PRACE NAUKOWE

Uniwersytetu Ekonomicznego we Wrocławiu

RESEARCH PAPERS

of Wrocław University of Economics

Nr 434

Quantitative Methods in Accounting and Finance

Copy-editing: Elżbieta Macauley Layout: Barbara Łopusiewicz Proof-reading: Barbara Cibis Typesetting: Agata Wiszniowska Cover design: Beata Dębska

Information on submitting and reviewing papers is available on websites: www.pracenaukowe.ue.wroc.pl www.wydawnictwo.ue.wroc.pl

The publication is distributed under the Creative Commons Attribution 3.0 Attribution-NonCommercial-NoDerivs CC BY-NC-ND



© Copyright by Wrocław University of Economics Wrocław 2016

ISSN 1899-3192 e-ISSN 2392-0041 ISBN 978-83-7695-589-6

The original version: printed

Publications may be ordered in Publishing House: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu ul. Komandorska 118/120, 53-345 Wrocław tel./fax 71 36-80-602; e-mail: econbook@ue.wroc.pl www.ksiegarnia.ue.wroc.pl

Printing: TOTEM

Contents

Preface
Piotr Bednarek, Evaluating the usefulness of quantitative methods as
analytical auditing procedures / Ocena użyteczności metod ilościowych
jako audytowych procedur analitycznych
prediction for investment / Budowa arch-modeli szeregów czasowych do prognozowania inwestycji portfelowych
Natalia Bielous, Valeria Sopko, Implementation of the results phase of the
estimation system of the economic security of enterprises / Wdrożenie
wniosków z systemu oceny bezpieczeństwa ekonomicznego przedsiębiorstw
Magdalena Chmielowiec-Lewczuk, The impact of the implementation of Solvency II on the financial reporting of insurance companies in Poland /
Wpływ wdrożenia projektu Solvency II na sprawozdawczość finansową
zakładów ubezpieczeń w Polsce
Elżbieta Jaworska, Diversity management and reporting in selected
companies / Zarządzanie różnorodnością oraz raportowanie informacji
o różnorodności w wybranych przedsiębiorstwach
Ganna Karmeliuk, Svitlana Plaskon, Econometric modeling of the external
debt of Ukraine / Ekonometryczne modelowanie długu zewnętrznego
Ukrainy Joanna Koczar, Responsibility for accounting of a business entity in Russian
accounting law / Odpowiedzialność za rachunkowość podmiotu gospo- darczego w rosyjskim prawie bilansowym
Mykhailo Kuzub, Ways of improvement of accounting of production stocks
in agricultural enterprises / Sposoby poprawy księgowego ujęcia zapasów
w księgach rachunkowych przedsiębiorstw rolnych
Lesya Leshchiy, Valuation models of Investment Property / Modele oceny nieruchomości inwestycyjnych
Marek Masztalerz, Why narratives in accounting? / Skąd narracje w rachun-
kowości?
Ruslan Motoryn, Estimation of services in global added value chains / Ocena
udziału wartości usług w globalnych łańcuchach wartości dodanej
Vasyl Mukoviz, Kateryna Obertas, The impact of accounting policy on
formation of the valuation of assets, obligations and company's capital /
Wpływ polityki rachunkowości na wartość aktywów, zobowiązań i kapi-
tału własnego

Contents

Maria Nieplowicz, The use of performance-based budget to measure the efficiency of public transport in metropolises in Poland / Wykorzystanie budżetu zadaniowego do pomiaru efektywności transportu publicznego w polskich metropoliach	125
Edward Nowak, Deviation analysis as an instrument of cost control in an organization / Analiza odchyleń jako instrument kontroli kosztów przedsiębiorstwa	140
Marta Nowak, Quantitaive assessment of culture and its usage in accounting / Ilościowa ocena kultury i jej zastosowanie w rachunkowości	148 159
 Michał Poszwa, Problems of determining the costs in the calculation of tax result / Problemy ustalania kosztów w rachunku wyniku podatkowego Olga Sharapa, Methodological approaches to determining the level of transaction costs of sales of agricultural enterprises / Metodyczne podejścia do określenia poziomu kosztów transakcyjnych gospodarstw rolnych 	166 174
Alfred Szydelko, Anna Warzybok, Risk associated with research and development projects and its consequences for the financial accounting system / Ryzyko w projektach badawczo-rozwojowych i jego konsekwen-	
cje dla rachunkowości finansowej	181 190

