CITY PROFILE —

— DEMOGRAPHIC • ECONOMIC • FISCAL —





Dear friends!

As the Mayor of Lviv, I'm pleased to present you with a copy of the Lviv City Profile. It is critical that our city has a document available not only to our residents, but also to potential investors, tourists, and others who are interested in Lviv.

A key step toward improving the quality of life enjoyed by the residents of this city is to create a database upon which we can base our long-term management decisions. This requires careful monitoring of the key indicators of the city.

We want future generations to be able to say that at the beginning of the 21st century Ukrainians built a secure

base of Ukrainian national and spiritual values in Lviv.

The city profile you are holding in your hands is the result of efforts to collect and make widely available key information on the economic and social conditions in Lviv.

We are all working together—honestly and, we believe, effectively—to create an environment that is clean and comfortable for our residents, supportive and safe for investors, and interesting for our visitors. We want to ensure that Lviv is a modern and dynamic city where young people are eager to come to study, and where they can develop culturally and spiritually and participate in sports—a city they can love.

The information contained in this document will serve as a guide and provide potential investors with the information and knowledge they need to identify the most promising investment opportunities.

On behalf of all citizens and myself, I'd like to thank our Canadian and Ukrainian colleagues from the EBED Project who initiated and prepared the profile, as well as the Canadian International Development Agency, which financed the project.

I am certain that the Lviv City Profile will be a useful tool for the city's residents, officials, and employees, as well as for investors, academics, experts, and all others who care about the future of our city.

Andriy Sadovyi, Mayor of the City of Lviv Lviv City Profile: Demographic, Economic, Fiscal.

This document was prepared within the framework of the International Technical Assistance Project "Building Capacity in Evidence-Based Economic Development Planning in Ukrainian Oblasts and Municipalities" (EBED project).

Project Director: Paul Darby

Authors: Brenda Lafleur (Benchmarking Expert)

Joseph Haimowitz (Economic Expert)
Matthew Stewart (Fiscal Expert)

Natalia Khodko (Consultant on Statistical Analysis)
Oleksandr Zholud (Consultant on Economic Analysis)
Olga Romanyuk (Senior Budget and Gender Consultant)
Sheila Rao (Benchmarking Expert, Fiscal Forecasting Expert)

Special thanks to **Andriy Sadovyi**, Mayor of the City of Lviv, and to **Oleksandr Kobzarev**, EBED Local

Coordinator in Lviv, for assistance and support in preparation of the Lviv City Profile.

Editors: Brenda Lafleur

Iryna Vernoslova Joseph Haimowitz Maxim Boroda Natalia Khodko

Design: Yana Kopylova

Data used in the city profile were collected with the participation of structural subdivisions of the executive committee of Lviv city council and provided by the main statistics office in Lviv Oblast and the statistics office in Lviv.

All the photos used in this document taken in Lviv and provided by city council.

The EBED project's main goal is to ensure the sustainable economic development of the Ukrainian oblasts and cities through building the capacity of oblast and city officials to apply quantitative analysis and forecasting tools to improve the economic development planning of their territories (www.ebed.org.ua).

The EBED project is implemented by The Conference Board of Canada (www.conferenceboard.ca) and financed by the Government of Canada through the Canadian International Development Agency (www.acdi-cida.gc.ca). The opinions expressed in this document are of the authors only and do not reflect the official position of the Government of Canada and the Canadian International Development Agency.

TABLE OF CONTENTS

INTRODUCTION	6
Overview	6
Administrative and Territorial Division	6
Local Self-Governance	6
Historical background	7
Geographic Location	8
Climate	8
Mineral Resources	8
Social and Economic Overview	9
CHAPTER 2. DEMOGRAPHIC PROFILE	
Overview	
Overall Population Dynamics	
Change in the Natural Population	
Net Migration	12
Summary of Natural Population Change and Net Migration	
Population Distribution by Age and Sex	
Dependency Ratio	15
Indicators of Lviv's Demographic Situation	17
CHAPTER 3. ECONOMIC PROFILE	
Overview	18
Economic Structure	
Sales of Goods and Services	
Employment	
Unemployment	
Size Distribution of Employers	
Key Industries in Lviv	
Key Enterprises in Lviv	
Infrastructure Development	24
Residential Construction Sector	
Consumption Activity	
Services Sector	
Investment	
Fixed Capital Investment	
Direct Foreign Investment	26
International Exports and Imports	
Exports	26
Imports	
Wages	27
Conclusions	
Indicators of Lviv's Economic Performance	30
CHAPTER 4. FISCAL PROFILE	31
Overview	31
Budget Surplus/Deficit	31
Revenues	32
Special Fund	35
Budget for Development	37
Modifiable Revenues	37
Expenditures	38
Indicators of Lviv's Fiscal Health	41

INTRODUCTION Chapter 1

OVERVIEW

First official record of the city • 1256

City status obtained • 1356

Resident population • 752,187,078*

Population density • 4,445 people per sq. km*

City's share in Ukraine's population ● 1.65%*

Area • 171 sq. km

Number of districts • 6

Key industries • food, mechanical engineering, tourism, IT services, outsourcing

Average annual temperature • +7.2°C

ADMINISTRATIVE AND TERRITORIAL DIVISION

Lviv is divided into six districts—Halytskyi, Shevchenkivskyi, Lychakivskyi, Zaliznychnyi, Frankivskyi, and Sykhivskyi. Lviv's jurisdiction also includes the town of Vinnyky and the two urban communities of Briukhovychi and Rudno.

LOCAL SELF-GOVERNANCE

The system of local self-government includes the mayor, city council, executive committee, other executive bodies of the city council, as well as six district councils and their executive bodies.

The Lviv City Council comprises 90 members who work in 12 permanent commissions. The executive committee of the Lviv City Council includes eight members. It has 6 subordinate departments responsible for certain domains of the city's life: urban development, economic policy, financial policy, housing and infrastructure, and preparation for Euro 2012. The seventh department is the Mayor's Administration which coordinates the activities of all executive powers. Lviv City Council executive bodies have 34 divisions. The executive committee of the city council employs 1,356 staff members (as of July 1, 2011).

Lviv City Council is introducing the ISO 9001:2008 quality management system. In addition, the city council has launched an e-government project aimed at enhancing the efficiency of city council departments and improving the quality of services delivered to citizens. The project is being implemented with the support of the Strategic Programme Fund of the British government. The e-government project has two major elements: an internal information infrastructure as well as an external information infrastructure that provides a way for city council, citizens, and entrepreneurs to interact.

^{*}Data as of January 1, 2011.

HISTORICAL BACKGROUND

While the City of Lviv is old, it is not the oldest city of Halychyna. Before the foundation of Lviv, there were the Cities of Halych and Zvenyhorod as well as less fortified towns in the suburbs of modern Lviv.

Lviv was founded by Danylo Romanovych, the King of Halychyna. The city was built around 1250 and served both a military purpose—defending the kingdom from Tatars—as well as an economic purpose as a new trade centre.

The city was named after Danylo's son Lev. *The first record of the city dates back to 1256.* The economy of the Kingdom of Galicia-Vohlynia and Lviv was predominantly agricultural, based mainly on self-sufficient farms. Citizens were also involved in such crafts as blacksmithing, pottery, leatherworking, gunsmithing, jewellery making, and casting.

Between 1250 and 1340 Lviv was the capital of a kingdom ruled by the Romanovych dynasty. Between 1340 and 1349, the Romanovych dynasty died out and the city was ruled by Voivode (military governor) Dmytro Detko who was appointed by Lithuanian Prince Liubart. In 1349 it was ruled by Polish King Kazimierz. It was during this period that the city obtained Magdeburg Rights (1356).

In 1370 Lviv fell under Hungarian rule and was governed by Władysław Opolski from the Silesian line of the Piast dynasty, then by Hungarian governors and in 1385–1387 again by Władysław Opolski.

Between 1387 and 1772 Lviv was again ruled by Poland. It was later a capital of Galicia and Lodomeria under Austria (up to 1914).

In the beginning of the 20th century, Lviv was a city of crafts and trade with little industry. During Polish rule, the garment and footwear industries had the largest number of enterprises and employed the most workers. Other industries in the city were construction, food, and metalworking. Big factories and plants were like tiny islands among hundreds of small enterprises and several thousand workshops.

Lviv was under Russian occupation from September 3, 1914 to June 22, 1915. At that time, Lviv was a capital of the Galician governorate; it was then claimed again by Austria and remained under its rule until the collapse of the empire.

On November 9, 1918, the West Ukrainian People's Republic was proclaimed and on November 21, 1918 Polish troops captured Lviv. On March 14, 1923 the Council of Ambassadors decided to annex Lviv and Halychyna to Poland. The city was a capital of Lvivske województwo (province) up until the German-Polish War of 1939.

According to the Molotov-Ribbentrop Pact, Western Ukraine became part of the Soviet Union in 1939. From September 23, 1939 to June 30, 1941 Lviv was a capital of the Lviv Oblast within the Ukrainian Soviet Socialist Republic.

After an attempt to restore the Ukrainian state and create the Ukrainian State Administration in the beginning of the German occupation, the leaders of the Administration were arrested by German commanders and Galicia became a district of the Governorate General with the capital in Lviv.







A resistance movement began in response to the occupation of Galicia. In 1942, separate paramilitary groups formed the regular Ukrainian Rebel Army. Motivated by the idea of an independent Ukraine, the Ukrainian Rebel Army fought against both Nazi Germany and the Soviet Union. On July 27, 1944 Soviet troops captured Lviv and it again became an oblast capital of the Ukrainian Soviet Socialist Republic.

Between the two world wars the industrial sector of Lviv continued to be dominated by small enterprises. *Following World War II*, in 1947, Lviv's industrial sector reached its pre-war level. By 1949 it had doubled compared to its pre-war level. In 1955, industrial output was 17 times higher than in 1945. In 1945, a locomotive repair plant, an electric bulb plant, a leather plant, garment and footwear factories, as well as a number of local industrial enterprises and industrial cooperatives started production. In 1946, Lvivsilmash (farm machinery plant), a telegraph and telephone equipment plant, a measuring equipment plant, a tool and engine repairing plant, a knitting factory, a glass and mirror factory, a pasta factory, and several other enterprises were launched. In 1947, a mechanical window glass plant, an electrical fit-

ting plant, a gas equipment plant, a water-meter plant, and a perfume container plant manufactured their first products. In 1948, a lift truck plant, a carton factory, and a fat plant started production. Lviv had become a large industrial city.

When Ukraine proclaimed independence, Lviv continued to be a capital of the Lviv Oblast and the largest regional centre in Western Ukraine. Its industrial sector comprises mostly medium-sized enterprises. Currently Lviv is developing as a tourism, education, and cultural centre.

Lviv's architecture—which was not heavily damaged in the wars of the 20th century—reflects many European styles of different epochs. No other Ukrainian city has more listed buildings than Lviv. Most of these buildings are in the historic downtown, which is on UNESCO's Heritage List. Fires in 1527 and 1556 almost completely destroyed Lviv's Gothic-style buildings; however, the city has retained many Renaissance, Baroque, and Neoclassical styles buildings. While Secession style predominates in Lviv, there are also Art Deco and Berlin Modern buildings.

GEOGRAPHIC LOCATION

Lviv lies in the central part of Lviv Oblast at the junction of the Lviv foothills, hilly Roztochchia, and lower Pobuzhzhia. The territory of the city includes the hills of the main European line that divides the rivers of the Baltic and Black Sea basins (the Bug and the Dnister, respectively). Historically Lviv was built on the Poltva river (a tributary of the Buh), but in the 19th century the river was redirected through the city's main sewer (under Shevchenka, Svobody and Chornovola avenues).

The city lies in the middle latitude of the Northern hemisphere relative to the equator and in the Eastern hemisphere relative to the Greenwich meridian. The city's coordinates are 48°50′ northern latitude and 24°01′ eastern longitude.

Lviv's land area is 171 sq. km. The city stretches for 17.7 km from north to south and 18.19 km from east to west.

Distance from Lviv to select cities: Kyiv – 469 km; London – 1,705 km; Paris – 1,570 km; Berlin – 797 km; Brussels – 1,398 km; Moscow – 1,123 km; Washington – 7,089 km.

Distances to border checkpoints with neighbouring European countries: Poland – 76 km; Slovakia – 262 km; Hungary – 253 km; Romania – 290 km.

CLIMATE

Lviv lies in the moderate Atlantic-continental climatic zone. Lviv's climate is moderate continental with mild winters and warm summers.

The city's average annual temperature is +7.2°C. The average temperature in June is +18°C and in January it is -4.0°C. The maximum temperature (+37°C) was recorded in 1921 and the minimum (-35.8°C) in 1929. Large pressure, temperature, and humidity fluctuations occur in all seasons. Winters are mild and frosts below -20°C occur very rarely. Not all winters bring stable snow cover. Summer is cool; a temperature above +30°C is rare. Of all Ukrainian oblast capitals, Lviv has the highest rainfall and the lowest summer temperature. The local climate is the least continental among Ukraine's large cities.

