

Karel Brychta

Evidence on Relative Tax Burden of Taxpayers with Income from Employment in the Czech Republic*

Key words: *Czech Republic, income from employment, natural persons, taxation*

Abstract: This paper presents the results of a comparative analysis of relative tax burden of taxpayers (natural persons) with income from employment in the Czech Republic from 1993 to 2009. Single, childless taxpayers with tax residency in the Czech Republic were chosen to represent this category of taxpayers. The amount of the tax burden was conceived as the sum of natural person income tax and the social and health insurance premiums paid by the taxpayer (employee), constituting in its nature and character a tax equivalent. The amount of these legally imposed payments was set with respect to the state valid and effective as of December 31st of the relevant year, in the case of the year 2009 with respect to the state as of June 30th. The results of the performed analysis prove gradual decrease in relative tax burden in the period of 1993–2009 for taxpayers of all income groups. However, the decrease cannot be characterized as uniform. The most marked decrease was identified with taxpayers in the upper income groups. The most significant change in the relative tax burden took effect in association with changes introduced in the Act on Income Taxes as of January 1st, 2008 when the progressive income tax of natural persons was replaced with a flat-rate tax and when changes were introduced to the concept of the partial income tax base calculations applicable to natural persons. The main contribution of this paper can be seen in the fact that the comparison encompasses the time interval covering the entire effective life of the Act on Income Taxes. It is also important that in view of the specified solution conditions, the relative tax burden values presented in the graphs can be understood as maximum values of the tax burden of taxpayers having income from employment.

INTRODUCTION

If one focuses on direct tax regulations in the Czech Republic, and namely on the income tax of natural persons, one can conclude that this particular area has

* The paper was completed with financial support of the Czech Science Foundation of the Czech Republic (GA ČR) as a partial output of the grant project No. 402/09/P469 – *Development and Competitiveness of the Czech Tax System in the Area of Taxation of Natural Persons Incomes*.

undergone relatively frequent changes, which can be documented by a considerable number of legal amendments of the Act No. 586/1992 Coll., the Act on Income Taxes, as amended by later regulations (hereinafter Act on Income Taxes). These amendments were naturally different in their extent, importance and reasons of imposition. Many of them stirred up relatively great interest of both experts and general public. The group of changes that incited the taxpayers' interest includes undoubtedly the changes associated with the relative tax burden.

The goal of this article is to compare relative tax burden for the selected category of taxpayers with income from employment only, occurring since the Act on Income Taxes came into operation (i.e., from 1993 to 2009). The selected category includes childless single taxpayers, who are tax residents of the Czech Republic. This selection is not random. If one takes into account relevant wordings of the Act on Income Taxes and associated regulations, one can conclude that the taxpayer specified in this way is exposed, within the context of the Czech tax law, to the highest relative tax burden (disregarding other aspects such as application of other possible tax-free parts of the tax base and tax discounts).

Considering the defined goal and the ways selected for achieving it, logic methods were applied, namely induction, analysis and synthesis, abstraction and concretization. In connection with these methods the method of modelling and comparison were applied.

That is to say, tax area is a very extensive one and, therefore, it was necessary to make some simplifications. The abstraction in many aspects was inevitable. In this respect, it is to point out that considering of all possible tax optimization means would conduce to very complicated and accordingly not providing an easy survey mathematical models. On the other hand, however, it was necessary to select a certain category of taxpayers for the analysis and to specify conditions for creation of the mathematical models. The analysis in connection with the method of modelling and comparison was used in relation to the description and assessment of relative tax burden development. While using induction and synthesis there were subsequently deduced generally valid conclusions for taxpayers with incomes from employment.

In the first part of the paper the issues of regulating natural person income taxation in the context of the Czech Republic's European Union membership are presented with the intent to include and reflect relevant associations and to indicate possible trends in regulations of taxation of this income type in the future. Some fundamental aspects are also mentioned here regarding regulations of taxation of income of natural persons in general and regarding regulations of the selected income type (income from employment) in the Czech Republic.

The next part presents the actual comparison of the relative tax burden of the selected category of taxpayers. The mathematical models, from which the presented graphic outputs were derived, were based on the following starting points and simplifications:

The taxpayer's only income is the income from employment (§ 6 of the Act on Income Taxes – *Income from employment and functional benefits*).

The comparison has been carried out in relation to data for the entire tax period (calendar year) (*the lowest considered yearly taxable income amounts to CZK 96,000.00 which corresponds to monthly gross wage of CZK 8,000.00, the minimum monthly wage since 2007*).

