

ECONOMIC KNOWLEDGE AND TAX ATTITUDES AMONG POLES AND MEXICANS

Sabina Kołodziej

Economic Psychology Chair

Kozminski University

ul. Jagiellonska 57/59

03-301 Warszawa

email: skolodziej@alk.edu.pl

Abstract: The article presents a research analyzing the level of economic knowledge and attitude towards taxation and tax authorities among Poles and Mexicans. Economic knowledge consists of understanding the basic economic terms (e.g. inflation, interest rate, privatization) as well as knowing the level of current economic indicators and selected public charges in a particular country (e.g. unemployment rate, minimum salary). The attitude toward tax system and Tax Office is described with Braithwaite's (2003) typology, which distinguishes five postures: commitment, capitulation, resistance, disengagement and game playing. Conducted analysis shows that the level of economic knowledge is moderate but significantly different in both nations. Mexicans are better informed about the actual level of economic rates while Poles have wider knowledge of the basic economic notions. Results of tax attitudes questionnaire also shows significant differences in four out of five scales describing tax attitudes.

Key words: economic knowledge, economic facts, taxes, tax attitudes, Poles, Mexicans.

Introduction

Taxes limit an individual's freedom to make autonomous decisions about his or her income (Kirchler, 2009). On the other hand taxes are also means to realize numerous important socio-economic goals by the government. Moreover, taxes also fulfill the non-fiscal role in the society. Government, through different tax concessions, exemptions from tax or raising tax liabilities, may support certain sectors of the economy or weaken the monopoly companies. Similarly, through the redistribution of income between different groups of population the government realizes social policy. Thus, tax avoidance or evasion will undoubtedly affect adversely the ability of the realization of the assumed goals in the sphere of public goods and services.

For the above reasons, we all pay taxes but we all benefit from taxes also. As research showed, several tax systems may be perceived as more or less just, which leads to different attitudes toward taxation and willingness to fulfill tax

duties. Braithwaite (2003) distinguishes five motivational postures, among which two postures reflect an overall positive orientation to authority:

a) *Commitment* which reflects beliefs about the desirability of tax system and feelings of moral obligation to act in the interest of the collective and pay one's tax good will.

b) *Capitulation* reflects acceptance of the tax office as the legitimate authority and the feeling that the tax office is a benign power as long as one acts properly and defers to its authority.

In contrast to these postures of deference, are three postures of defiance:

c) *Resistance* reflects doubts about the intentions of the tax office to behave cooperatively and benignly towards those it dominates and provides the rhetoric for calling on taxpayers to be watchful, to fight for their rights, and to curb tax office power.

d) *Disengagement* is also a motivational posture that communicates resistance, but here the disenchantment is more widespread, and individuals and groups have moved beyond

seeing any point in challenging the authorities. The tax office and the tax system are beyond redemption for the disengaged citizen, the main objective being to keep both socially distant and blocked from view.

e) *Game playing* is the posture of those whose sights were firmly set on winning in their interactions with the tax system. The voice of discontent belonged to those who had lost or feared losing the competition.

Research analyzing psychological variables determining the tendency to comply or reduce tax liabilities, beside the above motivational postures, usually refers to: tax knowledge, ethical norms, perceived fairness of tax systems and tax authorities and motivation to comply (Kirchler, 2009).

Tax knowledge is indicated as one of the important factors influencing individual's tax attitudes. Importance of this issue stems from the fact that tax law is generally considered as difficult, complicated and beyond one's depth. According to many authors, it results in negative attitudes toward taxation and tax authorities and indulgent opinions concerning tax avoidance and evasion. The research conducted by Eriksen and Fallan (1996) reports significant changes in respondents attitude toward tax and tax behavior due to the increased level of tax knowledge. After taking part in a course on taxes, respondents more severely judged tax evasion and perceived tax system as a fairer one. It shows that the understanding of tax systems and tax regulations may transfer into voluntary tax compliance.

People's behavior in a society is regulated by norms and ethical standards. It should be noted that among different moral rules which determine human decisions, researchers distinguished personal, social and societal norms (Wenzel, 2004). Personal norms consist of personality factors, moral reasoning, values, religious beliefs, etc. Social norms concerning tax behavior are constituted on common opinions about peoples' tendency to avoid or evade tax liabilities and societal acceptance of evasion. Societal norms in turn are connected with tax law, tax morale and civic duty. It can be assumed that taxpayers with strong civic duty comply honestly with tax law due to their internal motivation, not because of audits and the threat of fines.

Perceived fairness is another psychological factor which influences taxpayers' attitudes.

