### ICT and Personal Income Tax Control in Ukraine

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Abstract. The fiscal authorities use ICT for PIT compliance monitoring. But the formed electronic database is not available to detect income that is paid unofficially. In the result, the great part of individuals' income is not taxed and the fiscal authorities cannot reveal it. For this purpose, it is necessary to connect the electronic databases of all tax agents. Especially it is important for the fiscal authorities to have access to the information on bank current accounts transactions of the taxpayers. The authors suggest creating the taxpayers' electronic cabinets for individuals where the information received from all tax agents including banks will have been accumulated and give recommendation as to the way this information should be used for controlling. They pay attention to the risks and problems that can occur in the process of realizing their idea.

**Keywords:** Personal income tax, State register of individual taxpayers, tax control, tax compliance, taxpayers' electronic cabinet, tax agent

Key Terms: Accounting registers, Integration, ICT Component

#### 1 Introduction

The personal income tax (PIT) is one of the most important government resources in Ukraine. It is the second one after the value added tax. During the last 10 years, its share in the consolidated budgetary revenues made about 16 % [1]. At the same time, PIT is a main kind of the local government resources that is important fact taking into consideration the process of the decentralization that is taken place in Ukraine. It should be mentioned that the fiscal potential of this tax in Ukraine is rather high but is not fully implemented now because of weak and inefficient tax control.

The previous tax reforms did not create the necessary conditions for decreasing the shadow economy and the tax evasion levels in Ukraine. The level of unofficially paid personal income remains high; the tax burden is still concentrated on the people with low income (i.e., the employees that receive only the official salaries are the main taxpayers). The goal of shadow tax items legalization, particularly personal incomes, has not been achieved. This affects the place of Ukraine in the Global rating of Doing Business and the investment attractiveness of its economy.

We consider that it is impossible to solve this problem only by changing the tax rates without improving the tax control in the field of the personal income taxation. The success will be ensured, if the fiscal authorities actively use ICT in the tax administration. So, the main goal of this paper is to suggest the way of using ICT for con-

necting different electronic registers with information about individuals' income, but not technical implementation of authors' idea.

#### 2 Current Practice of Applying ICT in PIT Control

Nowadays the fiscal authorities in Ukraine form and maintain the State register of individual taxpayers [2, p 133] that according to the Tax Code of Ukraine should be used for monitoring PIT compliance. But the information included in the State register of individual taxpayers cannot be used for the efficient PIT control. Let's consider the data base of the State register of individual taxpayers. It includes: sources of revenue; taxable items; accrued and / or received revenues; information on the tax deduction and tax concession of the taxpayer; accrued and / or paid taxes.

So, there are five main blocs of information. The first of them, sources of revenue, means the kind of revenue and type of natural person activity. For example, salary, accrued (paid) to the taxpayer under the provisions of labor contract and amount of rewards and other benefits, accrued (paid) to the taxpayer under the provisions of civil law contract [2, article 164.2]. The total amount of these sources is 85 points and each of them has a special code that is used by the fiscal authorities for automatic processing of the received information (from 101 to 185) [3].

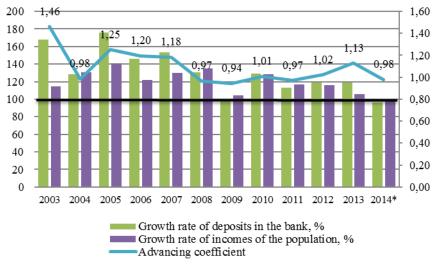
The second bloc includes information about taxable items. According to the Tax Code of Ukraine [2]:

- law enforcement agencies should give information on the vehicles for which a natural person's property rights either originate or terminated;
- state registration authorities for ships, boats and aircrafts on items, for which the
  property rights of natural persons arise or terminate (both of them on a monthly
  basis, but not later than the 10th date of the following month);
- state registration authorities of the rights on taxable real property in respect of which a property right of the natural person ceases.

In fact, the State register contains records only about the accrued or paid income to a certain natural person but there is not any information about other taxable items such as plots of land, real estate, vehicles. We consider that it is the very important information that makes it possible to control the level of the taxpayers' income.