The taxpayer receives the income throughout the entire taxation period from one domestic employer only with whom the taxpayer signed the tax declaration (*the above specified is one of the prerequisites for claiming the tax-free parts of the tax base, tax benefits and tax discounts; the taxpayer cannot sign tax declaration with multiple employers at the same time*).

The taxpayers claim only the basic tax-free amount of the tax base (or discount) for the taxpayer (*a great portion of the tax-free parts of the tax base was transformed with the effect as of January 1st, 2006 into the form of a tax discount – this applies also to the tax-free part of the tax base applicable to the taxpayer*).

The amount of the tax burden was conceived as the sum of the natural person's income tax and the social and health insurance premiums paid by the taxpayer (employee) as the latter payment is also a tax in its nature.

The amount of these legally imposed payments was determined with respect to the state valid and effective as of December 31st of the relevant year, in the case of the year 2009 as of June 30th.

The common basis, against which the total yearly tax burden is calculated, is the total taxpayer's income – that is the total yearly gross wage (*this shall eliminate errors which might result from different concepts of the tax bases for the years 2008 and 2009*).

In the concluding part the achieved results are summarized with reference to other aspects which need to be taken into account in more comprehensive and systematic assessment of the effects of tax burden changes.

TAXES IN THE CONTEXT OF THE EU MEMBERSHIP OF THE CZECH REPUBLIC

The Czech Republic, together with other nine countries, became on May 1st, 2004 a member state of the EU. This fundamental change was necessarily reflected, continues to be reflected and will be reflected in a number of aspects of its operations. By joining the EU, the Czech Republic delegated a part of its authority to supranational bodies and at the same time accepted the obligation to comply with *acquis communautaire*. Naturally, the above facts have substantial impact in the domain of taxation as this area has been determined by efforts of building a competitive common market and implementing the EU policy.

The Czech Republic has become a part of the inner market the establishment of which required creation of a special common tax system enabling regular operations and enforcement of the four fundamental freedoms among the member states. However, the special common tax system is not in form of a single fiscal space, the creation of which was soon abandoned, as achieving such a state was not and still is not realistic. Creating such an environment would require too broad harmonization of tax systems and taxes within the EU, which could not be limited to indirect taxes only (Týč, 2008, p. 87).

Within the context of the fundamental freedoms, which include free movement of goods, services, capital and persons, the need of harmonization in the area of indirect taxes has been probably the most perceptible. The obligation of the member states in this area ensues even from the relevant articles of the Treaty establishing the European Community (hereinafter the Treaty). The Article 93 of the Treaty deals directly with the issues of harmonization of legal regulations concerning turnover taxes, excise taxes, and other forms of indirect taxes. In order to create a single and operational market without discriminatory barriers it is necessary, however, to intervene in the area of direct taxes, doing so in spite of the fact that the Treaty does not contain any explicit provisions compelling the member states to harmonize direct taxes, especially in the area of natural person income taxes (Meussen, 2004, p. 158).

The process of harmonization of direct taxes has not by far reached such a level as in the area of indirect taxes and one can say that it is stagnating (Šíroký, 2009, p. 61). This fact is a natural consequence of attempts of individual states to retain at least part of their autonomy in the area of taxation, especially in the area of taxation of income from employment and income from business, the regulation of which is also a very sensitive political issue and subject to competitive political clashes. It remains a fact, however, that a factor influencing the degree of successful implementation of the EU policy is also a suitable regulation in the area of direct taxation, namely the one pertaining to taxation of capital, corporate income and partly also taxation of natural persons. In case of taxes imposed on natural persons a very important role is played by the European Court of Justice (hereinafter ECJ), the goal of which, pursuant to Article 220 of the Treaty, is to ensure within its authority observance of law when interpreting and implementing the Treaty. The ECJ thus performs the function of so called indirect harmonization (Nerudová, 2005, p. 15), (Šíroký, 2009, p. 27).

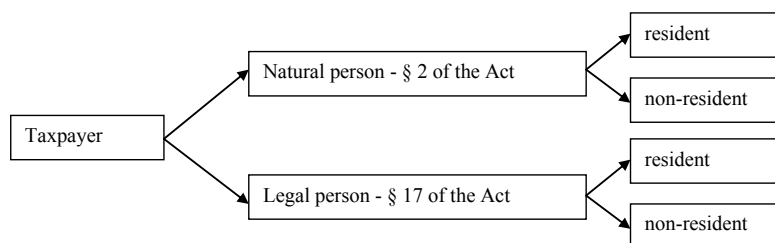
Having considered the above mentioned facts, one can conclude that the European Union countries can and do exercise their sovereignty in the area of natural person employment income tax regulations, which is reflected in the relatively frequent changes in this area.