The frost-free season varies from 120 to 165 days a year. Average annual precipitation is 740 mm, with the least precipitation in January and the most in July. Thundershowers and temperature drops caused by atmospheric fronts occur often in the summer.

Almost every year there are storms that bring down trees and power lines and cause other minor damage. Fall is moderately warm and dry.

The microclimate in the central part of the city—which lies in a hollow—causes lower minimum and higher maximum temperatures. Strong winds often blow in the suburbs, which lie in higher areas.

MINERAL RESOURCES

Generally, the city's economy is not based on mineral resources; they have never been important for the city's development. Currently no mineral resources are developed in the city.

Some mineral resources used as construction materials were explored in the suburbs of Lviv. There are Upper Creta-

ceous basement rocks in these suburbs. Among Upper Cretaceous marlstones—with their widely variable composition that change from west to east—there are some samples that are very similar to marlstones developed in Amvrosiivka and Novorosiisk for cement production. These marlstones have not been studied in detail but some tests indicate that they can be used for cement production.

Limestone in the suburbs of Lviv can be divided into four groups: lithothamnium, cavernous (Artinskian), ervilia, and detrital. Lithothamnium limestone make up three layers: lower, middle, and upper. The middle layer is the largest and the most convenient for development. In Lviv City, this layer contains much sand but to the southeast of the city (towards Navaria and Pustomyty) it turns into almost pure carbonate calcium. From the 15th to the 19th century, middle lithothamnium limestone was used in Lviv as building stone.

SOCIAL AND ECONOMIC OVERVIEW

There are 219 large and medium-sized industrial enterprises operating in Lviv. After the collapse of the Soviet Union, there was a trend toward the closure of large industrial enterprises. However, the tourism and IT sectors were developing. In 1991, mechanical engineering and metalworking were the city's key industries. By the start of the 21st century, the food industry began to dominate and, in 2001, its share of city output reached 39.4 per cent. The city provides 95 per cent of the national production of light bulbs and 100 per cent of lift trucks.

According to Lviv's Competitiveness Strategy, the key industries that will be developing in the next few years are tourism and business services (including IT services).

A large number of tourists visit the city every year. According to some expert estimates, this number varies from 700 thousand to 1 million annually. Thus tourism is currently one of the most important sectors in the city. There are 350 tourist enterprises, 1 five-star, 10 four-star, 25 three-star, 3 two-star, and 16 other hotels, as well as a number of hostels for young travellers operating in Lviv.

IT is another important sector. According to a 2009 report by KPMG, Lviv was ranked in the top 30 of the most attractive cities for IT development.

Municipal passenger transportation is an important part of the city's infrastructure and includes tram, trolleybus, and bus connections. After introducing a new transportation scheme in 2011, traditional private shuttle busses have been gradually replaced with big communal buses (LAZ).

Lviv has an international airport. The Lviv Railroad covers Lviv, Rivne, Ternopil, Volynska, Ivano-Frankivsk, Chernivtsi, and Zakarpatska Oblasts. The Lviv Railroad is one of the largest railroads in Ukraine in terms of freight transportation: the annual volume of freight transportation via the Lviv Railroad exceeds 322,490 thousand tons.

Currently there are 97 preschool establishments and 131 compulsory education establishments of all types in Lviv. There are also 24 vocational schools, 11 higher education institutions of I–II accreditation levels, and 21 establishments of III–IV accreditation levels.

Medical aid is provided by 35 medical treatment and prevention institutions including 7 municipal hospitals, the Military Health Centre of the Western Region of the Ministry of Defence of Ukraine, the Lviv Hospital of the State Border Guard Service of Ukraine, the Infectious Diseases Hospital, cosmetology and ophthalmology clinics, the Hospital of the Lviv Railroad, 17 oblast hospitals, clinics and diagnostic centres, and the Municipal Emergency Hospital. The municipal budget funds 23 health care institutions.





DEMOGRAPHIC PROFILE

Chapter 2

OVERVIEW

- Over the 2002–11 period, the population of Lviv grew slightly. It fell, however, between 2006 and 2011, due entirely to a decline in the number of males.
- Despite a larger number of births and a smaller number of deaths over the 2006 to 2010 period, the natural population change remained negative.
- Lviv's overall migration trend has been deteriorating. While positive and strong in 2006, the net inflow into Lviv shrank in 2007 and 2008, becoming negative in 2009 and 2010.
- In 2011, the number of females accounted for 53.2 per cent of Lviv's population. Males dominated in the younger age groups, but in the over-44 age group, females made up 58.5 per cent of the population.
- In 2011, the average age of the population of Lviv was 39.2 years—higher than that in Lviv Oblast.

OVERALL POPULATION DYNAMICS

The population of Lviv grew by 2,419 people between December 2001 and January 2011. (See Chart 2.1.) At the time of the census in December 2001, the city's population was 749,768. In January 2011, it was 752,187 people, meaning that the city's population grew by 0.32 per cent. *The population only grew until 2007, however. In 2008, 2009, 2010, and 2011, it shrank, with the number of males falling slightly faster than the number of females*. Females now account for 53.2 per cent of the total population. (See Table 2.1.) The largest decline occurred from January 2010 to January 2011—predominantly due to a migration outflow. The natural population growth has been negative over the past five years. Net migration has been negative for the past two years, mainly due to domestic migration.







800,000 Total population 700,000 600,000 500,000 400,000 Female Male 300,000 200,000 100,000 0 2010 2002 2003 2004 2005 2006 2007 2008 2009 2011

CHART 2.1. POPULATION DYNAMICS, 2002–11 (NUMBER OF PEOPLE)¹

TABLE 2.1. LVIV POPULATION, 2006-11

	Population,	Population	Ma	Males		Females		
Year number of people	growth, per cent	Number of males	Per cent of total population	Number of females	Per cent of total population			
2006	753,804	0.20	354,445	47.0	399,359	53.0		
2007	754,713	0.12	354,550	47.0	400,163	53.0		
2008	754,501	-0.03	354,237	46.9	400,264	53.1		
2009	754,127	-0.05	353,650	46.9	400,477	53.1		
2010	753,852	-0.04	353,243	46.9	400,609	53.1		
2011	752,187	-0.22	352,198	46.8	399,989	53.2		

Source: Main statistics office in Lviv Oblast.

The population of Lviv is affected by two factors: a) the change in the natural population; and b) net migration.

Change in the Natural Population

The change in the natural population is defined as the difference between the number of births and the number of deaths in a particular year. If the number of births is larger than the number of deaths, there is an increase in the natural population. A decrease in the natural population occurs if the number of births is smaller than the number of deaths.

In 2010, the number of births was 2.1 per cent higher than in 2006. (See Table 2.2.) The increase between 2006 and 2009, however, was 8.3 per cent. *A large drop in births occurred in 2010.*

¹ All population data are shown as of January for each year. The only exception is in 2002, when data are based on the national population census of December 5, 2001.

TABLE 2.2. BIRTHS, 2006-10 (NUMBER OF PEOPLE)²

Year	Total number of births	Males	Females
2006	7,418	3,775	3,643
2007	7,365	3,784	3,581
2008	7,862	4,033	3,829
2009	8,037	4,119	3,918
2010	7,576	3,936	3,640

The number of deaths increased in 2007 and 2008 and then fell in the following two years. (See Table 2.3.)

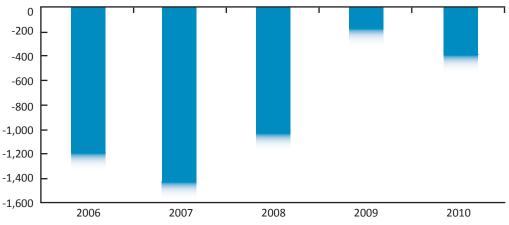
TABLE 2.3. DEATHS, 2006–10 (NUMBER OF PEOPLE)

Year	Total number of deaths	Males	Females
2006	8,602	4,594	4,008
2007	8,806	4,703	4,103
2008	8,884	4,704	4,180
2009	8,207	4,193	4,014
2010	7,962	4,039	3,923

Source: Main statistics office in Lviv Oblast.

Chart 2.2 shows that the decline in Lviv's population due to natural causes was larger in the 2006 to 2008 period. The lower number of deaths in 2009 and 2010 resulted in a smaller decline in the natural population in those two years.

CHART 2.2. NATURAL POPULATION CHANGE, 2006–10 (NUMBER OF PEOPLE)



Source: Main statistics office in Lviv Oblast.

Net Migration

There are two types of migration—domestic and international. Net domestic migration is the difference between the number of people moving into Lviv from other parts of Ukraine and the number of people moving out of Lviv to other parts of Ukraine. *In the years 2006, 2007, and 2008, more Ukrainians moved into than out of Lviv*. (See Table 2.4.) However, in 2009 and 2010, Lviv's net domestic migration became increasingly negative. As well, more Lviv males moved to other parts of Ukraine than did females.

 $^{^{\}rm 2}$ Data on births, deaths, and migration are annual totals.

TABLE 2.4. DOMESTIC MIGRATION, 2006–10 (NUMBER OF PEOPLE)

	Into Lviv		Out of Lviv			Net Domestic Migration			
Year	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
2006	11,617	5,723	5,894	9,405	4,776	4,629	2,212	947	1,265
2007	10,464	5,070	5,394	9,181	4,448	4,733	1,283	622	661
2008	9,783	4,695	5,088	9,142	4,635	4,507	641	60	581
2009	8,977	4,213	4,764	9,048	4,578	4,470	-71	-365	294
2010	8,805	4,293	4,512	10,101	5,267	4,834	-1,296	-974	-322

Net international migration is the difference between the number of people moving into Lviv from other countries and the number of people moving out of Lviv to other countries. Net international migration was positive, but small, in two years—2008 and 2010. (See Table 2.5.)

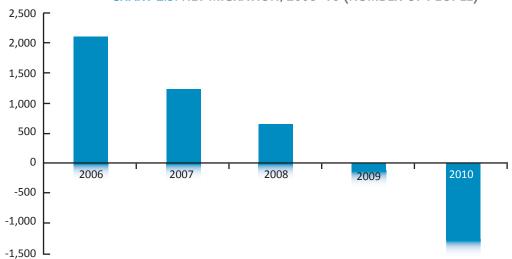
TABLE 2.5. INTERNATIONAL MIGRATION, 2006–10 (NUMBER OF PEOPLE)

	Into Lviv		Out of Lviv			Net international migration			
Year	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
2006	244	128	116	363	151	212	-119	-23	-96
2007	228	104	124	282	120	162	-54	-16	-38
2008	232	122	110	225	98	127	7	24	-17
2009	215	142	73	249	110	139	-34	32	-66
2010	233	125	108	216	93	123	17	32	-15

Source: Main statistics office in Lviv Oblast.

The overall net migration was positive and strong in 2006. (See Chart 2.3.) After that, however, Lviv's migration trend deteriorated, and the net inflow into Lviv become negative in 2009 and 2010. Domestic flows account for most of this change.

CHART 2.3. NET MIGRATION, 2006–10 (NUMBER OF PEOPLE)



Source: Main statistics office in Lviv Oblast.

Summary of Natural Population Change and Net Migration

The population of Lviv increased in 2006 due to a large inflow of people from other parts of Ukraine. From 2007 on, however, Lviv's population shrank. In 2007 and 2008, the overall decline was due to a higher number of deaths, while in 2010, it was due to a large number of people moving out of Lviv to other parts of Ukraine. (See Table 2.6.)

TABLE 2.6. NATURAL AND MIGRATION POPULATION CHANGES, 2006–10 (NUMBER OF PEOPLE)

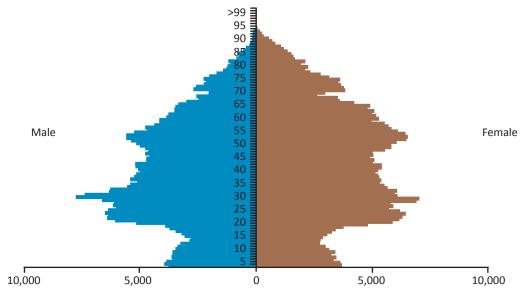
Population change	2006	2007	2008	2009	2010
Change in the natural population	-1,184	-1,441	-1,022	-170	-386
Net migration	2,093	1,229	648	-105	-1,279
Total population change	909	-212	-374	-275	-1,665

Source: Main statistics office in Lviv Oblast.

POPULATION DISTRIBUTION BY AGE AND SEX

The population pyramid in Chart 2.4 shows the age distribution of Lviv's male and female population. Although males make up a larger proportion of the population in the under-44 age group, females dominate in older age groups. *There is a substantial reduction in the male population in the over-44 age categories*. For example, females make up 58.5 per cent of the over-44 age group and 62.3 per cent in the over-60 age group.

CHART 2.4. LVIV POPULATION DISAGGREGATED BY AGE AND SEX, 2011 (NUMBER OF PEOPLE)³



Source: Main statistics office in Lviv Oblast.

