PERSONAL INCOME TAXATION IN BRAZIL: NOT REALLY THAT PROGRESSIVE

IMPOSIÇÃO DE RENDA PESSOAL NO BRASIL: NÃO TÃO PROGRESSIVO REALMENTE

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ABSTRACT: This paper aims to demonstrate the low implementation level of tax equality and economic capacity principles in Brazil, from a progressiveness perspective. Using qualitative research methodology and inductive method, the text construction addresses the study of the meaning and the effectiveness of progressiveness, linked to the principles of equality and economic capacity. The analyses sets national constitutional and legal texts relating to income tax, as well as some case law and legal doctrines as the main theoretical foundations. It’s concluded that there is a low level of progressiveness in the incidence of the personal income tax, because of a favorable and a not progressive treatment of the capital income. Besides that, historical data demonstrate the mitigation of this attribute due to the reduction of the amount of taxable income lines and the difference between the maximum and the minimum tax rates.

Keywords: principles; tax equality; economic capacity; personal income tax; progressiveness.

RESUMO: Este artigo pretende demonstrar o baixo nível de implementação dos princípios da igualdade fiscal e da capacidade econômica no Brasil, desde uma perspectiva de progressão. Usando metodologia de pesquisa qualitativa e método inductivo, a construção de texto aborda o estudo do significado e da eficácia da progressividade, ligados aos princípios de igualdade e capacidade econômica. As análises estabelecem os textos constitucionais e legais nacionais relativos ao imposto sobre o rendimento, bem como algumas jurisprudências e doutrinas legais como principais bases teóricas. Concluiu-se que existe um baixo nível de progressividade na incidência do imposto sobre o rendimento pessoal, por causa de um tratamento favorável e não progressivo da renda do capital. Além disso, os dados históricos
demonstram a mitigação desse atributo devido à redução do valor das linhas de renda tributável e à diferença entre as alíquotas máximas e mínimas. 

**Palavras-chave:** princípios; Igualdade fiscal; Capacidade econômica; Imposto de renda pessoal; Progressividade.

1. **INTRODUCTION:** progressivity of IRPF and constitutional principles

The main objective of the present study is to analyse the progressivity of the Brazilian Personal Income Taxation (IRPF, in Portuguese) as a way of demonstrating the small degree of realization of the fiscal equality principles and the economic capacity in the current national scenario.¹

The acquisition of public revenue needed to finance the State structure cannot disregard the question on how the financial burden is distributed among the community members. It is in this context that, using the inductive method and through a normative, doctrinal and jurisprudential research, it is sought to demonstrate that an evolution of the personal income tax is an essential attribute for the accomplishment of the aforementioned principles.

In pursuit of this objective, the principles of tax equality, isonomy, economic capacity and contributory capacity and their meanings under the IRPF will be examined. Additionally, the different forms of financial burden distribution among the members of a community will be studied as alternatives resulting from the adoption of theories of benefit and sacrifice. In sequence, it will be analysed the effects of incidence of direct and indirect taxes on the principles previously mentioned. Finally, in the context of the essential characteristics of the IRPF – personality, generality, universality and progressivity – it will be investigated the presence of the IRPF attribute of

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¹ This study composes a tetralogy dedicated to the study of the nature and characteristics of the Personal Income Tax (IRPF).
progressivity, in the light of the national normative structure, in a brief historical perspective.

The theoretical basis, as well as the normative and jurisprudential, are included in the text.

As a result, it is expected to demonstrate that the IRPF, although constitutionally informed by progressivity, is governed by a legislative framework that does not privilege this attribute.

This finding implies that the current configuration of the IRPF reveals a reduced degree of compliance with the principles of fiscal equality, tax isonomy, economic capacity and contributory capacity.

2. ECONOMIC CAPACITY AND CONTRIBUTORY CAPACITY: comprehending the equality principle in the taxation context.

The principle of economic capacity, in addition to the rule inscribed in art. 145, paragraph 1, of the Federal Constitution of 1988 (CF/1988), represents the announcement to the citizen that the financial burden of taxation should be distributed with isonomy.

It is a programmatic principle\(^2\), indicating, specifically, that the financial burden attributed to each individual should be compatible with the financial burden assigned to each other taxpayers who are in an equivalent situation\(^3\) (COSTA, 1991, p. 301-302).

Also, the Constitution of the United States of Brazil of 1946, in its art. 202, stated this principle: “Taxation will have a personal character, whenever possible, and will be graded according to the economic capacity of the taxpayer”.


\(^3\) Other authors who attribute this meaning to the principle: BECKER, 1972, p. 454; DE MITTA, 2005, p. 236; ÁVILA, 2005, p. 415.
Beyond this conception, other theories seek to explain the nature of economic capacity in tax matters: (I) it would be an undetermined juridical concept, although subjective, an empty box from which concrete solutions cannot be extracted\(^4\) (NOGUEIRA, 1986, p.13); (II) it would be a principle aimed at the legislator and would act restrictively, prohibiting taxation that does not take into account the concrete ability to pay taxes as occurs, for example, with taxation by capitation. In this case, it would imply the adoption of two limits to imposition: a) the lower limit, corresponding to the maintenance of the vital minimum and prevented any encumbrance of a minimum income such as the first range of the personal income tax table, which is non-taxable; b) the upper limit, representing a taxation above which would constitute the confiscatory effect\(^5\) (CONTI, 1997, p. 53-56); (III) it would be a principle addressed to the judge who, in deciding, would declare unconstitutional the taxation that offends him (BALEEIRO, 1985, p. 296).

In this case, José Casalta Nabais explains that the judgement of unconstitutionality of a tax law due to failure to comply with the economic capacity principle is not a binary judgement (legal regulation to test \textit{versus} principle) but tertiary judgement (legal regulation to test \textit{versus} legal regulation that establishes the criterion of taxation in accordance with the economic capacity \textit{versus} principle) (1998, p. 445-446).

