

Financing local government in Ukraine

Sydorovych, Mariia

Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

Sydorovych, M. (2011). Financing local government in Ukraine. *Federal Governance*, 8(3), 5-27. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-341482>

Nutzungsbedingungen:

Dieser Text wird unter einer Basic Digital Peer Publishing-Lizenz zur Verfügung gestellt. Nähere Auskünfte zu den DiPP-Lizenzen finden Sie hier:

<http://www.dipp.nrw.de/lizenzen/dppl/service/dppl/>

Terms of use:

This document is made available under a Basic Digital Peer Publishing Licence. For more information see:

<http://www.dipp.nrw.de/lizenzen/dppl/service/dppl/>

Special Issue on Federalism, Local Government and Policy-Making
edited by Anna Gamper and Francesco Palermo.

FINANCING LOCAL GOVERNMENT IN UKRAINE

by Mariia Sydorovych

National University of Kyiv-Mohyla Academy, Ukraine

Email: smarichka@gmail.com

Abstract: This paper provides the comparison of the Ukrainian system of intergovernmental relations and international experience of developed and developing countries in the context of revenue sharing within current decentralisation trends. The paper analyses the role of income taxes (and personal income tax in particular) within the economic and legal framework and emphasises their importance in funding needs of local governments. Statistic and comparative analyses are employed for this aim. A set of directions for further reform is proposed, aiming at providing local governments with tools and levers to generate sufficient financial resources for efficient provision of essential local services.

Keywords: *local budgets, tax revenues, income taxation, personal income tax, fiscal decentralisation, transition economies, Ukraine*

About Federal Governance

Federal Governance is an online graduate journal on theory and politics of federalism and multi-level governance. Its mandate is to engage the global federalism community and reach out to outstanding graduate students interested in federalism and multi-level governance. By providing a platform for graduate students to have early success in their careers, Federal Governance seeks to promote and sustain interest in federalism and multi-level governance research among graduate students. Allied with the Forum of Federations and founding partner, Institute of Intergovernmental Relations at Queen's University; Federal Governance aims to contribute to a global dialogue on federalism.

Co Chairs, Advisory Committee:	Rupak Chattopadhyay and Christian Leuprecht
Publisher:	Forum of Federations
Managing Editor:	Annegret Eppler
Associate Editors:	Joshua Cerovski, Dominic Heinz, Eva-Maria Maggi and Victoria Tait

Terms of Use

Your use of this Federal Governance article indicates your acceptance of Federal Governance's Terms and Conditions of Use, available at www.federalgovernance.ca/terms. Federal Governance's Terms and Conditions of Use provides that you may use Federal Governance content only for personal, academic and non-commercial use. Each copy of any part of this Federal Governance article must contain the same copyright notice that appears on the screen or printed page of such transmission.

Strengthening of the relations between central and local tiers of government and the decreasing of the role of the middle tier are decentralisation trends of recent years across the world. These processes are accompanied by the devolution of additional responsibilities to local governments without sufficient grants from senior governments. Thus, following these trends of the last decades requires assigning additional revenues to local governments to make them fiscally sustainable. These revenues should be reliable and stable, so that local governments are able to provide services and sustain living standards on the high level.

As Steytler argues, financing of local governments reflects the practice of local autonomy, 'determining whether local governments can make and implement policy choices in response to their constituencies' preferences' (Steytler, 2009: 418-419). As he reasons, where local governments raise most of their revenue independently, a high level of autonomy follows, and conversely, reliance mainly on transfers from central governments, especially conditional grants that are tied to particular outcomes, usually results in local governments' financial dependency and policy subservience to central government (Steytler, 2009: 419). Thus, sufficiently high level of financial self-reliance in collecting resources is key issue to exercising local autonomy and proximity of local government policy to citizens' needs.

Local taxes, sharing of national taxes, and grants from other tiers of government are the most significant revenue sources of local governments. The trade-off between these types of revenues defined in the legal framework depends on the fiscal decentralisation policy of a given country, premised by the historical background and economic conditions. Within national economic strategy of development, it should be decided which locally generated revenues – local taxes or sharing of national tax – are more appropriate and efficient for gaining the principal macroeconomic aims of a given state.

A benefits based model is considered to be the most appropriate model for addressing local tax issues. Its main principle is formulated as follows: local taxes should fund those services from which local residents benefit. In this context, defining all the stakeholders becomes an important issue. It is to be decided which tax or mix of taxes local citizens and businesses should be taxed with, and which solution is fiscally sustainable and most appropriate from economic and administrative point of view (Kitchen, 2004). The other model called taxation based on ability to pay criteria, is better applied to national taxation rather than to local taxation, since tax instruments are more restricted for local governments (Kitchen, 2004: 14).

From the theoretical point of view, there exist the following criteria for choosing taxes to fund local services: immobility of tax base, limited opportunity to export the tax to other jurisdictions, lack of latent causes of harmful competition between different tiers of government, and ease of administering the tax locally. According to these criteria, property tax is soundly considered as the most appropriate local tax. However, in

economies in transition property taxation is not a viable solution as a source of financing local governments, due to the difficulties in administration of the tax. This is an issue when the tax base is property value, and real estate market does not function properly, which is common for transition economies (Kitchen, 2004: 12).

Due to the criteria mentioned above, income tax on individuals is the next tax in the list which can be considered as a source of financing local government. Income tax, as well as sales tax, is more revenue elastic than property tax; income tax is also easier to administer. In addition, there is not much room for exporting criterion within revenue sharing of national taxes between different tiers of government. On the other hand, both taxes may be exported to other municipalities. This opportunity bears the potential risk of reduction of local accountability. In its turn, decrease of accountability may lead to inefficiencies in the allocation of local resources (Kitchen, 2004: 17). For companies that generate income, cost of doing business is an important factor in inter-municipal or inter-regional location decisions. Since capital is highly mobile, corporate income tax is under high risk to be exported, thus making it inappropriate for local governments.

High capital mobility was a reason for decreasing the shares of enterprise profit tax (EPT) assigned to local governments in Ukraine where special economic areas were introduced. These taxes were created in 1992 with the aim of fostering the development of regional economies. Special economic areas proposed exceptional taxation regimes that caused inequality of EPT revenues levied in different municipalities, and created huge disparities between the regions. Enterprises 'voted with their feet', making EPT a non-reliable source for local needs.

Theoretical background suggests that individual income taxes are suitable for use by several tiers of government (McLure, 1999). While central government may apply a progressive income tax with the aim of stabilisation and redistribution of resources, employing of a flat-rate tax might be more appropriate for sub-national governments. Thus, individual income taxes align with the fiscal aim of paying for the benefits of local public services.

Due to the reasons mentioned above, sharing of personal income tax (PIT) is one of the most appropriate revenue sources for local governments in transition economies. This tax is highly important in the decentralisation process since it is one of the main sources of revenues of local governments in a number of transition economies. As of 2009 PIT brings about a half (or more) of tax revenues of local budgets in such economies in transition or countries which recently completed transformation process as Estonia (91.5%), Croatia (90.6%), Latvia (88.2%), Lithuania (85.8%), Slovenia (78.9%), Ukraine (75.2%), Slovak Republic (75.1%), Russian

Federation (69.8%), Moldova (68.9%), Serbia (67.6%), Mongolia (62.9%), and Poland (47.6%), (IMF GFS, State Treasury of Ukraine, Table 2)¹.