Preface

This book presents the results of Polish-Ukrainian scientific cooperation. It contains the papers prepared for the 10th international conference "Quantitative Methods in Accounting and Finance". Accounting and finance face nowadays many challenges. They require both an international and local approach, they need to be considered from the theoretical and practical point of view, and they also encourage general and specific analysis.

Support from quantitative methods is needed in order to discover, implement and verify new finance and accounting trends, methods and instruments. The research papers which are part of this book present different aspects of accounting and finance combined with a quantitative, in particular Econometric, approach.

Some of the papers focus on methodology of measurement, estimation and forecasting of financial phenomena, especially those related to investment processes. Others address specific problems of accounting such as accounting solutions for different branches, legal issues of accounting, responsibility and reporting. An alternative approach was also undertaken and the roles of a narrative and culture in accounting were presented.

The variety of papers selected for this issue ensures the complexity of the book. It provides theoretical as well as empirical material which can be used in further research and in business practice, particularly in accounting and finance. We hope that the content of the book provides a starting point for scientific discussion and practical changes.

Marta Nowak

PRACE NAUKOWE UNIWERSYTETU EKONOMICZNEGO WE WROCŁAWIU RESEARCH PAPERS OF WROCŁAW UNIVERSITY OF ECONOMICS nr 434 • 2016

Quantitative Methods in Accounting and Finance

ISSN 1899-3192 e-ISSN 2392-0041

Michał Poszwa

Uniwersytet Ekonomiczny we Wrocławiu e-mail: michal.poszwa@ue.wroc.pl

PROBLEMS OF DETERMINING THE COSTS IN THE CALCULATION OF TAX RESULT

PROBLEMY USTALANIA KOSZTÓW W RACHUNKU WYNIKU PODATKOWEGO

DOI: 10.15611/pn.2016.434.17

Summary: The aim of this article is to present and analyze some problems related to the determination of tax costs. Tax expense is determined under the procedure as a result of the tax bill. Elements of the account are tax revenues and taxation costs. The way they are set is determined by the actual course of economic events and the content of tax legislation. Taxpayers expect that the legal standards will be formulated so that it will be possible to clarify disputes as to the manner of conduct on tax returns. However, the complexity of economic phenomena results in virtually no possibility of their accurate normalization. In addition, the legislator introduces regulations that have an impact on the taxpayer by making economic decisions. The circumstances also affect regulations for determining the costs. They contain a number of limitations to the recognition of costs. At the same time in provisions there is some freedom to determine the costs. This implies the need for the taxpayer proper procedures spreadsheets. They will allow to reduce tax risk and tax optimization.

Keywords: income tax, income account, tax costs.

Streszczenie: Celem artykułu jest przedstawienie i analiza wybranych problemów związanych z ustalaniem kosztów podatkowych. Koszty podatkowe ustala się w ramach procedury rachunku wyniku podatkowego. Elementami rachunku są podatkowe przychody oraz podatkowe koszty. Sposób ich ustalania determinowany jest rzeczywistym przebiegiem zdarzeń gospodarczych oraz treścią przepisów podatkowych. Podatnicy oczekują, że normy prawne zostaną tak sformułowane, że możliwe będzie jednoznaczne rozstrzyganie co do sposobu postępowania w rozliczeniu podatkowym. Jednak złożoność zjawisk gospodarczych skutkuje praktycznie brakiem możliwości ich dokładnego unormowania. Ponadto ustawodawca wprowadza regulacje, które mają oddziaływać na podejmowanie przez podatnika decyzji gospodarczych. Przedstawione okoliczności wpływają m.in. na regulacje dotyczące ustalania kosztów. Zawierają one wiele ograniczeń dotyczących uznawania kosztów. Jednocześnie z przepisów wynika pewna swoboda ustalania kosztów. Oznacza to konieczność stosowania przez podatnika właściwych procedur kalkulacyjnych. Pozwolą one na ograniczenie ryzyka podatkowego oraz optymalizację podatkową.

