

— CITY PROFILE —

KRYVYI RIH

— DEMOGRAPHIC • ECONOMIC • FISCAL —



Building Capacity in Evidence-Based Economic Development
Planning in Ukrainian Oblasts and Municipalities
International technical assistance project



Greetings:

Kryvyi Rih is a city with huge industrial, economic, social, and cultural potential. In order to protect and enhance the quality of life of its residents, we need to ensure that management decisions are based on reliable evidence. This requires detailed monitoring of key indicators of development.

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 Kryvyi Rih. The information provided here is to be used for making evidence-based management decisions and also provides a solid base for productive entrepreneurial initiatives.

The information provided in the Kryvyi Rih City Profile will help the city as it works to attract the investment required for economic development in all areas. The accurate and detailed information enables investors to determine where investment efforts should be focused and provides the knowledge they need to identify the most promising investment opportunities.

I want to thank everyone in the structural subdivisions of the executive committee of Kryvyi Rih City Council who participated in the preparation of the city profile.

On behalf of the executive committee of Kryvyi Rih and myself, I would like also 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.

It is my sincere hope that the Kryvyi Rih City Profile will be a useful tool for all the citizens, city officials, business, investors, managers, students, and other individuals who care about the future of our city.

Sincerely,
Mayor of the City of Kryvyi Rih
Yurii Vilkul

Kryvyi Rih 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).

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All the photos used in this document were taken in Kryvyi Rih 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).

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INTRODUCTION

Chapter 1

OVERVIEW

- The first official historical record of the city ● 1775
- Officially recognized as a city ● 1919
- Resident population ● 666,393*
- Population density ● 1,553 people per sq. km*
- City's share in Ukraine's population ● 1.46%*
- Area ● 430 sq. km
- Number of districts ● 7
- Key industries ● mining, metallurgy
- Average annual temperature ● +8.5°C

ADMINISTRATIVE AND TERRITORIAL DIVISION



Kryvyi Rih comprises 7 districts (Dzerzhynskiy, Dovhyntsivskiy, Inhuletskyi, Zhovtnevyi, Saksahanskyi, Ternivskiy, and Tsentralno-Miskiy).

Based on administrative and territorial division, the city also includes 3 communities (Avanhard, Hirnytske, and Kolo-miitseve) **and 2 villages** (Novoivanivka and Ternuvatyi Kut).

*Data as of January 1, 2011.

LOCAL SELF-GOVERNANCE

The system of local self-governance includes the mayor, city council, executive committee, other executive bodies of city council, and **7 district councils and their executive bodies**.

The Kryvyi Rih City Council comprises 90 members who work in 7 permanent commissions. The executive committee of the Kryvyi Rih City Council includes 10 members. Kryvyi Rih City Council has 32 executive bodies including 18 departments, 11 units, 2 committees, and 1 service. The executive bodies of the City Council have 546 staff members (as of July 1, 2011) and the executive bodies of district councils have 968 staff members.

Since February 2010, the Kryvyi Rih Resource Centre has been in place, making it possible for entrepreneurs and citizens to settle most city regulatory issues (receiving various permissions, approvals, and other administrative services) from their offices and homes.

Since 2005, Kryvyi Rih has been introducing a quality management system for administrative services. The first step was to establish the Visa Municipal Bureau, which helps entrepreneurs and companies with permits and licences. Since May 2007, the new system has been in place at Kryvyi Rih Registration Chamber.

In December 2007, the executive committee of the Kryvyi Rih City Council was awarded the DSTU (State Standards of Ukraine) ISO 9001-2001 certificate.

HISTORICAL BACKGROUND

The first official record of Kryvyi Rih was found in the *List of Post Houses Established Along the Inhulets River from Kremenchuk to Kherson* and dates back to 1775.

The city was named Kryvyi Rih (Ukrainian for “curved horn”) because the cape on the confluence of the Inhulets and the Saksahan rivers where the first settlement was founded has the shape of a curved horn. However, another version states the city was named after a cossack whose nickname was Kryvyi Rih and who settled in this picturesque place and founded the first settlement.