From the history of countries in transition being centrally planned, they inherited the perception of personal income tax as the one to be assigned to local budget. This tax scheme is thought to increase performance while being used for the local needs. For example, due to the budgetary law of Ukraine (BCU), PIT is shared between regional, district and local self-government budgets in a stipulated percentage. On the other hand, the share of revenues levied from PIT in the consolidated budget of Ukraine is among top-three taxes (along with VAT and EPT), thus being of high fiscal importance in the budgetary system.

Regardless of the potential fiscal efficiency of PIT, resources of local governments need to be sufficient and to correspond with local needs of the community in order to sustain indispensable level of the living standards. According to Lyapina and other experts (following their chapters in Čapková, 2005: 144), tied revenues in Ukraine are unable to ensure sufficient possibilities for community development. As a result, local government bodies strive to replenish the budget, in stead of fostering territory development (Čapková, 2005: 144). Thus, financial self-reliance of local governments should be increased and balancing revenues between tiers of government should be done.

This paper focuses on the revenue structure of local governments in Ukraine, and the role of PIT sharing in particular; it also compares Ukrainian evidence with international practice in order to propose viable solutions for reforming and improving the system of local government financing. In the first part of the paper, the analysis of revenues is conducted and the role of income taxes in local government financing is examined from an international prospective. In this part recent trends in financing local governments in developed economies and economies in transition are featured. The next three parts of the paper examine legal framework of local government financing in Ukraine, revenue structure of local budgets, and implementation of PIT sharing instrument between the tiers of government in Ukraine. Finally, after comparing international and Ukrainian practice, several reforms are proposed, aiming at providing local governments with tools and levers to generate sufficient financial resources.

Revenues of local budgets and role of income taxes in local government financing: international perspective

In federal states, where local governments are a priory thought to have higher level of autonomy than in unitary countries, the main sources of own revenue are a range of

¹ State Treasury of Ukraine is a source for data on Ukraine; IMF GFS statistics – for other countries.

taxes, income generated by trading or selling services, and borrowing (Steytler, 2009: 420).

The most important tax revenues are property taxes, commercial and payroll taxes, retail sales and income taxes, and other taxes, duties, levies, and fines. Local governments providing water, electricity, and other trading services often generate income from this source; it is the fastest growing and most important type of own-source revenues for countries and municipalities in the United States. Given the tight regulatory framework, coupled with intense supervision of financial operations, the rate of borrowing by local governments often is low, and used almost exclusively by a few large urban municipalities (Steytler, 2009: 421-422).

In a range of countries with federal systems of government examined by Steytler property taxes have traditionally been the principal source of revenue for local government (Steytler, 2009). Meanwhile, many local governments do not fully exploit the property-tax base. The main reason appears to be the unpopularity of increasing tax burden. This is the case in Australia, India, Spain, and the United States (421). There is a trend of local governments not always using their tax powers to the full, preferring instead to call for more intergovernmental transfers as a decision making option that is politically acceptable (421).

Comparing the data on developed economies and transition economies of 2009 with the data of 2000 allows drawing the trends in dynamics of revenue structure and income taxation in particular in the groups of developed and transition countries during recent decade.

Taxes are the main revenue sources of local budgets levied independently by local governments. The share of taxes in revenues of local governments both in developed economies and in transition economies in 2009 constituted around 41%. There is a trend of shrinking of the weight of tax revenues in local budgets across the world during recent decade. However, while in OECD countries respective share decreased slightly – by 3% (from 44.1% in 2000 to 41.0% in 2009), in transition economies it decreased considerably – by 16.2% (from 57.0% in 2000 to 40.8% in 2009) (Tables 1, 2).

Table 1. Share of taxes in revenues of local governments in OECD countries in 2009 comparing to 2000²

<i>Federal countries:</i>	2009	2000	<i>Unitary countries:</i>	2009	2000	<i>Unitary countries:</i>	2009	2000
Australia	35.6%	37.1%	Denmark	34.1%	52.1%	New Zealand	55.8%	61.6%
Austria	61.4%	53.5%	Finland	47.4%	56.6%	Norway	42.3%	40.7%
Belgium	33.4%	30.1%	France	44.5%	43.0%	Portugal	33.6%	35.9%
Canada	39.4%	42.1%	Greece	6.6%	11.8%	Sweden	70.9%	65.6%
Germany	39.6%	38.8%	Iceland	73.2%	79.2%	Turkey	9.1%	n/a
Ireland	11.5%	73.6%	Korea	27.0%	n/a	UK	12.9%	13.0%
Italy	37.4%	43.1%	Luxembourg	31.9%	39.5%	Spain	43.4%	50.9%
Switzerland	59.6%	48.8%	Netherlands	8.3%	8.7%	<i>Average, un.st.</i>	36.1%	43.0%
<i>Average, fed. st.</i>	39.7%	45.9%	<i>Average, all st.</i>				37.3%	44.1%
Countries of OECD, excl.			<i>Average, unit.st.</i>				41.7%	43.0%
Korea and Turkey:			<i>Average, all st.</i>				41.0%	44.1%

Data source: IMF Government Finance Statistics. Average is counted as unweighted indicator; Spain is considered to be semi-federal state, though included in a group of unitary states; 'un.st.' stands for a group of unitary states, 'fed.st.' stands for a group of federal states, 'all st.' stands for both groups of states (in this Table and further)

In federal OECD states the share of taxes in revenues of local governments during 2000-2009 shrank by 6.2% (from 45.9% to 39.7%), in unitary – by 1.3% (from 43.0% to 41.7%) (Table 1). During the last decade, there appeared enormous shortening of reliance of local governments on taxes in countries that recently entered EU and in the former USSR countries. Thus, in a group of countries that recently entered EU the share of taxes in revenues of local governments shrank by 15.3% (from 50.4% in 2000 to 35.1% in 2009). In the group of former USSR countries this share shrank by 26.5% (from 66.8% to 40.3%) (Table 2).

The majority of tax revenues of local budgets both in developed economies and in transition economies belong to three tax resources: income taxes, property taxes, and taxes on goods. In 2000-2009 their share constituted around 96%-98.5% of local revenues in OECD countries, and around 92-93% in transition economies. However, in countries that entered EU in 2004/2007 respective share is close to a group of developed countries and amounts to 98.9% (99.6% in 2000) (IMF GFS).

² Developed economies are represented with the data on members of the Organisation of Economic Cooperation and Development (OECD), subdivided into federal and unitary systems of government. For this study the data available at IMF GFS database is used. Distinction between federal and unitary states is not that sharp as the separation suggests.

