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The Role of Progressive Income Tax in relation to Economic Development

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Abstract

This paper attempts to investigate the role of progressive income taxation in promoting economic development. The methodology adopted for the study is a review of literature on progressive income taxation. The study initially focuses on the historical and theoretical evolution of progressive income taxation. In this paper, the articulation of ideas on how progressive taxation impacts the economic development is based on its influence on economic efficiency, stability, growth and income inequality. The developed analysis and the review of literature reflect unfavorable prospects about progressive taxation in achieving higher level of economic growth and development. Moreover, the study attempts to provide feasible policy recommendations to curtail the adverse effects of progressive income taxation on economic development.

Keywords: Progressive income tax; Economic development; Income inequality.

1. Introduction

The income tax policy designs are generally equipped with the attributes such as income taxes being progressive, regressive, flat, dual or nonexistent [1]. Progressive income taxation intends to impose higher tax rates with higher income or wealth in such a way that those who earn more or have more wealth are taxed at a higher rate [2]. Contrarily, regressive income taxation means lower tax rates for those with higher income or more wealth, so that those who earn or have more wealth are taxed at a lower rate. More importantly, a flat income tax if not a proportional tax is an income tax which is a flat percentage regardless of taxpayer's income [3].

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Moreover, a dual income taxation can embody a combination of progressive tax schedule and a flat rate tax [4]. Further, there are some countries where income taxes are nonexistent [5]. However, progressive income taxation can probably be identified as the clearest example of progressivity since the income tax is based on graduated scales where the rate of income tax increases as income level rises. The antiquity of progressive income taxes goes back to the era of Solon (BC 596) who was an Athenian statesman, lawmaker and a poet. During this time, a direct tax, embedded with progressivity on property was levied on the basis of produce. Subsequently, in the middle ages from the fall of the Roman Empire in the West (AD 476) to the fall of Constantinople (AD 1453), progression in income taxes were noticed due to the growth of democratic characteristics in the rule. Hence, class taxes were imposed where the upper class had been levied higher taxes. These class taxes were noticed in both England and France during the said time period. However, during the 17th century, in Spain, a progressive class tax was proposed to the Cortes of Calatayud by the industrials of Aragon. In contrast, with the dawn of 18th century, progressive taxation became more frequent with imposition of a classified income tax which varied from one to two and half percent in Holland. Thereafter, the last king of Saxony imposed a progressive general income tax with six classes that varied from one to eight percent [6]. It is evident from the above historical underpinnings that progressive income taxation is evolving throughout the years. More importantly, democracy has been empowering the very foundations of progressive taxation since its inception. Thus, in the most democratic nations such as Switzerland and Australia, progressive income taxes have been more favored [6]. While the history of progressive income taxes paves forehanded insights about its evolution, the review of theoretical underpinnings with respect to progressive taxation is highly prudent to investigate how progressive taxation relates to economic development. The author in [7] classifies the persistent theories of progressive taxation into five categories namely, the sacrifice theories, the faculty theory, the surplus income theory, the social importance theory and socio-political theory. These five categories could be the extensions of two broad theoretical categories of progressive taxation. Thus, such could be grouped as socialistic and economic [8]. Adolph Wagner (1835 – 1917) scientifically advocated the socialistic theory which entrusts the state to modify its fiscal policy based on the general national utility levels of the masses in such a way that ensures the state's duty to remedy all the inequalities of wealth [9]. Yet, this cross question the use of scientific public finance if the socialistic theory is the desired expectation of the state [10]. Thus, the compensatory theory of progression articulates that differences of wealth solely exists due acts of omissions by the state. Hence, compensations should be recompensed [12]. Although, the compensatory theory inculpates the governmental acts of omissions for the existence of differences in wealth, the theory is not promising enough to establish a scientific framework in progressive taxation. Consequently, more focus should be centered around the basis of taxation where the theory of benefits and theory of ability play a crucial role. The classical ideology in taxation was predominantly based on benefits empowered by proportional taxation [12]. Thereafter, this was substituted by the income theory which states that income should be chiefly taxed with a progression as it increases swiftly than property [13]. The faculty theory initially advocated for a flat taxation. However, this was modified into a progressive proportion tax with the origination of income and sacrifice theory that ultimately led to the establishment of marginal utility theory of value [8]. The marginal utility theory of value is identified as the foundation of progressive taxation due to the fact that every increment in gross income is taxed at the same value to the individual taxpayer [14]. The brief and concise review of theories on progressive taxation may illustrate a vivid picture of the theoretical evolution of progressive taxation. However, it is highly pivotal to observe the certain limitations of theoretical designs in explaining the incidence and the environment of the actual tax system. Current prominence of progressive income taxation is owing to the salient welfare and economic outcomes. Thus, progressive taxation can be perceived as a mechanism that finances the welfare state [15]. Further, in this contemporarily world, the progressive income taxation is one of the key elements of efficient fiscal redistribution [16]. The redistributive feature of progressive income taxation is universal. Hence, the establishment of progressive income taxes redistribute from wealthy to poor even in developing nations [17]. Every policy maker has to encounter the issue of equity-efficiency balance as moving towards economic development. In such instances, maintaining progressive taxation with the average tax rate rising as incomes rise can simultaneously achieve a considerable equity in the economy without drastically disrupting the efficiency [3]. Further, progressive income taxation generates more income compared to proportional taxes to the government that can be utilized towards the economic development [18]. At this backdrop it is highly prudent to investigate the role of progressive income tax in tax systems in relation to economic development of a nation. More importantly, such an investigation should incorporate objectives of identifying the impact of progressive income taxation on inequality, redistribution, efficiency, economic stability, economic growth and ultimately on economic development. The structure of this paper initially attempts to impart a brief background of progressive taxation emphasizing the historical and theoretical evolution. Secondly, the study aims to review the literature in the intersection of progressive income taxation and economic development. Thirdly, the study attempts to analyze the impact of progressive income taxation on inequality, redistribution, efficiency, economic stability, economic growth and development. Finally, the paper strives to deliver policy recommendations and conclusions based on the analysis.

