicates a trend towards formalisation of the economy. While higher formality is a positive predictor of growth, that growth has not yet been realised. But it is clear that growthless jobs cannot be attributed to new jobs not being good quality jobs.

The answer appears to lie in the nature of the new jobs being created, and the quality of the human capital employed to those jobs. The available data suggests that the new jobs are, for the most part, labour-intensive and low value-added. As such, it appears that the source of growthless jobs is to be found in the expansion of labour intensive production which has been concentrated in Construction and Business Services. That growth in labour intensive production has led to a 7.8 percent decline in national productivity, and hence, the phenomenon of growthless jobs.



The growth in labour intensive production activities has led to a **7.8%** decline in national productivity.



4 Conclusion



The Massive Decline
in **unemployment**, and the
associated growth experienced,
is a positive development in the
Jamaican economy.

The decline in unemployment, and the associated growth experienced, however meagre, is a positive development in the Jamaican economy, and for Jamaica in general. The question of why the country has not experienced commensurate growth is crucial to obtain answers to, in order to inform policy initiatives to rectify the gaps. Growthless jobs is an area of significant policy concern, because, as the country approaches full employment, the Jamaican economy is in reach of its productive limits. Seven years of significant employment growth has failed to deliver commensurate economic growth because of declining productivity. Productivity declined most in sectors with the greatest job growth.

Workers' human capital, as represented by their education levels, skills, and capacity to create output, is the critical variable in understanding Jamaica's growthless jobs phenomenon. Higher levels of education increase worker productivity, but the quality of education is an influence on the extent to which that positive relationship holds. The majority of workers gaining employment between 2015 and 2022 were semi-skilled workers, bumping up their share of employed labour. The skilled labour that has not emigrated (a small proportion of the skilled labour that is produced) is almost fully employed. This means that the most productive groups

of workers are already operating at full or near-full employment levels. Growth prospects are bleaker in a less skilled workforce, and so as new jobs are taken up by low-skilled workers, or by semi-skilled workers with poor quality education, increased employment will not be matched by increased growth.

Given that the quality of human capital appears to be crucial in Jamaica's productivity trends, attending to it is critical to secure the gains of low unemployment, and to produce meaningful economic growth. The policy options available to Jamaica are centred around increasing the quantity and quality of human capital through improving education and training, and allowing non-Jamaican workers to work in the country. The former has been a concern for decades, and several initiatives have been undertaken to address it. In 2021 an appointed commission conducted an exhaustive inquiry in the education system, culminating in the "Patterson Report". The report found that Jamaica spends what peer countries do on education on a per capita basis, but the return to that investment is relatively smaller, and there is a misalignment between the curriculum and skills required in the labour market. In the budget debate of March 2023 it was announced that all vocational training offered through the state training institute will be tuition-free.

The latter policy option is mostly comprised of allowing for the immigration of non-Jamaicans to work on the island. This is an idea which has not been well explored in Jamaica, in large part because it is considered sensitive, almost taboo. At the same time, there is a knowledge gap on the outcomes of immigration in developing countries, as most studies on immigration have been done on developing countries. One 2018 OECD study found that the total impact of immigration on GDP is generally small, but positive.⁸⁹ That small positive impact has been seen in an increase in per capita GDP and, in a minority of countries, immigrants contribute disproportionately to GDP.⁹⁰ More generally, it is well known that, in any national context, the immigration of workers at all skill levels supports the process of economic transition, and is most effective with a national immigration policy which protects the rights of nationals.⁹¹

There are other policy "tweaks" available to decision-makers, besides changing Jamaica's immigration policy, relating to tax incentives and special economic zones, and the role of statutory deductions and employment tax credits. These all form the basis of the following policy recommendations that the research suggests could bridge the identified gaps.

The **8.6%** of Jamaica's growth gap over the past seven years comes in the face of significant policy reforms to create a sustainable, resilient economy, conducive to economic expansion.

Recommendations

Labour Market Competition

**1**

Reduce the financial and bureaucratic barriers for non-Jamaican workers seeking access to work in Jamaica. Remove the requirement to state reasons for applying for a work permit (including the requirement to prove that Jamaican labour is unavailable), the requirement to have a job offer, and the requirement to pay to maintain the permit. Work permit approvals would then be dependent solely on demonstrated qualifications, sufficient financial resources to cover living expenses before finding work, and a clean criminal record, similar to the requirements for the CARICOM Single Market and Economy skills certificate. This option may function by granting a job seeker's visa which would allow temporary legal residence in Jamaica, or it may depend on a guaranteed approval of work visas for an overseas resident once a job offer is made, and that applicant satisfies the conditions named above.