The first conception which has been set forth and adopted here derives from the understanding of the principle of equality as an equality which transcends the formal aspect - an equality before the law - and which imposes itself, above all, as material equality - an equality in law "repeating itself

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\(^4\) In the same account: TIPKE e LANG, 2008, p.201, TORRES, 2009, p. 94.
\(^5\) With the same thinking: UCKMAR, 1999, pp. 81-82 e COSTA, 2003, p. 85.
Aristotelian formula according to which it is desired that 'what is (essentially) equal, be taxed equally, and what is (essentially) unequal, be taxed unevenly to the extent of this inequality' " (NABAIS, 1998, p.443)\(^6\).

It is exactly what has be written in article 150, II, of CF/1988, as a taxation equity, prohibiting unequal treatment of taxpayers who are in an equivalent situation, no distinction being made. In short, it is the "duty to dismiss equitable treatment to people" (MELLO, 1997, p. 13).

From the State finances point of view, the economic capacity principle has pragmatic roots (PENTEADO, 1989, p. 451). After all, being taxes derivative public revenue, you cannot get resources from sources that are not capable of producing wealth. In this sense, the principle represents an externalization or manifestation of potential taxable wealth.

Indeed, decisions about the profile of taxation – consideration taxes - such as the fees and improvement contributions of the benefit theory - or not as a consideration tax – such as taxes and special contributions, proper to the theory of sacrifice - are, first and foremost, political decisions (HENSEL, 1956, p. 118-142).

In any case, in our planning, such decisions must be guided by the principle of economic capacity, of mandatory obedience foreseen in article 145, paragraph 1, of the CF/1988.

It should be added that the principle of economic capacity is an essential guideline for taxes, tributes whose requirement is independent of state action (COSTA, 2003, p. 52).

In fact, as there is no - as there are for the fees and the improvement contributions - state consideration directed to the taxpayer that demands the

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state action, the assessment of the amount to be taxed can only be based on the condition of the individual.

In the matter of personal taxes, such as the IRPF, it is necessary to identify the subjective situation of the taxpayer, based on his income and expenses. Here are the structuring elements of the principle of fiscal equality and the principle of economic capacity in relation to this tax: the personality referenced in paragraph 1 of the article 145, of the CF/1988, and the attributes of generality, universality and progressivity, written in the item I of paragraph 2 of article 153 of the same Constitution.

It is important to distinguish the principle of economic capacity from the principle of contributory capacity, this meaning the personal and concrete condition of paying a certain tax or of submitting to a certain tax burden (BALEEIRO, 1985, p.362).

The economic capacity indicators are, on the contrary, objectives, and in relation to income tax, result from the externalization of wealth (TIPKE; LANG, 2008, p. 469-470):

(i) Earned Incomes, thus considered the income obtained from a continuous source, from work or capital;

(ii) Market, meaning expenses, consumption or costs incurred costs;

(iii) Accumulated, represented by the increase of wealth in two separate occasions.

The contributory capacity indicators, in contrast, are subjective and should take into account factors such as age, health and marital status (BALEEIRO, 1985, p. 330). In the case of IRPF, the measure of economic capacity is the gross income, while contributory capacity is measured in terms of net income, which means gross income minus legal deductions allowed by

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legislation - dependents, medical and educational expenses, among others
(SILVA, 1974, p. 20-22).

It is important to clarify that the economic capacity principle is not based on social solidarity. On the contrary, it materialises it. Indeed, the duty to pay taxes is a duty of all to contribute with the State to perform its own tasks. This duty is addressed to persons with tax capacity or, in the words of Casalta Nabais, those ‘fiscally endowed’ (1998, p. 186).

According to Marciano Seabra de Godoi the legal concept of solidarity emerged in the contemporary Constitutions because of the growth of political organization and trade union organization of the working classes in view of the distortions of the capitalist model: “Although the classic triad of the French Revolution was also formed by fraternity (“freedom, equality, fraternity”), that moment was about an idea excessively marked by philanthropy and charity. The Italian Constitution of 1947 mentions the inexcusable duties of political, economic and social solidarity. The references to solidarity are also found in the Constitutions of Portugal, in 1976 and Spain, in 1978. (1999, P. 142-143).

The citation of the concept of brotherhood - duty of one individual to another - to the conception of solidarity - an individual's duty towards all individuals - corresponded to the so-called third generation rights (BONAVIDES, 2008, p. 562-593), or social rights. Regarding the basis of solidarity, Godoi (1999, p. 149) understands that in John Rawls's second postulate (1997, p. 12-15), according to which inequalities in the distribution of social goods should bring improvements to expectations of all individuals, and not only the expectations of the most favoured, is incorporated the value of solidarity. Therefore, individuals can and should enjoy the different resource endowments, "but only to the extent that this also benefits the less favoured" (GODOI, 1999, p. 152).
Once these considerations are made, it is assumed that the principles of economic and contributory capacity are based on the principle of tax isonomy, meaning the material representation of the principle of equality provided for in article 5, item I, of the CF/1988. Social solidarity is not a cause, but an effect of these principles.

The Brazilian Federal Supreme Court (STF)\(^8\) had an opportunity to rule on the principle of economic capacity at the trial on the October 4\(^{th}\) of 2011, process RE 406.955-AgR, of which Minister Joaquim Barbosa was rapporteur, outlining some parameters: a principle applicable to all tributes - and not only to taxes - being subject to evaluation under three aspects: objective or relative to the economic capacity itself, subjective or relative to the contributory capacity, and proportional in reference to the proportion or percentage of taxation.

It is precisely the aspect of proportionality that is the object of the investigation of this article: is the progressivity of the natural person’s income tax necessary to comply with the principles of economic capacity and the contributory capacity?

First, however, the understanding of which profiles or taxation designs meet these principles must be sought.

3. REGRESSIVITY AND PROGRESSIVITY: how the taxation burden is distributed.

The examination of the tax profile or tax design in a society is not restricted to the discussion about the volume of resources that must be collected to meet authorized public expenses. The amount of tax burden - whether set at 1%, 10% or 50% of gross domestic product - reveals nothing

\(^8\) All the jurisprudence of the STF cited is available on the respective procedural monitoring page at: <http://www.stf.jus.br/portal/jurisprudencia/pesquisarJurisprudencia.asp>.
about the distribution of the burden of taxation between members of a community.