2. Materials and methods

The authors in [19] attempted to investigate whether progressive taxes reduce income inequality. This study explores the effect of changes in structural progressivity of national income tax systems on observed and actual income inequality by utilizing unique measures of progressivity for the time period spanning from 1981 to 2005 based on a large panel of countries. They found that progressivity in income taxation substantially reduces inequality in observed income. However, the progression has smaller impact on actual inequality. Further, the study empirically proclaims a differential effect on observed and actual inequality which is much larger in countries with weaker legal institutions. The authors in [20] prospect the role of progressive taxation in income inequality using time series data pertinent to the United States from 1962 to 2014. They found that income inequality was substantially smaller in years when the income tax was more progressive. The authors in [21] developed a heterogeneous-agent, endogenous growth model of a unionized economy in order to reveal the linkage between progressive taxation and income inequality in a unionized economy. The study found that a reduction in degree of progressive labor income tax results in a double dividend[a] in terms of reducing income inequality. However, the capital income tax progressivity resulted in the usual growth–inequality tradeoff. The author in [22] conducted a study to evaluate the role of progressive taxation in redistributing income among Americans for the time period spanning from 1957 to 1997. The general objective of this study is to find out whether progressive taxation has succeeded in raising real income of poor through the disproportionate taxing of

[a] This states that progressivity of taxation can result in two kinds of benefits, one being the reduction of income inequality and the other being higher growth in the economy.