Shift investment incentives away from subsidising labour intensive production by reducing the tax benefits that are available exclusively to enterprises in these industries. Examples of these benefits include preferential tax rates for Special Economic Zone companies, and tax breaks for tourism enterprises.

2

Recommendations

Formality



3

Eliminate mandatory statutory deductions not including NIS (HEART, Education, NHT) for incomes ranging from minimum wage to 2x minimum wage (equivalent to J\$ 1,248,000 as of June, 2023). This would reduce the cost of hiring workers and increase the number of people businesses hire formally. Since formal work is more productive, this reallocation of productive resources toward the formal sector will increase productivity and thereby raise the GDP.

Increase the Employment Tax Credit (ETC) cap from 30 percent to 100 percent when payable income taxes are J\$1.5 million or less.⁹² This would lower the cost barriers that currently prevent many informal small businesses from formalising their activities. The potential benefits to be gained by the business (access to credit, support from government, special treatment from financiers, etc.) would act as a pull factor for businesses entering the formal sector.

4



Appendix

Employed Labour Force by Industry

Industry	2015	2016	2017	2018	2019	2020	2021	2022
Agriculture and Fishing	200,255	193,590	199,685	195,423	188,275	187,063	190,775	187,867
Mining and Quarrying	5,800	5,225	5,075	6,350	7,450	5,013	4,750	4,033
Manufacturing	73,074	77,555	79,758	79,633	79,250	73,113	77,200	80,033
Utilities	15,950	12,146	10,633	11,596	11,525	8,638	9,125	8,433
Construction	83,264	95,465	98,868	104,237	108,875	100,188	116,525	128,333
Wholesale/ Retail	221,227	232,029	231,956	236,019	238,850	236,963	234,350	236,600
Transport and Storage	65,840	60,492	62,056	67,656	65,350	60,638	57,075	56,533
Accommodation and Food Service	88,580	95,105	99,546	102,758	109,950	92,700	92,350	103,933
Information/ Communication	13,070	12,008	12,319	13,430	13,050	13,963	13,800	15,467
Finance and Insurance	26,400	25,950	26,825	25,900	27,550	25,950	27,025	30,067
Real Estate/Business Services	72,256	73,546	79,608	82,871	92,025	98,950	113,025	129,900
Public Admin, Defence, Social Security	54,656	57,076	58,164	57,777	66,775	65,488	65,325	64,767
Education, Health, Social Work	102,572	98,666	99,661	104,786	107,275	104,050	102,350	104,900
Arts, Entertainment, Recreation	111,937	123,601	122,637	124,021	129,075	112,788	109,125	113,167
Industry Not Specified	2,950	3,850	3,050	2,425	1,925	1,913	975	767
Total	1,137,830	1,166,302	1,189,841	1,214,881	1,247,200	1,187,413	1,213,775	1,264,800

Endnotes

¹ “The Labour Force,” Statistical Institute of Jamaica, various years.

² Statistical Institute of Jamaica, various years.

³ “The Planning Institute of Jamaica’s Review of Economic Performance, October–December 2022 Media Brief,” PIOJ, February 21, 2023, www.pioj.gov.jm/wp-content/uploads/2023/02/DGs-QPB-27_3-Speaking-Notes.pdf. See also, “GDP (current US\$) - Jamaica,” The World Bank, n.d., <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=JM>.

⁴ The concept of the growth gap refers to the situation where an economy is not achieving its full potential for economic growth and development. It is the gap between the actual level of economic growth in an economy and the potential level of growth that could be or ought to have been achieved.

⁵ National (income) accounting refers to a complete and systematic system to measure the economic activities of a country.

⁶ Arthur M. Okun, “Unemployment and Output in 1974,” *Brookings Papers on Economic Activity* 2 (1974): 496, www.brookings.edu/wp-content/uploads/1974/06/1974b_bpea_okun.pdf. For most countries, the difference between GDP and GNP is not significant. While Okun developed his theory using GNP, most current studies use GDP as their primary indicator. For convenience, GDP will be used throughout this report.

⁷ Okun, “Unemployment and Output in 1974.”

⁸ Zaleha M. Noor, Norashidah M. Nor, and Judhiana A. Ghani, “The Relationship between Output and Unemployment in Malaysia: Does Okun’s Law Exist?,” *International Journal of Economics and Management* 1, no. 3 (2007): 337-344, <http://psasir.upm.edu.my/id/eprint/671/1/bab02.pdf>.

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