The design of the taxation system implies on the representation of how the tax burden is distributed among citizens (SLEMROD and BAJIKA, 2004, p. 2) and allows verifying whether the isonomy principle or vertical equality is met (PEREIRA, 2009, p. 66-67).

Evidently, in obedience to formal equality, a profile of taxation assumes the duty of all to contribute. At the same time, in regard of material equality, this duty to contribute is required of each one in accordance with their respective economic capabilities.

In matter of taxes, tributes whose requirement is independent of a state action, such equality can only be appreciated according to the act or situation of the individual (COSTA, 2003, p. 52). In fact, as there is no - as there are for the rates and the improvement contributions - state consideration directed to the taxpayer that demands the state action, the assessment of the amount to be taxed can only be based on the condition of the individual.

The first taxation profile was designed from the most primitive criterion of taxation burden distribution, the tributary sharing. This method of taxation "assured the State of the amount specified for each tax, while leaving uncertainly as to the amount to be claimed individually from the taxpayers (BALEEIRO, 2006, p. 211). The State was responsible for setting the total amount of public revenue to be collected, being the amount corresponding to each particular taxpayer a problem to be faced by the citizens themselves. According to the author, this method - proper of domination structures due to wars of conquest - was in force in France for the land tax until 1917.

An example of a method of tributary sharing that could be mentioned is the one applied during the gold cycle in Brazil in the eighteenth
century, when it was demanded by Portugal the *derrama* (surtax) (AMED and NEGREIROS, 2000, p. 158). It was an amount charged as a tax to complement the insufficient collection of the Fifth, in respect of the amount estimated by the Crown Portuguese. The Fifth, in turn, represented a tax with a rate of 20% on Gold extracted and taken to the Foundry Houses, which had just became Portugal’s property (COSTA, 2008, p. 52-77).

The method of sharing is not in force today and has been replaced by the method of quotient in which “the total to be collected is uncertain, for the Treasury, but each taxpayer finds in the law the part that he is obliged to pay” (BALEEIRO, 2006, p. 212).

The quotient method may be based on standardized procedures or self-evidential procedures (BALEEIRO, 2006, p. 213). The purpose of standardization is to eliminate subjective appraisals in tax calculations – being one of the most curious of cases, established almost two centuries ago, the method of calculating income through the number of doors and windows or male servants in each residence.

Othon Sidou (1978, p.25) indicates the tributes existing in Ancient Rome at the time of August, where it is verified the coexistence of the distribution with the quotient:

(i) Real direct taxes: on italic lands (*vectigal*) and on conquered lands (*stipendium*), these subdivided into tithes (*tributum soli*) and fixed tribute per capita (*tributum capitis*). Direct taxation also applied in a census form (*tributum ex censu*), sacramentum and hereditary (*vicesima hereditatum*) on the Roman citizens;

(ii) Indirect customs taxes (*portorium*), tax on goods (*centesima rerum venalium*), on slaves (*fifth and vicesima mancipiorum*) and their emancipation (*vicesima libertatis*).
According to the principle of capitation, all citizens pay equally the same amount of taxes, whether they have incomes or assets, or have higher or lower consumption levels, whether or not they use public services (TIPKE, 2002, p. 33).

According to the benefit theory, each taxpayer is charged with the tax burden proportional to the bonus, or to the services, received from the State. According to this principle, each citizen provides the State with the necessary and sufficient amount to compensate the State for its expenses and to repay the services received by the State (TIPKE, 2002, p.33).

Widely disseminated since the seventeenth century, the idea of retribution linked to the benefit motivated the design of various tax theories, such as the one where only residents should pay tributes in a given locality - because only they receive the State benefit - and that there should be specific lines of incidence - such as tolls for the users of the respective public roads.

However, the practical application of the benefit theory runs into great difficulties, because it requires the identification “of the advantages that each person derives from the State activities, or so that it can be specially taxed persons or groups of persons who benefits of private advantages or that generate certain expenses to society” (PEREIRA, 2009, p. 66).

In addition to these difficulties, it should be emphasized that the benefit theory tends to be an unjust distribution of the tax burden, since the poorest, because of a higher level of benefit dependence, according to this understanding, should pay more taxes.

In contrast, according to the theory of sacrifice, all individuals should be equitably or isonomically sacrificed in order to finance the State (SAMUELSON, 1979, p.176-177).
These theories or principles gave rise to the traditional rating (Sousa, 1972, p. 303) of tributes of bilateral nature or causal nature, or even yet, consideration tribute or one hand, and unilateral or non-causal or even yet non.consideration, on the other\(^9\). The bilateral or consideration tax collection depends of an action or activity related to the obligated taxpayer, for example the charges and improvement contributions.

The charge of unilateral or non.consideration tribute, of other part, works regardless on any State action. Taxes are thus classified also because Law number 5172/1966, of the National Tax Code (CTN), by influence of Rubens Gomes de Sousa (S /d, p. 130), made explicit and gave positivity to this characteristic, in its article 16, conceptualizing the tax as "the tribute whose obligation has as generator factor a situation of independence of any specific state activity, relating to the taxpayer".

The definition of tax had already been formulated by Gaston Jèze as "a cash benefit, demanded to private individuals by authority, on a definitive basis and without consideration to cover public charges" (Pereira, 2009, p. 13), focused, therefore, on one-sidedness.

The theory of consideration and non.consideration taxes was of major importance for the structuring of the Brazilian National Tax System. Through it were decided the private jurisdiction in the field of taxes and common tributary jurisdiction for the charges and improvement contributions, meaning that since performing the service, work or exercise police power, any of the state entities may create and collect these last two taxes.

\(^9\) The rating of taxes in two broad categories as to the imposition on a state consideration is present in another work by the same author - SOUSA, s /d, p. 127-135 - as well as other authors: Xavier, 1981, p. 42; Baleeiro, 2006, p. 271; Jarach, s / d, p. 187; Nabaís, 1998, p. 199; Berliri, 1962, p. 52-53; Schoueri, 2005, p. 117.
It should be added that income from taxes is distributed according to the needs of the political entity who compose the Federation - the Union, the States, the Federal District and Municipalities, from which it can be deduced that they are also untied taxes under the provisions of item IV of article 167 of the CF/1988, with the exceptions provided for in the Constitution itself.