TAXATION OF NATURAL PERSONS INCOME ACCORDING TO CZECH LAW

In addition to the community law, taxation of income of natural persons has been substantially influenced in the Czech legal environment by existing Conventions for the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income and on property (hereinafter CADT). It is worth mentioning that the Czech Republic has concluded CADTs with all the EU member states and although these conventions are based on a uniform model (OECD model), they are not fully identical. In relation to the law of the European Communities, a group of experts dealing with the issues of international taxation within the EU referred in June 2005 to the fact that there were more than 300 bilateral international treaties governing cross-border tax relations, which represented considerable obstacles and difficulties for the taxpayers who wished to enjoy the benefits resulting from their freedoms specified in the Treaty (Working document: EC Law and Tax Treaties, Workshop of Experts; pp. 1–20).

The fundamental material law regulating taxation of income of natural persons is the Act on Income Taxes. In this act there are distinguished two elementary groups of taxpayers, the natural and legal persons, who are further divided into so called tax residents and tax non-residents.

Figure 1. Taxpayer classification according to the Act on Income Taxes



Source: own design.

The fundamental difference between the tax resident and tax non-resident is that the resident files tax return for his/her global income, so called unlimited tax obligation applies to him/her. On the other hand, the non-resident is subject to taxation only from income with its source in the territory of the Czech Republic – the so-called limited tax obligation applies to him/her. The taxpayer's status has a fundamental impact on the way of income taxation, yet not on the income categorization as such. Income of natural persons has been since the operation of the Act on Income Taxes (i.e., since January 1st, 1993) divided into five elementary income types, including:

- a) income from employment and functional benefits (§ 6),
- b) income from business and other self-employment activities (§ 7),

- c) income from capital gains (§ 8),
- d) rental income (§ 9),
- e) other income (§ 10).

In relation to the individual income types specified above we talk about the so-called partial tax bases. A very specific position is held by the partial tax base of income from employment and functional benefits which not only cannot, naturally, be a negative figure but against which even possible losses associated with income pursuant to § 7 or § 9 of the Act on Income Taxes cannot be set off. Partial tax bases pursuant to § 8 or § 10 of the Act on Income Taxes can only be non-negative figures. The total natural person income tax base is the sum of all the partial tax bases while respecting the above stated conditions. This way of determining the total natural person income tax base has not been changed since January 1st, 1993. On the other hand, quite substantial changes were introduced in respect of the nominal tax rates and the tax-free amounts of the tax base.

KEY CHANGES IN DETERMINING THE PARTIAL TAX BASE PURSUANT TO § 6 OF THE ACT ON INCOME TAXES

Considering a situation where the natural person has only income from employment and functional benefits, this partial tax base equals to the total natural person income tax base. Disregarding the very frequent changes in the nominal tax rates and changes in the tax-free parts of the tax base or the tax discounts, fundamental concept changes for this specific taxpayer category were introduced in 2006 and 2008.

In 2006, there was a transformation in tax-free parts of the tax base related to the personal status of the taxpayer (for instance, the tax-free amount concerning the taxpayer, the tax-free amount concerning the spouse without income; tax-free amount for reasons of the taxpayer's disability). These tax-free parts of the tax base were transformed into form of tax discounts (deducted from the tax) and they were relocated from § 15 of the Act on Income Taxes to the newly established § 35ba of the Act on Income Taxes. A totally fundamental change in the concept of the partial tax base pursuant to § 6 of the Act on Income Taxes was introduced with the effect as of January 1st, 2008 when the flat-rate tax of 15 % was introduced at the same time for all natural person income types (there is a negligible exception in association to tax non-residents).

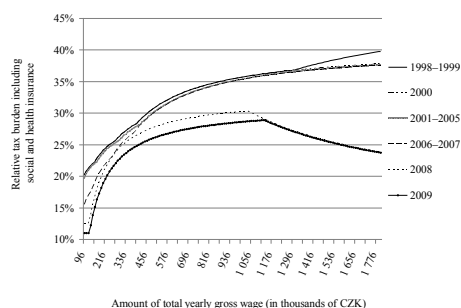
COMPARING THE RELATIVE TAX BURDEN IN THE YEARS 1993–2009

The results of the performed comparison are presented in form of graphs and related commentaries. For the sake of transparency, the time interval (1993–2009)

was split in two time periods. The first one covers the period between the years 1993 and 1999. The second one covers the period between the years 1999 and 2009. At first sight, this split may seem to be unbalanced; however, it reflects the fact that in some years there were no changes in the nominal tax rates and the tax-free parts of the tax base.

