The negative effects of application of increase taxes: a case of residents of Papua New Guinea University of Technology

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ABSTRACT

Taxation is a major source of revenue for every government of the countries around the world. In which the government can be able to generate revenue to finance its expenditure on funding infrastructures and providing basic goods and services to the people in the economy. Fluctuation in the rates of taxes either increases or decreases occurred because the government is attempting to either generate government revenue or to control the economic growth. The main objective of the study was to measure the effect of income tax on the public. The research approach used in this study was the quantitative approach. A convenience sampling technique was used for this study. The sample size is 50. When there is inflation tax rates increase and there are negative effects that come along with it and were faced by the taxpayers since the amount of money to be paid for as tax increases. Therefore, in this study, we are going to look at the negativities caused by increased tax rates and were faced by the taxpayers. The study recommends that the government has to apply a strategic plan to reduce the negative impact of taxation.

Introduction

The tax system plays a very special and important role in fostering and sustaining economic and job growth. Additionally, the fact that its policy complements monetary policy and works to keep the economy stable by keeping inflation under control and maintaining market balance (Lumniji thaci et al., 2021)

There are unfavorable consequences associated with taxation. As a result, it has an impact on various socioeconomic factors in today’s globalized society (Ferdi Cerlikay, 2020). Most nations utilize income taxes as one of their tools for keeping an eye on and influencing economic activity to attain economic stability. They also utilize other taxes such as goods and services tax for generating government revenue. There are negative consequences that arise and are experienced by the taxpayers as income tax and goods and services tax are levied on people and commercial firms at an increasing rate.(Sahin, O. at el., 2020)

Taxation was the government’s major source of income. Taxation was practiced in the past and it is still practiced or used today by the government of countries around the globe. It is the primary source of government revenue in both developed and developing nations.

Taxation is a means by which governments generate income to finance its expenditure to fund public infrastructures, goods, and services and meet the needs and wants of the citizens. And also as a measure to control economic growth which is inflation to achieve economic stability. Tax does results positively and negatively when changes are made to its rates either by increasing or decreasing the tax rates. And the people either benefit or suffers from these results respectively.
Sometimes in a given particular situation like for instance, inflation, taxes thus, greatly affect people. That is especially when taxes are charged at the higher rates. It might be done for a useful purpose but in the end, it also has some bad outcomes and negatively affects people's lives. Therefore, the negative effects of higher tax rates are the problem we are going to look at in this study.

Individuals that generate income are subject to income tax. To generate income and control economic growth, the government imposed higher tax rates. To sustain and expand fundamental public services, encourage stability, and achieve development, domestic revenue collection is essential (Akitoby et al., 2019).

When income taxes and Goods and Services tax increase, there are unfavorable consequences. These might burden taxpayers and harm the quality of their life. The tax burden is typically stated as a percentage of total revenue over a certain time. When income growth is smaller than the growth in tax collection, the tax burden increases (Ferdi Cerlikay, 2020).

**Impacts of higher taxes in a developed country**

One of the most significant aspects of fiscal policy is taxation. Tax is often used as a tool to monitor, manage, influence, control, and uphold economic stability in developed nations.

Developed nations are more mature, independent, and have stable economies. Countries that have high Gross National Product levels. They specialize in producing and exporting secondary products (finished goods) and do access to trade on the global market. Also having many sources to generate government funds both internally and externally and their economic activity is growing annually.

**Impacts of higher taxes in developing countries.**

Tax is a significant source of revenue for governments, particularly in underdeveloped nations. Also, a means for governments in emerging nations to oversee, manage and promote economic activity.

Developing nations have economies that are less savvy and less mature, as seen by their low GDP levels. These nations could be experts in producing and importing basic goods but might not be able to use those efforts to bring the nation more money. Due to a low level of GDP, they might not be qualified to trade on the global market. Other government revenue sources might produce less money than is required for development, which would reduce the amount of money in circulation in the nation. Making it challenging for the government to provide funding for initiatives and services that could advance national growth.