The special contributions, which are also non-consideration taxes, follow affiliation system, since they are established to finance certain social needs, such as health, social assistance, welfare, education, poverty reduction and economic development, always of general nature, as provided by articles 177 and 195 of CF/1988. The special contributions are provided for in the national constitutional text in articles 149 and 149-A.

In both cases - taxes and special contributions - the taxpayer is not granted with any direct and specific claim of remuneration on the part of the State. Taxes of a non-consideration nature are considered to be naturally adequate to the theory of sacrifice due to its non-retributive essence.

The doctrine also classifies them in direct and indirect. Direct taxes are those "borne definitively by the taxpayer bound by law to their payment" (SOUZA, s/d, p.135). They do not admit repercussion or translation, for it is not possible to legally transfer the burden of taxation. Direct taxes are also characterized by the existence of an identity between the taxpayer (provided for by law) and the taxpayer in fact (the one on whom the economic burden of the requirement falls). For this reason, an assessment of the taxpayer's economic capacity only makes sense in relation to direct tributes, such as income tax and social contribution on net income.

In indirect taxation the economic burden of paying the tax falls on the purchaser of the product, the merchandise or the service - taxpayer in fact -, even if the payment falls to the industrialist, merchant or service provider,
legal taxpayer or by right. They are taxes whose burden can be transferred from the legal taxpayer to the actual taxpayer through the phenomenon called repercussion or translation (SOUZA, s/d, 135). Consequently, they make it impossible for the ability to pay them to be verified directly and, on the other hand, provide a kind of fiscal anesthesia that facilitates their collection.

Montesquieu reports that Nero announced that he had suppressed the tribute demanded by the quaestors, to be paid by the slave buyers in the percentage of 20% on the value of the sale. In fact, the measure had only transferred from the buyer to the seller the obligation to collect the twentieth, and as the seller began to incorporate the value of the tribute to the sale price, the impression remained for the actual taxpayer - the buyer - who the twentieth was no longer collected (2000, p. 225).

In the sense of showing the invisibility of indirect taxation, Fr. Antônio Vieira, in his sermon to the Portuguese Courts of 1642, recalled that if God, in order to create Eve for the benefit of Adam, had to doze him to remove a rib, more silently (NABAIS, 2003, p. 737-767):

[... if it is to take from men what is necessary for their preservation. Ruled vassals of the emperor Theodoric, of whom for his great glory he said: Sentimus auctas illationes, addita tributa nescitis: 'I know that there are tributes, because I see my added incomes; you do not know if there are, because you do not feel yours diminished.

Although it seems less socially just today, indirect taxation was a conquest of the Modern Age, considered more isomorphic because it fell on all indistinctly, as opposed to the direct tributes that allowed the maintenance of the privileges of the nobility and the clergy until the Middle Age.

It occurs that the marginal propensity to consume - the relation between the consumption, and income variation – is as big as the lower the income of the individual (SAMUELSON, 1979, pp. 176 and 224), so that those
who earn less spend proportionately more and consequently pay more indirect taxes. It is concluded that the adoption of the theory of sacrifice, based on the criterion of income/expenditure, acts regressively on income and, therefore, does not comply with the principle of economic capacity (PEREIRA, 2009, p. 68).

On the other hand, since the marginal propensity to save - the relationship between saving variation and income variation - is increasing with income (SAMUELSON, 1979, p. 176), the distribution of the tax burden according to the income/earnings criterion, with taxation through direct tributes, does not present the regressive effect of the previous option. In fact, those who earn more effectively pay more, since establishing a system of aliquots appropriate.

Based on this perception, Klaus Tipke distinguishes indirect taxation from direct taxation, stating that the first one is based on the amount of the taxpayer consumption, while the second is measured by the amount of tax revenue earned by taxpayers (TIPKE, 2002, p. 33-34).

The Brazilian Tax System adopts a profile of tax plurality (BALEEIRO, 2006, page 233) covering consideration and non-consideration taxes and, among these, direct and indirect taxes.

A design or tax profile based mainly on direct taxes is better able to guarantee the realization of the principle of economic capacity because it can be measured according to the taxpayer's own situation. The twentieth century was the time of the affirmation of the income tax precisely because it affirmed, from the point of view of taxation, isonomy via economic capacity. It can be said that "The income tax, ..., is a paradigm of a responsive democracy" (WEBBER; WILDAVSKY, 1986, p.529).

However, national data of the year 2014 show that 71.50% of the revenue originated from indirect taxes which, by their very nature, are regressive
according to income. Consequently, less than 29% of the country's total tax burden was due to the collection of direct taxes, and only a small part - 17.30% - of the burden of taxation fell, in 2014, personally on the members of the community.\(^{10}\)

As there is nothing to indicate that there has been any substantial alteration in this configuration, it is necessary to investigate whether there is, in the current national scenario, effective progressivity in personal and direct taxation on the members of the community.

4. **LABOR INCOME AND CAPITAL INCOME: is there progressivity in the IRPF?**

It was pointed out that the methods of quotient are expressed quantitatively by means of fixed tributes - a certain amount in Reais - or variables - when they are calculated by a system of tax rates and bases of calculation. In this case, they may be neutral (or proportional), progressive, regressive or degressive.

There is proportionality when the rate does not change to any calculation base value. There is regressivity when the rates decrease as the calculation base increases. There is progressivity, on the contrary, when the rates increase as the calculation base increases. Finally, the tax is degressive when the rates increase until a certain value of the calculation base, remaining constant from this value (SELGIMAN, 1913, page 13).

Income tax was originally designed in a proportional or horizontal way (CONTI, 1996, p. 73), that is, by applying the same tax rate on any income values. Based on the idea of equity, Adam Smith asserted in 1776 that the subjects of each state should contribute as much as possible to the maintenance of government in proportion to their respective capacities, that is, in proportion

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\(^{10}\)BRAZIL. Ministry of Finances. Brazilian Federal Revenue Office. Tax Burden 2014.
to the income each enjoys under the protection of State (1988, p. 99). This
canon consisted of article 13 of the Declaration of the Rights of Man and of the
Citizen of 178911.

