

## Daňová vzdělanost jako součást finanční gramotnosti

### Tax Education as a Part of Financial Literacy

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#### Abstract:

**Purpose of the article:** Taxes are the matter which every citizen meets daily with, because indirect taxes are included in a price of purchased goods or services and incomes are subjected to income taxes. A lot of states deal with tax education and even the Czech Republic is not exception. Financial education is going on at elementary and high schools. On the basis of the fact it was done the research of tax knowledge at students of the university.

**Methodology/methods:** In the research there were used mono-graphic, typological, statistic and experimental procedures. Statistic method Chi-Quadrat Test was used for verification of the hypotheses.

**Scientific aim:** The article deals with tax education level of the students of Silesian University in Opava, School of Business Administration in Karviná, which was discovered on the basis of primary research which was done by the help of the questionnaire research. The research was orientated to knowledge of the students before graduation of the subjects focused on taxes at first phase.

**Findings:** On the basis of the questionnaires results it was found out, that more than 50 per cent of respondents have minimum or deficient knowledge in area of taxation. When comparing results between students according to form of study the statistical method of chi-test confirmed that student's result depends on the form of study. Respondents studying in the extramural form of study had better knowledge than full-time students.

**Conclusions:** On the basis of the results of the first part of the research we can state that more than one half of the students orientate deficiently. The knowledge from tax field which students got at high school eventually in a family or from public press is not satisfactory. The students of economically focused school will deepen their knowledge at studies in the subjects focused on tax matters. The differences in knowledge among the students in full-time and extramural form of studies are influenced particularly with the fact that the most of the students in extramural form work contrary to the students in full-time form.

**Keywords:** financial literacy, tax literacy, income taxes, consumption taxes, value added tax, environmental taxes

**JEL Classification:** H20, H24, I21

## Introduction

Financial literacy is specialised part of wider economic literacy which includes an ability to ensure income, to consider consequences of personal decisions on current and future income, orientation on the market of job opportunities, an ability to decide on expenses etc. Financial literacy is a complex of knowledge, skills and value attitude of a citizen, it is necessary to provide for themselves and their family in present society and to act actively on the market of financial products and services. Financially literate citizen orientates in the matters of money and prices and is able to manage personal/family budget responsibly including management of financial assets and financial obligation in consideration of changing life situation (MŠMT, 2008).

Financial literacy as management of personal or family finance includes 3 components:

- monetary literacy,
- pricing literacy,
- budget literacy.

Budget literacy represents an ability to understand important terms such as public finance which include state budget and municipal budgets, incomes and budget expense, taxes, deficit management and budget policy (Vybíhal, 2011).

OECD created financial education project in the year 2003. The National Strategy for Financial Literacy also exists in the USA from 2003. In the Czech Republic in the year 2005, it was issued a government decree whereby a task of building up of financial education system at elementary and high schools was set.

In the European Union there was established a group of experts for financial education on the basis of the Decision of the Commission from 30th April 2008 (Commission decision 2008/365/EC). Financial education systems are various in individual EU states.

### 1. Tax literacy

Inseparable part of financial literacy is also tax area and especially with regard to participating in financial sources of individuals and households significantly and so it has significant influence on cash flow in private financial. Many people believe the taxes they pay are unfair. And many do not understand why taxes exist. Basic awareness of tax system and tax role in terms of citizen society is necessary to understand as an element for ensuring responsible behaviour of citizens towards a family and a state.

Tax ignorance costs money each of us. Many of us pay more tax than we actually owe. Tax ignorance also makes it hard to discuss and enact sound tax policies, we are not able to raise money in the fairest and most efficient possible way (Tax Literacy project, 2012).

The tax system is a set of all taxes which are levied at the specific territory as a rule, in a state (Košťufíková, 2011; 78). Every citizen should have basic knowledge of the tax system and taxes levied in the state where he lives. It is necessary to state that it is almost impossible to reach and mainly keep basic tax literacy at current rate of novelizations of tax law (Brychta, Svirák, 2010).