Table 2. Share of taxes in revenues of local governments in transition countries in 2009 comparing to 2000³

Countries	2009	2000	Countries	2009	2000
Armenia	33.4%	n/a	Estonia	45.8%	53.5%
Azerbaijan	93.8%	n/a	Latvia	50.9%	55.0%
Belarus	66.0%	77.4%	Lithuania	33.7%	84.6%
Georgia	18.9%	83.6%	Slovenia	39.2%	33.3%
Kazakhstan	36.7%	83.0%	Czech Rep	45.1%	55.1%
Kyrgyz Rep	42.5%	38.6%	Hungary	22.8%	33.0%
Moldova	37.7%	52.5%	Poland	30.9%	17.9%
Russian Federation	18.1%	72.4%	Slovak Rep	51.8%	57.5%
Ukraine	53.1%	67.3%	Bulgaria	20.9%	44.7%
BiH	54.8%	n/a	Romania	9.8%	69.4%
China	35.8%	42.4%	Countries entered EU in 2004/2007:		
Croatia	61.6%	59.7%	<i>Average</i>	35.1%	39.7%
Macedonia Rep	29.6%	n/a	Former USSR countries:		
Serbia	47.3%	n/a	<i>Average</i>	44.2%	40.5%
Mongolia	62.8%	41.1%	Transition economies:		
Iran	72.2%	75.5%	<i>Average</i>	42.9%	34.2%
Former USSR countries, excl. Armenia and Azerbaijan:			Transition economies, excl. Armenia, Azerbaijan, BiH, Macedonia, Serbia:		
<i>Average</i>	40.3%	40.5%	<i>Average</i>	40.8%	34.2%

Data source: IMF Government Finance Statistics. Exemptions in the data: Azerbaijan, Republic of Macedonia, and Romania – 2008

Income taxes and property taxes, in their turn, are principal sources of revenue of local governments and amount to around 80% (OECD countries) and 70% (transition economies) of tax revenues of local budgets as of 2009. Their role over the last decade has increased. In OECD countries, the reason is the growing role of property taxes which demonstrated 5.1% growth over the last decade, the tendency being mostly traced in federal OECD countries (by 12%).

³ According to EBRD Transition Report 2010, transition economies are listed as follows: Central Europe and the Baltic States: Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Rep., Slovenia; South-eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, FYR Macedonia, Montenegro, Romania, Serbia; Turkey; Eastern Europe and Caucasus: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine; Russia; Central Asia: Kazakhstan, Kyrgyz Rep., Mongolia, Tajikistan, Turkmenistan, Uzbekistan. IMF also includes Iran and China. In this study transition economies are represented with the data of 26 countries, including countries in transition (9 countries representing economies of the former USSR, 4 Balkan countries, Mongolia, Iran, and China) and 10 countries that successfully completed transformation process. For this study the data available at IMF GFS database is used.

While in former USSR countries the share of income and property taxes increased by 6.9% (from 72.1% to 79.0%), in the countries that recently entered EU in 2004/2007 the share of income and property taxes in financing local government decreased by 11% (from 92.0% to 81.0%) (Table 3-6). However, this is a converging trend, since in the countries that recently entered EU the role of these taxes is inherently higher than in any other group of countries.

Table 3. Income taxes (including PIT) and property tax share in local tax revenues in OECD countries in 2009

<i>Unitary countries:</i>	Income	PIT	Property	<i>Federal countries:</i>	Income	PIT	Property
Denmark	89.0%	87.1%	10.9%	Australia	0.0%	0.0%	100.0%
Finland	94.7%	86.5%	5.2%	Austria	34.2%	27.9%	9.2%
France	0.0%	0.0%	70.7%	Belgium	40.1%	40.1%	57.8%
Greece	0.0%	0.0%	63.8%	Canada	0.0%	0.0%	97.8%
Iceland	77.7%	77.7%	19.8%	Germany	80.4%	42.2%	13.3%
Korea	16.8%	16.8%	46.9%	Ireland	0.0%	0.0%	100.0%
Luxembourg	91.7%	0.0%	6.3%	Italy	26.1%	21.2%	10.6%
Netherlands	0.0%	0.0%	36.3%	Switzerland	84.2%	68.0%	14.3%
New Zealand	0.0%	0.0%	89.0%	<i>Average, fed.st.</i>	33.1%	24.9%	50.4%
Norway	88.2%	88.2%	10.3%	<i>Average, unit.st.</i>	39.7%	30.9%	42.7%
Portugal	30.3%	19.8%	46.4%	<i>Average, all st.</i>	35.9%	27.6%	43.5%
Spain	20.9%	16.8%	36.3%	Countries of OECD, excl. Korea and Turkey:			
Sweden	50.3%	43.1%	2.7%	<i>Average, unit.st.</i>	41.8%	32.2%	38.3%
Turkey	0.0%	0.0%	52.0%	<i>Average, all st.</i>	38.5%	29.5%	42.9%
UK	0.0%	0.0%	100.0%				

Data source: IMF Government Finance Statistics. Exemptions in the data: Finland and Switzerland – 2008, New Zealand – 2007

Meanwhile, the role of property taxation raised in all groups of transition economies: in countries in transition, the overall share in revenues of local governments almost doubled – increasing by 9% – from 12.6% to 21.6%; in the former USSR the share increased from 11.4% to 17.8%; in countries that recently entered EU it increased from 16.7% to 27.8% (Tables 5, 6). The heaviest reliance on property tax is in the countries that entered EU. This is the result of successful implementation of real estate market reform in these countries.

Table 4. Income taxes (including PIT) and property tax share in local tax revenues in OECD countries in 2000

Unitary countries:	Income	PIT	Property	Federal countries:	Income	PIT	Property
Denmark	93.6%	91.3%	6.4%	Australia	0.0%	0.0%	100%
Finland	95.7%	74.2%	4.2%	Austria	39.2%	31.5%	8.9%
France	0.0%	0.0%	81.7%	Belgium	29.9%	29.9%	58.5%
Greece	0.0%	0.0%	65.8%	Canada	0.0%	0.0%	94.7%
Iceland	43.6%	37.6%	9.5%	Germany	80.5%	44.3%	13.3%
Luxembourg	92.9%	0.0%	5.6%	Ireland	49.0%	34.8%	2.9%
Netherlands	0.0%	0.0%	44.4%	Italy	17.7%	16.3%	13.2%
New Zealand	0.0%	0.0%	85.4%	Switzerland	84.4%	72.2%	15.3%
Norway	95.0%	95.0%	2.9%	<i>Average, fed. st.</i>	37.6%	28.6%	38.3%
Portugal	22.7%	8.0%	46.9%	<i>Average, unit.st.</i>			
Spain	18.1%	n/a	29.7%		39.9%	29.4%	37.5%
Sweden	56.8%	47.1%	4.5%	<i>Average, all st.</i>			
UK	0.0%	0.0%	100.0%		39.0%	29.1%	37.8%

Data source: IMF Government Finance Statistics

Table 5. Income taxes (including PIT) and property tax share in local tax revenues in transition economies and countries that recently completed the transformation process, in 2009

Countries	Income	PIT	Property		Income	PIT	Property
Armenia	0.0%	0.0%	86.6%	Estonia	91.5%	91.5%	7.0%
Azerbaijan	49.5%	28.1%	2.8%	Latvia	88.2%	88.2%	10.7%
Belarus	45.5%	29.0%	11.0%	Lithuania	85.8%	85.8%	10.2%
Georgia	28.9%	28.9%	70.6%	Slovenia	78.9%	78.9%	16.0%
Kazakhstan	35.1%	35.1%	16.1%	Czech Rep.	49.7%	24.2%	3.7%
Kyrgyz Rep.	43.9%	20.6%	23.7%	Hungary	0.0%	0.0%	20.7%
Moldova	72.8%	68.9%	10.7%	Poland	59.2%	47.6%	28.4%
Russian Fed.	81.4%	69.8%	16.7%	Slovak Rep.	75.1%	75.1%	11.9%
Ukraine	76.0%	75.2%	2.6%	Bulgaria	2.2%	2.2%	97.7%
BiH	8.4%	8.4%	12.9%	Romania	1.5%	1.1%	72.0%
China	21.3%	5.7%	14.0%	Countries entered EU in 2004/2007:			
Croatia	90.6%	90.6%	5.2%	<i>Average</i>	53.2%	49.5%	27.8%
Macedonia	3.1%	3.1%	34.6%	Former USSR countries:			
Serbia	69.5%	67.6%	18.3%	<i>Average</i>	55.1%	47.4%	22.3%
Mongolia	67.2%	62.9%	6.3%	Transition economies:			