Table 2.7 presents Lviv's population distribution by age and sex for 2007, 2009, and 2011. The share of people in the youngest cohort (those aged 0 to 14) fell slightly in 2011 compared to 2007, while *the share of those in the 15 to 24 age cohort fell more noticeably. In each cohort the reduction was seen in both males and females.* In 2011—and for the first time—the 25 to 44 age cohort was dominated by males. The demographic trend in Lviv is one of an aging population. The shares of population in the three older age groups (25 to 44, 45 to 60, and over 60) have been growing steadily.

³ Territory of Lviv, excluding other communities subordinate to the city council. Age and sex distribution is shown as of January 1, 2011.

TABLE 2.7. POPULATION DISAGGREGATED BY AGE AND SEX, 2007, 2009, AND 20114

		2007		2009	2011		
Age and sex	Number of people	Per cent of total population	Number of people	Per cent of total population	Number of people	Per cent of total population	
Males 0–14 years	53,479	7.09	52,541	6.97	52,925	7.04	
Females 0–14 years	50,663	6.71	49,888	6.61	50,022	6.65	
Both sexes 0–14 years	104,142	13.80	102,429	13.58	102,947	13.69	
Males 15–24 years	69,449	9.20	63,895	8.47	58,244	7.74	
Females 15–24 years	65,504	8.68	61,804	8.20	56,648	7.53	
Both sexes 15–24 years	134,953	17.88	125,699	16.67	114,892	15.27	
Males 25–44 years	109,312	14.48	112,769	14.95	115,748	15.39	
Females 25–44 years	113,254	15.01	114,042	15.12	114,865	15.27	
Both sexes 25–44 years	222,566	29.49	226,811	30.07	230,613	30.66	
Males 45–60 years	75,283	9.98	76,019	10.08	76,097	10.12	
Females 45–60 years	94,509	12.52	95,453	12.66	94,914	12.62	
Both sexes 45–60 years	169,792	22.50	171,472	22.74	171,011	22.74	
Males over 60 years	47,027	6.23	48,426	6.42	50,067	6.65	
Females over 60 years	76,233	10.10	79,290	10.52	82,657	10.99	
Both sexes over 60 years	123,260	16.33	127,716	16.94	132,724	17.64	

As of January 1, 2011, *the average age of Lviv's population was 39.2 years*, which is a significant increase from the year before (38.9 years) and *higher than the average age in the Lviv Oblast (39.0 years)*. The average age of females was 41.1 years and that of males was 37.0 years.

DEPENDENCY RATIO

The dependency ratio measures the size of the "dependent" population in relation to the "working-age" population. The dependent population is defined as those typically not in the labour force—the youth population (0 to 15 years) and elderly population (55 and over for females and 60 and over for males). The working-age population is defined as those aged 16 to 54 for females and 16 to 59 for males. The dependency ratio is expressed as the number of dependents for every 1,000 people of working age.⁵

Lviv's dependency ratio in 2011 was 591 dependent people for every 1,000 people of working age. This total was made up of 233 people younger than the working age and 358 people older than the working age.

In 2011, 62.8 per cent (472,688 people) of Lviv's population were of working age, 14.7 per cent (110,396 people) were younger than the working age, and 22.5 per cent (169,123 people) were older than the working age. (See Chart 2.5.) The number of males older than the working age was smaller than the number of males younger than the working age. In contrast, the number of females over the working age was double the number of females younger than the working age. Part of the reason for this is the earlier retirement age for females. Yet, even if we calculated the male elderly dependent population using the same retirement age as that of females (55 and over rather than 60 and over), the female elderly dependent population would still be 1.5 times that for males. This is due to the longer life expectancy for females.

⁴ Age and sex distribution is shown as of January 1 for each year.

⁵ Working age is defined as of January 1, 2011.

⁶ Dependency ratio is shown as of January 1, 2011

⁷ Age distribution is shown as of January 1, 2011.

Both sexes Male Female 28.9

22.5 68.7 16.1 57.7 13.4

CHART 2.5. POPULATION BY WORKING AND DEPENDENT AGE, 2011 (PER CENT)

Working-age population

The dependency ratio has increased since 2006, mainly due to a higher dependency ratio of those older than the working age. (See Chart 2.6.) The dependency ratio of those younger than the working age has fallen slightly between 2006 and 2011.

Older than working age

Younger than working age

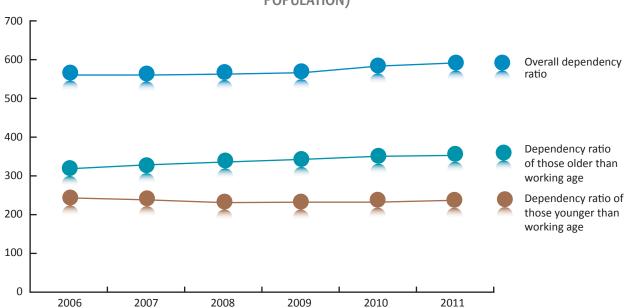


CHART 2.6. DEPENDENCY RATIO, 2006–11 (NUMBER OF DEPENDENTS PER 1,000 WORKING-AGE POPULATION)⁸

Source: Main statistics office in Lviv Oblast.

16

⁸ Dependency ratio is shown as of January 1 for each year.

INDICATORS OF LVIV'S DEMOGRAPHIC SITUATION

Table 2.8 compares the situation of the City of Lviv with that of Ukraine as a whole on five key demographic indicators. *The natural population decline is much smaller in Lviv than in Ukraine in general, but net outward migration is higher*. The dependency ratio in Lviv is much lower than for the whole of Ukraine, as is the share of population over the age of 60 years. The proportion of males and females in Lviv's population is more balanced than for Ukraine in general.

TABLE 2.8. KEY DEMOGRAPHIC INDICATORS

Indicator	Lviv	Ukraine	Relative position of Lviv
Rate of natural population change in 2010	-0.5 per 1,000 people	-4.4 per 1,000 people	Stronger
Net migration rate in 2010	-1.7 per 1,000 people	0.3 per 1,000 people	Weaker
Dependency ratio as of January 1, 2010	580 per 1,000 people of working age	659 per 1,000 people of working age	Stronger
Share of females in population as of January 1, 2011	53.18 per cent	53.87 per cent	Stronger
Share of population over 60 years as of January 1, 2010	17.25 per cent	19.33 per cent	Stronger

Source: Main statistics office in Lviv Oblast.

ECONOMIC PROFILE

Chapter 3

OVERVIEW

- Lviv's economy is well diversified, with no single sector dominating. In terms of sales by sector, wholesale and
 retail trade leads the pack, which is typical for oblast administrative centres.
- Half of the employment in the city is concentrated in large-sized enterprises; the rest is split between medium- and small-sized enterprises.
- Lviv has a well-developed services sector, with services making up 75 per cent of the total output of non-financial companies in 2010. The main services components are trade, transportation, and education.
- While the city is a clear leader in both exports and imports for the oblast, there is a downward trend in the city's share of the international trade in the oblast.
- For most professions, wages in Lviv are above the oblast average; the gap between the wages of men and women is small and is closing over time.

ECONOMIC STRUCTURE

Sales of Goods and Services

One way in which the structure of an economy can be measured is through sales. Table 3.1 shows sales of goods and services in Lviv over the 2005–10 period. The table illustrates that both the goods and services sectors are very important for the city's economy. The largest single contributor is trade, especially wholesale trade. *Over the 2005–10 period, trade accounted for between 46 and 51 per cent of all sales in Lviv.* Typically, among cities within an oblast, the oblast capital has the largest share of oblast wholesale trade. However, even retail trade represents a rather large share of economic activity, supplying on average 6.6 per cent of output. Other important economic sectors in 2010 are transportation and communication (12.0 per cent), manufacturing (12.1 per cent), electricity generation (12.8 per cent), and real estate, engineering, legal, and accounting activities (7.1 per cent). The major manufacturing industries are food processing, the manufacture of computer, electronic, and optical products, and the manufacture of motor vehicles and equipment. The city's economic diversification enables its economy to better withstand both local and external shocks.

TABLE 3.1. SALES OF GOODS AND SERVICES, 2005-10 (UAH THOUSANDS IN CURRENT PRICES)¹

Economic activity	2005	2006	2007	2008	2009	2010
Total city economy	31,545,634	39,292,309	48,793,307	60,052,809	57,043,180	67,167,286
Agriculture, forestry, and fishing	21,383	38,452	37,030	38,619	39,498	32,405
Industry	8,302,449	10,790,939	12,407,567	14,756,664	14,779,350	16,717,587
Mining and quarrying	38,423	43,757	31,822,	26,256	4,712	9,433
Manufacturing	4,552,538	5,490,739	6,450,954	7,503,152	7,342,368	8,097,095
Manufacture of food products, beverages, and tobacco	1,559,403	1,758,181	1,732,612	2,107,404	3,027,150	3,109,119
Manufacture of computer, electronic, and optical products	380,018	551,645	535,967	809,596	762,614	1,003,169
Manufacture of motor vehicles and equipment	459,174	518,206	723,200	495,520	486,209	679,061
Production and distribution of electricity, gas, and water	3,711,488	5,256,443	5,924,792	7,227,256	7,432,270	8,611,059
Construction	1,381,834	2,584,008	4,191,224	4,676,862	3,091,687	2,251,319
Wholesale and retail trade; repair of motor vehicles and motorcycles	16,087,817	18,107,519	22,303,025	29,191,192	27,673,900	34,427,003
Accommodation and food service activities	110,184	163,225	210,068	278,511	243,423	323,933
Transport and communications	4,310,692	5,367,980	6,949,743	8,062,693	7,183,941	8,064,095
Financial and insurance activities	215,668	281,210	660,576	419,550	235,034	280,293
Real estate, engineering, legal, and accounting activities	830,624	1,609,153	1,658,191	2,112,364	3,419,357	4,742,517
Education	33,909	29,693	37,089	48,723	47,503	50,686
Human health and social work activities	22,123	21,366	28,475	44,427	53,042	63,839

Employment

Another way of looking at the structure of an economy is through employment. Table 3.2 shows staff employment by economic activity and sex in 2009.² *Although the trade sector accounted for 49 per cent of sales in Lviv in 2009, it only accounted for 13 per cent of employment.* The number of employed in education and industry was slightly higher, while transport, health care, and real estate had just slightly lower levels of employment.







¹ Sales values are given excluding VAT and excise duties.

² Beginning in 2010, data on the distribution of wages and employment by sex at the city level are no longer being collected.

TABLE 3.2. NUMBER OF STAFF EMPLOYEES BY ECONOMIC ACTIVITY AND SEX, 2009 (NUMBER OF PEOPLE)³

Economic activity	Both sexes	Males	Females
Number of staff employees, in total	271,046	134,295	136,751
Agriculture, hunting, and forestry	1,082	652	430
Industry	52,470	31,114	21,356
Construction	13,692	11,859	1,833
Wholesale and retail trade; repair of cars, home appliances, and personal use items	34,523	20,273	14,250
Hotels and restaurants	4,365	1,314	3,051
Transport and communications	32,280	20,780	11,500
Financial activity	10,054	3,648	6,406
Real estate, leasing, engineering, and services to businesses	26,848	14,953	11,895
Public administration	14,257	5,789	8,468
Education	40,038	13,235	26,803
Health care and social assistance	30,877	5,423	25,454
Other economic activity	10,560	5,255	5,305

Table 3.3 presents details of staff employment in Lviv's industrial sector by sex for 2009. The manufacturing sectors with the largest employment figures in 2009 were the food industry and agricultural processing industry (13 per cent of industrial employment), the electrical, electronic and optical equipment industry (12 per cent), textile industry (10 per cent), and the machinery and equipment industry (9 per cent). It is important to note that both sexes are represented almost equally in the manufacturing sector, although there are differences by sector. For example, Chart 3.3 shows that females dominant employment in the textile industry (86 per cent of workers are women) while males dominate employment in machine building (80 per cent of workers are men).⁴

TABLE 3.3. NUMBER OF STAFF EMPLOYEES BY INDUSTRY AND SEX, 2009 (NUMBER OF PEOPLE)

Industry sector	Both sexes	Males	Females
Number of staff employees, in industry	52,470	31,114	21,356
Food industry and agricultural processing industry	6,652	3,358	3,294
Manufacture of electrical, electronic, and optical equipment	6,509	3,783	2,730
Textile industry and tailoring	5,209	711	4,498
Manufacture of machinery and equipment	4,588	3,672	916
Other industries (combined)	31,828	20,435	11,393

Source: Main statistics office in Lviv Oblast.

Unemployment

The Lviv economy was growing quite rapidly before the global crisis of 2008–09, with the result that the number of registered unemployment was steadily declining. Registered unemployment hit a low in 2007. However, the global financial crisis had a negative impact on Lviv's unemployment, with the number of registered unemployed increasing from 2,277 at the end of 2007 to 3,626 at the end of 2008. (See Chart 3.1.) There was not a strong recovery in the number of unemployed in subsequent years, with the number of unemployed at the end of 2011 remaining at about the same level as at the end of 2008. Although there has been a slight growth in the number of unemployed, the unemployed still represent less than 1 per cent of the city's workforce.

³ Yearly average.

⁴ The criteria for dominating employment in a sector is if that sex makes up at least two-thirds of employment in that sector.