A lot of states deal with tax education both in terms of the European Union and outside the EU. For example The Tax Literacy Project, based at the Sandra Day O'Connor College of Law at Arizona State University educates the public about basic aspects of taxation in three distinct, but overlapping, areas:

1. Why we have taxation, it means the purpose of taxes and the connection between taxing and spending.
2. Fairness of taxation – how to distribute the burden of taxation, including choice of tax base and rate structure.
3. Basic concepts of taxation, e.g. marginal rates versus effective rates and credits versus deductions.

Tax literacy was found out *e. g.* in Malaysia in connection with the establishment Self-Assessment System (SAS) for taxpayers in 2005. In this system the onus for computing tax liability lies with the taxpayers. A taxpayer is expected to be “functionally literate” to determine his own taxable income and income tax payable; and to furnish correct returns to Inland revenue Board (Madi, 2010).

Taxes are the matter which every citizen meets daily with, because indirect taxes are the part of a price for end consumer and annuity taxes are concerned both citizens in employment and even businessmen.

#### 1.1 Taxation of natural person incomes

The natural person income tax and the legal entity income tax are direct taxes income type. The Czech Republic is characteristic with low share of taxation of personal incomes but on the contrary high share of social insurance. Therefore in connection with income taxes it is needed to mention the matter of social insurance which does not fulfil all characteristics of the tax for its finality, but significantly influences annuity situation of a tax payer and increases

tax burden of companies (Janoušková, 2011).

The social insurance in the Czech Republic is divided into:

- social provision,
- public health insurance.

Income tax construction in the Czech Republic is quite complicated because includes incomes of tax payers from various sources (Hamerníková, Maaytová et al, 2007).

The base of tax is made of the sum of component bases of tax. Then tax base can be decreased by tax free allowances and then the tax is counted from the adjusted base.

Tax rate from natural person incomes in the Czech Republic is unified in the amount of 15% from the year 2008 (Zákon č. 586/1992 Sb., 2008). Tax credits can be subtracted from calculated tax obligation. Some discounts can be used by all tax payers (then they have a character of social benefits) or they can be targeted for certain groups of people (invalids, old people) or they can be used with the intention of stimulation of certain activities (investment, pro-export policy) (Janoušková, 2011). After using of credits and tax allowance for a child it is set resulting tax obligation eventually tax bonus.

The tax base from incomes from employment is calculated with specific way. In 2008 it was established so called “super gross wage” which is made of gross pay and employer’s payment for social and public health insurance. It is fictional increase of tax base for calculation of tax obligation.

An employer pays tax and insurance from employee’s incomes for an employee during calendar year. After ending of taxation period an employee has the right for tax settlement of obligation.

An employee who did not have other incomes except for incomes from employment and did not have more than 1 employer simultaneously can request for making annual tax accounting. In other cases a tax payer has to hand a tax return for natural person income in the terms of it he is obligated to calculate tax by himself.

Every natural person has to ensure what tax free allowances and tax credits he has the right for and he has to evidence the right as well.

The calculation of net earnings should belong to basic knowledge of every employee. For right calculation of net earnings it is needed to know the amount of payments for social and health insurances which are subtracted from the pay at every employee. The net wage is calculated when the insurance premium for social and public health insurances and the tax prepayment are subtracted from the gross earnings.

Better tax literacy means that calculations of tax obligation are more accurate and tax subject optimize tax obligation so that uses all tax free allowances and tax credits which they have the right for. On the other hand tax ignorance can cause that tax payer does not tax all his incomes. Then the incomes can be assessed by tax administrator and tax payer also has to pay sanction (penalty, interest) except for the tax.

## **1.2 Taxes from consumption**

In terms of pricing literacy knowledge regarding tax area – taxes from consumption is researched, because these taxes influence prices of goods and services with fundamental way.

Among taxes from consumption in the Czech Republic we sort value added tax, consumption taxes and environmental taxes. All taxes from consumption are included into a price for end consumers and they strike on households with high and low incomes. Selected products subjecting to consumption and environmental taxes are taxed relevant selective consumption tax and afterwards they subject to the taxation of value added tax because consumption and environmental taxes enter into the tax base for calculation of value added tax (Šíroký, 2008).