In Brazil, the Political Constitution of the Empire of 1824, because it
was inspired by the revolutionary ideals of the end of the previous century,
referred to the proportionality of taxation according to the taxpayer's assets:
"Art. 179 ... XV - no one will be exempt from contributing to the expenses of the
state in proportion to their assets".

In one of the first books on taxation in Brazil, Viveiros de Castro
associates contributory capacity with proportionality, since "the ideal of a good
tax system is that each should pay in proportion to his income" (1910, p. 159).

However, the progression of the rates had already been mentioned
in the creation of an income tax - the *decima scalata* - in Florence in the 15th
Century and in 1404 in England because of the need for war, both provisionally
(ADAMS, 2001, p 343). There is no documentary record of either. It was not until
Sir William Pitt's definitive institution of income tax in England in 1799 (ADAMS,
2001, page 349), destined to finance the war against Napoleon, that formal
progressivity was recorded.

This paradigm shift of economic capacity - from proportionality to
progressivity - is associated with John Stuart Mill's utilitarian theory (SILVA,
1974, p. 25). If the duty to pay taxes corresponds to a sacrifice, the isonomy is
to distribute it equally, the burden of each taxpayer being evaluated from the
marginal utility of the individual income destined to the payment of the tax.
Since the marginal utility of income decreases (SAMUELSON, 1979, p. 457), the
higher the income, the less proportionately the sacrifice of its loss (SILVA, 1974,
p. 29).

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Finally, only progressivity allows the sacrifice of the lower income individual to be equal to that of the higher income, realizing vertical equity (CONTI, 1996, p.74).

Edwin Seligman reports that the first conformation to progressivity was achieved by the adoption of a super-tax (1913, p.258), that is, an additional percentage applicable to income exceeding a certain value.

Studies show that there are limits to progressivity, since very high percentages lead to the reduction of income available for consumption, and may cause recessive effects to the economy. On the other hand, the Laffer curve demonstrates that excessive tax rates on income are not able to generate more revenue, due to adverse economic effects (ADAMS, 2001, pp. 481-484).

There are at least four theories about the legal nature of progressivity. The first theory states that progressivity is merely a technique of taxation used for doctrinal classification purposes (MACHADO, 2004, p.135).

According to the second, progressivity would be a necessary principle (CONTI, 1996, p. 80) to satisfy the principle of economic capacity.

The third way, covering both perspectives, claims to be progressivity at the same time a mandatory principle and a technique for calculating income tax (COELHO, 1999, p. 362).

Finally, part of the doctrine attributes to progressivity extra-fiscal function, characterizing it as an instrument of income redistribution (SCHOUERI, 2005, p.150) and maintenance of the welfare state. In this view, progressivity would be associated with the principle of social solidarity and not with economic capacity (TIPKE; LANG, 2008, p.202).

In fact, progressivity plays a redistributive role of income. Data on the concentration of income measured by the Lorenz curve, collected before
and after the incidence of progressive tax, show the shift of the curve closer to the line of equality, inclined to 45º (SAMUELSON, 1979, p.182).

Alcides Jorge Costa, however, argues that a tax system based mainly on progressive direct taxes does not guarantee social justice or redistribution of wealth if public spending “favours the wealthier classes ... because the mass of resources will benefit the same segment from where it came from”(1991, p. 301).

On the other hand, criticism focuses on giving progressivity a political connotation, being “an instrument of class struggle, a socialist ideal that does not promote fiscal justice and can assume a discriminatory character” (ZILVETI, 2004, p. 387).

The national legal system, when dealing with income tax, has given it three characteristics - generality, universality and progressivity - provided for in paragraph 2, subsection I of article 153 of CF/1988. From this, it can be concluded that progressivity is a mandatory attribute of this tax.

It is argued in the present study that this characteristic makes the IRPF obedient to the principle of economic capacity: taxpayers with higher incomes pay proportionally more tax, since the marginal utility of the income of these people is smaller than that of the individuals of lower income.

Progressivity has been present in the IRPF since its definitive institution through article 31 of Law Number 4625/1922: “The general tax on income is established, which shall be annually payable by any physical or juridical person residing in the territory of the country, and shall be levied in each case on the net of income from any source”. Not having been demanded immediately, Law number 4783/ 923 stipulated in its article 3 the rates applicable to income exceeding 10.000 $, varying from 0.5% to 8% among nine taxable brackets as set out in Table 1.
Table 1
Anual progressive tax –1924

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<th>Calculation base - Mil Réis ($)</th>
<th>Tax rate (%)</th>
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<tr>
<td>Till 10:000$</td>
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<tr>
<td>Between 10:000$ e 20:000$</td>
<td>0,5%</td>
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<td>Between 20:000$ e 30:000$</td>
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<td>Between 300:000$ e 400.000$</td>
<td>6%</td>
</tr>
<tr>
<td>Between 400:000$ e 500:000$</td>
<td>7%</td>
</tr>
<tr>
<td>Acima de 500:000$</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: Law nº 4.783/1923

From then on the nominal rates were gradually increasing, reaching the maximum of 65% foreseen in Law 4154/1962 for the calendar years 1962 to 1964 (NÓBREGA, 2014, p. 346-351).

More recently – from the calendar year 1992 to the 2008 calendar year - the minimum income tax rate was set at 15%, ranging from 25% to 35%, as shown in Table 2. Since the 2009 calendar year there are four ranges of taxable income on which progressive rates of 7.5%, 15%, 22.5% and 27.5% are applicable.

Table 2
IRPF rates
Based on the assumption that the IRPF progressivity is aimed at complying with the principle of economic capacity, it is now examined the normative reality, seeking to examine the effectiveness of progressivity in the incidence of this tax.