Kirchler (2009) lists three areas of justice which should be analyzed: a) distributive justice; b) procedural justice; c) retributive justice. Generally, justice consideration are associated with the assessment of effects caused by taxpayer's decisions concerning tax compliance, avoidance or evasion. This assessment is made on individual, group and societal level. Factors taken into account in this assessment refer both to audits or fines and the derived benefits.

Issues of conducted research

The research presented in the article was aimed at describing the intensity of five distinguished by Braithwaite (2003) tax attitudes among two countries which are not only geographically but also culturally and historically distant. Moreover, as the economic knowledge is considered to be important factor affecting tax attitudes, the level of this knowledge in Poland and Mexico was also examined.

Methodology of research

The presented research was conducted on two 50 persons groups of adult Poles and Mexicans (50 men, and 50 women).¹⁹ Respondents were predominantly working part-time business students. The average age in both group was similar and amounted to 21,93 years.

Research of the economic knowledge level was conducted on the basis of a questionnaire form specially drawn to this purpose, measuring objective aspect of the economic knowledge. Respondents filled in one-choice test referring to 2 areas:

a) Facts – the scale consists of 8 questions measuring the degree of knowing current economic indicators and chosen public charges in the year preceding the year of research in a particular country (e.g. rates of unemployment, growth in the economy, rates of income tax).

b) Notions – the scale of 16 positions concerning defining economic notions (e.g. inflation, growth in the economy, unemployment).

Attitudes toward taxation and tax authorities was measured by a questionnaire based on Braithwaite's work (2003) and covering 29

¹⁹ The author thanks Alicja Mierzejewska for her help in conducting the research.

questions concerning person's attitude toward tax duties and Tax Office. Below there are few selected items from this questionnaire:

Paying tax is the right thing to do.

The tax system may not be perfect, but it works well enough for most of us.

It's impossible to satisfy the Tax Office completely.

I don't really know what the Tax Office expects of me and I'm not about to ask.

I like the game of finding the grey area of tax law.

Respondents expressed the opinion on a scale from 1- strongly disagree to 5 – strongly agree.

Research results

According to the test of economic knowledge, two indicators of this variable were obtained in the conducted research: a) the level of current economic indicators and selected public charges and b) understanding of basic economic terms. Fig. 1 presents the percentage of correct answers on questions regarding actual economic rates and law regulations.

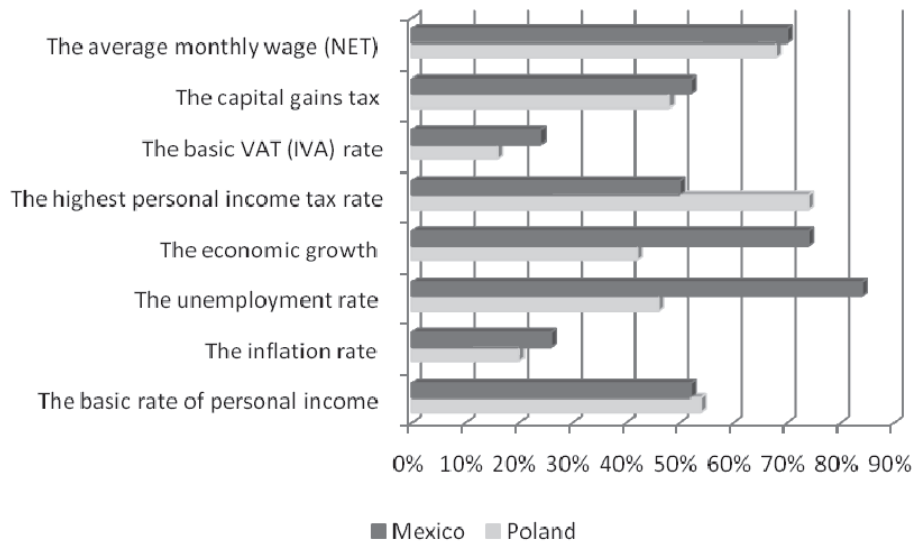


Fig. 1 Frequency of correct answers in regard to the level of current economic indicators and selected taxes

As it can be seen, the level of current economic knowledge among Poles and Mexicans is similar but differs in some aspects. Conducted U Mann-Whitney test showed that significant differences ($p < 0,01$) occurred in three questions: current unemployment rate, economic growth and the highest personal income tax rate in a particular country.

The above figure shows also that some of the analyzed economic indicators are well-known for the respondents (e.g. the average monthly wage) in both countries but others are rather difficult for them to pinpoint (e.g. the basic VAT rate or the inflation rate – in both cases less than 30% of respondents knew the correct answer). According to the fact that the respondents' task was to choose the correct answer among two (not to recall it), those

results show that the level of economic knowledge in this part of the test may not be adequate in both nations (the maximum score in this scale of economic knowledge test amounted to 8).