As in the Czech Republic as in the countries of the European Union the value added tax is the only admissible general tax from consumption and all products and services subject to it (Sobotovičová, 2011).

Value added tax is levied at every stage of processing but only from the part that was added to the value of good at given stage. Contrary of the duplicate taxes, only the added value is taxed (Kubátová, 2006). Nowadays in the Czech Republic there are applied two tax rates and they are standard rate and reduced rate. Food, medicine, newspapers and books are burdened with reduced tax rate because with lower taxation the state applies certain social function of the tax (Zákon č. 235/2004 Sb., 2012).

Consumption taxes are the tax from mineral oils, spirit tax, beer tax (David, 2012), tax from wine and intermediate products and tobacco product tax. The reason for applying of excise taxes is particularly the ensuring of stable income into the state budget. Other given reasons for their applying are that selected products negatively influence health of population and they have negative effect on the environment. Consumption taxes are collected once at putting the product into the free tax circulation usually from the people who produce or import them.

Environmental taxes were established in the Czech Republic from 1st 2008. They are taxes from

natural gas and some other gas, tax from solid fuel and tax from electricity. Among main causes of their introduction include nature and environment protection. Environmental taxes as well as consumption taxes are collected once when the product is sold to end consumer.

Consumption and environmental taxes are the part of the tax base for calculation of value added tax and they also influence the amount of value added tax.

## 2. Research focused on students

Because increasing of financial literacy is focused especially on students of elementary and high schools in the Czech Republic, the aim of our research was to find out what tax knowledge students come to the university with.

At School of Business Administration there are four subjects focused on tax matters guaranteed by Department of Accounting, three of them are in bachelor study programme. The subject Taxes and Tax Policy A is focused on income taxes. Indirect taxes are the content of the subject Taxation of the Consumption and subject Application of Tax Law deepens knowledge of tax matters in the field of income taxes.

The research is focused on research of tax knowledge at students both bachelor and master study programmes in full-time and extramural forms of study.

In the research there were used monographic, typological, statistic and experimental procedures. Statistic method Chi-Quadrat Test was used for verification of the hypotheses.

Most of the questions in the questionnaire are focused on taxation of natural person incomes of

employment earnings, because even students work during studies and they most often meet this kind of incomes. The questions concern tax rate and also payments for social and public health insurances and tax credits. From the field of consumption and environmental taxes the questions are focused only on general knowledge of selected products which subject to these taxes.

In the first part of the research students of bachelor study programme, who have not still attended subjects focused on taxes, were chosen as respondents. The aim of the research was to find out what knowledge from taxes the respondents got at high schools, in a family, from public press and other sources.

As target focus 2 following hypotheses were verified in the inquiring:

H1: More than one half of the students have minimum or deficient knowledge;

H2: Knowledge of the students does not depend on the form of studies.

### 2.1 Knowledge of the students

In the graph on Figure 1 there are represented results of all students according to the number of correct answers.

From above mentioned graph it is seen that a mode is 7, because it is the most frequent value, it means that the most of students answered 7 questions correctly. Only 2 respondents had all answers correctly, they were students of extramural form of studies who work or worked in economic field. Respondents had at average 8 correct answers as it represents 49%.

For verification of stated hypothesis H1 the respondents were divided into four categories according to a level of knowledge. On the base of the dividing, H1 hypothesis: More than one half of

Tab.1 Quantitative Characters of the Questionnaires.

Number of students	1 120
Number of returned filled in questionnaires in first part	189
Number of questions identifying a respondent	5
Number of questions	17

Source: Own processing.

Tab. 2 Tax literacy.

Results	Tax knowledge
0 up to 24,99 %	a – minimum
25 up to 49,99 %	b – deficient
50 up to 74,99 %	c – good
75 up to 100%	d – very good

Source: Own processing.