The third bloc includes the information about the accrued and received revenues. This information comes from the tax agents and taxpayers. The tax agents can be employers, banks, insures companies, issuers, notarial agencies, etc. The information about salaries, dividends, and insurance payments, incomes from operations with movable and immovable estate is given personally, according to the registration number of the taxpayer registration card. At the same time the information about the interest income that is paid by banks, winnings (prizes) in a lottery and military tax is given in a total amount, not personally. We consider that it is a wrong practice, especially with the regard to the interest income because in this case the fiscal authorities do not have a possibility to control the total amount of a certain individual's income.

The statistical data demonstrate that in Ukraine the amounts on the deposit accounts until 2014 rose quicker than the official average salaries (fig 1). It means that some individuals put on the deposit account the undeclared and therefore untaxed income. The fiscal authorities in the process of PIT control did not consider that fact.



 $\ast$  excluding the temporarily occupied territories of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone

Data received from [4]

Fig. 1. Dynamics of growth rate of population incomes and deposits on bank accounts

The data for 2015-2016 are not demonstrated in the chart because of their absence for this period in the official sources. Moreover, it is unreasonable to compare the data for 2014-2016 with the previous years' data because there were some changes in the analytical base caused by many reasons. For example, a lot of banks were liquidated in the result of the economic, monetary and political problems in Ukraine during that period, so the data for these years are not comparable with the others.

The fourth bloc of the State register of the individual taxpayers includes the information on the tax deductions and tax concessions of the taxpayer. These are important data because the amount of the tax deductions decreases the taxable base. That is why it is necessary to control the taxpayers' rights to receive different kinds of deductions.

The final bloc contains the data about the accrued and paid taxes that can be used for controlling. Only this information is the object of the fiscal authorities control for determining the real level of tax compliance. For the sake of control the fiscal authorities compare the received information about PIT with the amount of this tax that was declared by the individuals at the end of the accounting period and with the results of tax inspections that are permanently carried out at the tax agents (at the places of their activity).

It should be mentioned that according to the Tax Code of Ukraine most of people must not file the tax return to the fiscal authorities at the end of the accounting period. So, these taxpayers are not responsible for tax compliance.

Let's consider some examples:

A person receives only the official income and the tax agent accrues and pays PIT to the government. In this case there is not any offence of tax legislation. But if the person receives the official salaries and the salaries in the "envelope", the tax agent accrues and pays PIT only from the official part of the total employee salaries. In this case the tax agent informs the fiscal authorities only about the taxes which were accrued and paid only from the official part of salaries. Being not obliged to file the return, such individual is not responsible for the accruals and payments of PIT. Only the tax agent is responsible for such payment. But to detect the fact of paying salaries in the "envelope" is almost impossible. That is why this information is not included into the Register. So, the fiscal authorities can only find out the arithmetic mistakes but not the untaxed income.

Paying salaries in "envelopes" is a famous Ukrainian practice. It is proved by the following data. According the fiscal authorities assessments, in 2013 the amount of salaries in "envelopes" was about 170 bln UAH (it is two times more than PIT revenues in 2014), the withdrawal of the non-cash means in the cash form or on foreign-currency accounts in foreign banks was about 100 bln UAH, unofficial payments - 35 bln UAH, fixed assets, material resources and services of the informal sector - 45 bln UAH [5, p. 3].

# **3** Using ICT for Detecting Untaxed Income

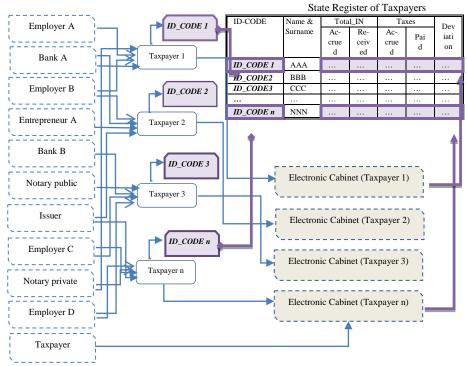
To detect the untaxed income we should know where it may come from, where it may be saved and where it can be spent. As it was mentioned above a part of the untaxed income can be received "in envelop" in cash. The other part of it can be transferred to the individual current or deposit accounts in banks.