4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 2005 2007 2006 2008 2009 2010 2011

CHART 3.1. NUMBER OF REGISTERED UNEMPLOYED AT YEAR-END, 2005-11 (NUMBER OF PEOPLE)

Sources: Lviv's city employment center; main statistics office in Lviv Oblast.

There are substantial differences between the level of registered unemployment reported here and the level of unemployment that would be measured by the internationally recognized methodology used by the International Labour Organization (ILO). Unfortunately, estimates of unemployment using the ILO methodology are not available at the city level. However, looking at differences between the two methodologies at the oblast level can provide some insight into the degree by which registered unemployment underestimates true unemployment. In Lviv Oblast, registered unemployment as a share of the working-age population (16–54 for women and 16–59 for men) was 1.7 per cent in urban areas at the end of 2010. In contrast, unemployment measured using the ILO methodology suggests that unemployment as a share of the working-age population (15 to 70) was 9.8 per cent. Using the local definition of working age, 10.1 per cent of the oblast working-age urban population was unemployed in 2010. At the end of 2010, registered unemployment as a share of the working-age population (local definition) in Lviv was 1.7 per cent. If it were available, unemployment as measured using the ILO methodology would likely be closer to 6 per cent.

The distribution of registered unemployment shows that unemployment has affected men to a lesser extent than women. For example, between 2007 and 2011, 62 per cent of all registered unemployed were women. The gap narrowed in 2009, with 56 per cent of unemployed being women, but widened again in 2011 to 62 per cent. *The average duration of registered unemployment has been relatively stable, holding at six to seven months over the 2007–10 period*.

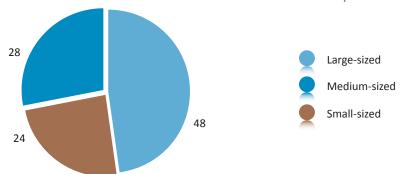
Size Distribution of Employers

The economic structure of a city has an important effect on the size distribution of enterprises, institutions, and organizations. The distribution of staff employees by size of enterprise/institution for the City of Lviv in 2009 is illustrated in Chart 3.2.5 The chart shows that *staff employment in Lviv is dominated by large-sized enterprises/institutions, which in 2009 accounted for almost half of all staff employment in the city,6 while shares of medium- and small-sized enterprises are almost equal. This concentration of employment in large-sized enterprises, chiefly in manufacturing, is due to the existence of several large enterprises.*

⁵ Beginning in 2010, data on employment by size of employer are no longer being collected at the city level.

⁶ Small-sized enterprises/institutions/organizations include those with 11 to 50 employees; medium-sized, 51 to 250 employees; large-sized, 251 and more employees.

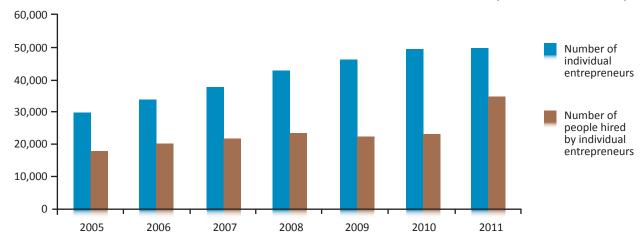
CHART 3.2. DISTRIBUTION OF STAFF EMPLOYEES BY SIZE OF ENTERPRISE/INSTITUTION, 2009 (PER CENT)



Sources: Main statistics office in Lviv Oblast; in-house calculations.

Besides staff employment, the other important category of employment is individual entrepreneurs and their hired workers. Between 2005 and 2010, the number of individual entrepreneurs grew steadily. The number of hired workers rose between 2005 and 2008 before falling in 2009 and 2010. In 2011, trends were reversed as the number of hired workers rose while the number of individual entrepreneurs fell. (See Chart 3.3.)

CHART 3.3. INDIVIDUAL ENTREPRENEURS AND THEIR HIRED WORKERS, 2005–11 (NUMBER OF PEOPLE)7



Source: Lviv City State Tax Inspectorate.

Key Industries in Lviv

Processing

Manufacturing is an important sector in the City of Lviv. The major manufacturing industries are food and soft drinks processing, machine building, and transportation equipment. In food processing, a prominent firm is the Svitoch confectionery factory (owned by Nestlé), which supplies both the domestic market and exports its production abroad. Also important is the instant coffee and other instant drink packaging company, Halka. Finally, the brewery Lvivska Pyvovarnya is the largest beer producer in Western Ukraine and currently belongs to the Carlsberg Group. Transport equipment manufacturing is represented by Pasavtorom, Ukraine's manufacturer of city buses. Currently the enterprise is experiencing financial difficulties but has impressive capacity.

Trade

As the oblast's capital, Lviv has a well-developed wholesale trade sector. The major commodities in wholesale trade are foodstuffs, tobacco, and petrol. There are several large companies that specialize in specific commodities (for example, West Tobacco Group trades in alcohol and tobacco).

The retail trade sector is developed as well. There is a local network of shops—Barvinok Ltd.—as well as local branches of national networks.

⁷ Data on individual entrepreneurs and their hired workers are as of January 1 for each year.

Transport

The city has a well-developed transportation network. Lviv is the largest transport hub in Western Ukraine, and a number of national highways of European importance and important railroad lines pass through the city. Lviv also has an international airport.

However, Lviv suffers from traffic congestion and roadways are in poor condition. The following are the major causes of traffic congestion:

- · In the old city, streets are mostly narrow, and the geography of the city forces major traffic flows to pass through the centre of the city.
- There has been a rapid increase in the number of vehicles in the 2000s.
- · A significant number of the main streets are paved with cobblestones, which slows traffic and requires higher maintenance costs than asphalt roads.

The well-developed municipal transport network includes 9 tram lines, 12 trolleybus lines, and 90 bus (chiefly shuttle bus) lines. Over the 2005–10 period, there was a shift from electric transport to buses. In 2005 more than half of the passengers were transported by trams and trolleys, while in 2010, almost two-thirds of passengers used shuttle buses. Overall in 2010, passenger transport services were used by 204.3 million passengers—0.2 per cent less than in 2009 but 12.7 per cent more than in 2005. Almost two-thirds of the total number of passengers using electric transport are subsidized riders.

Lviv is an important railway junction for the western regions of Ukraine (the Chernivtsi, Ivano-Frankivsk, and Zakarpatska Oblasts) and with the rest of the country. There are also railways that connect Lviv with Europe.

Education

With 22 universities (or equivalent higher education institutions) in Lviv in 2009, the city is currently the Western Ukraine leader in higher education. According to one ranking of universities in Ukraine, Lviv Polytechnic National University (the oldest technical educational institution in Ukraine) was in 5th place while Ivan Franko National University of Lviv was in 6th spot.⁸

Key Enterprises in Lviv

The city has several key large enterprises. (See Table 3.4.) The table shows the name of the enterprise, its basic activity, and the income earned from those basic activities in 2010.

TABLE 3.4. ENTERPRISES WITH THE HIGHEST REVENUES, 2010

Enterprise, organization, institution	Basic activity	Income from basic activity, UAH thousands	Average number of employees in 2010
Closed joint-stock company Lvivska Pyvovarnya	Brewery	431,161 (2009)	n/a
Closed joint-stock company Svitoch	Confectionery	373,211 (2009)	n/a
Closed joint-stock company Iskra	Manufacture of electric lamps (bulbs)	297,501	n/a
Public joint-stock company Halychfarm (subsidiary of Arterium)	Manufacture of pharmaceutical items	2,665,265	n/a
Open joint-stock company Pasavtoprom	Transport manufacturing	582	n/a
Limited liability company retail network Barvinok	Retail trade (supermarket network)	n/a	617
Limited liability company Titan Group	Security	n/a	328
Private company Cleaning-Pro	Cleaning services	n/a	171
Limited liability company Med-Service Lviv	Retail trade in pharmaceuticals and medical equipment	n/a	170
Limited liability company West Tobacco Group	Wholesale trade in alcohol and tobacco	n/a	157

Source: www.smida.gov.ua.

⁸ www.yourcompass.org/ratings/Compass_2011/all.php.

INFRASTRUCTURE DEVELOPMENT

Residential Construction Sector

Most of the city's housing stock is relatively old—over 100 years. Most of the 'new' parts of the city were built when Ukraine was part of the USSR. The infrastructure is slowly being renewed. *Between 2000 and 2010, output in the construction industry increased on average by a meager 0.2 per cent every year.* This is largely a result of the negative growth that occurred between 2008 and 2010. (See Table 3.5.) In real terms, residential investment in the city increased, on average, by 13.3 per cent each year over the 2000-10 period. At the same time, there was a severe decline in 2009, so that over the 2005–10 period, real investment in fixed capital housing construction fell cumulatively by more than 24 per cent.

TABLE 3.5. MAJOR CONSTRUCTION INDUSTRY INDICATORS IN LVIV, 2005-10

Indicator	2005	2006	2007	2008	2009	2010
Commissioning of residential buildings, total m ²	158,727	153,133	210,270	239,602	187,179	184,484
Commissioning of individual homes, total m ²	52,892	40,390	50,519	50,198	41,854	106,442
Commissioning of residential buildings, units	173	171	212	200	185	420
Real construction output, % change over previous	-24.1	30.8	11.5	-19.6	-44.6	-19.3
year						
Investment in fixed capital into housing construction, UAH thousands	237,538	451,453	621,128	734,577	372,265	504,098
Real investment in fixed capital in housing construction, % change over previous year	-15.5	55.6	11.7	-11.3	-54.6	28.4

Sources: Main statistics office in Lviv Oblast: in-house calculations.

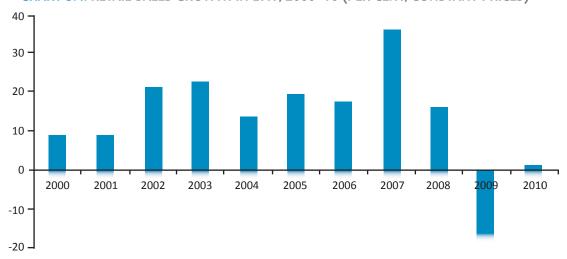
CONSUMPTION ACTIVITY

At the city level, retail sales data adjusted for inflation are a good indicator of consumption activity. Aggregate retail sales data for Lviv indicate that retail sales in real terms increased between 2002 and 2008 by a solid 18.4 per cent per year on average. This growth was the result of increasing incomes, an expansion in consumer loans, and the development of supermarket chains. However, in 2009 the recession caused a sharp drop in retail sales. In 2010 sales growth, backed by the economic recovery, resumed, but was rather sluggish and well below the pre-crisis average. (See Chart 3.4.)

Per capita retail sales in Lviv is twice the oblast average, due to high wages and easier availability of consumer loans in large cities. In 2010, per capita retail sales in Lviv was UAH 12,055 per person.

Lviv is an administrative centre and has traditionally been an important focus for wholesale trade in Lviv Oblast. The city clearly leads both in wholesale sales of food products (on average 77.7 per cent of the oblast total between 2000 and 2010) and non-food products (on average 75.3 per cent of the oblast total during the same period).

CHART 3.4. RETAIL SALES GROWTH IN LVIV, 2000–10 (PER CENT, CONSTANT PRICES)



Sources: Main statistics office in Lviv Oblast; in-house calculations.

SERVICES SECTOR

In 2010, services made up 75 per cent of the total output of non-financial companies. Except for trade, which dominates the overall services sector, three services stood out as being especially important for the city's economy in 2010. Transport activity represented 50.2 per cent, real estate transactions represented 10.2 per cent, and education represented 6.5 per cent of all services sold by the non-financial services sector. (See Table 3.6.) It should be noted that, in 2009, Lviv supplied 61 per cent of all non-financial services in the oblast and, in some cases (for example, higher education), its contribution was 80 per cent or higher.

TABLE 3.6. AMOUNT OF SOLD SERVICES BY FIRMS IN THE NON-FINANCIAL SERVICES SECTOR BY TYPE OF ACTIVITY IN LVIV, 2010 (UAH MILLIONS IN CURRENT PRICES AND PER CENT)

Economic activity	Amount of sold services	Share of total, %
Total	7,140.1	100.0
Repair of motor vehicles, household goods, and personal items (subsector of Trade)	73.0	1.0
Maintenance and repair of motor vehicles and motorcycles	42.1	0.6
Repair of household goods and personal items	30.9	0.4
The activities of hotels and restaurants	127.4	1.8
Hotel operations	126.0	1.8
Transport and communications	4,230.3	59.2
Transport activities	3,587.7	50.2
Travel agency services	45.0	0.6
Organization of cargo transportation	156.6	2.2
Post and communications	440.9	6.2
Real estate, leasing, engineering, and services to entrepreneurs	1,888.5	26.4
Real estate transactions	725.2	10.2
Information-related activities	166.9	2.3
Repair and maintenance of office and computer equipment	13.9	0.2
Research and development	121.7	1.7
Legal services	70.6	1.0
Architecture and geodesy-related services	281.9	3.9
Investigation and security	220.2	3.1
Providing other commercial services	119.6	1.7
Education	467.5	6.5
Health care and social protection	100.2	1.4
Provision of communal and personal services, cultural activities and sports	253.2	3.5
Culture and sport, recreation and entertainment	137.3	1.9

Sources: Main statistics office in Lviv Oblast; in-house calculations.