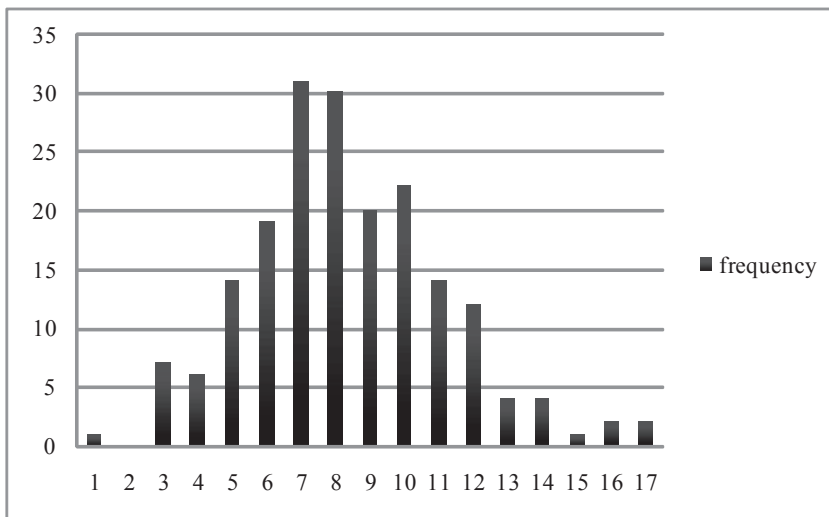


Figure 1. Frequency of the Correct Answers. Source: Own processing.

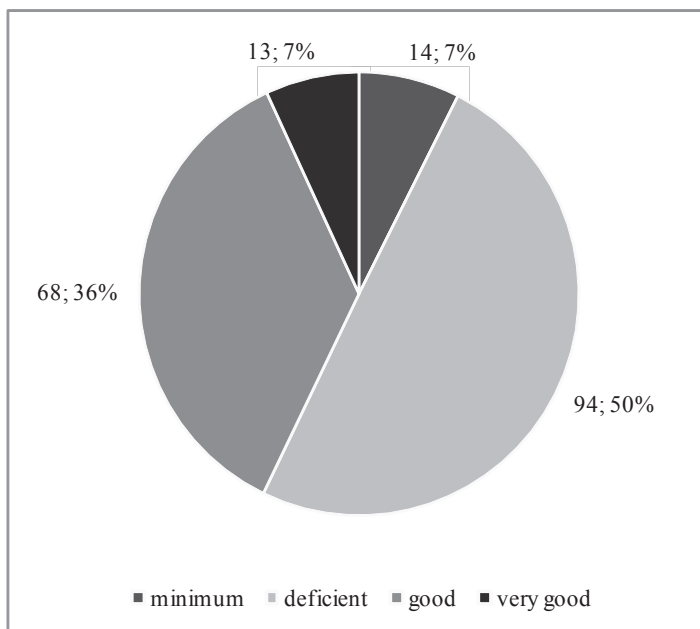


Figure 2. Knowledge of the respondents. Source: Own processing.

students has minimum or deficient knowledge was researched.

From above mentioned it is seen that 108 respondents in total have tax knowledge in categories minimum (14) and deficient (94). It represents 57 per cent from total number (Figure 2).

Hypothesis H1 was confirmed, because it was found out that 57 per cent of the respondents have minimum or deficient knowledge from tax field.

## 2.2 Knowledge of students according to the form of studies

For verification if the relation between results of the respondents and form of studies exist was specified hypothesis H2: Knowledge of students does not depend on a form of studies. It means that it was being verified if differences of frequencies of the respondents in individual groups are only work of coincidence or if it is statistic dependence among them.

Tab. 3 Observed Frequencies.

Number from class Form of study	Class				Total sum
	a	b	c	d	
Full-time	9	60	26	5	100
Extramural	5	34	42	8	89
Total sum	14	94	68	13	189

Source: Own processing.

Tab. 4 Expected Frequencies.

Number from class Form of study	Class				Total sum
	a	b	c	d	
Full-time	7,4074	49,735	35,979	6,8783	100
Extramural	6,5926	44,265	32,021	6,1217	89
Total sum	14	94	68	13	189

Source: Own processing.

In the following contingency table there are represented observed frequencies.