the wealthier. The study revealed that progressive taxation has failed to achieve its desired intention among Americans. Hence, progressive taxation has failed to reduce the disparity of real incomes. The author in [17] explored the issue of the redistribution of wealth from richer to poorer countries and the role of taxation in redistribution of wealth. The study emphasizes that the tax policy design during the post colonization was built incorporating the aspect of progressivity specifically to redistribute from rich to poor within developing countries. Moreover, she highlights the fact that decline in progressive taxation in tax policy designs in the world since 1980's has resulted in increased inequality. The author in [23] briefly reviewed Henry C. Simon's book on Personal Income Taxation. In this review, he intensifies the Simon's view on progressive income taxations as the mainstay of federal revenue that contemplates the equality as the Master of Taxation. The author in [24] attempted to investigate the mechanisms in which that progressive taxation may boost economic efficiency based on Game Theory analysis. The study found that progressive tax rate structure can discourage rent seeking activities by powerful interest groups. Further, the paper suggests that progressive taxation is likely to favor more socially productive activities that would ultimately enhance the economic efficiency. The author in [25] researched the question of why rich should be taxed and the combined issue of efficiency, equity and progressive taxation. This study advocates for an optimal tax policy design that safeguards both efficiency and equity. The authors in [26] presented a dynamic general equilibrium methodology to explore the impact of taxation on economic efficiency and growth. They suggest that progressive taxation should be replaced by a proportional tax and equity should be ensured with different tax rates on capital and labor incomes in order to sustain high level of economic efficiency. The authors in [27] evaluated the role of progressive income tax policy in enhancing the economic stability. The methodology adopted for the study is based on panel data set of 33 emerging economies from 1981 to 2002. The panel data set includes macroeconomic and tax policy variables that are inbuilt in to a univariate and multivariate regression analysis to derive the inferences. They concluded that a more progressive income tax policy can emanate a stabilizing alternative. Further, they revealed that a more progressive tax structure could result in more revenue, more countercyclical policy, more income equality and more stable demand growth in the economy. The authors in [28] analyzed the growth effects of progressive income taxes using a macroeconomic general equilibrium model allowing for heterogeneous households and progressive taxes. They found that progressive taxation could increase the economic growth across countries. The authors in [29] attempted to investigate the effect of progressive taxation on economic growth in Europe OECD countries using a panel data regression analysis from 2002 to 2014. They found that progressive personal income tax has a negative impact on economic growth while progressive value added tax has a positive impact on economic growth. The authors in [30] researched the question of whether progressive taxation can contribute to economic development by employing a macroeconomic econometric analysis for the time period from 1981 to 2002. They found no evidence that progressive taxation adversely affects economic stability by reducing growth. The author in [31] conducted a study analyzing the effects of personal income tax progressivity on long-run economic growth using a Solow based growth model with calibration of the US data. The study revealed that increase in progressive income taxes leads to a decline in aggregate savings level thereby resulting in a lower growth rate in the economy. The author in [32] analyzed the issue of tradeoff between economic growth and egalitarian wealth distribution by employing an econometric regression analysis for the US states for the time period spanning from 1979 to 2004. The study found that the current year's progressivity of income has a robust negative effect on the annual growth rate of real gross state product 3 years later. Thus, he concluded the existence of a negative relationship between income tax progressivity and macroeconomic growth. From the review of literature in this direction, it is comprehensible that the literature on the impact of progressive taxation on economic growth has mixed perspectives. Moreover, there does exist a vacuum in literature with respect to the effect of progressive taxation on economic development. However, this paper attempts to investigate the role of progressive income tax in tax systems in relation to economic development of a nation. There is an unambiguous distinction between the economic growth and economic development. Economic growth discerns the constant increase in real Gross Domestic Product (GDP) of a country while economic development is a multi-dimensional broader concept. Thus, economic development is an economic phenomenon that evinces the quality of human lives that empowered by the benefits of growth coupled with economic stability, low income inequality, better redistribution of income and prevalence of better political, legal and economic institutions [33]. Hence, this paper attempts to articulate the impact of progressive income taxation on economic development in a more profound manner that reckons how progressive taxation impacts on inequality and redistribution, economic efficiency and economic stability and ultimately on economic growth and economic development.

3. Discussion

3.1. Income inequality and redistribution

Every personal income tax design has to encounter the tradeoff between efficiency and equity [34]. Thus, this tradeoff has been vastly discussed in the public finance literature. It has been the conventional belief in the literature in this direction that using an uncomplicated lump sum tax may achieve the efficiency perspective while the graduated tax rates may safeguard the equity concern of the tax policy design [35]. Consequently, these two objectives are always in a discord. A profound analysis of this tradeoff may result in a premise with the conclusion that an increase in the progressivity of the tax design leads to a decline in income inequality. However, this conclusion may become senseless if there is any presence of tax evasion in the economy. In general, progressive taxes are designed to collect a larger proportion of tax income from the richer compared to poor. Thus, the richer class may respond by restricting the taxable income which leads to tax evasion. Hence, the economy may observe a decline in observed income inequality. Yet, the impact of progressive taxation on actual income inequality can have a differential effect [19]. Moreover, one of the desired goals of progressive taxation is to provide the state with the means of redistributing income. If this goal is to be accomplished, the graduated tax share borne by the rich should increase the after-tax income share of the remaining taxpayers in the economy. But the literature which analyzed the patterns of tax share versus income share lucidly discovers a negative relationship between tax share paid by the richer and the after-tax income share of the other taxpayers in the economy. Hence, when tax share of the rich rises, the after-tax income of the poor declines [22]. Subsequently, Joseph Schumpeter’s fiscal sociology reflects that progressive taxation may result in loss of interest in working hard of the managers and other high-income earning groups. Hence, this can lead to a crisis in the tax state [36]. Additionally, some nations depend greatly on progressive tax systems. Yet, such nations are not the most equitable compared to other nations with lesser progressivity in taxes [17].