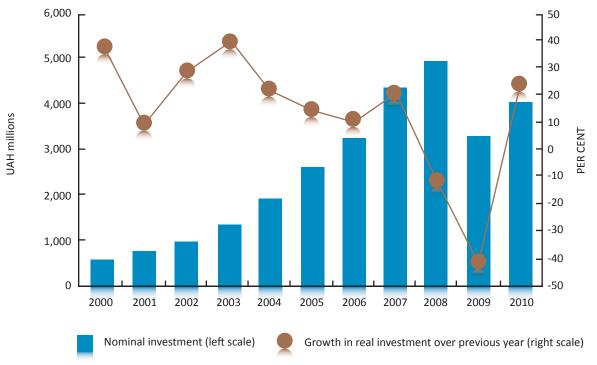
INVESTMENTFixed Capital Investment

Fixed capital investment represents the spending of businesses on the construction of buildings or the purchase of vehicles or equipment. Chart 3.5 illustrates the accumulation of fixed capital (in nominal and real terms so that changes illustrated in the chart include changes in prices as well as changes in volumes) in Lviv over the 2000–10 period. Between 2005 and 2008, nominal fixed capital investment rose at an average pace of 8.3 per cent. The recession hit hard in 2009, when investment in fixed capital in the city fell by 40.9 per cent and then recovered only partially in 2010, remaining

⁹ Does not include trade and construction, which are described in other parts of this chapter.

36 per cent below the level of **2007** in real terms. Capital investment increased to 4,045 million UAH in 2010 after falling to 3,266 million UAH in 2009. In 2010 investments were made primarily in transport and communications (38 per cent of the total fixed capital investment), trade (14 per cent), and real estate and services to enterprises (14 per cent).

CHART 3.5. INVESTMENT IN FIXED CAPITAL, 2000–10 (UAH MILLIONS IN CURRENT PRICES AND REAL PER CENT CHANGE OVER PREVIOUS YEAR)



Source: Main statistics office in Lviv Oblast.

Direct Foreign Investment

Lviv is the clear oblast leader in terms of attracting direct foreign investment (FDI). (See Table 3.7.) FDI in Lviv grew steadily over the 2005–10 period, without significant fluctuations—even during the crisis years of 2008 and 2009. As of the end of 2010, the largest foreign investor was Poland with 36 per cent of total FDI in the city, followed by Austria (17 per cent), and Cyprus (14 per cent). Over half (51 per cent) of FDI was directed to the financial sector.

TABLE 3.7. FOREIGN DIRECT INVESTMENT (FDI) IN LVIV AT YEAR-END, 2005-10

Indicator	2005	2006	2007	2008	2009	2010
Foreign direct investments, USD thousands	245,713	307,193	494,240	576,398	696,150	837,098
FDI growth, USD thousands	51,279	61,480	187,046	82,159	119,752	140,948
Share in total oblast, %	57.6	59.6	64.1	61.9	62.6	65.7

Sources: Main statistics office in Lviv Oblast; in-house calculations.

INTERNATIONAL EXPORTS AND IMPORTS

Exports

Over the 2005–10 period, Lviv led the oblast in exports, accounting for 35 per cent of the oblast's total exports—hardly surprising given that the city is both the industrial and administrative centre of the oblast. However, there is a clear downward trend in Lviv's share of the oblast's exports: the share decreased from 71 per cent of total oblast exports in 2000 to just 28 per cent in 2009. In 2010 there was a reversal in this trend as the city's share of the oblast's exports

climbed to 34 per cent. (See Table 3.8.) The world financial crisis hit the city harder in terms of exports of goods than the rest of the oblast. The drop in Lviv's exports was 31 per cent in 2009, while the rest of the oblast (excluding Lviv) experienced a 16 per cent decline. However, the city's rebound from the financial crisis was stronger than the rest of the oblast. In 2010, the city's exports rose by 50 per cent while exports in the rest of the oblast (excluding Lviv) rose only 12 per cent.

Imports

Between 2005 and 2010, Lviv imports constituted on average 57 per cent of total oblast imports. Two factors play an important role in the import activity in Lviv. First, as an administrative centre and the largest city in the oblast, many goods are imported by Lviv-based firms and later distributed to other parts of the oblast. Second, residents of the city have relatively high incomes and easier access to consumer loans, which makes purchases of imported durable goods easier.

Imports fell uniformly in 2009, both in the city (36 per cent) and in the oblast (37 per cent) as a result of the economic crisis. (See Table 3.8.) The reduction is roughly equal to the extent of the devaluation of the UAH and the corresponding fall of incomes measured in USD. In 2010 Lviv's imports increased much faster than that of the rest of the oblast. Lviv's imports rose 39 per cent while imports to the rest of the oblast (excluding Lviv) rose just 5 per cent.

TABLE 3.8. INTERNATIONAL EXPORT AND IMPORT OF GOODS IN LVIV, 2005–10

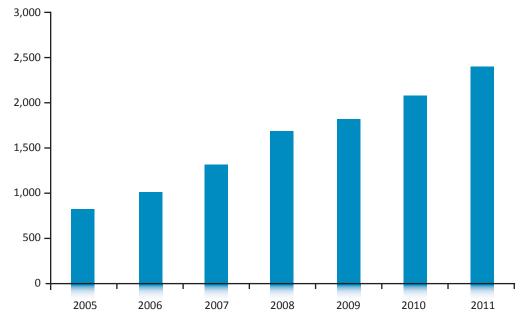
Indicator	2005	2006	2007	2008	2009	2010
Exports, USD thousands	273,109	301,791	348,592	319,206	221,001	332,571
Imports, USD thousands	502,273	606,143	793,062	1,484,665	950,017	1,320,501
Share of oblast exports, %	43.9	37.5	33.6	32.0	27.8	34.1
Share of oblast imports, %	53.8	54.2	53.8	57.7	58.6	65.1

Sources: Main statistics office in Lviv Oblast; in-house calculations.

WAGES

Nominal wage growth for staff employees in Lviv has been quite robust. The dynamics of average monthly nominal wages for staff employees over the 2005–11 period are illustrated in Chart 3.6. The chart shows that *nominal wages* per employee have steadily increased, averaging 22 per cent growth per year. Adjusted for inflation, wages grew by 70 per cent between 2005 and 2011 or 8.2 per cent per year on average.

CHART 3.6. AVERAGE NOMINAL WAGES, ALL STAFF EMPLOYEES, 2005–11 (UAH PER MONTH)



Source: Main statistics office in Lviv Oblast.

Average nominal wages for staff employees of Lviv's economy tripled over the 2004–09 period. The fastest growth between 2005 and 2009 was in the chemical industry (on average 35 per cent per year), education (31 per cent per year), and public administration (30 per cent per year). The slowest growth during the same period was in construction (on average 12 per cent per year), production of rubber and plastic products (13 per cent per year), and textile manufacture and the production of garments, furs, and fur goods (14 per cent per year).

Table 3.9 provides details on the dynamics of average monthly nominal wages over the 2005–11 period, as well as details of the differences in average monthly nominal wages between the sexes.¹¹ At the aggregate level, the difference between average wages for males and females is substantial. These differences may reflect differences in employment across economic activities and industries by males and females, in job types within any given economic activity or industry by males and females, and in wages for males and females who have similar jobs.

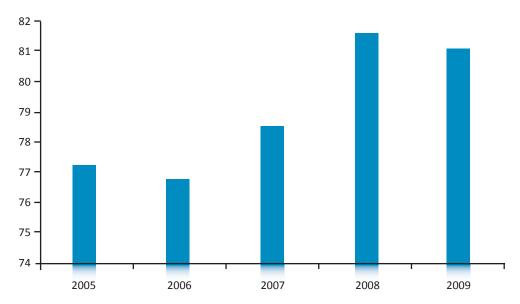
TABLE 3.9. AVERAGE NOMINAL WAGES FOR STAFF EMPLOYEES BY SEX, 2005-11 (UAH PER MONTH)

	2005	2006	2007	2008	2009	2010	2011
Employees, total	802	1,035	1,324	1,734	1,824	2,096	2,400
Males	906	1,171	1,483	1,908	2,016	n/a	n/a
Females	700	899	1,164	1,557	1,635	n/a	n/a

Source: Main statistics office in Lviv Oblast.

Although there are substantial differences between the average wages of male staff employees and female staff employees, Chart 3.7 shows that those differences shrank over the 2005–09 period.

CHART 3.7. RATIO OF AVERAGE NOMINAL WAGES OF FEMALE STAFF EMPLOYEES TO AVERAGE NOMINAL WAGES OF MALE STAFF EMPLOYEES, 2005–09 (PER CENT)



Sources: Main statistics office in Lviv Oblast; in-house calculations.

Table 3.10 provides details on average nominal wages for staff employees by economic activity and sex for 2009. The table illustrates a key point. *The differences in average nominal wages between males and females varied greatly depending upon the economic activity.* For example, the average nominal wage for female staff employees in the agriculture, hunting, and forestry sector was only 65 per cent that of male staff employees, while the average nominal wage for female staff employees in the construction sector exceeded that of male staff employees.

¹⁰ Beginning in 2010, data on wages by sector of the economy are no longer reported at the city level.

¹¹ Beginning in 2010, data on wages by sex are no longer reported at the city level.

TABLE 3.10. AVERAGE NOMINAL WAGES FOR STAFF EMPLOYEES BY ECONOMIC ACTIVITY, 2009 (UAH PER MONTH)

Economic activity	Both sexes	Males	Females
All sectors	1,824	2,016	1,635
Agriculture, hunting, and forestry	1,513	1,756	1,144
Industry	1,815	2,052	1,471
Construction	1,101	1,097	1,129
Wholesale and retail trade; repair of motor vehicles, household appliances, and personal use	1,435	1,521	1,313
Hotels and restaurants	961	1,090	906
Transport and communication	2,520	2,730	2,142
Financial activities	3,494	4,262	3,057
Real estate, renting, and services for entrepreneurs	1,676	1,764	1,565
Public administration	2,680	2,934	2,507
Education	1,810	2,043	1,695
Health care and social assistance	1,218	1,396	1,180
Other types of economic activity	n/a	n/a	n/a

Table 3.11 provides details on average nominal wages for staff employees by industry and sex for 2009. The table reemphasizes the key point made in the preceding table—while there may be large differences in nominal wages for male and female staff employees for some industries, these differences are small for other industries. For example, the average nominal wage for female staff employees in the manufacture of machinery and equipment industry was only 66 per cent that of male staff employees, while the average nominal wage for female staff employees in "other industries" was 21 per cent higher than that of male staff employees.

TABLE 3.11. AVERAGE NOMINAL WAGES FOR STAFF EMPLOYEES BY INDUSTRY, 2009 (UAH PER MONTH)

Economic activity	Both sexes	Males	Females
Industry, total	1,815	2,052	1,471
Mining industry	3,672	3,682	3,594
Food, beverages, and tobacco	2,086	2,362	1,805
Textile manufacture, production of garments, furs, and fur goods	996	1,184	966
Production of leather, leather goods, and other items	1,053	1,052	1,055
Wood processing and manufacturing of wood products, except furniture	1,459	1,526	1,306
Pulp and paper industry, publishing	1,279	1,347	1,201
Production of coke, refined petroleum products, and nuclear fuel	1,614	1,616	1,605
Chemical industry	2,467	2,421	2,510
Production of rubber and plastic products	1,108	1,149	967
Production of other non-metallic mineral products	1,379	1,452	1,185
Metallurgy and manufacture of fabricated metal products	1,154	1,196	1,021
Manufacture of machinery and equipment	2,148	2,314	1,485
Manufacture of vehicles and equipment	1,570	1,701	1,264
Other industries	1,205	1,111	1,342
Electricity, gas, and water	2,468	2,645	2,101

Source: Main statistics office in Lviv Oblast.

CONCLUSIONS

Lviv's economy is dominated by services, especially retail and wholesale trade. This sector accounts for 49 per cent of the city's sales of goods and services by non-financial enterprises and 13 per cent of total employment in the city in 2009. Within the city's industrial sector, the major industries are food and soft drinks processing (38 per cent of the total manufacturing industry in 2010), production of electronic and optical equipment (12 per cent), and transport construction (8 per cent).

Employment in the city is concentrated in large-sized enterprises (48 per cent of staff employees). Over the 2005–10 period, Lviv accounted for 35 per cent of the oblast's exports.

INDICATORS OF LVIV'S ECONOMIC PERFORMANCE

Table 3.12 compares Lviv's economic performance and Ukraine's economic performance for nine key economic indicators.

Lviv's performance over the past six years has generally been weaker than that of Ukraine in terms of FDI growth, exports per capita, and growth in exports per capita and suggest that the City of Lviv has been less open than the country as a whole. At the same time, the city has per capita FDI levels similar to that of Ukraine as a whole, revealing that foreign investors are interested in the city even if it is not a major exporter.