Iran	0.0%	0.0%	0.0%	<i>Average</i>	45.7%	39.8%	23.4%
Former USSR countries, excl. Armenia and Azerbaijan:				Transition economies, excl. Armenia, Azerbaijan, BiH, Macedonia, Serbia:			
<i>Average</i>	61.2%	54.0%	17.8%	<i>Average</i>	50.4%	44.2%	21.6%

Data source: IMF Government Finance Statistics. Exemptions in the data: Azerbaijan, Republic of Macedonia, and Romania – 2008

Table 6. Income taxes (including PIT) and property tax share in local tax revenues in transition economies and countries that recently completed the transformation process, in 2000

Countries	Income	PIT	Property	Countries	Income	PIT	Property
Belarus	30.8%	19.9%	6.7%	Estonia	88.6%	88.6%	9.0%
Georgia	52.0%	29.5%	26.2%	Latvia	79.7%	79.7%	18.8%
Kazakhstan	50.9%	19.3%	10.1%	Lithuania	91.9%	91.9%	7.8%
Kyrgyz Rep	37.9%	20.5%	0.0%	Slovenia	72.2%	72.2%	20.2%
Moldova	55.2%	35.7%	25.6%	Czech Rep.	90.8%	66.3%	4.6%
Russian Federation	49.4%	20.7%	9.8%	Hungary	48.1%	48.1%	11.8%
Ukraine	70.2%	52.1%	0.0%	Poland	54.1%	48.8%	40.5%
China	26.7%	9.1%	6.0%	Slovak Rep	59.9%	50.3%	28.2%
Croatia	85.0%	70.3%	11.3%	Bulgaria	89.7%	60.6%	10.3%
Mongolia	52.8%	29.0%	0.5%	Romania	78.1%	75.8%	16.2%
Iran	0.0%	0.0%	0.0%				
Former USSR countries:				Countries entered EU in 2004/2007:			
<i>Average</i>	60.7%	45.8%	11.4%	<i>Average</i>	75.3%	68.2%	16.7%
Transition economies:				<i>Average</i>	63.1%	49.3%	13.1%

Data source: IMF Government Finance Statistics

The comparison of importance of income taxes, and personal income tax in particular, in local tax revenues of selected OECD countries and transition economies is illustrated in Tables 3 and 5. From the fiscal point of view, in countries of OECD income taxation is prevailing in a third of countries, as well as property taxation. In contrast, in transition economies 11 out of 26 countries rely on income taxation, and 10 out of those 11 – on personal income taxation. Only 4 transition economies rely on property taxation. Thus, in transition economies, the role of income taxation (and personal income taxation in particular) is prevailing in financing local governments. This trend is related to the peculiarities of flows of financial resources and the low level of development of real estate market.

The heaviest reliance of sub-national governments on income taxes is in the Nordic countries. In Denmark, Finland, Iceland, Luxembourg, Norway, Switzerland, and

Germany income taxation accounts for more than 75% of local tax revenues. On the other hand, the countries where sub-national governments do not have direct access to income tax revenue generated in the region include federal states such as Australia and Canada, and unitary states such as France, Greece, Ireland, the Netherlands, New Zealand, Turkey, and the United Kingdom. Luxembourg has no access to personal income taxation, only to corporate income taxation. All countries (excluding the Netherlands) that do not have access to income taxation at the local level rely on property taxation.

In federal OECD states the role of income taxes decreased over the last decade. The share of income taxes in local tax revenues shortened by 4.3% of local tax revenues (from 37.6% in 2000 to 33.3% in 2009) mostly as a result of a 3.7% decrease in personal income taxation (from 28.6% to 24.9%). In contrast, in unitary states their share increased: income taxes from 39.0% to 41.8% with PIT increasing from 29.4% to 32.2% (Tables 3, 4).

While in 2000 the structure of tax revenues of local governments in unitary OECD countries was almost identical to federal countries, by 2009 the disparities in sources of financing had widened. Thus, the role of income taxes in unitary states became higher than in federal states by 8.6% of local tax revenues (41.8% comparing to 33.1%), including 7.3% in PIT (32.2% to 24.9%). The share of property tax in tax revenues of local governments in federal states exceeded the share of property tax in unitary states by 12.1% (50.4% compared to 38.3%) (Tables 3, 4).

Overall, over the last decade income taxation in transition economies shrank by 10% of local tax revenues – from 60.2% in 2000 to 50.4% in 2009. In transition economies the share of PIT in taxes of local governments amounted to 44.2% as of 2009. Over the last decade it decreased slightly compared to 47.1% in 2000. Thus, in transition economies the role of personal income taxation is prevailing. In countries that recently entered EU the share of income taxes shrank by 22% – from 75.3% in 2000 to 53.2% in 2009, and PIT by 19% – from 68.2% to 49.5% accordingly (Tables 5, 6). In contrast, in countries of the former USSR, income taxation increased from 60.7% in 2000 to 61.2% in 2009, mostly due to PIT that increased from 45.8% to 54.0% (Tables 5, 6). Thus, the heaviest reliance on income taxation, and PIT in particular, exists in the countries of the former USSR.

In a range of federal countries examined by Steytler, the power of municipalities to set their own rates is significantly varied between countries and within countries (Steytler, 2009: 421). Systems of local income taxation are rather diverse. In the Nordic countries, local income taxes are levied as a surcharge on the central tax base, with a flat rate established locally. Flat rates range across counties and municipalities: in Sweden – 29-37%, Finland – 16-21%, Norway – 28% (according to national legislation as of 2009, EYGM, 2009). At the same time, central income tax rates are progressive (except for Sweden).

In Japan, local income tax is a surcharge on the national tax with progressive rates based on a system of per capita rates determined both nationally and by the size of the municipality. National individual income tax rate varies from 5% to 40%, while local inhabitant tax rates are flat rate plus per capita levy – 4% of prefectural and 6% of municipal taxes (EYGM, 2009).

In Switzerland, local income tax is levied as a surcharge on cantonal income taxes with progressive rates established locally. Here the tax base of local taxes is both income and assets, including a tax on personal wealth. As of 2009 the maximum overall federal tax rate is 11.5%, while cantonal and municipal tax rates range from about 14% to 35% (EYGM, 2009).

In Germany, the system of tax sharing between the tiers of government includes both corporate and personal income taxes. While corporate income tax accounts for about 40% of local tax revenue being the biggest revenue source of local budgets, personal income tax is on the second place by its share. PIT is distributed to local governments as a share of the national income and wage tax. Tax is levied due to a progressive rate up to 45%. According to the Constitution, 15% of PIT revenues are assigned to local governments while the share for each municipality may vary across the country (Kitchen, 2004: 8-9).

In Croatia local income tax is a surcharge on the national tax. While national tax rate is progressive, ranging from 15% to 45%, rates assigned by municipalities vary from 0% to 18%, with the highest rate in Zagreb (EYGM, 2009). However, in transition economies income taxes are mostly redistributed to regions applying tax-sharing scheme, which is also the case in Ukraine. In general, this is the cause of a weak base of local taxes.

To conclude, taxes are the main sources of own revenue of local governments across the world. However, trends of dynamics of revenue structure and revenue sources that prevail in the budgets of local governments differ in countries in transition and in developed economies. Over the last decade, a trend of shrinking tax revenues in the sources of financing local governments across the world may be traced in both developed economies and in economies in transition. This trend may be a result of reductions in the resources that are redistributed through local budgets after financial an economic crisis that started in 2008. This tendency is stronger in transition economies. In case of developed countries, this trend is stronger for federal countries than for unitary states. In addition, shrinking tax revenues might be a sign of higher centralisation of resources throughout the world economic system.