In this category, many people rely on agriculture (subsistence farming) to provide food for consumption and also sell their fresh produce at the local market in exchange for money to survive. Whereas others, are employed and are earning income to sustain their living. Such nations' governments are always working to improve their economies seeking tools and strategies for enhancing economic activity and achieving economic stability. Income tax become crucial as a result, being the main source of funding for governments where the government can raise money from income taxes paid by taxpaying citizens to pay for the costs of providing services. The government raised the income tax and GST to pay for a variety of initiatives and public services.

This includes giving money to public or government initiatives. It covers everything, from health and education to infrastructure projects like roads and bridges, paying for the military, government employees, and politicians' salaries as well as supporting various other charitable endeavors. Other political process variables including societal demands, social welfare, and the desire to maximize autonomous returns to enlarge the modern state result in the implementation of various taxes and an increase in government spending. Therefore, a higher tax burden is an effect rather than a cause (Ferdi Cerlikay, 2020).

At that point, there may be a change in the income tax rate, which would raise it. The burden of paying taxes has grown significantly for both people and enterprises. Their amount of income will decline as a result of the government taking the money back through taxation. (Poterba, J. M., & Shoven, J. B. (2002)

People may struggle to budget and use their meager income to cover their demands for basic products and services. Not being able to satisfy some of their important demands. (Ulyssea, G. (2020).

Additionally, because they do not have enough income, they might not be able to save and invest for long-term use.

Some people with low income may avoid paying taxes, yet doing so demonstrates a failure to comply with tax laws (Ulyssea 2020). So they may engage in tax evasion as individuals. Tax avoidance strategies include income splitting, deferring taxes, and tax arbitrage between different types of income for those who dislike paying taxes (Alm J 1999).

Governments all across the world, both developed and developing, use tax as a measure to keep an eye on and control the stability of their economies. One of the numerous tiny nations in the world that is categorized as a developing country is PNG. PNG government uses income tax as a way to raise money to finance its expenditure by contributing to initiatives and proving infrastructures, offering Papua New Guineans the goods and services they require. However, the country's leaders engage in corruption and continue to lack integrity, transparency, and openness in their governance. In terms of economic performance, it is one of the low-performing nations in terms of economic activities. Countries with weak institutions, significant levels of corruption, and other political problems and difficulties that might obstruct efforts to collect taxes thus causing economic growth. (Michael Keen, 2020).
People are earning low income due to high-income taxes, so as business firms, fewer profits are generated. Inflation also caused GST to increase thus causing the price of commodities such as good (foods) and services to skyrocket. Currently, people are suffering from the negative outcome of the increased taxes in PNG. Low-income nations may be more likely to borrow money from other nations for their growth, which could lead to a balance deficit (Loayza N at el., 2020)

**Literature Review**

**Overview of negative effects of increased taxes rates.**

Increased rates are the addition or rise in the amount of a fixed price paid or charged on taxes. In this case, it is the addition or rise in the amount of a fixed price paid as tax on income and goods and services. Increased rates of taxes imposed on both income and consumption cause negative effects that involve experiencing the world more negatively, feeling negative emotions, and more negativity in relations and surroundings. (Cantore, C. at el., 2021)

**Negative effects of increased rates of income tax**

Type of taxes where the burden cannot be transferred to another party when the state or government raises the income tax rate. High-income taxes lower people's discretionary income, which directly affects their quality of life. Direct tax rates rising will lower disposable income and lower total demand for goods and services, which will harm economic growth (Korkmaz S et al, 2019). Increase in income tax causes a reduction in the number and wages of personnel working in the public sector- another direct effect on the disposable income of those holding such jobs. Increased taxes also impact levels of economic activity and individual income and wealth (Stubbs T at el., 2021).