In the 18th century, Kryvyi Rih was a cossack settlement within Inhuletska palanka of Zaporizka Sich. Inhuletska palanka was created in 1734 and Kryvyi Rih was mentioned in the list of villages and settlements included in that palanka. **In 1775, a post house was established in Kryvyi Rih** and five cossacks who were sent to work there lived in temporary dugouts. So, the modern City of Kryvyi Rih started from a small settlement around that post house. In the first third of the 19th century, Kryvyi Rih became a military base. **In 1860, it was officially recognized as a town of Kherson Province (now Kherson Oblast) and in 1919 it became a district centre of Katerynoslav Province (now Dnipropetrovsk Oblast).**

At the end of the 19th century, iron deposits were found in the town and its suburbs. After confirmation of significant iron deposits, the Saksahanskyi Mine was established in 1881. It was the first mine in the Kryvyi Rih region. In 1882, construction of the Kryvyi Rih railroad started. This railroad played an important role in boosting industrial development in the region.

In early 1918, the Donetsk and Kryvyi Rih Soviet Republic was created in this region. Metallurgy continued to develop, even during the Civil War in 1919–20. At this time, an administration system in the mining industry was formed. In 1924, construction of a power plant started in Kryvyi Rih. **Soviet industrialization significantly boosted the development of a more modern ore mining and processing sector.** The town continued to grow, merging together small villages that had sprung up around the mines. This merger together with its complex terrain has meant that industrial and residential areas are not clearly separated in the city.

During the Second World War, the city was occupied by Nazi forces from August 1941 until February 1944. The Kryvo-rihstal, the biggest industrial plant in the city, was shut down before occupation.

After the war, the city and its economy recovered—first of all, industrially. **From 1952 to 1956, the Pivdennyi Ore Mining and Processing Enterprise was built. It was the first facility in the USSR to use low iron content ores from banded iron formations (BIFs).** In 1959, the Novo-Kryvorizkyi Ore Mining and Processing Enterprise was launched. **In the mid-1970s, the city's economy was diversified and supplemented with light industry enterprises.** Today, Kryvyi Rih is the biggest mining and metallurgy centre of Ukraine.

GEOGRAPHIC LOCATION

Kryvyi Rih is located in a steppe zone of Ukraine in the central part of the Ukrainian crystalline core area on the confluence of the Inhulets and the Saksahan rivers, which flow into the Dnipro.

The city lies in middle latitudes, north of the equator and east of the prime meridian. As the city stretches almost meridionally for several dozens of kilometres, it does not have standard coordinates. **The city has a total area of 430 sq. km, which stretches for 126 km from north to south and for 20 km from west to east.**

The distance from the city to Dnipropetrovsk is 137 km; to Kyiv – 345 km; to London – 2,160 km; to Paris – 2,741 km; to Berlin – 1,777 km; to Brussels – 2,531 km; to Moscow – 962 km; and to Washington – 8,650 km.



CLIMATE

Kryvyi Rih region lies in an area of continental Europe where the climate is moderately warm and humid.

The average annual temperature is +8.5°C. The average temperature in July is +22.2°C, which falls to an average temperature of -5.1°C in January.

The number of frost-free days is 175, which is favourable for growing a large number of crops. It often thaws in winter. **Precipitation is 400–450 mm per year (with the maximum amount occurring in early summer).** The Kryvyi Rih region is one of Ukraine's dry areas. Over the last 60 years, each decade has had 3 or 4 dry years. Severe droughts hit the Kryvyi Rih region every 5 to 10 years, with only 100–150 mm of rainfall during the growing period.

North and east winds are the prevailing winds in Kryvyi Rih. In summer, north and northwest winds prevail while northeast, north, and east winds dominate in other seasons.

The city has a unique microclimate. It is like an "isle of warmth." **The temperature in the City of Kryvyi Rih is 1.8°C higher than that in nearby areas.** Often there is smog in winter because of dust and gas emissions from industry and cars, combined with low solar radiation.