Table 1 presents the results of the conducted t-students test on differences between the mean score in questions regarding the level of current economic indicators and selected public charges among Poles and Mexicans. As it is shown Mexicans have a significantly higher level of economic knowledge in this aspect.

The next figure shows the percentage of correct answer of both nations to questions regarding the understanding and defining the basic economic notions.

Table 1. Current economic indicators and selected taxes – differences between Poles and Mexicans

	Poles	Mexicans
Mean	3,68	4,41
Stdev	1,04	1,32
T- student test	-3,05 (p<0,003)	

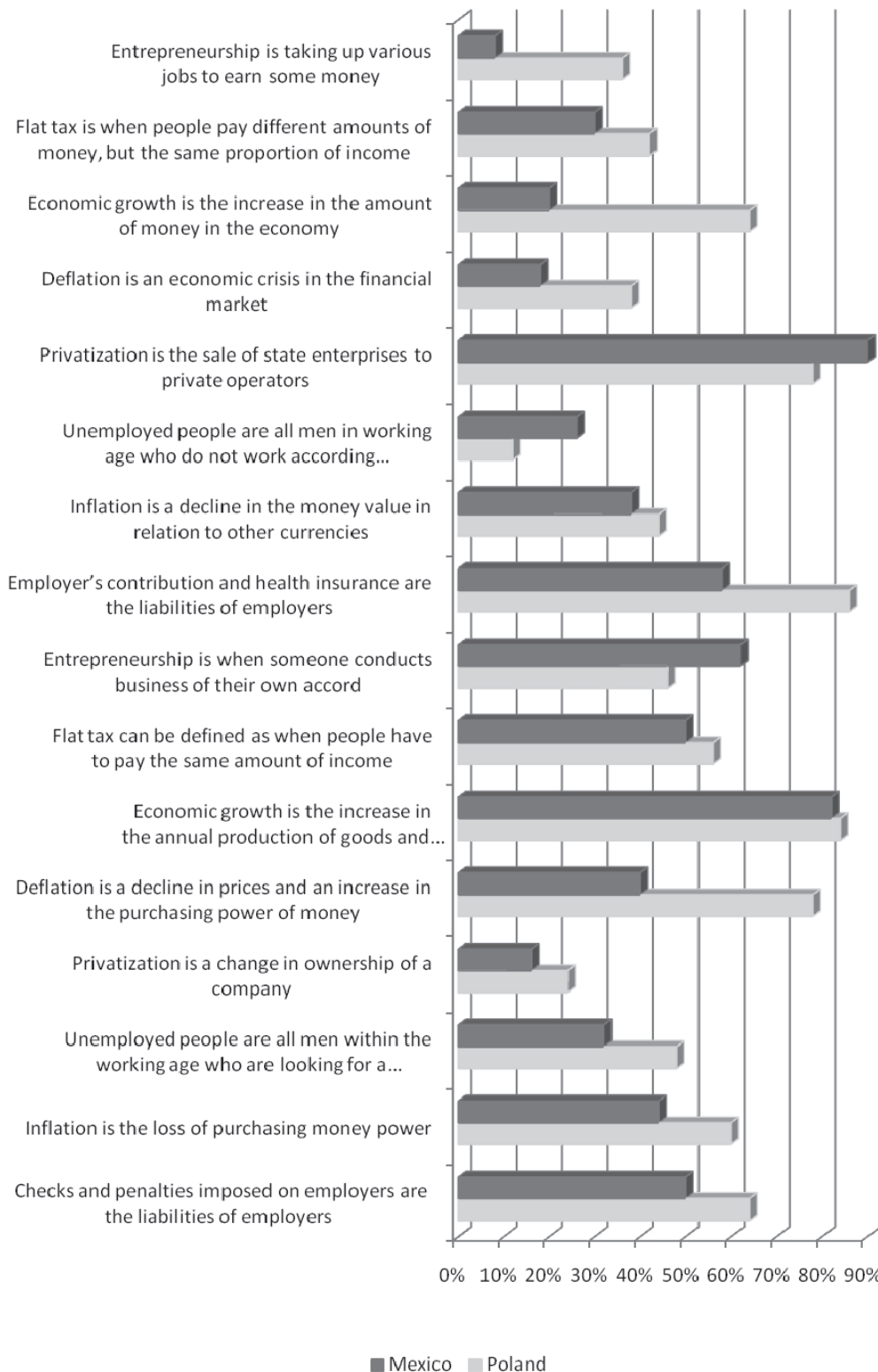


Fig. 2 Frequency of correct answers regarding the basic economic notions

The above figure shows that the knowledge regarding the basic economic notions among Poles and Mexicans is more differentiated in comparison with the previous question. The conducted U Mann-Whitney test showed that significant differences ($p < 0,01$) occurred in five statements:

- a) Deflation is a decline in prices and an increase in the purchasing power of money.
- b) Employer's contribution and health insurance are the liabilities of employers.
- c) Deflation is an economic crisis in the financial market.
- d) Economic growth is the increase in the amount of money in the economy.
- e) Entrepreneurship is taking up various jobs to earn some money.

In all those questions Poles significantly more often chose correct answers in comparison to Mexicans.

Similarly to the previous figure, the above graph also shows differences in the difficulty of particular questions. What is interesting, the easiest and the most difficult question for the respondents from both countries concerned the

same economic notion: privatization, which shows that this term is still not well-known (although at least in Poland it is commonly used by politicians, economists as well as journalists). Another easy question was related to the definition of economic growth. For Mexicans relatively difficult was also the question about the definition of entrepreneurship.

Table 2 presents the results of the conducted t-students test on differences between the mean score in questions on defining the basic economic notions obtained by Poles and Mexicans. As it is shown Poles have a significantly higher level of economic knowledge in this field.

Despite the discrepancy of the results obtained by two nations in this part of economic test, the mean score shows that both Poles and Mexicans have moderate level knowledge of the basic economic notions (the maximum score in this scale of economic knowledge test amounted to 16).

Table 2. Defining basic economic notions - differences between Poles and Mexicans

	Poles	Mexicans
Mean	8,60	6,78
Stdev	1,73	2,01
T- student test	4,84 ($p < 0,001$)	

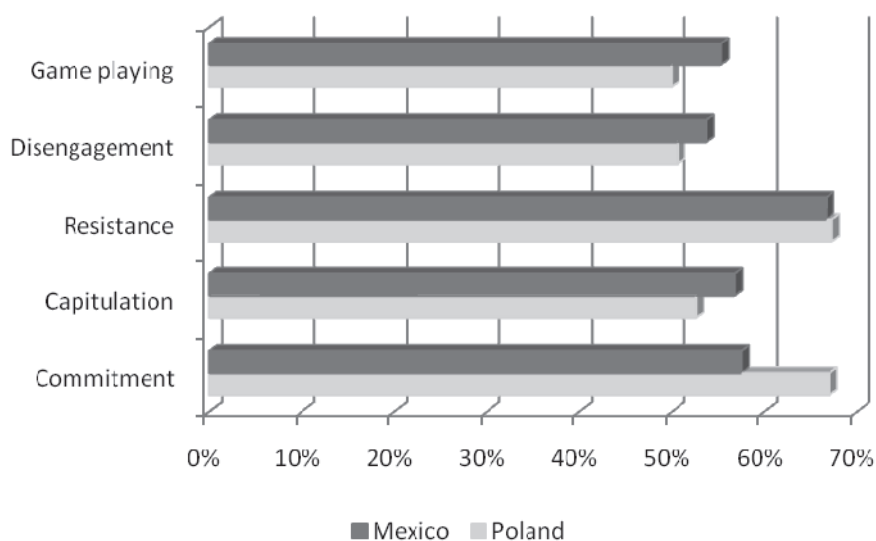


Fig. 3. Attitudes toward tax system and tax authorities among Poles and Mexicans

The results obtained on Braithwaite's scale (2003) to characterize attitudes toward tax and tax authorities are presented in the graph below. Due to the fact that particular scales of this questionnaire consist on different amount of items, the results are shown in percentage of the theoretically maximum score in each scale to provide clarity and the possibility to compare the intensity of distinguished tax attitudes.

The analysis of the results obtained in this questionnaire shows some similarities among those two geographically and culturally distant countries. In both cases, respondents declared a relatively strong resistance to tax system which indicates a negative tax attitude. Simultaneously, Poles show a comparable level of commitment which suggests coexisting opinions about fairness and propriety of tax system and tax authorities.

In order to analyze the significance of the observed differences in the intensity of five measured tax attitudes, the variance analysis was conducted. The results indicate that Poles and Mexicans differ on three out of five scales:

- a) Commitment (F=17,80, p<0,001)
- b) Capitulation (F=4,93, p<0,03)

c) Game playing (F=5,76, p<0,02), which allows to describe Poles as having a more positive attitude toward tax and tax authorities in comparison to Mexicans.