Early research indicates that southern Europe and France have the highest unemployment rates due to an increase in income tax (Doerr and Gambacorta, 2020). Young, uneducated, low-wage workers appear to have the largest income and employment risk at the national level (Pouliakas and Branka, 2020).). Additionally, higher taxes deter workers from doing their duties and have led to their departure

**Negative effects of increased rates of goods and services tax**

**Negative effects of increased rates of tax imposed on consumption**

Taxes are imposed on purchases of goods and services, where the tax liability may be transferred to another party. It has indirectly affected the life of taxpayers when the government raises the rate for the goods and service tax. A rise in the goods and services tax may raise the price of the commodities when taxpayers purposefully buy those items and services to satisfy their necessities. Making it challenging for customers to buy the more expensive things. Fiscal-based programs are associated with an increase in the Value Added Tax (Reinsberg et al, 2029), which place a great burden on poorer household (Stubbs T at el.,2021).

The indirect tax which is the consumption tax does impact the operation of businesses operating in an economy. Turning to the indirect mechanism, from the business perspective this pertains to the impact of indirect tax, high indirect taxes lead to a reduction of staff in companies, and the discontinuation of tax relief measures to the business firm having inadequate support at a time of heightened need (Stubbs T at el., 2021)

An increase in value-added tax increases the tax burden on lower and middle-class income individuals. Indirect tax increases on commodities hence reducing total demand for goods and services. Decreasing their ability to afford a sufficient amount of the necessities for survival. Arthur Laffer concluded that this circumstance might lead to tax evasion, which could reduce the revenue base (Korkmaz, S et al 2019). (Loayza, N., & Pennings, S. M. (2020)).

Value-added tax collections, which eventually make up the majority of indirect taxes, will decline as a result of the reduction in overall spending on goods and services. Suna concludes that to boost economic growth, indirect taxes should be decreased.

**Other related negative effects of these taxes**

The tax burden may increase if tax revenue growth outpaces income growth, according to theory. Smith A 1937 predicted that an unchecked increase in the tax burden would harm economic activity, particularly the use of taxable resources (Ferdi Cerlikay, 2019). Direct and indirect tax effects are likely to determine other associated effects as well. Effects that arise as a result of other effects create additional costs for taxpayers to bear. High-income taxes deter employees from performing their jobs to the best of their abilities.

Increased income taxes may result in employees working fewer hours for their employers. The tax increase would dramatically reduce work effort by incentivizing primary workers to work fewer hours and secondary workers in high-income households to leave the labor force. If taxes were to increase, high earners would alter the scope and timing of their retirement plans (Kniesner, T. 2014). (Celikay, F. (2020))

High income tax reduces tax payer's income thus reducing their savings. High-income taxes lower taxpayers' take-home earnings, which lowers their savings. Keynes, J. M. (1936) believes that the tax burden brought on by high tax rates can have an impact on
investment and savings, even if Ricardo, D. (1871) also contends that high tax rates might cause capital to be displaced (Ferdi Cerlikay, 2019) The capacity of businesses to save grows as capital levels rise. A capital increase is likely to result in a rise in total savings, which will require reductions in consumption and/or leisure to finance. (Nikolova, V. L., et al., 2021)

If superannuation and private savings were perfect replacements, people would simply transfer their private assets to superannuation to reduce their tax obligations without having to forgo consumption or leisure time (Marc Chan et al, 2022). The government must develop those strategies to increase individual and company savings activity. Many governments provide tax breaks for contributions to private pension plans to boost retirement savings, promote independence in retirement, and lessen the financial strains associated with an aging population (Chan, M. K., & Kwok, S. S. (2022) Zidar, O (2019).

High tax rates deter people from investing in businesses from investing in and growing their operations. Compared to non-corporate inventors (individual “garage” innovators working outside the walls of firms), corporate inventors are far more elastic to personal and corporate income taxes. They are also particularly strongly elastic to the corporate tax rate (Chan, M. K., & Kwok, S. S. (2022) Taxes have an impact on all aspects of innovation, including quantity, quality, and location. Particularly at the macro state level, when cross-state spillovers and significant placement and entry decisions compound the micro, individual-level elasticity, the effects are economically significant. (Chetty, R, at el., 2016) (Fuente, D., at el., 2022).