The role of income and property taxes overall in tax revenues of local governments grew up during last decade in a group of countries of OECD and of the former USSR, while it fell away in a group of countries that entered EU during the fifth enlargement (in 2004/2007). Both in developed economies and transition economies, the share of property taxation increased considerably.

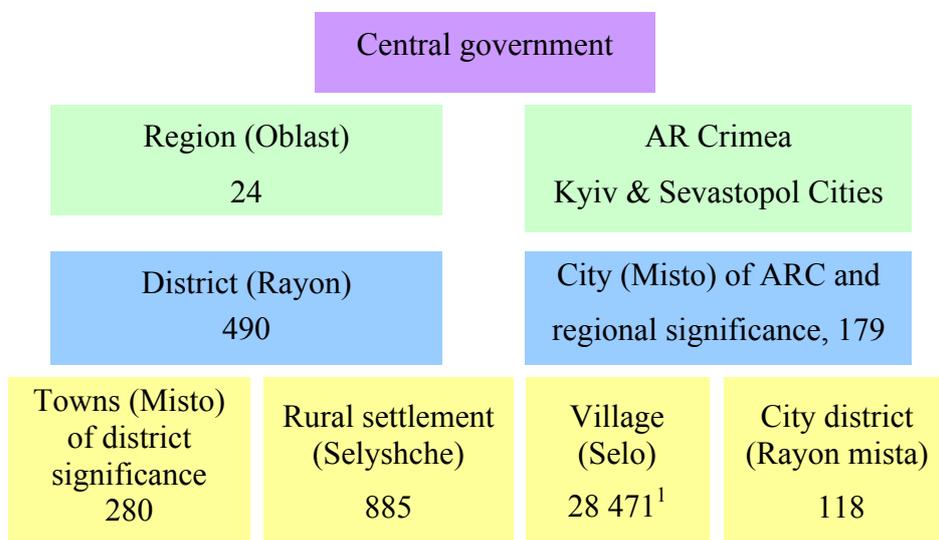
While income taxation increased in OECD unitary states, it shrank in federal countries. Income taxation also heavily decreased in the countries that recently entered EU, while in the group of countries of the former USSR the share of income taxation increased. In the countries of the former USSR, income tax, and personal income tax in particular, is used to be the basic and prevailing tax revenue source of local governments, and in this region, its role has grown over the last decade. Here the share of income tax is higher than in any other group of countries so it makes income taxation in Ukraine, and PIT in particular, of specific interest.

Legal framework of local government financing in Ukraine

In order to analyse the system of local government financing in Ukraine it is necessary to investigate it in correspondence with the system of local government, intergovernmental fiscal relations, and legal framework.

Ukraine is a unitary state with three tiers of local government: (i) regions ('oblasts'), Autonomous Republic of Crimea (ARC), cities of Kyiv and Sevastopol (regional level); (ii) districts ('rayons') and cities of regional significance; (iii) towns, rural settlements, and villages. The system of government of Ukraine is presented in Chart 1.

Chart 1. System of government of Ukraine



¹ Number of councils of villages is 10 278. Number of administrative-territorial units as of 01.01.2010, Data source: Ukrstat

According to the Budgetary Code of Ukraine (article 5), the Ukrainian budgetary system consists of central budget and local budgets. Budgets of ARC, regional (oblast), district (rayon), city districts and local self-government budgets are local budgets. Budgets of local self-government are budgets of territorial communities of villages, rural settlements, towns, and their unions (Chart 1).

The main principles of functioning of the budgetary system are laid in the basis of the national legislation and the Charter of Local Self-Government. In 1996 Ukraine signed a Charter of Local Self-Government which entered into force in 1998. According to Article 9 on the financial resources of local authorities (Charter), the central principles of fiscal decentralisation are the following:

- 'Local authorities shall be entitled, within national economic policy, to adequate financial resources of their own, which they may dispose freely within the framework of their powers;
- Local authorities' financial resources shall be commensurate with the responsibilities provided by the constitution and the law.'

These sub-articles imply accountability of the state on the adequacy of financial resources of local governments. These issues are implemented within the legal framework of Ukraine.

The right of local governments to impose local taxes was prescribed by the Decree of Cabinet of Ministers of Ukraine of 1993, 'On Local Taxes and Charges'. The Decree allowed for 17 local taxes and charges (until 2011 the amount of taxes ranged from 15 to 17). These included a charge on parking, a market charge, a charge on order of the flat, a charge on dogs, a resort charge, a charge on participation in hippodrome competitions, a charge on gain and on totaliser in competitions, a tax on advertisement, a charge on the use of local symbolics, a charge on movie recording, a charge on local auctions and lotteries, a communal tax, a license charge on trade allocations, a tax on sale of import goods, and a tax on real estate other than land property. However, most of these fees were still weak due to administrative reasons, and do not lend themselves to collecting much income for the local budgets of the country.

Starting from 2011, according to the Tax Code of Ukraine passed in 2010 (article 10) the amount of local taxes and charges was reduced from 15 to 5. There are 3 obligatory local taxes and charges such as a tax on real estate (other than land property), single tax and a license charges for special entrepreneurial activities. The two optional charges are a charge on parking of transport and a tourist charge.

As a result of the legislation amendments, local governments obtained even less capacity and tax base to independently obtain revenues generated locally. Though the tax base of the previously allowed taxes and charges was weak, the legislative changes might be a reason for the shortage of sufficient resources for local governments for independent decision making, not relying on the governments of a higher level.

In the first decade of independence, budgetary relations were regulated by the Law of Ukraine of 1991, 'On the Budgetary System of Ukraine'. Before the Budgetary Code of

2001 was approved, the process of sharing of national taxes between tiers of government had not been stipulated in any document. Thus, national taxes were shared between the levels of government purely based on the *ad hoc* principle, due to the Law on the State Budget and regulations of local councils for the respective year.

In this period, local budgets were enclosed into the budgets of the higher level (regional budget). The main revenue source of sub-national budgets was EPT. 30% of EPT was assigned to the central government, and 70% – to the other budgets. However, the tax was assigned to the ARC, regional, Kyiv and Sevastopol governments, which, in their turn, had the power to distribute this share of EPT between the enclosed subordinated budgets of the lower level. The *ad hoc* principle of allocation of resources made the process of decision making non-transparent. As a result, some budgets, being left without sufficient revenues, became dependent on the central government. These circumstances decreased accountability of all levels of government. PIT was another source of revenues of sub-national budgets; however, in every budgetary period it was subject to negotiations.

In 2001, the reform of budgetary relations was conducted in accordance with the Budgetary Code of Ukraine. The law gave sub-national governments more self-reliance, sustainability, and thus, independence in decision-making, assigning tied revenues to the budgets of all levels. The Budgetary Code of Ukraine of 2001 included most of the principles of local self-governance. In 2010, it was updated slightly and a new version entered into force in 2011. During the same year, tax reform took place. It was implemented in the approval of the first version of Tax Code of Ukraine.

The amendments of the Budgetary Code that should have entered into force in 2010 (but were vetoed by the President), became an unsuccessful attempt to settle the direct intergovernmental relations between central budget and all local budgets. Though according to these amendments decentralisation process was said to be deepened, in fact they would be a move in the opposite direction. In the conditions of scarcity of revenues of local budgets, these changes would lead to higher centralisation of fiscal resources, and local governments would become more dependent on the central government.