3.2. Economic efficiency and stability

Efficiency is one of the tax principles that should be sustained to achieve a progressive tax collection that ultimately boosts the economic growth. If a state can simultaneously minimize the economic cost of complying with its tax requirements by reducing the administrative burden of taxation and minimizing any distortions of the economy that caused by the tax system, that state may have achieved the efficiency in terms of tax policy [37]. Consequently, any reductions in economic efficiency caused by poor tax policy are considered as a deadweight loss or excess burdens of taxation [35]. Excess burdens of taxations are added costs to taxpayers and to the entire society which result in deformed economic decisions. Progressive income taxes are somewhat complex in contrast to proportional taxes due to the complexities in the administrative process of the tax code. Thus, such processes may be administrative burdens of the taxation that result in higher economic cost of complying with the tax code. Moreover, an effective tax policy should promote efficiency so as to maximize the social welfare pie [15]. But if the tax system generates economic distortions, the optimal social welfare could be in jeopardy. Hence, it is highly irresolute that progressive income taxation is appropriate in ensuring social welfare on such occasions. Furthermore, it is a conventional wisdom in tax policy advocacy that taxation of income is the most effective approach to tax reform. Consequently, this should be carried out in such a way that equalizes the tax burdens on businesses and households. Accordingly, progressive taxes fail to equalize the tax burden due to graduated scales of tax administration [26]. Hence, a proportional tax may rectify the efficiency losses caused by progressivity of taxes. According to the authors in [27], progressive income taxes can lead to economic stability owing to the fact that they are linked with greater income equality and a greater plausibility towards countercyclical fiscal policies. Nevertheless, the authors in [27] suggest that all income tax rates should be constrained by openness in order to facilitate a greater stability. Thus, the implicit comprehension may be to rely on government to uphold the openness in the prevailing tax system. Consequently, whether masses can endorse their trust in government in achieving openness would be hardly in consensus [38]. Additionally, there is an intrinsic correlation between general price levels and progressivity of income taxes. Therefore, any increase in general price level of the economy due to increase in money supply[b] would precipitate the tax severity that is detrimental towards the economic stability [39].

3.3. Economic growth and development

The review of literature in this direction hardly favors the hypothesis of progressive taxation in achieving a higher growth rate in the economy. Yet, some studies manifest favorable reflections towards the said hypothesis. The authors in [28] contended that the said hypothesis is not favored by most of the macroeconomic literature due to the exclusion of heterogeneous households and progressive taxation from the endogenous growth models. Thus, according to the authors in [28] and [30] growth do not necessarily have to decline due to progressive income taxes. However, most of the empirical literature concludes otherwise. Evidence from European OECD countries states that personal income tax in countries with higher tax progressivity has a negative impact on economic growth. Consequently, a 1 percent increase in the share of personal tax revenue to GDP is associated with 0.15 percentage points lesser growth [29]. Progressive income taxation can act as a labor income tax since both employees and employers are obliged to pay personal income taxes. As a result, progressive income

[b] Milton Friedman (1970) in his book titled as “The Counter-Revolution in Monetary Theory” proclaimed that “Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output.”.