Theoretical Review

Proportion to income or ability to pay

Proportion to income or ability to pay is one major theory of taxation where this involves the progressive tax principle. It’s a principle where one has to pay an income tax that is in proportion to his or her income earned. People who earn high incomes pay more taxes than people who earn a lower income. Not because the high-income earners use more government goods and services, but because taxpayers who earn more income can pay more. People who earn lower income can pay less tax which is in proportion to their level of income. Where there should be compatibility with taxpayers’ conditions, including their ability to pay in line with personal and family needs.

Certain rather than arbitrary

Certainty rather than arbitrary in decision-making is one principle of the theory of taxation. The government must be certain in whatever decisions it makes regarding the tax system it has applied. Also must be certain with whatever the actions it is planning to take on changing the tax. If the government has to make a change on the income tax then it has to be a valid reason for doing that. For example, if the government identified that there is inflation then the government may raise income tax and collect more revenue to stop inflation. Inflation is occurring therefore, the government increases taxes rates based on genuine reasons.

Since things have to be done as it is supposed to and must be done with valid reasons. And not being done because of your self-interest as the government leader having the power to do so. Changes in the rate of income tax either by increasing it or decreasing it has to be done based on the reasons that are valid and can serve a useful purpose. Informing taxpayers about why and how taxes are levied.

Cheap to administer and collect

The type of taxing system applied by the government must be cheap to manage and collect. Where the cost involved in managing and pooling of tax by the government must be acceptably at a low cost. Ensuring taxation activity is not done at the highest cost. So when the government imposes income tax, how they go about managing and collecting it must not cause any other economic-related problems. Finally, efficiency touches on the collection of taxes is basically on the administration for tax collection and that should not negatively affect the allocation and use of resources in the economy, and certainly shouldn’t cost more than the taxes themselves.
Research and Methodology

Research Design and Approach Used

Research design is the conceptual structure within which research is conducted and constitutes the blueprint for the collection, measurement, and analysis of data. The research design used in this study was causal-comparative/Quasi-Experimental. It is a methodology used to identify the cause-effect relationship between independent and independent variables. This can help determine the consequences or cause of differences already existing among or between different groups of people.

The research approach used in this study was the quantitative approach. It is a plan and procedure that consists of the steps of broad assumptions to detailed methods of data collection analysis and interpretation (Chetty, R., et al., (2016). It involved academic members of staff, students, and other residents such as the dependents of staff who provide data for this research.

It decided to employ a causal-comparative/quasi-experimental design because this can help determine the cause of the consequences (negative) such as reduced income, increased commodities price, and reduced purchasing power.

Study settings

The Campus of the Papua New Guinea University of Technology located at Taraka, in the Lae District of Morobe Province, Papua New Guinea is the setting where the study was carried out. Due to these factors; short given time frame and financial constraints, the study was carried out only within the campus of the University. Since the campus is made up of people with different ethnicity, qualifications, pay level, and standards, this contains potential respondents who can participate effectively in providing information to the research topic.

Population

The population of UNITECH staff and personnel is approximately 1100 both academic and non-academic. The population of UNITECH Students is approximately 2500 and the other dependents are approximately 700 giving approximately a total of about 4500.

Sample size

Sample size refers to the number of participants or observations included in a study. For sample size or the number of participants involved in this research study for providing information was a maximum of 50 individuals in which were included in this research survey purposely for data collection. And the data were collected from them through issued questionnaires.

Sampling technique

A convenience sampling technique was used for this study where there is no pattern whatsoever in acquiring respondents.
Data Collection Methods

Primary data

These are the data that were collected for the first time. This helps in providing up-to-date information. Quantitative research often involves data collection through sources such as questionnaires and observations. Therefore this study adopted questionnaires and observation in data collection.