Słowa kluczowe: podatek dochodowy, rachunek dochodu, koszty podatkowe.

1. Introduction

The financial result is charged with an income tax. The way of its settlement depends on the form of the income tax. Given the manner of determining the amount of tax liability, there is a flat-rate income tax and income tax on general principles. A characteristic trait of flat-rate forms is setting income tax without taking into consideration the amount generated as a result of professional activity. A characteristic feature of the flat-rate taxation is therefore the lack of the problem of determining the outcome of the activity, because the result is not taken into consideration in the settlement of the tax.

The basic form of charging the financial result is taxation on general principles. The essence of the tax structure is determining its amount by taking into account the result of the tax, therefore the income or tax loss. Income (tax loss) is a tax measure of the effects of activity, which determines the level of the charge. The tax on a general basis is calculated from the base, which is income minus deductions from the income. The tax rate may be either proportional or progressive. The tax may be addi-tionally reduced by tax deductions.

The individual elements of the structure of income tax on general terms are defined in the relevant tax regulations. The Polish tax system has different formulas for determining the income tax from the results of economic activity. The legislator differentiates between tax results for taxpayers who are individuals [Ustawa z dnia 26 lipca 1991 r. ...] and for other taxpayers, and therefore legal persons [Ustawa z dnia 15 lutego 1992 r. ...] and other entities without legal personality. The differences relate to tax rates, the extent of deductions from income and tax. The common element in the various forms of tax is the tax result.

According to art. 7 of the law on income tax from legal persons and art. 9 of the law on income tax from individuals, income is the sum of the excess of revenues over costs of obtaining them achieved during the fiscal year. If the acquisition costs exceed the amount of income, the difference is a loss. Income (tax loss) of a business is determined only by taking into account the revenues and expenses related to these activities. In the procedure of determining the tax, one should calculate the amount of tax revenues and tax costs taking into account their respective elements [Olchowicz 2009]. The legislation defines the three elements of the bill as a result of the tax. First, it defines the nature and types of income and tax costs, it indicates the events and situations that cause an increase or decrease in income or tax loss. Second, it determines the rules of valuation and income tax expenses. Thirdly, it refers to the recognition of revenues and tax costs, i.e. their inclusion in the appropriate months and years of settlement.

The aim of this article is to present and analyze the procedures for determining the costs of taxes. The article presents various problem areas related to the determination of costs. The main problem is the indication of the range of costs included in the tax. It is therefore necessary to separate the costs recognized in the income tax and costs

168 Michał Poszwa

excluded. Another important problem is the calculation of tax expenses which are included in the income tax result in a given period.

2. Costs and organization of a tax bill

The essence of the tax bill result is correct, and thus compliant with the rules determining the scope, amount and time of obtaining or withholding of tax revenues and tax costs of obtaining them. The tax result is calculated for a specific period. For the settlement of advance payments on a monthly or quarterly basis, the results are calculated YTD. However, in order to make the annual tax settlement, there is settled a fixed income or tax loss for the year. The amount of the tax result is determined by the amount attributable to the period of revenues and tax costs.

The amount of income or tax loss depends on the extent of the revenues and expenses taken into account, the manner of their valuation and the moment of recognition in the income statement. In the income tax result, there should be taken into account only those events that are relevant for tax purposes. These events should be valued according to the rules contained in the tax laws. The period which takes into account the identified and valued event also follows the rules.

In the case of bookkeeping, the tax result is usually based on the financial result. Financial results presented in financial reporting reflect, on the one hand, the course of economic events, and on the other hand the accepted accounting principles. These principles and their application may be identical in accounting law and tax or different in either of the two regulations [Litwińczuk (ed.) 2013]. Differentiation of the adopted policies and methods of their use stems from the different objectives of the regulation. The aim of establishing the financial result (according to the balance sheet law) is the accurate and reliable representation of the results of operations. The rules for determining the tax result have been determined by taking into account the fiscal taxation and additional economic and social objectives pursued by the tax regulations.