According to article 64 of the effective Budgetary Code of Ukraine, among the revenues that are tied to the budgets of local self-government there are a part of PIT; user charges on forest resources, mineral resources digging, special usage of water; some types of license charges and registration fees; and state due. Previously single tax was also partly included in revenues of local governments (BCU, 2001, article 64, 65).

According to article 66 of the Budgetary Code, ARC and regional budgets receive 25% of PIT levied on the corresponding territory; 50% of user charges on forest resources, digging of mineral resources, special usage of water; and 100% of charges on other natural resources and some of registration fees. District budgets receive 50% of PIT

levied on the territory of villages, rural settlements, towns of district significance; license charges for special entrepreneurial activities; registration fees; and fines.

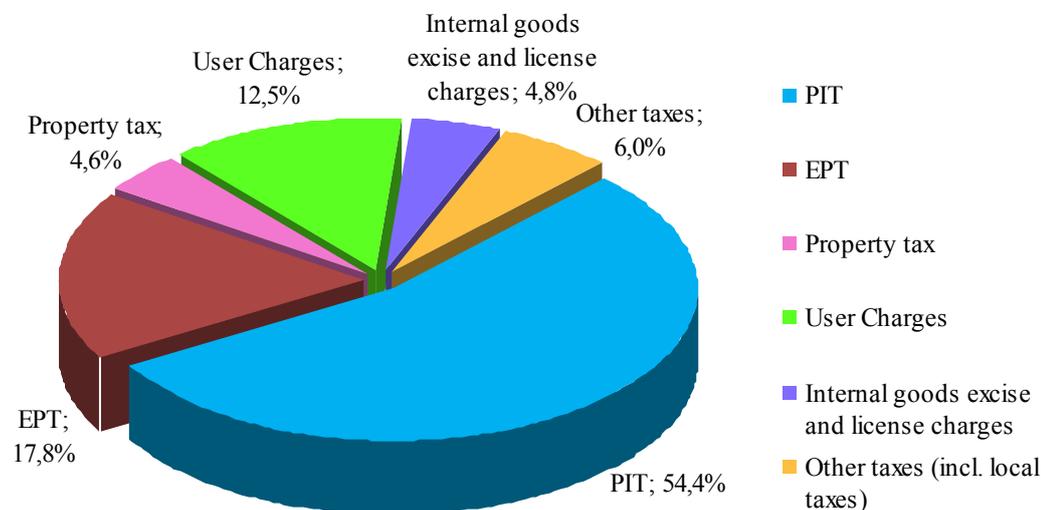
Before 2011 regional budgets also received 25% of the land fee levied on the corresponding territory, and license charges for special entrepreneurial activities; and district budgets – 15% of the land fee levied on the territory of villages, rural settlements, and towns of district significance. Local self-government is financed by a share of PIT (25%), of state duty, and of a single tax; license charges for special entrepreneurial activities issued by the respective councils; entrepreneurship registration fees; trade patent fees; and fines that are levied by the respective councils (BCU, article 65). Starting from 2011 land fee is not tied to local budgets.

Structure of revenues of local governments in Ukraine

From a fiscal point of view, tax revenues are the most important part of the budget revenues in Ukraine. In 2010 they constituted 74.5% of the revenues of consolidated budget. Income taxes, in their turn, constituted 29.1%, about a half of which was made up by personal income tax – 16.2% (State Treasury of Ukraine).

During the last decade there has been a trend of decreasing fiscal independence of local budgets as a part of consolidated budget of Ukraine. It is based on the comparison of share of local budgets (excluding transfers) in the budgetary system during recent decade, which decreased from 29.3% in 2000 to 25.6% in 2010 (State Treasury of Ukraine). This tendency of shrinking revenues of sub-national budgets corresponds to the world trend. However, it implies the increased dependence of local governments on the grant resources from the central government. Thus, over the last decade the share of transfers from state budget to local budgets in total revenues of local governments doubled (from 23.7% in 2000 to 49.5% in 2010) (State Treasury of Ukraine). Taxes are also the most solid revenue source of budgets on the local level. In 2010 their share in local revenues constituted 83.9%. Along with taxes, there are other revenues of local budgets such as non-tax revenues (10.9% in 2010), revenues from transactions on capital (3.2%), and special-purpose funds (2.0%) (State Treasury of Ukraine).

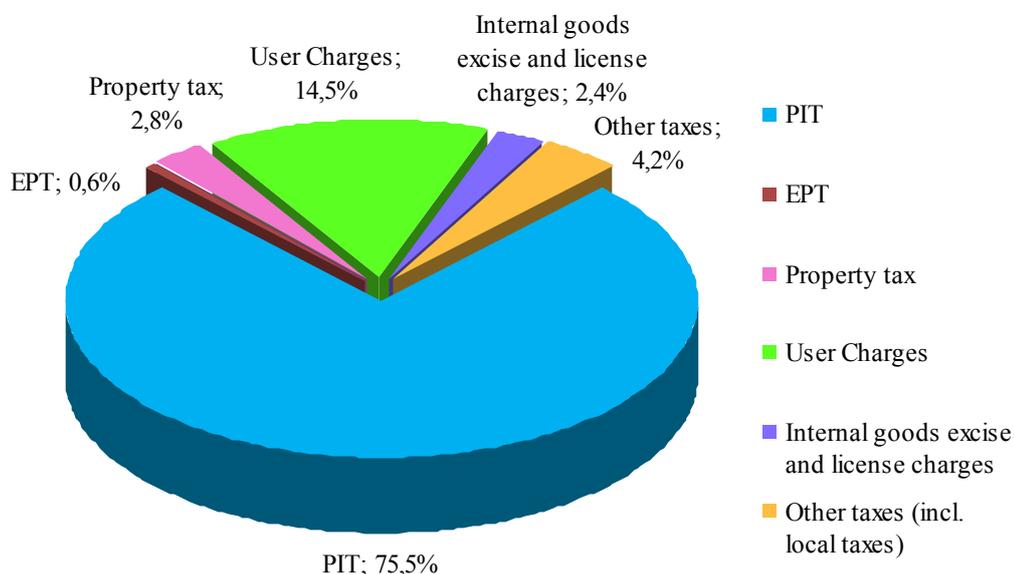
Shifting of the importance of the PIT and the other tax revenues can be drawn from the comparison of Charts 2 and 3. The share of income taxes during 2000-2010 years increased almost by 4% (from 72.2% to 76.1%). The increasing importance of income taxes in sub-national budgets is caused both by higher level of redistribution of income taxes from central government to the regions and municipalities, and growing level of incomes of population. In this regard there are 2 divergent trends: increase in importance of PIT and decrease in weight of EPT in sub-national budgets.

Chart 2. Structure of tax revenues of local budgets in Ukraine in 2000

Data source: Annual report of State Treasury of Ukraine, 2000

Thus, the share of PIT in revenues of local budgets increased by almost 40% – from 54.4% in 2000 (Chart 2) to 75.5% in 2010 (Chart 3). At the same time the share of EPT heavily decreased from 17.8% in 2000 (Chart 2) to 0.6% in 2010 (Chart 3). Thus, PIT adopted the prevailing role of the revenue source of sub-national governments in Ukraine.