The first part of the untaxed income is difficult to disclose directly, but it is possible to use ICT for this purpose when a person spends his untaxed income, for example buying something expensive (according to the legislation of Ukraine purchases which cost more than 50 thousand UAH should be paid cashless through the bank transfer). It is clear that it is impossible to collect all information about the expenditures that are less than 50 thousand UAH that can be made in cash. But it does not essentially influence the results of PIT control.

If the individuals' income is transferred to a current or deposit accounts this information is automatically accumulated in the clients' electronic cabinet in the bank. The fiscal authorities should have access to the information about the receipts and spending of each taxpayer at every bank where the person has accounts. This access can be possible if the banks' electronic information base is automatically connected with the electronic cabinet of a taxpayer that is formed for the tax compliance control goals.

A part of income can be used for buying movable and immovable estate, plot of lands etc. All these transactions are notarized. So notaries should also form the electronic base of notarized transactions. And this base should also be connected with the taxpayers' electronic cabinet.

All tax agents should form the electronic base of the individuals' receipts and spending. The database between different kinds of tax agents and fiscal authorities can be connected using the individual register code of the individual taxpayers (Fig 2).



Note. According to the Ukrainian legislation, **tax agents** include employers, banks, public and private notaries, issuers, self-employed individuals, other legal entities that pay income to the natural persons Designed by authors

**Fig. 2.** Ways of automatic data interactions between electronic State register, electronic cabinet and possible sources of information about accrued and paid income and taxes.

Thus, the State register must be not just a table in which the fiscal clerks record the information about accrues and/or paid income and taxes, received mostly from the tax agents. Every individual who is included in this Register should have an electronic cabinet.

The electronic cabinet should be an interactive table that includes the information about persons' income and spending. This information should come from different tax agents (employers, banks, notary agencies, issuers etc.). (Fig 3). If the expenditures are higher than the received from different sources income (Total IN  $\leq$  Total EX) it means that a part of income was not officially identified and taxed.

We realize that the expensive purchases can be funded using different kinds of loans. The information about the loans should be recorded in the electronic cabinet of a taxpayer (*credit* in fig 3). Possessing such information, the fiscal authorities should monitor the process of repaying credit. The main goal of this monitoring is to prevent fictitious agreements between banks and taxpayers. If the credit debt of a taxpayer is recognized uncollectible and therefore it is cancelled the taxpayer must pay PIT. In this case the tax base will be the amount of a cancelled loan.

		The Electronic Ca	abinet of <i>Ta</i> .	xpayer		
Source of information:	Taxpayer ID_CODE			xxxxxxxxx		
Employers Bank 1	Income			Spending		Es-
	OZN_ DOX	NAME	Amount, UAH	Direction	Amount, UAH	tate
Bank 2 Bank n	101 102	Salary		Deposit accounts		
Notaries Other tax agents Taxpayer Fiscal authorities	93	Revenues from the sale of property and non-property rights		Current accounts		
		income from sale or exchange of immovable property		Credits		_
	105	income from sale or exchange of movable property				
	106	Rent			urce of	
	109	Dividends			Bank 1,2,,n Notaries Other tax agents Taxpayer	
	110	Interest on deposits				
	185					
	TOTAL_IN			TOTAL Fisca	al authorities	
					out person's esta	te
$LN_DOX - is$ the code	of income	according to legislation				

OZN\_DOX – is the code of income according to legislation NAME - Type of received income

Designed by authors

**Fig. 3.** Fragment of the Interactive Personal Electronic Cabinet and possible sources of information automatically recorded in it.

When the accounting year is over every taxpayer must file the tax return to the fiscal authorities in the electronic form. The information from the tax returns is com-pared automatically with the information accumulated in the electronic cabinet of a taxpayer. The main goal of such fiscal monitoring is to detect the cases when the information in the tax return does not correspond to the information depicted in the taxpayers' electronic cabinet.