Tax costs are determined in the context of a specific procedure which can be described as deductible costs [Poszwa 2009]. The object of the bill is only the cost of the tax, which, to distinguish it from the accounting cost, is defined as the cost of revenues. The effect of the bill should be the correct amount of costs incurred in a specific period and costs included in the income statement tax. These costs are deductible in a given period. For the correct determination of the moment of cost deduction in the tax bill it is necessary to establish the eligibility of costs by the relevant sections, and their relation to expenditure on payment for the purchased assets and services. As in the case of revenue, the amount of the costs of tax stems from both the actual course of economic events and from the free, to a certain extent, assessment of these events, by the taxable person within the framework of the existing legislation. A precise and unambiguous reflection of the economic reality is not possible, which means the necessity for the acceptance of tax risk.

The method of calculating the tax cost is closely linked to the form of records. For the purpose of further consideration, it is assumed that the taxpayer keeps accounting records. The method of determining the tax costs according to the laws on income tax from legal entities and individuals is identical. The procedure for determining the costs of obtaining revenue includes the following consecutive steps. First, it is necessary to identify the tax cost, i.e. indicate which costs included in the accounting books are included in the cost of revenues. Second, it is necessary to conduct a valuation and determination of the timing of the recognition of costs. This involves calculating the deductible costs and determining the moment of incurring the cost of the tax and the indication for which the billing period (month, quarter, or year) costs should be included in the bill, i.e. deducted.

The basic problem is to identify the scope of the tax costs. The income tax takes into account only those costs which meet certain conditions. Another problem is to determine the amount of costs which are deducted from the taxable income within the period in question.

3. Problems of identifying tax costs

Identification of the cost of the tax is carried out by taking into account the definition of deductible costs (art. 15 paragraph 1 of the law on income tax from legal persons and art. 22 paragraph 1 of the law on income tax from individuals) and the catalog of exemptions from the tax costs (art 16 of the law on income tax from legal persons and art. 23 of the law on income tax from individuals). According to the tax laws, tax deductible costs are the costs incurred to generate revenue or preserve or secure sources of income with the exception of costs excluded from the tax bill. Tax costs can therefore include only accounting costs which fulfill certain conditions.

The main condition is the actual incurred expense recognized in the accounting books. Not included in the income tax are the expenses considered to be reserves or accruals. The basis for recognition of the cost incurred is its documentation and registration [Nykiel, Mariański (eds.) 2015]. The main condition of the recognition of the cost is its actual occurrence. This means that it requires the charge of the property of the taxpayer, and no other entity. In addition, for intangible services, the tax authorities expect to be shown that such services were actually provided. Presentation of an invoice or contract may not be sufficient evidence of "incurred" costs [Kosakowski 2015].

Another condition for the recognition of the costs incurred to the cost of revenue is its relationship to the business activity (the cost must be incurred in order to achieve income or preserve or secure sources of income). The tax bill cannot take into account the costs that relate to income exempt from taxation (e.g. the cost of agricultural activity). The estimation of the connection of cost to the business has to some extent a discretionary nature and often will cause doubts in interpretation. The burden of proof rests not only on the taxpayer, but also for the tax authorities, which should seek to

170 Michał Poszwa

establish the actual facts (i.e. the principle of objective truth). The tax authorities have the right to assess the connection between the cost and the business (e.g. assessment of whether the phone is used exclusively for business purposes). In some situations, the assessment will also pertain to the validity and reasonableness of cost (e.g. assessment of the "reasonableness" of the purchase of an "expensive" car).