Figure 2 represents relative tax burden (including social and health insurance premiums paid by the employee) in the period of 1993–1999. In this time frame, in each year, the relative tax burden was progressive in its nature. At the same time, it can be detected that in the course of time there was a gradual decrease of the relative tax burden of the taxpayers.

Figure 2. Relative tax burden including social and health insurance (years 1993–1999)



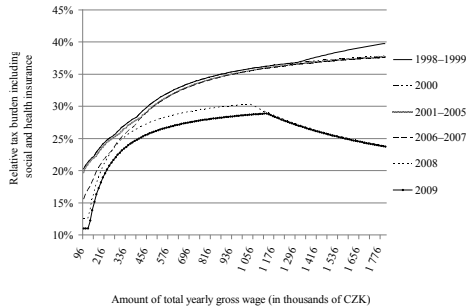
Source: own study based on created mathematical model.

The following Figure 3 represents evolution of the relative tax burden in the time period of 1999–2009. For this time period too, decrease of the relative tax burden is characteristic. A fundamental change concerning the extent of tax savings in comparison with the previous year took place in 2008. While the relative tax burden in the years 1993–2007 was progressive throughout the entire income interval, the relative tax burden in 2008 and 2009 is regressive after reaching the inflection point – it means that the relative tax burden decreases with the increasing income.

Evolution of the relative tax burden in the years 2008 and 2009 deserves a more detailed commentary. First of all, concerning explanation of the fact that in these years the relative tax burden in the lowest income level is linear in its nature: This is a result of the high tax discount for the taxpayer (CZK 24,840.00 in 2008 and 2009; CZK 7,200.00 in 2007) which meant that the relative tax burden consisted only of the social and health insurance paid by the employee (12.5 % in 2008 and 11.0 % in 2009). Up to a certain total income level, the relative tax burden in 2008 and 2009 is significantly progressive in its character despite the existence of the flat-rate tax which is due to tax discount.

Degression in the relative tax burden in the years 2008 and 2009 is a result of a new concept of the tax base (see § 6 par. 13 of the Act on Income Taxes) in

Figure 3. Relative tax burden including social and health insurance (years 1999–2009)

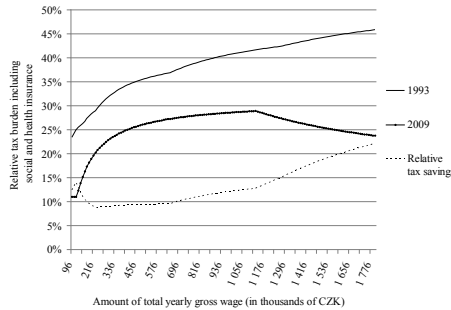


Source: own study based on created mathematical model.

association with the existence of the maximum admeasured base for social and health insurance – see § 15a of the Act No. 589/1992 Coll., on Social Security and Contribution on State Labour Policy, as amended and § 3 subsection 15 et seq. of the Act No. 592/1992 Coll., on General Health Insurance, as amended). Since 2008 the tax base for employment income has been newly defined as the sum of the gross wage and the social and health insurance to be paid by the employer while a so called maximum admeasured base is set for this social and health insurance – meaning that no social and health insurance premium is paid from the sum exceeding this amount. As the taxpayer's income grows above the level of the maximum admeasured base, it is logical that the relative share of the social and health insurance drops (both the premiums paid by the employee and the employer). This fact eventually results in the total decrease of the relative tax burden. The maximum admeasured base for the social and health insurance is set as the total of forty-eight times the average monthly wage. In 2008 this sum amounted to CZK 1,034,880.00 (i.e., $48 * \text{CZK } 21,560.00$) and in 2009 it is the sum of CZK 1,130,640.00 ($48 * \text{CZK } 23,555.00$).

Based on the Figures 2 and 3 which represent the output of the compiled mathematical models, one can conclude that during the period of the years 1993–2009 there was a gradual decrease in the relative tax burden. Additionally, in Figure 4, the relative tax burden is compared only for the two marginal years (1993 and 2009) with the aim to assess the overall change occurring from the very beginning of the operation of the Act on Income Taxes. Figure 4 shows both the relative tax burdens in 1993 and 2009 and the relative tax savings for the respective income interval.