However, the discrepancy between five distinguished scales of tax attitudes is limited in both countries. In Poland it ranges from almost 50% (49,96% game-playing) to 67,33% (resistance) while among Mexicans it is even narrower, amounted from 53, 68% (disengagement) to 66,67% (resistance).

According to the literature cited above, many studies showed the significant relation between economic knowledge and positive attitudes toward taxes (e.g. Eriksen, Fallen, 1996; Kirchler, Maciejovsky, Schneider, 2003; Kirchler, 2009). In the table below the results of r-Pearson correlation analysis between economic knowledge and five distinguished tax attitudes are presented. The analysis was conducted jointly for both groups and sums of both indicators of economic knowledge (current economic rates and taxes as well as definitions of economic terms).

Table 3. R-Pearson correlation between economic knowledge and attitudes toward tax (N=100)

	Economic knowledge
Commitment	0,25 (p<0,01)
Capitulation	0,14
Resistance	- 0,04
Disengagement	- 0,25 (p<0,01)
Game- playing	- 0,09

The result of this analysis shows a significant positive correlation between commitment and economic knowledge as well as a negative correlation between disengagement and economic knowledge which is similar to the previous research. Having economic knowledge, with respect to both indicators (facts and notions) combines with a more favorable attitude toward taxes. However, the value of the correlation shows that the relation between those variables is not very strong.

Conclusion

Summarizing the results of the study, it can be assumed that in both countries, Poland and

Mexico, the average level of economic knowledge is moderate regarding both analyzed scales: current economic indicators as well as defining the basic economic notions. Mexicans are a little bit better oriented in the level of current economic indicators than Poles, but still the mean score subtly surpass the midpoint of the theoretical scale. In relation to the ability to recognize the adequate definition of selected economic terms, Poles have a wider knowledge in comparison with Mexicans, but again the mean score is in the middle of the scale.

The analysis of the five motivational postures proposed by Braithwaite (2003) showed that respondents from those two countries are differentiated in three out of five scales: commitment, capitulation and game playing. In

both countries all the five attitudes are present but their intensity shows that Poles have a little bit more positive attitudes toward tax system and tax authorities than Mexicans.

Referring to the literature on psychological factors influencing people's willingness to pay taxes, the r-Pearson correlation analysis between economic knowledge and tax attitudes was conducted jointly for both groups. Its results show low but significant correlation between economic knowledge and two motivational postures: positive correlation with commitment which refers to the belief in the validity of tax system and willingness to pay taxes and negative correlation with disengagement which describes taxpayers'

postures as distrust and willingness to prove the impropriety of tax authorities' decisions. Both correlations are consistent with the previous research data showing that economic knowledge is related to more positive attitudes toward taxation. Relative weakness of the correlation may result from the insufficient level of economic knowledge among respondents which made it impossible to determine the stronger relation between understanding the economic relations (including tax system) and attitudes toward taxes.

References

1. Braithwaite, V., *Dancing with authorities: Motivational postures and non-compliant action*. in: ed. V. Braithwaite, *Taxing democracy: Understanding tax avoidance and evasion*, Aldershot: Ashgate Publishing Limited 2003, pp. 15-39.
2. Domurat, A., Kołodziej, S., Macko, A., Tyszka, T., *Wiedza ekonomiczna polskiego społeczeństwa – 2008*, Research report, Center of Economic Psychology and Decision Research, Kozminski University (former: WSPiZ), Warsaw 2008.
3. Eriksen, K., Fallen, L., *Tax knowledge and attitudes towards taxation: A report on a quasi-experiment*, *Journal of Economic Psychology*, 1996, 17, 3, pp. 387-402.
4. Kirchler, E., Maciejovsky, B., Schneider, F., *Everyday representation of tax avoidance, tax evasion, and tax flight: Do legal differences matter?*, *Journal of Economic Psychology*, 2003, 24, pp. 535-553.
6. Kirchler, E., *The economic psychology of tax behavior*, Cambridge University Press, 2009.
7. Kołodziej, S., *Wiedza ekonomiczna i postawy wobec podatków dorosłych Polaków*, *Studia i Materiały Polskiego Stowarzyszenia Zarządzania Wiedzą*, 2001, 40, pp. 192-201.
8. Mierzejewska, A., *Tax attitudes and economic knowledge of Polish and Mexican society*. Unreported Master Thesis (tutor: S. Kołodziej). Kozminski University, Warsaw 2012.
9. Wenzel, M., *An analysis of norm processes in tax compliance*, *Journal of Economic Psychology*, 2004, 25(2), pp. 213-228.