Costs regarded as desirable, and therefore linked to the operation of a business, are tested for their presence in the registry of costs excluded. Deductible costs are included in those "deliberate" costs which are not excluded [Marciniuk (ed.) 2016]. Costs excluded are those that are related to the business, but arbitrarily are not included in the tax bill. The list of expenses includes positions which do not cause doubts regarding their interpretation (e.g. administrative penalties), as well as items whose interpretation is ambiguous (e.g. the costs of representation which are not defined for tax purposes, thin capitalization) [Kukulski 2006]. Deductible expenses therefore include costs considered to be related to the business (fulfill the positive condition), which also are not exempt from the tax bill (do not meet the negative condition).

Tax costs are thus only those costs which meet the positive conditions (they have been incurred and are purposeful) and which do not fulfill the negative condition (are not excluded from the tax).

4. Problems of deducting tax expenses

Tax costs are included in the income tax in the corresponding period. It is therefore necessary to perform a valuation of the costs for a given month, quarter and year. Valuation includes both the activity measuring the cost of tax and determining the amount of the deductible costs in a given period. Measuring the cost of obtaining revenue happens on the basis of the source documents, and in the case of fixed assets and intangible assets, by taking into account the detailed arrangements for tax depreciation. The amount of tax deductions is determined within the limits of laws without regard to actual consumption. Determining deductible costs means the need for settlement of tax costs carrying out the calculation of the tax base of products, services and goods. The tax legislation lacks specific regulations concerning the accounting and calculation of taxing costs [Małecki, Mazurkiewicz 2015]. The analysis of interpretations by the tax authorities shows that in the absence of regulations it is necessary to apply the principles adopted in the accounting policy of the entity. Settlements and calculations of tax expenses are closely related to the determination of the moment of deducting tax expenses.

Determination of the moment of recognition of the cost in the income tax is an essential element of the procedure for determining the tax costs. For the correctness of the bill, it is essential to first isolate the moment of incurring tax cost and then the moment of deducting the tax cost.

Correct establishment of the moment of the incurred cost determines the period of recognition of the cost as tax-bound. Deductible expenses may include only the

costs incurred. For the taxpayers who keep accounting books, the day of the cost incurred is the date when the cost has been added to the books based on the received invoice (bill) or the recognition date of the cost on the basis of other evidence in the absence of an invoice (bill), with the exception of provisions and accruals. To obtain recognition for the cost incurred, it is necessary to obtain an invoice (bill), if the transaction is documented with an invoice (bill). Another proof of incurring the cost can only be used in cases where it is not possible to use an invoice. It is also dubious whether the condition for recognition of costs incurred should be the costs' registration in the books in any account (such an interpretation follows from the regulations) or the cost account (such understanding of the provision is used in some NSA verdicts) [Kosakowski 2015].

The moment of incurring the tax cost is determined on an accrual basis. The condition for the recognition of the cost incurred is not the expenditure itself but the "recognition of the expense in the books." However, one should take into account the specific legislations. Some costs are recognized as incurred on a cash basis. Exceptions to the accrual basis include in particular the costs of salaries, social security contributions and other interests transferred to the Social Insurance Institution.

The costs incurred are deducted in the income tax result. In order to determine the deductible cost in a given period (e.g. a year) there should be two groups of costs incurred, namely the costs directly related to revenues and costs other than those directly related to income (expenses indirectly related to revenues).

Costs that are directly and indirectly related to the revenues are not defined in the tax regulations. It can be assumed that the costs directly related to revenues are deductible costs relating to products, services, goods and other assets which are the subject of sales (from which there are obtained tax revenues). Simply put, these are therefore the costs (taxes) of producing goods and services covered by the activities of the entity [Walińska et al. 2014]. All other tax costs, including those that cannot be allocated to products, services, etc. are tax expenses indirectly related to the revenues.

The purpose of separating deductible costs directly and indirectly related to the revenues is to determine the date of their deductions, and therefore their inclusion in the income statement tax [Kudert, Jamroży 2013]. Incremental costs directly related to revenues are deducted in the period of obtaining the corresponding revenue. Therefore, costs for services sold in 2016 will be deducted from these revenues in 2016. However, if the costs were incurred in the following year, but before submitting the annual tax return, they would also be deducted in the year of reaching one's income (and therefore in the year preceding the year in which they were incurred). Incurring the cost after the date of filing the annual tax return results in them being deducted in the year they were incurred (i.e. after obtaining the revenues).