Figure 4. Relative tax savings (compared year 1993 and 2009)

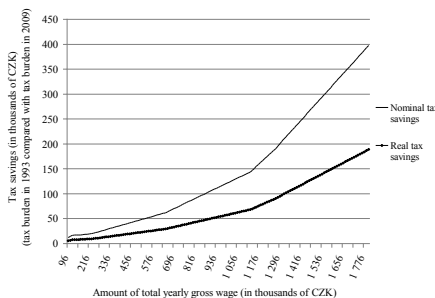


Source: own study based on created mathematical model.

Specific values were derived from the mathematical model and it was discovered that the income amounts corresponding to the inflection points in relative tax savings function are incomes amounting to CZK 132,000.00 and CZK 240,000.00. Up to the amount of CZK 132,000.00 the relative tax saving has a growing tendency. On the other hand, from this income amount to the sum of CZK 240,000.00 it has a declining tendency. Starting from the taxpayer’s income level of CZK 240,000.00, the relative tax saving function shows a continuing growth.

Comparing the relative values is very important in respect of describing trends and development, however, when talking about tax savings, it is appropriate to evaluate also the absolute figures and also to take into account the current value of money (i.e., namely to reflect the impact of inflation). Figure 4 shows the amount of tax savings in nominal and real values. The real values were calculated from the nominal ones by reflecting the inflation rates from 1993 to 2009. The inflation rate for 2009 was taken from a document of the Ministry of Finance of the Czech Republic containing inflation rate estimation for the year 2009 (see the reference No. 6 in the list of literature); the data for the other years were drawn from information presented by the Czech Statistics Office (see the reference No. 8 in the list of literature).

Figure 5. Tax savings in absolute figures (compared year 1993 and 2009)



Source: own study based on created mathematical model.

The last graph presenting the amount of tax savings resulting from comparison of the tax burden in the years 1993 and 2009 confirms the earlier conclusion regarding evolution in the area of the relative tax burden. The key breaking point in development of the function describing the amount of the tax savings falls on the moment when the income reaches the amount corresponding to the maximum admeasured base for the social and health insurance (CZK 1,130,640; this amount corresponds to the gross monthly wage of CZK 94,220, which is quadruple of the average monthly wage for the year 2009).

CONCLUSIONS

Based on the performed analysis one can make a general conclusion that in the tracked period the relative tax burden of the selected category of taxpayers experienced gradual decrease. However, this decrease was not uniform, with the greatest volumes being achieved in taxpayers with the highest income. This conclusion can be deduced in general terms not only for single and childless taxpayers but also for taxpayers with income pursuant to § 6 of the Act on Income Taxes in general.

Between the years 1993 and 2007 the relative tax burden for the monitored income interval has solely progressive character. Therefore, there is a direct proportion between the income amounts and the amounts of the relative tax burden. This conclusion cannot be made for the tax periods of 2008 and 2009 as the relative tax burden in these years is not only progressive in its character, but also linear and regressive. The linear character in the case of low total income of the taxpayer is a result of the increased tax discount (since January 1st, 2008) which leads to the fact that the tax burden up to a certain income level consists only of the social and health insurance premiums paid by the employee. The regressive development of the relative tax burden function is associated with changes in the concept of the partial tax base pursuant to § 6 of the Act on Income Taxes along with the maximum admeasured base for the social and health insurance (see the comments above).

In this respect it is necessary to stress, however, that the decrease of the taxpayer's tax burden and the ensuing tax savings is only one of many factors influencing the amount of the taxpayer's disposable income and the changes in the area of income taxation must be viewed in context of and in relation to other aspects, such as:

- possible broadening of the tax base (*inclusion of new types of income in the partial tax bases*) and expansion of income included in the admeasured base for the social and health insurance;
- changes in the system of welfare benefits;
- changes in other taxes affecting the disposable income of the taxpayer (*for example, increase of the value added tax rates or reclassification of some goods*)

or services formally subject to the reduced tax rate into a group which is subject to the standard tax rate);

– rate of inflation which affects real income values and, therefore, also the volume of the tax savings.