Table 3 contains information on the amount of taxable income brackets, the highest and lowest rates applicable in each of the years in Brazil from its institution to the present. It is noted the tendency to reduce the number of brackets and the progressivity itself, due to the approximation between the maximum and minimum limits of the rates.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Exercise</th>
<th>Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1923/1924</td>
<td>1925 e 1926</td>
<td>9, 0.5%, 8%</td>
</tr>
<tr>
<td>1925/1929</td>
<td>1926 a 1930</td>
<td>11, 0.5%, 10%</td>
</tr>
<tr>
<td>1930/1934</td>
<td>1931 a 1935</td>
<td>12, 0.5%, 15%</td>
</tr>
</tbody>
</table>

Table 3
IRPF incidence tables

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Exercise</th>
<th>Number of brackets</th>
<th>Lowest rate</th>
<th>Highest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1923/1924</td>
<td>1925 e 1926</td>
<td>9</td>
<td>0.5%</td>
<td>8%</td>
</tr>
<tr>
<td>1925/1929</td>
<td>1926 a 1930</td>
<td>11</td>
<td>0.5%</td>
<td>10%</td>
</tr>
<tr>
<td>1930/1934</td>
<td>1931 a 1935</td>
<td>12</td>
<td>0.5%</td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Period</th>
<th>Income Period</th>
<th>Rate 1</th>
<th>Rate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935/1942</td>
<td>1936 a 1943</td>
<td>0.5%</td>
<td>18%</td>
</tr>
<tr>
<td>1943/1944</td>
<td>1944 e 1945</td>
<td>0.5%</td>
<td>20%</td>
</tr>
<tr>
<td>1945/1946</td>
<td>1946 e 1947</td>
<td>1%</td>
<td>20%</td>
</tr>
<tr>
<td>1947/1950</td>
<td>1948 a 1949</td>
<td>1%</td>
<td>50%</td>
</tr>
<tr>
<td>1951/1955</td>
<td>1950 a 1956</td>
<td>3%</td>
<td>50%</td>
</tr>
<tr>
<td>1956/1959</td>
<td>1957 a 1960</td>
<td>3%</td>
<td>50%</td>
</tr>
<tr>
<td>1960</td>
<td>1961</td>
<td>2%</td>
<td>50%</td>
</tr>
<tr>
<td>1961</td>
<td>1962</td>
<td>1%</td>
<td>60%</td>
</tr>
<tr>
<td>1962/1964</td>
<td>1963 a 1965</td>
<td>3%</td>
<td>65%</td>
</tr>
<tr>
<td>1965</td>
<td>1966</td>
<td>3.3%</td>
<td>55%</td>
</tr>
<tr>
<td>1966/1975</td>
<td>1967 a 1976</td>
<td>3%</td>
<td>50%</td>
</tr>
<tr>
<td>1976/1977</td>
<td>1977 e 1978</td>
<td>4%</td>
<td>50%</td>
</tr>
<tr>
<td>1978/1982</td>
<td>1979 a 1983</td>
<td>5%</td>
<td>55%</td>
</tr>
<tr>
<td>1983/1985</td>
<td>1984 a 1986</td>
<td>5%</td>
<td>60%</td>
</tr>
<tr>
<td>1986/1987</td>
<td>1987 e 1988</td>
<td>5%</td>
<td>50%</td>
</tr>
<tr>
<td>1988</td>
<td>1989</td>
<td>10%</td>
<td>45%</td>
</tr>
<tr>
<td>1998/2008</td>
<td>1999 a 2009</td>
<td>15%</td>
<td>27.5%</td>
</tr>
<tr>
<td>2009/2016</td>
<td>2010 a 2017</td>
<td>7.5%</td>
<td>27.5%</td>
</tr>
</tbody>
</table>


However, another aspect is even more relevant since the tax law established different forms of taxation for different income modalities, some of them not conformed to progressivity.
For the purposes of the present analysis, the income tax of individuals can be divided into two broad categories:

(A) Paid employment income (with employment bond) and self-employed income (no employment bond) - wages, pensions, pensions, retirement pensions, commissions, bonuses, fees - rental income, amounts received from paying sources located abroad and income derived from of rural activity; and

(B) Income from capital, such as income from financial investments, capital gains and interest on shareholders' equity. Dividends received by partners or shareholders as a result of the profits established by the company are exempt from IRPF taxation.

The incomes of category (A) are submitted to the progressive table - Table 4. In the calendar year 2016 the referred table consists of four aliquots - 7.5%, 15%, 22.5% and 27.5% - on the monthly amounts received by individuals with annual income exceeding R $ 1,903.98, in each of the months of 2016. In addition to the monthly tax, income earned between 01/01 and 31/12 of each year must be added together and subject to taxation by means of the annual adjustment (Annual Adjustment Declaration), carried out in April of the following year, using the annual table - Table 5 -, equal to twelve times the values of the monthly table - Table 4.

<table>
<thead>
<tr>
<th>Calculation base (R$)</th>
<th>Rate (%)</th>
<th>Deduction installments (R$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Till 1,903,98</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Finally, labor income is subject to Tables 4 and 5, monthly and yearly, respectively, which portray graduated progressivity (SOUZA, s/d, p. 136-137), as can be seen from the existence of the plots to be deducted from each income range.

Simple progressivity results from the application of the tax rate on the calculation base, without any equalization of the transition between the income brackets. Suppose, for example, that the taxpayer received in the calendar year of 2016 a monthly net income salary of R$ 5,000.00. The calculation of the IRPF by simple progressivity will result in a tax equal to R$
1,375.00, calculated by multiplying the 27.5% rate by the income amount, R$ 5,000.00.

The calculation of the IRPF, according to graduated progressivity, will result in R$ 505.64, as follows: \[ \text{IRPF} = (R$ 5,000.00 \times 0.275) - R$ 869.36 = R$ 505.64. \]

This is because graduated progressivity makes continuous the burden of tax when changes in income brackets, as shown below:

- Income up to R$ 1,903.98: IRPF = 0
- Income from R$ 1,903.99 to R$ 2,826.65: IRPF = R$ 922.66 \times 7.5\% = R$ 69.20
- Income from R$ 2,826.66 to R$ 3,751.05: IRPF = R$ 924.39 \times 15\% = R$ 138.66
- Income from R$ 3,751.06 to R$ 4,664.68: IRPF = R$ 913.62 \times 22.5\% = R$ 205.57
- Income above R$ 4,664.69: IRPF = R$ 335.32 \times 27.5\% = R$ 92.21
- Total income R$ 5,000.00: IRPF = R$ 0.00 + R$ 69.20 + R$ 138.66 + R$ 205.57 + R$ 92.21 = R$ 505.64

The doctrine differentiates the concepts of nominal, effective, and marginal rates (GUTIERREZ, 2011, p.168). A nominal rate is the rate at which the
taxpayer’s income falls. In the example, for the monthly income equal to R$ 5,000.00, the nominal rate is 27.5%.