The tax costs incurred, indirectly related to the revenues, are deducted in the period when they are incurred (and therefore recognized in the books). The costs indirectly related to the revenues need to extract those that have been paid in advance and relate to the period of over one year. These costs are subject to mandatory periodic settlements proportionally to the length of the period to which they relate.

172 Michał Poszwa

Tax costs included in the income tax in a given period are mostly running costs and thus the costs incurred during this period. However, there are possible situations when deductible costs were incurred in previous periods. This means having to include the cost shifts in the tax bill. This also means striving to include these costs in the periods to which they relate, regardless of the period in which they were incurred.

5. Conclusion

In the procedure of the costs of obtaining revenues it is necessary to distinguish two basic steps. In the first stage, it is determined that the costs included in the book are tax deductible costs. Qualification of expenses for taxation is based on clear evidence, as well as a discretionary basis based on a subjective assessment of the economic processes and the interpretation of the rules. The costs included in the tax are then included into one of two groups (the costs directly and indirectly related to revenues). The result of this division is to determine the amount of costs that are deducted in a given period, and those that will be deducted in the income tax result in the future.

Each stage of determining tax costs faces specific problems. At the stage of identifying the cost, the taxpayer must demonstrate that the expense was actually incurred and what was its relation to the profile of the business. In a number of situations the objective demonstration of the existence of such a relation is difficult. In addition, the taxpayer has to decide whether the costs incurred belong to the category of costs excluded. Such decisions are, to some extent, subjective.

At the stage of determining deductible costs there is a basic problem of qualifying costs into those directly related to income and those indirectly related to the income. To a certain degree, the qualification of the tax cost is carried out arbitrarily. It is therefore necessary to develop adequate criteria for assigning costs. The consequence of these decisions will be the earlier or later presentation of income.

Tax costs undoubtedly represent a source of tax risk. This stems from the fact that establishing costs is, to some extent, subjective. The evaluation by the taxpayer may differ from the assessment of the tax authorities. The development and application of procedures concerning tax costs helps minimize this risk.

References

Kosakowski E., 2015, Opodatkowanie dochodu z działalności gospodarczej, [in:] Zamknięcie roku 2015, Rachunkowość sp. z o.o., Warszawa.

Kudert S., Jamroży M., 2013, *Optymalizacja opodatkowania dochodów przedsiębiorców*, Wolters Kluwer, Warszawa.

Kukulski Z., 2006, *Niedostateczna kapitalizacja w prawie podatkowym*, C.H. Beck, Warszawa. Litwińczuk H. (ed.), 2013, *Prawo podatkowe przedsiębiorców*, Wolters Kluwers, Warszawa.

- Małecki P., Mazurkiewicz M., 2015, CIT. Komentarz. Podatki i rachunkowość, Wolters Kluwer, Warszawa.
- Marciniuk J. (ed.), 2016, Podatek dochodowy od osób fizycznych, C.H. Beck, Warszawa.
- Nykiel W., Mariański A. (eds.), 2015, Komentarz do ustawy o podatku dochodowym od osób prawnych 2015, ODDK, Gdańsk.
- Olchowicz I., 2009, Rachunkowość podatkowa, Difin, Warszawa.
- Poszwa M., 2009, *Rachunek kosztów uzyskania przychodów*, Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, nr 53.
- Ustawa z 15 lutego 1991 r. o podatku dochodowym od osób prawnych, Dz.U. 2011 nr 74, poz. 397 ze zm. Ustawa z dnia 26 lipca 1991 r. o podatku dochodowym od osób fizycznych, tekst jednolity Dz.U. 2012, poz. 361 ze zm.
- Walińska E., Wencel A., Jurewicz A., Wiatr M., 2014, *Podatek dochodowy w systemie rachunkowości zasady ustalania i rewizji*, SKwP, Warszawa.