This paper reflects only changes of the key regulation parameters of the Act on Income Taxes which include the tax nominal rates and, with regard to the limited category of taxpayers, the changes of the amount of the tax-free part of the tax base for the taxpayer (or the taxpayer's tax discount). However, these variables represent only a relatively small part, nevertheless fundamental in its importance and impact, of variables which must be taken into account. For a comprehensive evaluation it is important to reflect also possibilities of tax optimization offered by the Act on Income Taxes, i.e., in case of taxpayers with income pursuant to § 6 of the Act on Income Taxes especially the amounts of the other tax-free parts of the tax base and tax discounts including the conditions for their application.

REFERENCES

- Act No. 586/1992 Coll., Act on Income Taxes, as amended.
- Act No. 589/1992 Coll., on Insurance for Social Security and Contribution on State Labour Policy, as amended.
- Act No. 592/1992 Coll., on General Health Insurance, as amended.
- ASPI [automatizovaný systém právních informací]. ASPI, a. s. © 2009 (*Automized System of Legal Information*).
- Consolidated Versions of the Treaty on European Union and of the Treaty Establishing the European Community.
- Dokument Ministerstva financí České republiky. Makroekonomická Predikce – červenec 2009 – komentáře, http://www.mfcr.cz/cps/rde/xbcr/mfcr/MakroPre_2009Q3_komentar_pdf.pdf (quoted on 18 August 2009). (*Document of the Ministry of Finance of the Czech Republic – Macroeconomic Prediction – July 2009 – in Czech language*).
- Meussen, G. T. K., (2004), *Taxation of Individuals: (Recent) Developments in Case Law of the ECJ*, „ERA-Forum“, 2004, vol. 5, No. 2.
- Míra inflace, http://www.czso.cz/csu/redakce.nsf/i/mira_inflace (quoted 18. August 2009). (*Rate of Inflation in the Czech Republic – in Czech language*).
- Nerudová, D., (2005), *Harmonizace daňových systémů zemí Evropské unie*, Aspi Wolters Kluwer, Praha. (*Harmonization of Tax Systems in the Countries of the European Union – book in Czech language*).
- Široký, J., (2009), *Daně v Evropské unii*. Linde, Praha. (*Taxes in the European Union – book in Czech language*).
- Týč, V., (2008), *Harmonization of indirect taxes in the European Union*, „International Journal of Law and Management“, vol. 50, No. 2.
- Working document: *EC Law and Tax Treaties, Workshop of Experts*, http://ec.europa.eu/taxation_customs/taxation/personal_tax/double_tax_conventions/index_en.htm (quoted on 05 July 2009).

ANALIZA PORÓWNAWCZA OBCIĄŻEŃ PODATKOWYCH OSÓB OSIĄGAJĄCYCH DOCHODY Z ZATRUDNIENIA W REPUBLICIE CZESKIEJ

Słowa kluczowe: *Republika czeska, dochody z zatrudnienia, osoba fizyczna, opodatkowanie*

Abstrakt: Artykuł prezentuje wyniki analizy porównawczej obciążeń podatkowych podatników (osób fizycznych) z dochodów z pracy w Republice Czech w latach 1993–2009. Do reprezentowania tej grupy podatników wybrano osoby samotne i bezdzietne zamieszkujące Republikę Czeską. Wysokość obciążeń podatkowych jest rozumiana jako suma podatku dochodowego od osób fizycznych oraz składek na ubezpieczenia społeczne i zdrowotne zapłacone przez podatnika (pracownika), które stanowią ekwiwalent podatku. Kwota tych prawnie nałożonych płatności została ustalona w odniesieniu do rzeczywistego stanu obowiązującego na dzień 31 grudnia danego roku, a w przypadku roku 2009 w stosunku do stanu z 30 czerwca. Wyniki przeprowadzonej analizy pokazują stopniowy spadek relatywnych obciążeń podatkowych w okresie 1993–2009 dla podatników ze wszystkich grup podatkowych. Jednakże spadek ten nie może być uznany za jednolity. Najbardziej zauważalny był w przypadku podatników z najwyższej grupy podatkowej. Najistotniejsza zmiana w zakresie obciążeń podatkowych weszła w życie z dniem 1 stycznia 2008 roku na mocy ustawy o podatkach dochodowych, która zastąpiła progresywny podatek dochodowy od osób fizycznych podatkiem zryczałtowanym oraz wprowadziła koncepcję częściowej podstawy obliczania podatku dochodowego od osób fizycznych. Porównanie obejmuje wszystkie lata, gdy efektywnie obowiązywała ustawa o podatku dochodowym. Ważny jest również fakt, iż w świetle określonych warunków względne obciążenia podatkowe mogą być rozumiane jako maksymalne wartości obciążeń podatkowych podatników czerpiących dochód z pracy.