Observations

Data collected is based on the effects of the application of increased taxes faced by the staff of UNITECH. Specifically on the effects of an increase in income tax, which reduces the level of income, and increases goods and services tax.

Analysis and Findings

Findings based on the Demographical information of Respondents

This section provides details on the characteristics of the respondents who have been involved in responding based on this research topic. These details include gender, age, home province, education level, marital and employment status. The discussion of each characteristic is shown as follows.

Gender of the participants

This part provides the general characteristics of the respondents in terms of their gender. This was done purposely to find the figure of males and females that have given in their responses on the questionnaire based on the research topic. Results show the gender of the respondents. It shows that out of 51 total respondents, 29 (55%) of the respondents were male and 22 (45%) of the total respondents were female. This is because most of the staff that are employed by the university as well as for students entering university each year are male than the female staff and students.

Age of the participants

The results show that 1 (2%) of the participants is the age of a person who is between the age range of 0-18. A total number of 31 (61%) of the participants were between the age range of 19-30. Followed by a total number of 12 (23%) of the participants were between the age range of 31-45. Again, a total of 6 (12%) of the participants were between the age range of 46-59, and finally, another 1 (2%) of the respondents represents the age range of 60 and above or (60+), someone who is older than other participants in this survey.

We understood that most of the participants were young people between the age ranges of 19-30 because the university is mostly made up of the student body in which most of them were happy to participate and provide information for me in my research. Then followed by several administrative and departmental staff and other respondents such as contractual workers employed by the university between the age range of 31-45 and 46-59. Many of them due to work and other personnel commitments did not able to participate in the survey and provide the information for my research.

Level of education of participants

The result shows that 7 (13.7%) of participants had attained High School Certificates, and 11 (21.6%) of participants had Diplomas. Followed by 26 (51%) of participants who had a Bachelor's Degree, 6 (11.8%) of the participants had a Master's Degree and 1 (1.9%) of participants had completed a PhD.

Marital Status of Participants

The outcome of the findings shows that 18 (35.3%) of respondents have married and 33 (64.7%) of respondents are not married. It is because most of the respondents are students. They are not married and they are single. Respondents who have been indicated as married are the staff and a few other married students.

Taxing System of Papua New Guinea

Survey findings of the research show that 21 (41.2%) of respondents ranked the taxing system of PNG to be good, 19 (37.25%) of respondents ranked the system to be bad and 6 (11.8%) of respondents ranked the system to be very bad. 4 (2.04%) of the participants rank the taxing system of Papua New Guinea to be very good, 1 (0.51%) of respondents rank the tax system to be excellent.

Negative effects of increased taxes

According to the research findings, it shows that 45 (88%) of respondents have been negatively affected by the increase taxes rates whereas 6 (12%) of respondents were not negatively affected by the change made in the tax rates.

Income tax rate

The findings show that 2 (4%) of respondents were said to be fully satisfied with the tax rate that was charged on their income by the government through IRC. Whereas the other 17 (34%) of respondents are partly satisfied in other words, it means that at a certain
point in time, they are happy with the tax rate that was charged on their income, and at other times they are not happy and 32(62%) of the respondent are not satisfied with the tax rate that was charged on their income.

**Income amount reduces**

According to the findings, the results have revealed that the increase in income tax rates has affected the respondents’ level of income by reducing the amount of the income they earn as their fortnightly salary or wage.

**Findings based on Negative Effects of Increase Goods and Services Tax**

There are different types of tax that the government of Papua New Guinea applied to generate its income. The government also increases the rate of tax that was charged on public goods and services. Goods and Services tax was charged at higher rates than ever expected. This has caused the price of every commodity to rise. Apart from the increase in the income tax rate, goods and services tax rates also increase thus, causing the price of the commodities to rise and that adds a burden to the tax bearers.

**Increasing GST Rates adds another burden**

The findings reveal that 48(94.1%) of respondents have agreed as indicated on the graph in Figure as ‘Yes’ that the increased rate of goods and services tax had caused another tax burden to them whereas the other 3(5.9%) of respondents shows that increase in the rate of GST did not seem to add another tax burden to them.