taxation can adversely affect labor utilization in terms of both labor supply and labor demand [40]. Furthermore, if progressive income tax acts as a labor tax, it may potentially disrupt the labor supply through decision to work and number of average working hours [41]. Therefore, progressive income taxation can lead to lower labor utilization and lower levels of labor productivity thereby adversely affecting the growth momentum. Subsequently, the potentially adverse impact of progressive income taxation on labor supply may become more severe in economies where the contribution of informal sector is relatively large. Hence, imposition of higher progressivity in income taxation may result in disrupting effects on the economy unless the tax bracket is expanded to absorb the economic activities in the informal economy. Subsequently, higher progressive income taxes may harm the investment in human capital. According to the author in [42], 'Tax reform will also remedy other areas of the tax code such as high marginal tax rates and progressive taxation that discourage people from acquiring extra skills and punish them as they deploy their talents and abilities - their human capital'. Besides, human capital investment acts as an intrinsic control variable in the augmented Solow growth model that accurately predicts the level of economic growth [43]. Moreover, higher progressive taxes can be unfavorable towards the individual savings. Thus, the aggregate savings levels may decline with any increases in progressivity of taxation [44]. Resultantly, a reduction in aggregate savings can translate into a lower equilibrium growth rate. In accordance with the author in [31], 'eliminating the progressivity and moving to a flat tax regime would raise the equilibrium annual growth rate of per capita GDP from 1.92 to 1.95 percent'. Further, savings and investments are interconnected. The author in [45], in his seminal book 'General Theory of Employment, Interest and Money' states that savings and investments are always equal. Thus, any reduction in savings will be a reduction in investments that may drive the economy into a recession. As it has already been mentioned, economic development is a broader concept. Thus, it requires the economy to enhance the quality of human lives by the distributional effects of the growth benefits. Therefore, achieving the economic development in the absence of the economic growth is a luxury that cannot be afforded in the contemporary world. Reasoning from this fact, economic growth is intrinsically linked with economic efficiency and stability [46]. The derived arguments fail to acknowledge progressive income taxation as an expedient that promotes economic growth. On a similar note, the meticulous analysis on progressive income taxation in reducing inequality and enhancing redistribution in the economy renders discouraging facets of the potency in progressive income taxation in achieving its desired goals. At this background, it is prudent to raise the question whether progressive income taxation has enhanced the economic development, if it has failed to ensure the economic efficiency, stability, growth and income redistribution.

4. Conclusion and policy recommendations

The study is based on a review of literature to research the role of progressive income taxation on economic development. In this paper, the economic development is perceived as a divergent economic phenomenon from the economic growth. Accordingly, economic development is discerned as a multi-dimensional economic manifestation that embodies efficiency, stability, growth, lower income inequality and better redistribution. Firstly, the study revealed that progressive income taxes fail to ensure lower income inequality and healthy redistribution owing to increases in tax evasion and to the inverse relationship between tax share paid by the richer and the after-tax income share of the other taxpayers in the economy. Secondly, the paper found that progressive income taxation is ineffectual in sustaining higher level of economic efficiency and stability caused by excess tax burden and inflationary effects in the economy. Thirdly, the analysis revealed that progressivity in income taxation may restrict the growth momentum owing to lower labor utilization, discouraged human capital investment, and depressed aggregate savings and investment rates. Finally, the paper reflects an unfavorable viewpoint on progressive income taxation in relation to economic development. Although, most of the policy makers are reluctant to advocate for proportional taxes owing to the fact that proportional taxes can result in more money amongst wealthy, such taxation may be direct financial resources for more investment that results in higher growth. Resultantly, higher investment may generate more employment opportunities in the economy that can benefit the working class. Moreover, it has been evident that proportional taxes are easier to administer with limited number bureaucratic procedures. Thus, such taxation can enhance the efficiency while reducing the unnecessary costs. Article 7 of the United Nations' Universal Declaration of Human Rights states that 'All are equal before the law and are entitled without any discrimination to equal protection of the law' [47]. If no discrimination and equality are the building stones of law, then why cannot the same principles be applied to taxation. Further, consumption taxes can be more effective in implementing and collecting. Hence, it is widely considered as one of the most efficient systems in taxation. More importantly, consumption taxes suit any economy irrespective of the nature of the economy. Subsequently, the taxation in a nation with a larger informal economy will only be effective with consumption taxes. Additionally, vast amount of empirical literature advocate in favor of consumption taxes against the income taxes in promoting growth. Hence, tax policy designers should focus their attention more on proportional and consumption taxes as the effective substitutes for progressive income taxes. Finally, reminisce of the development of lot of nations provides evidence that poverty can be easily eradicated with growth oriented tax policies that boost the economic growth, thereby enhancing the economic development, not with unproductive and inefficient tax systems. Hence, an innovative fundamental tax reform package empowered by proportional and consumption tax systems appears to be necessary in order to sustain the growth momentum thereby strengthening the development process.

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