In comparison, the share of local taxes (they are included into 'Other taxes' in Charts 2 and 3) is still very poor. While the role of property has recently evolved in Ukraine, the low share of property tax, which still is not seen as a local tax, and its shrinking from 4.6% in 2000 (Chart 2) to 2.8% in 2010 (Chart 3) is an alarming tendency. These results call for the reform of the system of local taxation and a shift to property tax as a source of revenues of local governments. However, primarily the reform of property tax requires institutional changes, setting proper real estate market conditions, and establishing property evaluation procedures.

Chart 3. Structure of tax revenues of local budgets in Ukraine in 2010

Data source: Annual report of State Treasury of Ukraine, 2010

As it can be seen from the charts above, local budgets in Ukraine are mostly funded from the national taxes and charges. The share of tied revenues is higher than the share of own resources. In comparison, the share of local taxes is rather low. There is a need to increase the role of local taxes in order to enhance financial independence and implement the principle of autonomy and accountability of local governments that is implied by the Charter of local self-government. This is the main direction of strengthening local budgets within fiscal decentralisation trends. In order to increase accountability in allocation of resources and expand the economic power and tax base of the regions and municipalities, stimulus should be provided to widen locally generated revenues.

PIT sharing between the tiers of government in Ukraine

According to the Tax Code and Budgetary Code of Ukraine, PIT is a national tax shared between all tiers of government. The tax rate is uniform for all the municipalities, since the tax is national. The main reform of PIT was conducted in 2004. The reform was rather successful in terms of widening of tax base and so-called legalisation of incomes of the population. It included the shift in the scale of taxation from a progressive to a flat rate (with a tax rate of 13% in 2004-2006, and 15% in 2007-2010). The efficiency of this reform was evaluated in the previous paper (Sydorovych, 2010). According to TCU, starting from the second quarter of 2011 the tax rate is progressive. While the main rate remains on the level of 15%, excess of revenues upon

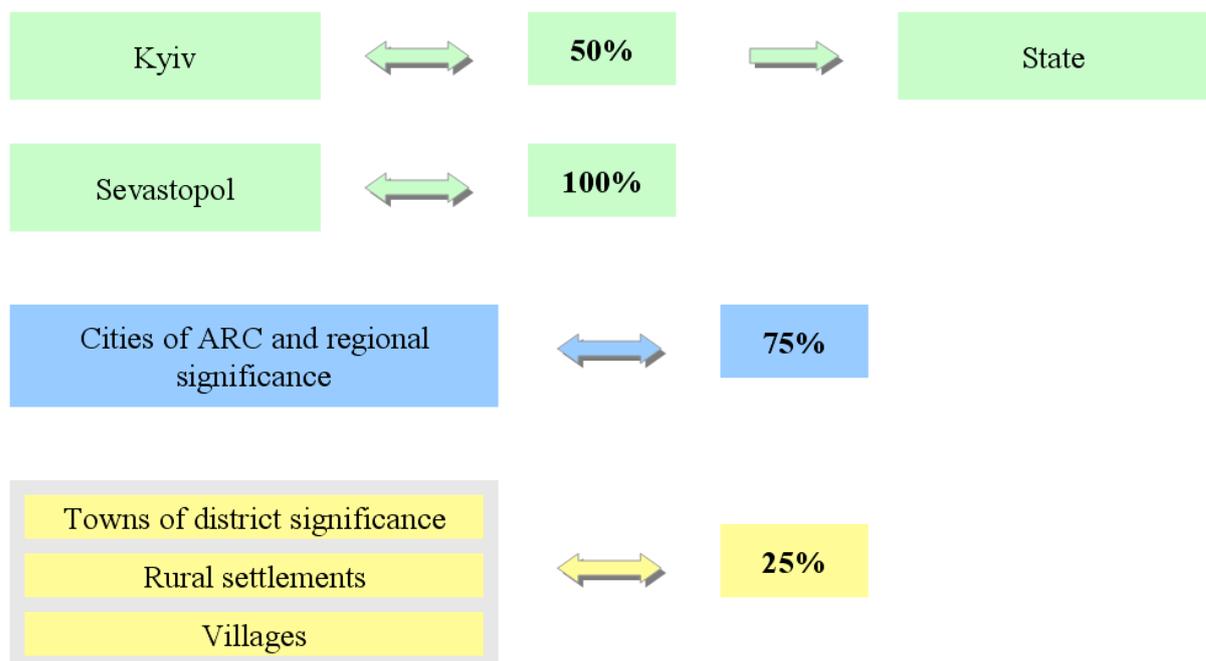
the level of 10 minimal salaries determined yearly on January 1, is taxed with the rate of 17% (TCU, article 167).

Though from a conceptual point of view, the sharing of national taxes on income of individuals is thought to be better assigned to the jurisdiction of residence than to the jurisdiction of employment, it must give way to practical reality (McLure, 1999: 44). Since the final withholding of individual tax basic in the Ukrainian practice, generally for administrative reasons it is hard to implement with the residence-based taxation. PIT is assigned to the jurisdiction of employment. Thus, PIT, which is paid by an employer as a tax agent, is assigned to the respective local budget on its location principle.

According to the Budgetary Code of Ukraine, PIT is shared between all sub-national tiers of government (except for tax levied in the city of Kyiv under BCU of 2010). According to article 65 of the Budgetary Code, the shares are distributed to sub-national budgets in the following proportions (Chart 4):

- 100% of PIT levied in the city of Sevastopol and 50% of PIT levied in the city of Kyiv are assigned to these cities (according to article 29 of BCU the other 50% of PIT levied in the city of Kyiv is assigned to the state budget). Between 2001 and 2010 the lump sum of PIT levied in the city of Kyiv belonged to the budget of the city;
- 75% of PIT levied on the territories of cities of Autonomous republic of Crimea (ARC) and in cities of regional significance is assigned to these cities;

Chart 4. PIT share in the revenues of local governments in Ukraine

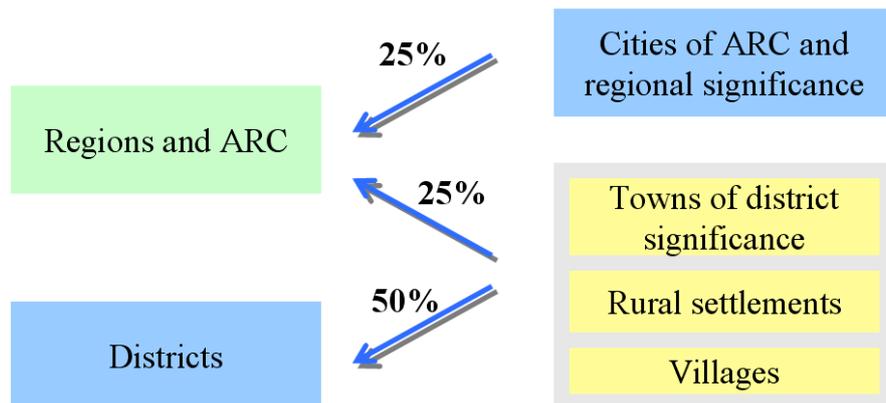


- 25% of PIT levied on the territories of towns of district significance, rural settlements, and villages is assigned to the corresponding budgets.

According to article 66 of the Budgetary Code the shares of PIT revenues transferred to local governments are distributed to sub-national budgets in the following proportions (Chart 5):

- 25% of PIT levied on the territories of towns of district significance, rural settlements and villages, and in cities of ARC and regional significance is assigned to the budgets of ARC and regions;
- 50% of PIT levied on the territories of towns of district significance, rural settlements, and villages is assigned to the budgets of districts.