An effective rate is the rate that represents, in fact, the percentage of income taxation. In this case, the effective rate is equal to 10.11% (tax of R$ 505.64 / income of R$ 5,000.00).

The marginal rate is the aliquot incident on the last monetary unit of the income. In this example, the marginal rate is 27.5%.

These distinct rate concepts are only relevant when there is graduated progressivity, since simple progressivity presents the nominal, effective, and marginal tax rate coincident.

As explained above, the installments to be deducted have the function of making the tax burden continuous, equalizing the progressive rates. The quantification of these installments to be deducted is done by calculations, as explained below. Considering the income and tax rate brackets according to Table 4, it is assumed that the first installment to be deducted is always zero, corresponding to the non-taxable income bracket.

The 2nd installment to be deducted is always equal to the first rate (7.5%) times the non-incidence limit (2nd income bracket - corresponding to the first taxable bracket -, equal to R$ 1,903.99). For the 2016 annual table: 7.5% of R$ 1,903.99 = R$ 142.80.

The 3rd installment to be deducted is equal to the 2nd rate (15%) times the value of the 3rd bracket (R$ 2,826.66), less the difference between the values of the 3rd and 2nd brackets, times the 1st rate. This results in the following calculation: 3rd installment to be deducted = (15% x R$ 2,826.66) - [7.5% x (R$ 2,826.66 - R$ 1,903.99)] = R$ 424.00 - 7.5% x R$ 922.67 = R$ 424.00 - R$ 69.20 = R$ 354.80.
The 4th installment to be deducted is equal to the 3rd rate (22.5%) times the value of the 4th bracket (R $ 3,751.06), less the difference between the values of the 4th and 3rd brackets times the 2nd rate, and still less the difference between the values of the 3rd and 2nd brackets, times the 1st rate. This results in the following calculation: 4th installment to be deducted = (22.5% x R$ 3,751.06) - [15% x (R$ 3,751.06 - R$ 2,826.66)] - [7.5% [R$ 2,826.66 - R$ 1,903.99]] = R$ 843.99 - [15% x R$ 924.40] - [7.5% x R$ 922.67] = R$ 843.99 - R$ 138.66 - R$ 69.20 = R$ 636.13.

Finally, the 5th installment to be deducted is equal to the 4th rate (27.5%) times the value of the 5th installment (R$ 4,664.68), less the difference between the values of the 5th and 4th times the 3rd rate, deducted still: the difference between the values of the 4th and 3rd brackets times the 2nd rate, and the difference between the values of the 3rd and 2nd brackets, times the 1st rate. This results in the following calculation: 5th installment to be deducted = (27.5% x R$ 4,664.68) - [22.5% x (R$ 4,664.68 - R$ 3,751.06)] - [15% x R$ 3,751.06 - R$ 2,826.66]) - [7.5% x (R$ 2,826.66 - R$ 1,903.99)] = R$ 1,282.78 - [22.5% x R$ 913,62] - [15% x R$ 924.40] - [7.5% x R$ 922.67] = R$ 1,282.79 - R$ 205.56 - R$ 138.66 - R$ 69, 20 = R$ 869.36.

Questions about the value of the non-taxable minimum income, the scale of the rates, and especially if there are categories of privileged income, in the sense of not being submitted to progressivity, are questions that concern the effectiveness of the own progressivity and, consequently, of the attendance to the economic capacity principle.

The non-taxable income limit can be associated with the minimum amount of income sufficient to maintain a dignified life, since the Federal Supreme Court, in dealing with the principle of prohibition of confiscation in the judgment of ADI 1.075-MC on June 17, 1998, of which Min. Celso de Mello...
was rapporteur, considered confiscatory the taxation that would jeopardize "for the unbearable nature of the tax burden, the exercise of the right to a dignified existence, or the practice of licit professional activity or, even yet, basic life needs". In quantitative terms, non-taxable income should not be greater than per capita income - a result of the division of the gross national product by the number of inhabitants of the region. In Brazil the monthly per capita income in 2015 was equal to R$ 1,113.00\textsuperscript{12}. The minimum limit must consist of the amount set for the minimum wage, in accordance to article 7, IV, CF/1988, which in the same year of 2015 was defined by Decree 8.381/2014 at R$ 788.00. Above the higher of these values can be established any amount for the non-taxable income bracket, which is usually done from a political decision.

Regarding the graduation of tax rates studies indicate that there should be limits to progressivity. The Laffer curve shows that the excessive raising of the rates leads to a reduction in collection, not to increase, due to the negative effects on the economic activities subject to taxation\textsuperscript{13}.

There are, in addition, questions related to the erosion of the tax base, that is to say, the so-called ‘escape valves’ (SAMUELSON, 1979, p.183) arising from the legal provision of exemptions, income deductions and reduced rates for certain types of income. Legal deductions - such as medical and education expenses - are aspects of income taxation that aim to meet the postulate of personalities, a characteristic also inherent to IRPF due to the subjectivity of this tribute.

Differentiated exemptions and tax rates, however, may indicate non-compliance with progressivity. In the case of current Brazil, income classified in

\textsuperscript{12} BRAZIL. Brazilian Institute of Geography and Statistics. IBGE releases household per capita income 2015.

\textsuperscript{13} THE LAFFER CENTER. The Laffer Curve.
category (B) - capital income, such as income from financial investments, capital gain, interest on equity and dividends received by partner or shareholders - are treated favorably.

This question is extremely relevant, since it refers to the binomial capital and labor. While the income of labor is obtained from the current human effort, the capital income originates from the past, from accumulated previous work. It is true that this differentiation, which takes into account the human effort to obtain income, may be reduced over time because, "as the individual assets increase, this relation must be progressively less important, because of the size of income is to be used as a source of capital increase, which would increase the annual volume of income "(SILVA, 1974, p. 12). However, the greater the distance between the burden of capital and labor income, the less progressivity there will be, since it will unequally affect the income of individuals.