As the oblast's administrative center, Lviv has a high level of per capita retail sales. Per capita retail sales in the city are twice that of the country as a whole. This is typical of the situation for oblast administrative centres.

The diversified economy of the city, the presence of an educated labor force, and proximity to the country's border allowed Lviv to enjoy a relatively high level of nominal fixed investment per capita and stronger real investment growth per capita compared to that of Ukraine as a whole.

Wage growth in the city was slower than in Ukraine as a whole. However, wage levels in the city compared favorably to wage levels in the western region of Ukraine.

TABLE 3.12. KEY INDICATORS OF LVIV'S ECONOMIC SITUATION

Indicator	Lviv	Ukraine	Relative position of Lviv
Six-year average of employment growth (2005–10), %	1.1	-0.8	Stronger
Six-year average of FDI per capita growth (2005–10), $\%$	28.3	33.5	Weaker
Six-year average of FDI per capita (2005–10), USD	698.1	683.0	Average
Six-year average of exports per capita growth (2005–10), %	2.0	12.3	Weaker
Six-year average of exports per capita (2005–10), USD	397.1	1,012.7	Weaker
Six-year average of retail sales per capita (2005–10), UAH	8,380.8	4,185.3	Stronger
Six-year average of real fixed capital investment per capita growth (2005–10), %	2.6	1.6	Stronger
Six-year average of nominal fixed capital investment per capita (2005–10), UAH	4,956.0	3,409.6	Stronger
Six-year average of wage growth for staff employees (2005–10), %	23.4	28.8	Weaker

Sources: Main statistics office in Lviv Oblast; State Statistics Service of Ukraine; in-house calculations.

FISCAL PROFILE¹

Chapter 4

OVERVIEW

- Budget revenues were UAH 1,826.7 billion in 2010. Given the city's population of 753,852, this was equivalent to UAH 2,423.1 per capita.
- On a per capita basis, nominal revenues increased from UAH 1,051.7 in 2005 to 2,423.1 in 2010, implying a compound annual growth rate (CAGR) of 18.2 per cent. Adjusted for inflation, this drops to 3.4 per cent. The same distinction in growth rates is found for expenditures, which grew by a CAGR of 18.4 per cent in nominal terms but only by 3.6 per cent in real terms.
- Except for 2006, when it generated a surplus of UAH 14.5 million (1.2 per cent of revenues), the City of Lviv incurred a deficit every year from 2005 to 2010.
- Official transfers declined from 34.2 per cent of budgetary revenues in 2005 to 25.1 per cent in 2010. Over this period, the city went from being a donor to the state budget (2005–09) to a recipient of equalization grants in 2010.
- Revenues of the Budget for Development almost doubled from 2005 to 2010 (from UAH 65.6 million to UAH 128.3 million); however, the share of these revenues in total revenues declined from 8.3 to 7.0 per cent.
- Capital expenditures declined from 20.8 per cent of total expenditures (UAH 218.5 per capita) in 2005 to 7.6 per cent of the total (UAH 185.6 per capita) in 2010.
- Over the 2005–10 period, modifiable revenues averaged just 10.4 per cent of total revenues; in 2010, this figure was 10.7 per cent, which was equivalent to UAH 260.3 per capita.
- Over the 2005–2010 period, the city incurred debt service from 2007 to 2010. During this period debt service averaged 1.2 per cent of operating revenues.

BUDGET SURPLUS/DEFICIT

The city incurred a deficit in five of six years over the 2005–10 period. (See Chart 4.1.) The largest deficit was in 2009 (UAH 123.8 million), although this declined to UAH 19.6 million the following year. The city borrowed from external sources in 2007 and 2009.

¹ Unless otherwise noted, all figures and statistics in this report are based upon budget information from the State Treasury Reports on Local Budgets Execution for the City of Lviv for 2005–10, demographic data from the main statistics office in Lviv Oblast, CPI data from the State Statistics Service of Ukraine, and in-house calculations using data from these three sources. In some cases, percentage shares do not add up to 100 due to rounding.

40 . 1 20 0 0 -1 -20 **UAH** millions -2 PER CENT -40 -3 -60 -4 -80 -5 -100 -6 -120 -7 -140 -8 2005 2006 2007 2008 2009 2010 Surplus/deficit (left scale) Proportion of total revenues (right scale)

CHART 4.1. BUDGET SURPLUS/DEFICIT, 2005-10 (UAH MILLIONS AND PER CENT)

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; in-house calculations.

REVENUES

From 2005 to 2010, growth in budgetary revenues (CAGR) was 18.2 per cent. (See Chart 4.2.) In 2010, total revenues declined slightly to UAH 1.826 billion relative to the previous year, as official transfers fell by 169.5 million to UAH 457.9 million. Between 2005 and 2010 32.2 per cent of the city's total revenues consisted of official transfers.

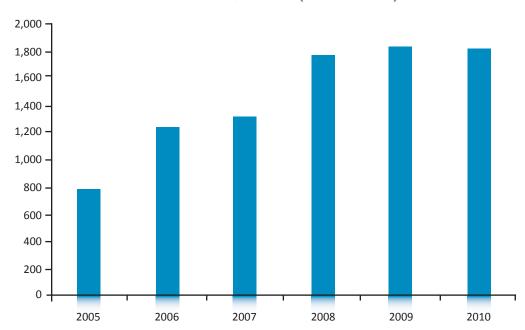


CHART 4.2. REVENUES, 2005-10 (UAH MILLIONS)

Source: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10.

Nominal budget revenues per capita grew from UAH 1,051.7 in 2005 to UAH 2,423.1 in 2010 (CAGR of 18.2 per cent). Adjusted for inflation,² total revenues increased from UAH 926.6 in 2005 to UAH 1,092.8 in 2010 (CAGR of 3.4 per cent). Indeed, between 2008 and 2010, while nominal revenues per capita were relatively steady (from UAH 2,352.1 to 2,423.1), the real (i.e., adjusted for inflation) data show that revenues per capita decreased (from UAH 1,345.0 to UAH 1,092.8 per capita). (See Chart 4.3.)

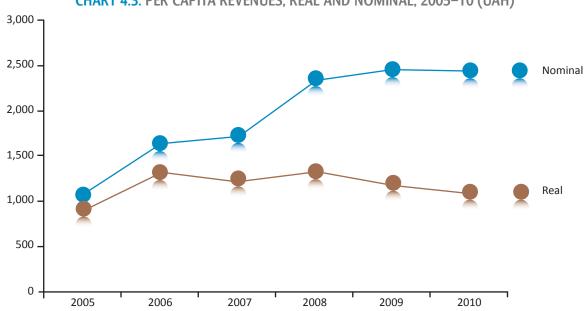


CHART 4.3. PER CAPITA REVENUES, REAL AND NOMINAL, 2005–10 (UAH)

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; State Statistics Service of Ukraine (CPI data); in-house calculations.

As with other Ukrainian cities, the largest portion of Lviv's budgetary revenues consists of tax revenues and official transfers. In 2010, tax revenues represented 59.6 per cent of total revenues and official transfers 25.1 per cent. Non-tax revenues (e.g., administrative charges, fees, fines, various charges) made up just 7.9 per cent of total revenues, while revenues from financial capital operations—mainly sales of land and non-tangible assets—accounted for 7.0 per cent. Revenues from targeted funds (e.g., payment for pollution charges) represented less than 0.4 per cent of budget revenues. (See Chart 4.4.)

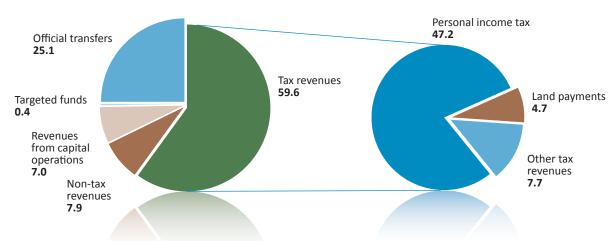


CHART 4.4. REVENUES BY PRINCIPAL CATEGORY, 2010 (PER CENT)

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv; in-house calculations.

 $^{^{2}}$ The cumulative inflation index used for this calculation was developed using CPI data from the State Statistics Service of Ukraine for the 2005–10 period.

From 2005 to 2010, tax revenues consisted mainly of personal income tax revenues (UAH 861.8 million in 2010, or 75.7 per cent of total tax receipts on average) and land payments (UAH 85.4 million in 2010 or 7.9 per cent on average). (See Chart 4.5.)

1,000 900 Personal income tax 800 700 Land payments 600 500 400 300 200 100 0 2005 2006 2007 2008 2009 2010

CHART 4.5. PERSONAL INCOME TAX AND LAND PAYMENTS, 2005–10 (UAH MILLIONS)

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005-10; in-house calculations.

The growth in personal income tax revenues from 2005 to 2010 implies a CAGR of 25.9 per cent. Continuous growth of this revenue item was interrupted only once during this period. In 2009, revenues from personal income taxes declined to UAH 763.7 million from UAH 784.0 million in 2008. This reflects the sharp economic downturn that occurred in Ukraine that year which saw GDP contract by 15 per cent in real terms.³ With the exception of 2007, land payments increased continuously from 2005 through 2010 (from UAH 39.5 million to UAH 85.4 million), implying a CAGR of 16.7 per cent.

From 2005 to 2010, while the total value⁴ of official transfers from the state to the municipal budget increased from UAH 270.3 million to UAH 457.9 million, the share of official transfers in total revenues decreased from 34.2 to 25.1 per cent. (See Table 4.1.) This decline was mostly due to a drop in all categories of government funding save for "Subventions".







³ International Monetary Fund Country Report No. 10/262 (August 2010), p. 33.

⁴ Consistent with Ukrainian accounting conventions, revenues from budget codes 41020300, 41020900, and 41030500 have been included in "Other Grants and Subventions." Line item 41020300 ("Equalization Payments to Raions") has also been included in "Other Subventions."

TABLE 4.1. STRUCTURE OF OFFICIAL TRANSFERS, 2005-10 (UAH MILLIONS AND PER CENT)

	2005	2006	2007	2008	2009	2010
Total official transfers	270.7	533.6	357.4	523.0	627.5	457.9
Proportion of total revenues, %	34.2	42.9	27.2	29.5	34.1	25.1
Grants	19.5	4.9	31.5	9.6	25.9	9.5
Proportion of total revenues, %	2.5	0.4	2.4	0.5	1.4	0.5
of which equalization grants	0.0	0.0	0.0	0.0	0.0	9.5
proportion of total revenues, %	0.0	0.0	0.0	0.0	0.0	0.5
Subventions	156.0	327.7	269.3	443.2	489.9	440.9
Proportion of total revenues, %	19.7	26.3	20.5	25.0	26.6	24.1
Funds directed to Budget for Development	2.0	55.5	52.3	66.9	105.0	0.0
Proportion of total revenues, %	0.3	4.5	4.0	3.8	5.7	0.0
"Other grants and subventions"	93.3	145.5	4.4	3.3	6.6	7.6
Proportion of total revenues, %	11.8	11.7	0.3	0.2	0.4	0.4
Memorandum:						
Total revenues	791.2	1,244.2	1,314.5	1,774.7	1,841.2	1,826.7
Transfers to the Equalization Fund	39.6	39.6	60.8	86.2	59.6	0.0

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; in-house calculations.

Under Ukraine's regulations for municipal finances, a city may be deemed either a contributor to or a recipient from the equalization fund. From 2005 until 2009, Lviv was a contributor to the state budget for equalization. In 2010, the city's status changed to that of a recipient, when it received a UAH 9.5 million equalization grant from the central government.

If they have operating surplus funds, Ukrainian municipalities may transfer revenues from a General Fund to the Budget for Development (via a Special Fund). Between 2005 and 2010, transfers from a General Fund to the Budget for Development (via a Special Fund) averaged 3.0 per cent of budget revenues, with the largest individual transfer—UAH 105 million, which was equivalent to 5.7 per cent of total revenues—occurring in 2009. While Lviv's financial situation allowed these transfers to occur from 2005 through 2009, the city's financial situation was such that it could not make transfers to the Budget for Development in 2010.

SPECIAL FUND

The Budget Code of Ukraine states that the budget can be divided into a General Fund and a Special Fund. (See Chart 4.6.) The Special Fund includes all revenues dedicated or earmarked for certain budget expenditures, including own revenues from budgetary institutions such as libraries and hospitals. All revenues not designated for the Special Fund are put in the General Fund.

1,800 1,600 General Fund 1,400 Special Fund 1,200 1,000 800 600 400 200 0 2005 2006 2007 2008 2009 2010

CHART 4.6. GENERAL AND SPECIAL FUND REVENUES, 2005-10 (UAH MILLIONS)

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005-10; in-house calculations.

The Special Fund is mainly funded by own revenues from budget-funded institutions, subventions, and revenues from the Budget for Development (including internal borrowing.) (See Table 4.2.) The total revenues of Lviv's Special Fund averaged 21.3 per cent of total revenues over the 2005–10 period. Regarding the stability of Special Fund revenues during this period, revenues from the property tax portion were the most stable (standard deviation of only 3.4 per cent), followed by own revenues of the budget funded institutions (standard deviation of 4.5 per cent), and subventions (standard deviation of 11.8 per cent). Of all Special Fund components, the Budget for Development varied the most (standard deviation of 27.1 per cent).