# 4 Risks and Problems of Introducing ICT for Detecting Untaxed Income

There are some difficulties in realizing the suggested idea about using ICT for detecting the untaxed income.

First, most taxpayers psychologically are not ready for the fact that the fiscal authorities will have access to their information about their incomes and expenditures. It is explained by a low level of tax culture in Ukraine. There are no good relationships between the Ukrainian government and civil society. Most government officials consider the tax receipts to be a means of their enrichment but not the resources that should be used for funding public goods and services. The recent e-declaration has demonstrated that top management of our country's legislative authorities, executive authorities at central and local levels, judges, and prosecutors possess a great amount of cash, real estate and other expensive things. The Ukrainian taxpayers realize that

such great incomes could not be received in legal way because the official salaries of state officials are low enough in Ukraine. But there are not any investigations of the edeclaration results and it is not clear what amount of taxes were paid from this income. That is why the fiscal authorities should begin to use ICT for detecting the untaxed income of mentioned above categories of taxpayers and other government officials. It will influence awareness of other categories of taxpayers and encourage the tax compliance.

Second, banks as the main tax agents that have the necessary information about the un-taxed income will hinder using ICT for detecting the untaxed income. The main rea sons are the following: a lot of banks serve large business and some top government authorities interests. That is why the banking secrecy is not correctly used in our country. According to article 60 of the Law "On Banks and Banking Activity" [6], the information about the clients banks accounts and transactions that were carried out on behalf of the client is confidential and should not be given publicity. We consider that this information in fact must not be disclosed. But this information should be known for the fiscal authorities to detect the untaxed income, otherwise banks become involved in tax evasion. The essence of bank-client confidentiality is different in European countries. If we consider the Swiss experience, when bank-client confidentiality was introduced in 1934, the intention was not to facilitate the tax evasion. The latter has always been considered an offence in Switzerland [7]. That is why there is collaboration between the fiscal authorities and banks in different European countries. They exchange the information concerning taxation. Moreover, the necessity of exchanging data among commercial banks, the central bank, other tax agents and fiscal authorities is mentioned in the KfW Development Bank report [8, p. 20, 54]. We consider that the European experience should be taken into the consideration in order to prevent the tax evasion in Ukraine.

Additionally, the fiscal authorities in Ukraine do not have the necessary software to connect different databases. Besides, some databases are missing and it is necessary to form them. For example, it refers to the database on estate, plot of lands. In addition, the fiscal authorities have old, not up to date computers to process a large volume of in-formation.

# 5 Conclusions

ICT that the fiscal authorities use in the current practice of PIT control do not make it possible for them to reveal the unofficially paid salaries and other kinds of untaxed income. The State register of individual taxpayers as an electronic database includes only the information about the officially paid income. To detect the hidden income it is necessary to compare the information from the State register with the information on bank current account transactions, notarized agreements on buying-purchasing bargains, the data from real estate register and other information about the received and spent income of certain individuals.

For this purpose the electronic databases of all tax agents should be connected. It is possible to do using the register code. An electronic cabinet of the individual taxpayer connected with the State register and database of all tax agents should be formed.

Every person as an individual taxpayer must file the tax return to the fiscal authorities and be responsible for tax compliance.

Comparing the declared indicators of individual's income, spending and property with the information depicted in tax agents' databases the fiscal authorities will be able to disclose the untaxed income. The obstacles in the way of realization of the mentioned above idea can be surmounted. It is not difficult to check E-declarations of state officials and reveal the untaxed income. If the other categories of taxpayers see that the top management of our country is actually responsible for tax compliance and pay great amount of taxes according to the correctly defined tax base they will give the fiscal authorities the true information about taxable income and will not avoid taxation.

According to the KfW Development Bank report, the duration of implementing an ICT-solution in tax field takes in average about three years but some countries need up to 16 years [8, p.10]. We believe that there are many high-qualified IT specialists in Ukraine and this idea can be rather quickly implemented (during 1-3 years) if the political decision is made. Moreover, new soft-ware that will connect different electronic databases can be used not only by the Fiscal Authorities, but also by other state agencies, e.g. the National agency on corruption prevention.

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