Data presented in Table 6, collected from the IRPF collection in the 2014 calendar year, show that the incidence of capital income tax represented only 21.66% of the total tax collected in that year. This would be a strong indication that labor income is taxed more heavily over capital income\(^\text{14}\).

\(^{14}\) Access only to the amounts collected from the different incomes of individuals does not allow us to conclude that their capital incomes are more or less taxed than their labor income, being only an indication. Otherwise, let's see. According to the latest data released by the Federal Revenue Office (Brazil, 2016) for the declaration of personal income tax in 2014, the income obtained by the individual in 2013 is: 60% of taxable income, 30% of income exempt and 10% of income taxed exclusively at source. Part of the exempt income (50%) corresponds to profits, dividends, withdrawals from members and other equity interests, while approximately 40% of the exclusive tax at the source refers to the 13th and the income received cumulatively, on which the progressive table is set. We would have, roughly, within the income of individuals: 60% + (0.5 * 30%) + (0.4 * 10%) = 60% + 15% + 4% = 79% referring to income from work or of them, while 100% - 79% = 21% refers to capital income. Let's assume that the composition of the incomes of 2013 behave in a similar way in 2014, data from our collection. Yet the conjugation of the tax bases with the amounts collected does not tell us anything, for what we need to know is whether the values of labor income are more or less burdened than equal values of the income of capital. This, the data provided by the Federal Revenue Office does not yet contain!
Table 6

IRPF collection - 2017 (millions R$)

<table>
<thead>
<tr>
<th>Item</th>
<th>Collection</th>
<th>Relative amount in the IRPF collection (%)</th>
<th>Part. total collection (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRPF - payment of quotes in the annual adjustment</td>
<td>28.562,00</td>
<td>15,18</td>
<td></td>
</tr>
<tr>
<td>IRRF – tax withholding from labor incomes</td>
<td>89.289,00</td>
<td>47,46</td>
<td></td>
</tr>
<tr>
<td>IRRF - tax withholding from abroad labor income</td>
<td>19.187,00</td>
<td>10,20</td>
<td></td>
</tr>
<tr>
<td>IRRF - tax withholding from other incomes</td>
<td>10.335,00</td>
<td>5,49</td>
<td></td>
</tr>
<tr>
<td>IRRF – capital income</td>
<td>40.748,00</td>
<td>21,66</td>
<td></td>
</tr>
<tr>
<td>Total of Personal Income Tax</td>
<td>188.121,00</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total of central government collection</td>
<td>1.220.030,00</td>
<td>12,0</td>
<td>8</td>
</tr>
</tbody>
</table>


In fact, these values can be understood from information contained in the Brazilian Federal Revenue Service’s website, regarding the rates applicable to labor income, where it can be verified that these incomes are subject to maximum taxation (27.5%) higher than the higher tax burden attributed to capital income (22.5%), and higher, than the incident on income of unknown origin, hidden abroad (15%), as can be seen in Table 7.
### Tabela 7

**Tax rates in the IRPF**

<table>
<thead>
<tr>
<th>Highest Rate</th>
<th>Category</th>
<th>Revenue category</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.5%</td>
<td>Labor Income</td>
<td>Wages, pensions, pensions, retirement pensions, commissions, bonuses, fees</td>
<td>Law nº 13.149/2015, art. 1º</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Law nº 10.101/2000, art. 3º</td>
</tr>
<tr>
<td>22.5%</td>
<td>Rendimentos de Capital</td>
<td>Fixed income applications. Capital gain from the transference of assets and rights</td>
<td>Laws nº 11.033/2004, art. 1º</td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td>Real states funds.</td>
<td>Law nº 8.668/1993, art. 10</td>
</tr>
<tr>
<td>15%</td>
<td></td>
<td>Stock funds. Interests on own capital. Income from unknown sources and not declared.</td>
<td>Law nº 12.973/2014, art. 9º</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Law nº 13.254/2016, art. 6º</td>
</tr>
</tbody>
</table>


Finally, in the case of capital income and those of unknown origin, the law itself provokes an offense to progressivity, insofar as it does not increase
the incidence of income tax in proportion to the fact that the calculation base - income earned - rises.

Furthermore, considering only the labor income - which is subject to the progressive table - there is a tendency to reduce its own progressivity, due to the reduction in the number of taxable income brackets, and the shortening of the difference between the maximum and minimum of the tax rates, according to data from Table 3.

It can be concluded, therefore, that progressivity, a mandatory attribute of the IRPF that should lead it to full compliance with the principles of economic capacity and tax isonomy, is not entirely presented in the normative configuration of this tax.

5. CONCLUSION

Along with distributing tax jurisdictions to federation entities, the Constitution has established limits to the power to tax, including the principles of fiscal equality and economic capacity. With regard to personal income tax, the original legislator was concerned with conceptualizing it as a personal tax and indicating its essential characteristics: generality, universality and progressivity.

It was sought to demonstrate, in this study, that the principles of economic and contributory capacity are based on the principle of isonomy, fundamental right foreseen in article 5, I, CF/1988, meaning the material representation of the principle of equality. Social solidarity is not a cause, but an effect of these principles.

The analysis of the distribution of taxation burden among members of the community has resulted in the understanding that a tributary profile based mainly on taxes is in conformity with the theory of sacrifice and, as such
direct taxes, as is the case of the IRPF, will be it essentially aimed at realizing the principle of economic capacity.

However, the examination of the norms governing the incidence of the IRPF indicates that progressivity, an obligatory attribute of this tax and that should lead to full compliance with the principles of economic capacity and tax isonomy, is not completely present. This is due to at least two factors: (i) taxation by means of favored proportional tax rates on capital income in comparison with progressive rates applied to income from work; (ii) the trend towards mitigation of progressivity over labor income due to the reduction in the number of taxable income brackets and the reduction of the difference between the maximum and minimum rates.

In sum, one can point, with some certainty, the low degree of progressivity of the IRPF, an indicative fact of non-compliance of the principles of fiscal equality and economic capacity.

With such a conclusion, it is expected that the critical understanding of the subject stimulates changes in the configuration of the IRPF, in order to direct it to the encounter of its inherent characteristic, that is, the progressivity.

REFERENCES