TABLE 4.2. SPECIAL FUND, 2005–10 (UAH MILLIONS AND PER CENT)

	2005	2006	2007	2008	2009	2010
Budget for Development	65.6	170.8	226.0	201.3	417.9	128.3
of which borrowing	0.0	0.0	92.0	0.0	202.3	0.0
Property taxes	11.2	13.7	18.8	20.9	28.8	39.9
Own revenues from budget funded institutions	22.7	25.8	35.2	47.3	45.2	56.2
Targeted funds	8.3	11.1	46.1	24.1	11.1	7.9
Subventions	24.6	155.8	13.6	125.9	96.4	62.5
Other revenues	0.7	5.4	1.0	0.8	0.8	0.3
Total	133.1	382.5	248.8	420.3	397.9	295.2
Memorandum:						
Total revenues	791.2	1,244.2	1,314.5	1,774.7	1,841.2	1,826.7
Proportion of total revenues, %	16.8	30.7	18.9	23.7	21.6	16.2

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005-10; in-house calculations.

The high variability of revenues from subventions is the result of large, earmarked subventions from the central government to individual households for the repayment of debts incurred for the purchase of heating, water, and sewage fees in 2006, 2008, and 2009. (See Table 4.2.) These subventions were not paid in 2007, leading to a significant decline in subventions that year. In 2008 and 2009, these subventions amounted to 24 and 19 per cent of total subventions, respectively. The program did not operate in 2010.

BUDGET FOR DEVELOPMENT

The Budget for Development is a component of the Special Fund. Revenues from the Budget for Development are earmarked for infrastructure development purposes, including debt repayments (for entities that have debt), subway and gas pipeline construction, and other designated purposes. For this reason, the Budget for Development plays a significant role in the social and economic development of Ukrainian cities.

The Budget for Development represents, on average, 13.4 per cent of the total budget revenues. (See Table 4.3.) By order of contribution, between 2005 and 2010, the highest source of revenues to the Budget for Development was from asset sales (39.2 per cent), followed by land sales (26.1 per cent), funds transferred from a General Fund (19.5 per cent), loans (14.9 per cent), and investment subventions (0.32 per cent).

TABLE 4.3. BUDGET FOR DEVELOPMENT, 2005-10 (UAH MILLIONS AND PER CENT)

	2005	2006	2007	2008	2009	2010
Receipts from asset sales	15.2	82.8	55.4	86.4	93.8	94.0
Revenues from land sales	48.4	32.5	25.8	46.6	15.3	33.1
Investment subventions	0.0	0.0	0.5	1.4	1.4	0.9
Borrowings	0.0	0.0	92.0	0.0	202.3	0.0
Transfers from the General Fund	2.0	55.5	52.3	66.9	105.0	0.0
Total	65.6	170.8	226.0	201.3	417.9	128.3

Memorandum:						
Total revenues	791.2	1,244.2	1,314.5	1,774.7	1,841.2	1,826.7
Proportion of total revenues, %	8.3	13.7	17.2	11.3	22.7	7.0

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; in-house calculations.

In both 2007 and 2009, revenues to the Budget for Development were augmented by borrowings from external sources. Cumulative transfers from the General Fund to the Budget for Development totaled UAH 281.7 million over the 2005–2009 period. This suggests that the city consistently generated funds it could devote to the Budget for Development. The only exception was 2010, when no transfer occurred, which is likely a result of the city's status changing from that of a donor to a recipient of equalization payments.

MODIFIABLE REVENUES

Modifiable revenues are taxes or levies that the executive bodies of local self-governance units can decide to modify at will. These include taxes and fees such as local taxes and duties, as well as income derived from leasing land or buildings. The share of modifiable revenues in Lviv's total revenues averaged 10.4 per cent over the 2005–10 period.

Lviv's modifiable revenues consist mainly of land payments (UAH 85.4 million in 2010, which is equivalent to 43.5 per cent of all modifiable revenues in 2010); proceeds of the unified single tax on small entrepreneurs (UAH 54.2 million, or 27.6 per cent of the total) and revenues from leasing community property (UAH 37.5 million, or 19.1 per cent). (See Table 4.4.)

⁵ In accordance with the new Budget Code of Ukraine, adopted in 2010, modifiable revenues include the unified single tax on small entrepreneurs.

TABLE 4.4. MODIFIABLE REVENUES, 2005-10 (UAH MILLIONS AND PER CENT)

	2005	2006	2007	2008	2009	2010
Land payments	39.5	48.0	47.4	64.8	77.9	85.4
Local taxes and duties	12.4	13.6	16.3	18.1	18.4	19.0
Receipts from community property lease	12.2	15.0	20.5	31.4	36.6	37.5
Unified single tax on small entrepreneurs	38.4	38.6	46.5	54.3	50.6	54.2
Total	102.5	115.2	130.7	168.6	183.5	196.1
Memorandum:						
Total revenues	791.2	1,244.2	1,314.5	1,774.7	1,841.2	1,826.7
Proportion of total revenues, %	13.0	9.3	9.9	9.5	10.0	10.7

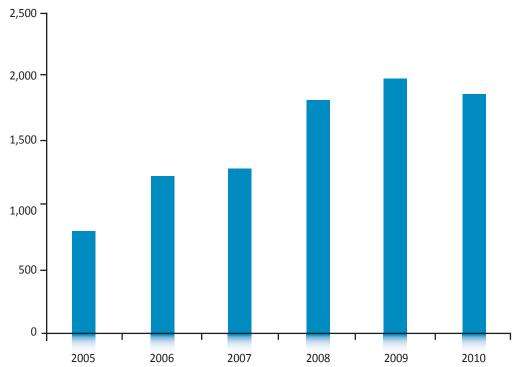
Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; in-house calculations.

The proportion of local taxes and duties to total modifiable revenues is stable, averaging 11 per cent over the 2005–10 period. During this time, the variability of this tax revenue component was extremely low (standard deviation of just 1.15 per cent).

EXPENDITURES

Lviv's expenditures grew at a CAGR of 18.5 per cent from 2005 to 2010, from UAH 790.9 million in 2005 to UAH 1.85 billion in 2010. (See Chart 4.7.)

CHART 4.7. EXPENDITURES, 2005–10 (UAH MILLIONS)



Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; in-house calculations.

Nominal expenditures on a per capita basis more than doubled from 2005 to 2010—from UAH 1,051.3 to UAH 2,448.8. This increase suggests a CAGR of 18.4 per cent. Adjusted for inflation, expenditures expanded far less quickly—from UAH 926.2 to UAH 1,104.4—suggesting a CAGR of 3.6 per cent. (See Chart 4.8.)

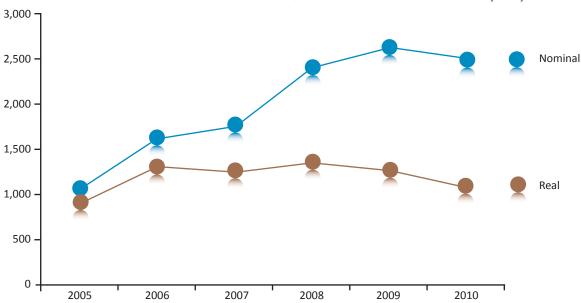


CHART 4.8. PER CAPITA EXPENDITURES, REAL AND NOMINAL, 2005–10 (UAH)

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; State Statistics Service of Ukraine (CPI data); in-house calculations.

In 2010, expenditures consisted mainly of five broad categories: education (28.0 per cent), social protection and security (23.7 per cent), health care (18.2 per cent), housing and municipal economy (6.4 per cent), and construction (5.2 per cent). (See Chart 4.9.)

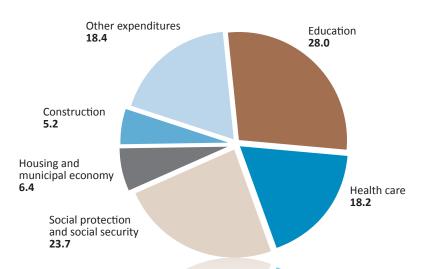


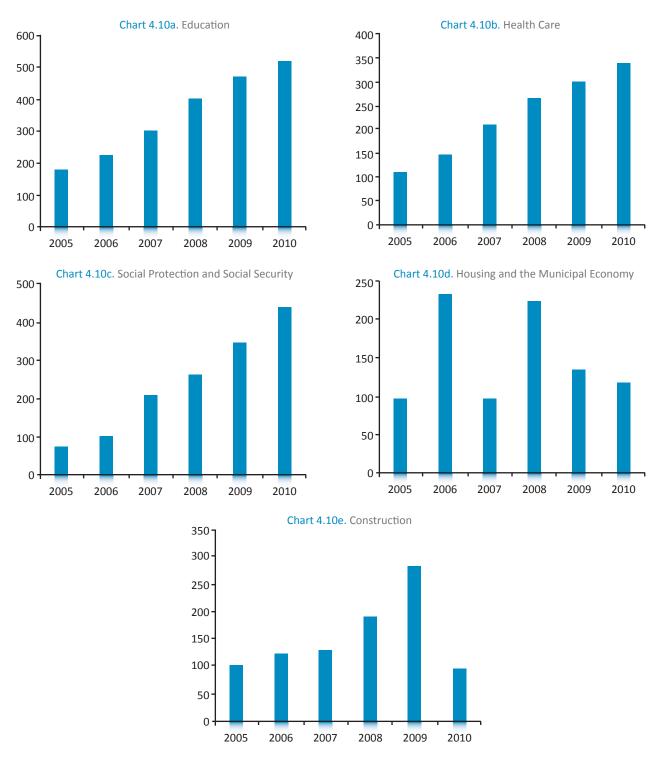
CHART 4.9. EXPENDITURES BY PRINCIPAL CATEGORY, 2010 (PER CENT)

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv; in-house calculations.

The fastest growth in expenditures occurred in the social protection and social security category, which rose from UAH 69.6 million in 2005 (8.9 per cent of total expenditures) to UAH 436.9 million in 2010 (23.7 per cent of the total), which suggests a CAGR of 44.4 per cent. (See Chart 4.10.) This increase—which also occurred in many cities across Ukraine at the same time—was due to a review of the basic social standards introduced by the state. Health care ex-

penditures also increased rapidly, by 25.1 per cent yearly (CAGR)—from UAH 109.8 million in 2005 to UAH 336.5 million in 2010. While education retained the distinction of being the largest single expenditure both in 2005 (22.9 per cent of the total) and 2010 (28 per cent), its rate of growth was slightly lower than the previously mentioned sectors (CAGR of 23.4 per cent).

CHART 4.10. LARGEST EXPENDITURES BY CATEGORY, 2005–10 (UAH MILLIONS)



Source: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10.

Expenditures on housing and the municipal economy in Lviv fluctuated widely from 2005 to 2010, varying from a high of 19.2 per cent of total expenditures in 2006 to a low of 6.4 per cent in 2010. As with other municipalities in Ukraine, these peaks and troughs were caused by payments to households for the repayment of debts they incurred to pay for heat,

power, water, and sewage. These debts were the result of the difference between the actual cost of heat, power, water, and drainage services and the tariffs that had been approved by state authorities and local government bodies.

Expenditures on construction increased rapidly from 2005 to 2009 (from UAH 101.5 million to UAH 286.6 million), peaking in 2009 at 14.6 per cent of total expenditures as a result of a boost in investment expenditures. However, in 2010, total construction expenditures declined to less than the 2005 level (UAH 96.5 million versus UAH 101.5 million).

Between 2007 and 2010 the City of Lviv also incurred expenditures to service its bonds. These expenditures, averaging UAH 19.6 million annually, were equivalent to 1.2 per cent of revenues (on average); and relate to the bonds that the City of Lviv had outstanding during that time.

Total expenditures may also be viewed in terms of operating and capital expenditures. The share of capital expenditures as a proportion of the total varied from year to year, although from 2005 through 2009 it averaged over 24.1 per cent of total expenditures before declining to 7.6 per cent in 2010 (UAH 139.9 million). (See Chart 4.11.)

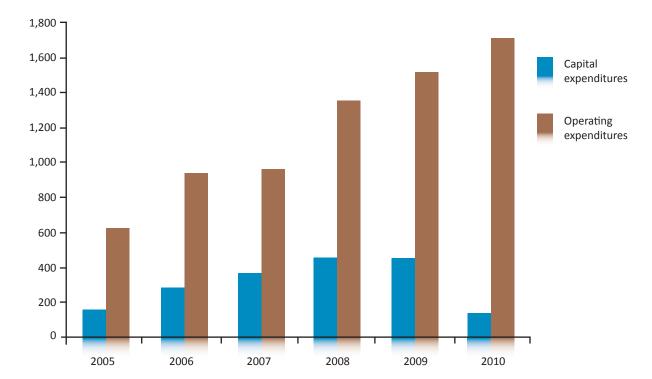


CHART 4.11. OPERATING AND CAPITAL EXPENDITURES, 2005–10 (UAH MILLIONS)

Source: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10.