**Increasing GST rates reduces purchasing power.**

The findings reveal that 49(96.1%) of respondents have agreed (as indicated by the word 'Yes' on the graph below) that the increased rate of Goods and Services tax reduced their purchasing power or their ability to purchase as many goods and services they required for their survival and 2(4%) of participants responded that the increase GST rates did not affect their ability to purchase as much goods and services they required for survival.

**Increased Taxes affect work effort**

The given taxes, especially income tax affected respondents to execute their duties effectively at the workplace. Because an increase in income tax reduces the amount of their income which discourages them to work hard.

The findings show that 38(74%) of respondents have agreed that an increased rate of income tax affects their work effort thus, discouraging them from actively carrying out their duty effectively and efficiently and working without having any ambitions to achieve. Whereas the other 13(26%) of respondents have reacted that increasing taxes does not affect their work effort.

**Conclusion**

And the findings reveal that most of the citizens of Papua New Guinea as represented by the majority of the respondents have been badly affected by the increased taxes rates that were intended by the government of PNG in an attempt to control the economic growth in the country. Where there is an increase in the circulation of money and economic activities in the country. But in fact, many citizens have been greatly affected negatively by higher tax rates.

According to the survey of this research, the findings show that people have reacted to be badly affected by the increase in tax rates as discussed in chapter five. Increase tax rates have affected them in many areas of their lives. Most of them were not happy about the tax system of Papua New Guinea. Most of them were not satisfied with the amount of income they earned fortnightly. A big amount of money had been deducted from their income as an income tax. People find it difficult to manage and use their limited income since their income had been reduced by the increased tax rates.

Goods and services tax was also increased which added another tax burden to them. The increased goods and services tax causes the prices of commodities to rise and they were not able to purchase as many goods and services as they required to sustain their living. Thus, reduces the purchasing power of the consumers. Due to the increase in those taxes, income tax, and goods and services tax because of inflation respondents were not also able to do savings which can serve for other purposes since they earn limited income. Increased taxes affect the work effort of employed respondents thus discouraging them to actively participating in carrying out their duty effectively.

**Recommendations**

Government must focus on reducing high-income tax and goods and services tax. Negative effects of income tax and goods and services tax caused by higher tax rates. Higher tax rates are then caused by inflation and inflation occurs as a control measure to control and reduce economic growth when a particular country faces economic growth. Inflation occurs on purpose which is to control economic growth thus, causing tax rates to rise. Although high tax rates were charged to serve a useful purpose, the government must focus on how to at least reduce the high tax to bring relief to taxpayers and reduce their tax burden.
Reduction in high tax rates must not prolong

The appropriate measure and reduction process for reducing increased tax rates must be used and also the time to be taken in doing that must not be prolonged or else the taxpayers may not be able to cope with the increased taxes rates and their negative effects.

Alternate source of income

Government must consider other sources where it can be able to generate income such as increasing the export of natural resources, trading in the global market, doing investments, and owning shares in big international companies. In that increase tax rates can be reduced which can help relieve taxpayers and reduce their tax burden.

Areas for further study.

In general, the survey results of this research paper show the negative effects of increased taxes that affected respondents and portray the real situation of how they have been struggling with the higher taxes. The survey has been carried out on a specific group of people which are the residents of the higher learning institution called the Papua New Guinea University of Technology. Where this specific group of people in a given setting is made up of students, staff, staff’s spouses, children, and other dependents that reside within the university campus. Although the data findings were based on that particular group of people their response, based on the topic thus, matters because it reflects the real situation and exactly what all Papua New Guinea citizens are facing right now and that is the negative effects of increased taxes. Negative effects of increased taxes may occur in the future because the tax will still be used since it is the major source of government income. Therefore, future research should focus on the disadvantages caused increase tax rates and the possible measures that can be used to reduce higher tax rates.

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