For verification of independence of chance quantities in the contingency table it was used the test of independence which is based on comparison of observed frequencies with expected frequencies, it is with those which we would expect in case of independence of compared quantities.

Expected frequencies were calculated according to the formula:

$$E_{ij} = (n_i \times n_j) / n, \tag{1}$$

where:

$n_i$  the sum of individual lines,

$n_j$  the sum of individual columns in the contingency table,  
 $n$  the sum of all observed frequencies.

Test criterion T was calculated according to the formula:

$$T = \sum_{i=1}^r \sum_{j=1}^s \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \tag{2}$$

where:

$r, s$  numbers of the categories of the observed character, i.e. the number of the columns of the contingency table, resulting T = 12,192.

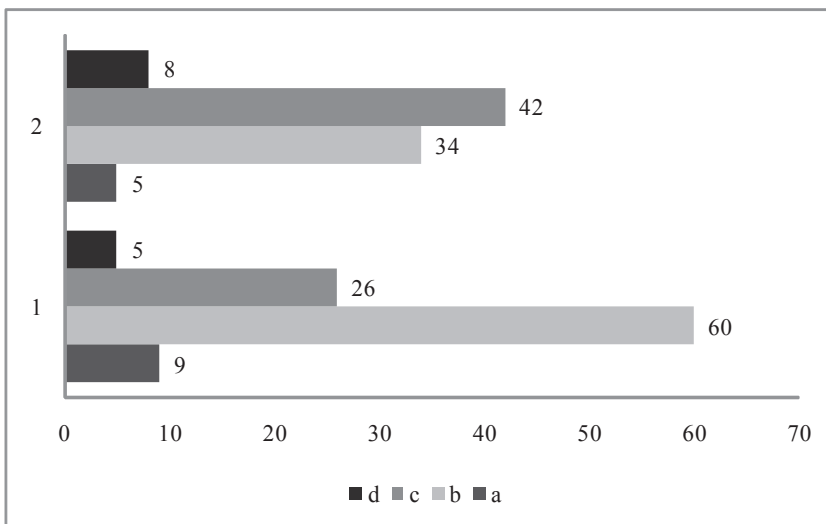


Figure 3. Graphic Representation of Observed Frequencies. Source: Own processing.

Critical value of dividing of Chi-Quadrat with the degree of freedom  $df = 3$  and for entered level of the relevance  $\alpha = 0,05$ ;  $K = 7,814728$ .

$T = 12,192 > K = 7,814728$  and therefore hypothesis  $H_2$  about independence at the level of relevance  $\alpha = 0,05$  we deny.

**Knowledge of the respondents depends on form of their studies.** Discovered level of knowledge of the students in extramural form is higher in comparison with the students in full-time form.

The result is mainly influenced with the fact if the students are employed or not. From the students in full-time form of studies were employed only 7% of questioned ones contrary to them in extramural form of studies, there were employed 85% of the respondents.

### Conclusion

Everyone should have basic awareness about system and form of taxation to have an overview about it what taxes and in what amount they usually pay. The tax system in the Czech Republic is very complicated and very unclear therefore enables even inconspicuous increase of some taxes. At so frequent changes, which are common in the Czech Republic,

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in tax legislation, it is an achievement and mainly keeping of basic tax literacy almost impossible.

The law about taxes from incomes enables to decrease the tax base of every tax payer and so to decrease even resulting tax with applying of tax credits, tax reductions and tax allowance. Financial literacy of every citizen should include knowledge of these significant forms of tax optimization.

On the basis of the results of the first part of the research we can state that more than one half of the students orientate deficiently. The knowledge from tax field which students got at high school eventually in a family or from public press is not satisfactory. The students of economically focused school will deepen their knowledge at studies in the subjects focused on tax matters.

The differences in knowledge among the students in full-time and extramural form of studies are influenced particularly with the fact that the most of the students in extramural form work contrary to the students in full-time form.

In another part of the research there will be verified knowledge of students after graduation of the subjects focused on tax matters and it will be observed if the orientation in the tax field will be increased or if the difference among the respondents studying in various forms of studies will persist.

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