INDICATORS OF LVIV'S FISCAL HEALTH

The city's two strengths are its relative low dependence on budget transfers compared to operating revenues (a ratio of 27.3 per cent versus a threshold of 33 per cent), along with its low level of debt servicing. While both attributes earn the city a "strong" rating, these attributes are offset somewhat by the relatively low level of modifiable revenues (11.7 per cent) and capital expenditures relative to total expenditures (7.6 per cent). (See Table 4.5.) Both attributes earn the city a "neutral" rating. Moreover, four of the city's attributes may be considered "weak": a per capita deficit of UAH -25.9; two expenditure ratios (total expenditures to total revenues and operating expenditures to operating revenues) suggest that expenditures are greater than revenues; and the negative ratio of operating surplus to tax revenues. Overall, two "strong," two "neutral," and four "weak" indicators suggest a potentially weakened fiscal position in 2010.

TABLE 4.5. INDICATORS OF THE FISCAL HEALTH OF LVIV'S CITY BUDGET

	2005	2006	2007	2000	2000	2010		Benchmark			Position	
	2005	2006	2007	2008	2009	2010	Str	ong	W	eak	(2010)	
Deficit/surplus per capita, UAH	-0.7	19.3	-25.5	-45.5	-164.2	-25.9	>	0	<	0	Weak	
Total expenditures/ total revenues, %	100.0	98.8	101.2	101.7	106.7	101.1	<	95	>	100	Weak	
Modifiable revenues/ operating revenues, %	15.1	11.4	11.6	11.4	11.3	11.7	>	40	<	10	Neutral	
Operating expenditures/operating revenues, %	92.5	92.8	85.3	90.9	93.2	101.7	<	100	>	100	Weak	
Operating surplus/tax revenues, %	12.5	13.7	21.9	13.7	11.3	-2.6	>	5	<	2	Weak	
Budget transfers/operating revenues, %	40.0	52.7	31.7	35.2	38.8	27.3	<	33	>	50	Strong	
Capital expenditures/ total expenditures, %	20.8	23.6	27.8	25.2	23.2	7.6	>	15	<	5	Neutral	
Debt servicing/operating revenues, %	0.0	0.0	0.1	0.6	1.2	2.9	<	10	>	15	Strong	
Debt servicing/capita, UAH	0.0	0.0	1.7	11.8	25.6	64.7	No data	n/a	No data	n/a	n/a	

Sources: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10; in-house calculations.

ATTACHMENT 1. MAIN FISCAL INDICATORS OF THE CITY OF LVIV, 2005–10

	20	05	20	06	20	07	20	08	20	09	20	10
Main budget indicators	Total, UAH mil	Per capita, UAH										
Revenues												
Budget revenues, total	791.2	1,051.7	1,244.2	1,650.6	1,314.5	1,741.7	1,774.7	2,352.1	1,841.2	2441.5	1,826.7	2,423.1
Budget revenues growth, year-over-year, %	n/a	n/a	57.3		5.6		35.0		3.7		-0.8	
of which city revenues without transfers	520.4	691.8	710.6	942.7	957.1	1,268.1	1,251.7	1,659.0	1,213.7	1,609.4	1,368.8	1,815.7
of which official transfers	270.7	359.9	533.6	707.8	357.4	473.6	523.0	693.1	627.5	832.0	457.9	607.4
of which grants	110.2	146.5	142.0	188.3	31.7	42.0	9.6	12.7	26.6	35.3	10,5	13,9
of which subventions	158.5	210.7	336.1	445.9	273.5	362.4	446.5	591.8	495.8	657.5	447,4	593,5
of which funds directed to Budget for Development from the general budget fund	2.0	2.7	55.5	73.6	52.3	69.3	66.9	88.6	105.0	139.3	0.0	0.0
Share of total revenues,	%											
of which city revenues without transfers, %	65.8		57.1		72.8		70.5		65.9		74.9	
of which official trans- fers, %	34.2		42.9		27.2		29.5		34.1		25.1	
of which grants, %	13.9		11.4		2.4		0.5		1.4		0.6	
of which subventions, %	20.0		27.0		20.8		25.2		26.9		24.5	

of which funds directed to Budget for Develop- ment from the general budget fund, %	0.3		4.5		4.0		3.8		5.7		0.0	
Main city budget revenue of which city revenues	e items 520.4	691.8	710.6	942.7	957.1	1,268.1	1,251.7	1,659.0	1,213.7	1,609.4	1,368.8	1,815.7
of which personal income tax	272.3	362.0	381.5	506.2	588.3	779.5	784.0	1,039.1	763.7	1,012.7	861.8	1,143.2
of which tax on own- ers of the vehicles and other self-propelled machines and mecha- nisms	11.2	15.0	13.7	18.2	18.8	25.0	20.9	27.7	28.8	38.2	39.9	52.9
of which land pay- ments	39.5	52.5	48.0	63.6	47.4	62.8	64.8	85.9	77.9	103.3	85.4	113.3
of which payment for trade patent for some types of entrepre- neurial activity	26.7	35.5	31.6	41.9	31.7	42.0	30.2	40.1	11.7	15.5	10.4	13.9
of which local taxes and fees	12.4	16.5	13.6	18.1	16.3	21.6	18.1	24.0	18.4	24.4	19.0	25.3
of which unified single tax for small entrepre- neurs	38.4	51.1	38.6	51.2	46.5	61.7	54.3	72.0	50.6	67.1	54.2	72.0
of which receipts from lease payment for us- ing integral property complexes and other state property	12.2	16.2	15.0	19.9	20.5	27.1	31.4	41.6	36.6	48.6	37.5	49.8
of which payments for services provided by institutions subsidized from the budget	17.1	22.7	20.1	26.6	25.1	33.2	32.0	42.5	32.9	43.6	38.1	50.5
of which receipts from disposal of property owned by the Au- tonomous Republic of Crimea and property owned by municipali- ties	15.2	20.2	82.8	109.8	55.4	73.4	86.4	114.5	93.8	124.4	94.4	125.2
of which receipts from land sales	48.4	64.4	32.5	43.1	25.8	34.2	46.5	61.7	15.3	20.3	33.1	43.9
of which other budget	26.9	35.8	33.3	44.2	81.2	107.5	82.9	109.9	84.0	111.4	94.9	125.9
of which official trans- fers	270.7	359.9	533.6	707.8	357.4	473.6	523.0	693.1	627.5	832.0	457.9	607.4
General and Special Fund	ds revenu	es										
General Fund revenues	658.0	874.7	861.7	1.143.2	1.065.7	1,412.0	1.354.4	1.795.0	1,443.3	1,913.9	1,531.5	2,031.6
Special Fund revenues	133.1	177.0	382.5	507.4	248.8	329.7	420.3	557.1	397.9	527.6	295.2	391.6
of which Budget for Development, %	8.29	2,7.0	13.70	307.4	17.20	323.7	11.34	337.1	22.70	327.0	7.02	331.0
Expenditures												
Budget expenditures, total	790.9	1,051.3	1,229.3	1,630.8	1,330.4	1,762.8	1,805.1	2,392.5	1,964.6	2,605.1	1,846.0	2,448.8
Budget expenditures growth, year-over-year, %	n/a		55.4		8.2		35.7		8.8		-6.0	
Main budget expenditur	e items											
of which public ad- ministration	26.2	34.9	43.6	57.8	74.0	98.0	92.7	122.9	81.1	107.5	98.5	130.7

of which law enforce-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ment activities and state security mainte-												
nance												
of which education	181.0	240.6	225.8	299.6	298.8	395.9	403.5	534.7	468.6	621.3	517.6	686.6
of which health care	109.8	146.0	146.2	193.9	208.1	275.7	263.9	349.8	298.8	396.2	336.5	446.4
of which social	69.6	92.6	96.0	127.4	206.2	273.2	260.6	345.3	344.2	456.4	436.9	579.5
protection and social security												
of which housing and municipal economy	96.5	128.2	235.6	312.6	97.0	128.5	224.2	297.2	134.2	178.0	118.9	157.8
of which culture and arts	14.5	19.2	20.5	27.2	29.4	38.9	44.1	58.4	47.3	62.8	55.2	73.2
of which mass media	0.7	0.9	0.7	0.9	0.7	0.9	1.1	1.4	0.9	1.2	0.9	1.2
of which physical edu- cation and sport	3.2	4.3	3.7	4.9	5.1	6.7	7.7	10.2	10.4	13.9	8.4	11.2
of which construction	101.5	134.9	124.0	164.4	130.8	173.4	191.9	254.4	286.6	380.1	96.5	128.0
of which agribusiness and forestry, fishing, and hunting	0.6	0.8	0.6	0.8	0.5	0.6	0.7	1.0	1.0	1.3	0.4	0.6
of which transport, public road system, communications, telecommunications, and IT	27.5	36.5	38.8	51.5	44.1	58.5	52.5	69.6	69.8	92.5	73.0	96.9
of which other services related to economic activity	14.0	18.6	51.2	68.0	67.5	89.4	57.8	76.6	23.3	30.8	31.4	41.7
of which environmen- tal protection and nuclear security	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.1	0.0	0.0
of which prevention and elimination of	0.9	1.2	1.0	1.3	0.9	1.2	5.4	7.2	1.1	1.5	1.0	1.3
emergency situations and disaster conse- quences												
of which debt service	0.0	0.0	0.0	0.0	1.3	1.7	8.9	11.8	19.3	25.6	48.8	64.7
of which targeted funds	7.7	10.2	10.3	13.6	42.1	55.8	31.2	41.4	8.5	11.3	10.6	14.1
of which expendi- tures not referred to main groups	0.7	1.0	1.0	1.3	4.5	5.9	4.7	6.3	3.1	4.2	9.5	12.7
of which other budget expenditures	136.5	181.5	230.5	305.8	119.7	158.6	153.8	203.9	166.4	220.6	1.8	2.4
General and Special Fun	ds expend	litures										
General Fund expendi-	663.2	881.5	845.3	1,121.4	1,044.2	1,383.6	1,348.2	1,786.9	1,477.9	1,959.7	1,557.5	2,066.1
tures	127.7	160.0					4500	605.6	486.7			·
Special Fund expendi- tures	127.7	169.8	384.0	509.4	286.2	379.2	456.9	605.6	486.7	645.4	288.5	382.7
Structure of the budget						4.070.0	10101	1 700 5	1 500 5	2 224 5	1.706.1	2.052.4
Operating expenditures, total	626.5	832.8	939.6	1,246.5	960.7	1,273.0	1,349.4	1,788.5	1,509.5	2,001.6	1,706.1	2,263.1
Capital expenditrues, total	164.3	218.5	289.7	384.3	369.7	489.9	455.7	604.0	455.1	603.5	139.9	185.6
Budget surplus/deficit												
Budget surplus/deficit	-0.5	-0.7	14.5	19.3	-19.2	-25.5	-34.4	-45.5	-123.8	-164.2	-19.6	-25.9
as % of revenues	-0.1	n/a	1.2	n/a	-1.5	n/a	-1.9	n/a	-6.7	n/a	-1.1	n/a
Total population at the beginning of the year, number of people	752,285		753,804		754,713		754,501		754,127		753,852	

Source: State Treasury Reports on Local Budgets Execution for City of Lviv 2005–10.

Note: In this Attachment in calculations the funds on the code 41010000 are included into the code 41020000 and those revenues are considered as grants.

Building Capacity in Evidence-Based Economic Development in Ukrainian Oblasts and Municipalities Project (EBED project) is a five-year project (2010–2015) that is funded by the Canadian International Development Agency and managed by The Conference Board of Canada. The project provides targeted support to build capacity in evidence-based economic development planning in Ukrainian oblasts and municipalities.

The EBED project is part of the Program of Technical Cooperation with Ukraine run by the Canadian government that emphasizes capacity building at the municipal, oblast, and central government levels. Relationships established with the help of the EBED project create opportunities for the exchange of experiences, methodologies, and knowledge related to economic development planning processes.

The EBED project aims to encourage sustainable development of Ukrainian oblasts and municipalities by building the capacity of local authorities to use quantitative analysis and forecasting tools in economic development planning.

The project provides assistance to Dnipropetrovsk and Lviv oblasts as well as to six Ukrainian cities (Lviv, Chervonohrad, Drohobych, Nikopol, Kryvyi Rih, and Dnipropetrovsk).

In addition to producing a comprehensive analytical report on social and economic development in the above mentioned Ukrainian oblasts and cities, the EBED project will aid the cities and oblasts in designing improved strategic development plans based on benchmarking (comparative analysis) as well as on demographic, fiscal, and economic forecasts.

Thanks to the EBED project, Ukrainian governmental institutions will have an opportunity to engage with Canadian experts and learn from Canadian experience. This will help to identify evidence-based priorities in the economic development of Ukrainian oblasts and municipalities as well as to design realistic economic development plans for Ukrainian oblasts and municipalities. The project also enhances the capacity of officials to defend city and oblast interests before the state government as well as to more effectively attract foreign investment, loans, and donor assistance for economic development.

The EBED project is funded by the Canadian International Development Agency



Agence canadienne de développement international