Chart 5. Shares of PIT prescribed as transfers to local governments in Ukraine



The shares of PIT assigned to national and local levels of government correspond with recent decentralisation trends. The importance of international cities (e.g. Kyiv) has rapidly grown in the context of recent globalisation process. Currently, cities concentrate major powers of economic development and prosperity. In addition, the quality of conditions in urban areas often determines location decisions for companies and investors. Thus, there is economic justification of the necessity in assigning additional taxes and greater fiscal autonomy to the cities to sustain their compatibility. This is the reason why the cities get a higher share of PIT resources in Ukraine. However, it should not discriminate rural areas in their development.

Conclusions

Recent decentralisation trends, strengthening of the relations between central and local tiers of government and the decreasing role of the middle tier, are accompanied with devolution of additional responsibilities to local governments without sufficient grants from senior governments. Following these trends requires rethinking the model of local government financing by decision-makers and assigning additional revenues to local governments to make them fiscally sustainable and commensurate to their constituencies' preferences.

The principal revenue sources of local governments are locally generated revenues such as local taxes and sharing of national taxes, as well as grants devolved from the other tiers of government. An important issue of fiscal decentralisation policy is finding the trade-off between the types of revenues defined in the legal framework.

According to the criteria for choosing revenues generated locally for financing local services, the most appropriate taxes are property tax (which is not a viable solution for economies in transition), individual income, and sales taxes. In transition economies, where local governments traditionally have relied on income taxes, revenue sharing of the national taxes is still administratively easier to implement. Thus, personal income tax (PIT) sharing is one of the most appropriate and significant revenue sources of local governments, being highly important in the decentralisation process in a number of transition economies.

In the countries of the former USSR, income tax and personal income tax in particular is used to be the basic and prevailing tax revenue source of local governments, and in this region, its role has grown over the last decade. Here the share of income tax is higher than in OECD countries, countries that have already completed transformation process, and other transition economies, which makes income taxation in Ukraine, and PIT in particular, of specific interest.

Comparison of shares of income taxes in the revenues of sub-national governments in the countries of the OECD, in Ukraine, and other countries in transition has reflected that there are a number of economies relying on PIT as a key resource base for meeting their expenditure needs to accomplish the functions assigned to them. Where it is true, this tax plays the role of a local tax as a surcharge on the national tax in one group of countries, or it is implemented within the mechanism of revenue sharing.

During the recent decade PIT has adopted the prevailing role of the revenue source of sub-national governments in Ukraine. In Ukrainian practice, PIT is presented as a revenue tied to all sub-national tiers of government in the parts stipulated in the Budgetary Code. It allows local governments to rely on stable resources, thus increasing their efficiency. In the context of comparatively successful reforms of personal income taxation in Ukraine, along with fiscal function, PIT also plays an important role in stabilisation and redistribution of resources within the country.

While PIT is distributed to the regions and municipalities as a sharing of national tax rather efficiently, which is reflected in recent trends, there is still a high need for reforms of local taxation. Under the conditions of growing incomes of population, strengthening of institutional structure, and transformation of property relations, a shift to property tax in local government financing is highly important. This is one of directions for future reforms. The other direction is enhancing independence of local budgets through increasing their own resources. In addition to successful PIT sharing implementation, the weight and importance of local taxes and local budgets in the budgetary system should be widened. This would increase accountability of local governments and approximate citizens to the decision-making process.

References

- [1] Bird, R. 2001, "Subnational Revenues: Realities and Prospects", Annual World Bank Conference on Development in Latin America and the Caribbean 1999: Decentralization and Accountability of the Public Sector, Eds. Shahid Javed Burki & Guillermo E. Perry. Washington: World Bank Institute.
- [2] Čapková S. 2005, *Local Government and Economic Development*, Budapest: Open Society Institute.
- [3] Danylenko A.I. 2008, *Fiscal and Monetary Levers of Economic Development*, Kyiv: Fenix (in Ukrainian).
- [4] Kitchen H. 2004, "Local Taxation in Selected Countries: A Comparative Examination". Working Paper. IIGR, Queen's University: 1-26.
- [5] Lukianenko I. Hr. 2004, *System Modelling of Budgetary System Indicators of Ukraine: Principles and Instruments*, Kyiv: KM Academy (in Ukrainian).
- [6] McLure Ch. E. Jr. 1999, "The Tax Assignment Problem: Conceptual and Administrative Considerations in Achieving Subnational Fiscal Autonomy", Economic Development Institute, Washington: World Bank.
- [7] Melnyk P. V. 2001, *Development of Tax System in Transition Economy*, Irpin: Academy of State Tax Agency of Ukraine (in Ukrainian).
- [8] Kaufman R. F. & Hardt J.P. 1993, *The former Soviet Union in transition*. Armonk, New York: M.E.Sharpe.
- [9] Oates W. E. 1998, *Federalism and Government Finance*. The Economics of Fiscal Federalism and Local Finance, Cheltenham, UK: An Elgar Reference Collection.
- [10] Steytler N. 2009, *Local Government and Metropolitan Regions in Federal Systems*, London, Ithaca: McGill-Queen's University Press.
- [11] Sydorovych M. 2010, "Dynamic Approach to Analysis and Modelling of Personal Income Tax", Kyiv: Scientific Works of Scientific and Research Financial Institute, vol. 1, no. 50, pp. 141-150 (in Ukrainian).
- [12] Ernst&Young Global Limited 2009, The 2009 Global Executive: Individual Tax, Social Security and Immigration (reference : EYGM, 2009)
- [13] European Bank for Reconstruction and Development 2010, Transition Report 2010: <http://www.ebrd.com/downloads/research/transition/tr10.pdf>
- [14] *Decree of Cabinet of Ministers of Ukraine on Local Taxes and Charges 1993*, Bulletin of Verkhovna Rada, no.10, p.77.
- [15] *European Charter of Local Self-Government*. Strasbourg, 15.10.1985
- [16] *Law of Ukraine on the Budgetary System of Ukraine 1991*, Bulletin of Verkhovna Rada of USSR, 1991,no. 1, p. 1.
- [17] *Budgetary Code of Ukraine 2001*, Bulletin of Verkhovna Rada, no 37-38, p. 189 (reference: BCU, 2001).

- [18] *Budgetary Code of Ukraine 2010*, Bulletin of Verkhovna Rada, no. 50-51, p. 572 (reference: BCU).
- [19] *Tax Code of Ukraine 2011*, Bulletin of Verkhovna Rada, no. 13-14, no. 15-16, no. 17, p.112 (reference: TCU, 2010).
- [20] *Law on local councils and local self-government 1991*, Bulletin of Verkhovna Rada of USSR, no. 2, p.5.
- [21] *Law of Ukraine on Local Self-Government 1997*, Bulletin of Verkhovna Rada, no. 24, p.170.
- [22] *Law of Ukraine on the Local Taxes and Charges 1993*, Bulletin of Verkhovna Rada, no. 30, p.336.
- [23] *Law of Ukraine on the Personal Income Tax 2003*, Bulletin of Verkhovna Rada, no. 7, p. 308.
- [24] Eurostat of European Commission (Eurostat) 2009, Taxation trends in the EU, 2009. <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/>
- [25] International Monetary Fund Government Finance Statistics (IMF GFS) (source of data): <http://www2.imfstatistics.org/GFS/>
- [26] State Treasury of Ukraine (source of data): <http://www.treasury.gov.ua/>
- [27] State Statistics Service of Ukraine (Ukrstat): <http://ukrstat.gov.ua/>