MINERAL RESOURCES

Kryvyi Rih is one of Ukraine's richest regions in terms of mineral resources. The Kryvyi Rih Iron Basin (Kryvbas) is 80 to 100 km to the west of the Dnieper River and is a part of the river system that includes the Inhulets and its left tributaries—the Saksahan, Zhovta, and Zelena rivers. The basin stretches to the north and northeast over a 100-km long strip, which is 1 to 6 km wide in Kryvyi Rih. To the north, the basin expands into the Kremenchuk Magnetic Anomaly. The total area of the basin is about 300 square kilometres.

Most of the mineral deposits discovered in the Kryvbas are related to the ancient rocks of the Ukrainian Shield. **The Kryvyi Rih Basin contains about 50 metal and non-metallic minerals, which are used in the industrial sector.** The most

important are *iron ore, brown coal, marble, dolomites (40 per cent of Ukraine's reserves), roofing and talc slates, ochre, ruddle, mortar sands, loams, scandium, vanadium, and 40 other elements of the periodic table.*

Today, three industrial types of iron ore are mined in the Kryvbas: high-grade ores, which are immediately used by the steel industry; magnetite ores; and banded iron formation ores (BIFs), which require processing. High-grade iron ore is usually found among BIFs in about 300 ore deposits, and are extracted mainly through underground mining. Total explored reserves of iron ore in the Kryvbas is estimated at over 32 billion tons.

There is a Hlevatske deposit in Kryvyi Rih region, which is unique for its decorative stones including crystalline silica, various "cat's, falcon's, and tiger's eyes" as well as jasper.

The region is also rich in medicinal mineral waters—both for internal and external use.

SOCIAL AND ECONOMIC OVERVIEW

Kryvyi Rih has about 6,000 enterprises. The industrial sector of the city comprises 73 large and medium-sized enterprises operating in various industries: ferrous refining, mechanical engineering, manufacturing of construction materials, chemicals, publishing, woodwork and timber, light manufacturing, and food and beverages. *Eight of the 11 Ukrainian ore mining and processing enterprises are located in the Kryvyi Rih Basin.* Therefore, ferrous metallurgy is a strategic industry for the city—and plays a key role in terms of the labour force profile. This powerful production centre includes one mining and metallurgy enterprise, four ore mining and processing enterprises, one iron ore enterprise, two mining groups, and three mining equipment repair plants. The major products from this industry include iron ore, iron ore concentrate, sintered ore, pellets, cast iron, steel, and rolled products. *The share of mining and metallurgy reaches 86 per cent of the city's industrial output. The Kryvyi Rih Minium Plant is Ukraine's only enterprise that produces iron minium,* which is in great demand both in Ukraine and abroad.

Over 40 enterprises in the city are in the business of manufacturing non-food products. These include light manufacturing products, household goods, and construction products. *Food products are manufactured by 16 food processing enterprises* and about 80 private entrepreneurs. A number of enterprises specialize in cement manufacturing, the manufacturing of reinforced concrete, and local construction materials.

Public transport—in the form of buses, trams, and trolleybuses—is an important part of the city's infrastructure and for enhancing quality of life. A number of transportation companies provide these services. There is also an express tram.

There is an international airport in Kryvyi Rih. The Kryvyi Rih Department of Prydniprovskia Railroad is one of Ukraine's leaders among railroads in terms of rail-freight traffic. *The department mostly targets the needs of Kryvyi Rih, and its annual rail-freight traffic exceeds 53 million tons.*

Currently, Kryvyi Rih has *151 kindergartens and 148 secondary schools,* which include 25 lyceums, gymnasiums, and specialized schools. There are also *15 vocational training schools,* 15 higher education institutions with accreditation levels I–II, and *16 institutions with accreditation levels III–IV* (among them, 12 educational centres, faculties, and other branches of Ukrainian higher education institutions).

Forty-eight hospitals and other medical establishments provide citizens with medical care. There are also the Research Institute of Industrial Medicine and the Post-graduate Department of Dnipropetrovsk Medical Academy. Kryvyi Rih's doctors *have created a national medico-genetic centre.* Some medical institutions in the city use equipment that is unique both for the oblast and Ukraine.



DEMOGRAPHIC PROFILE

Chapter 2

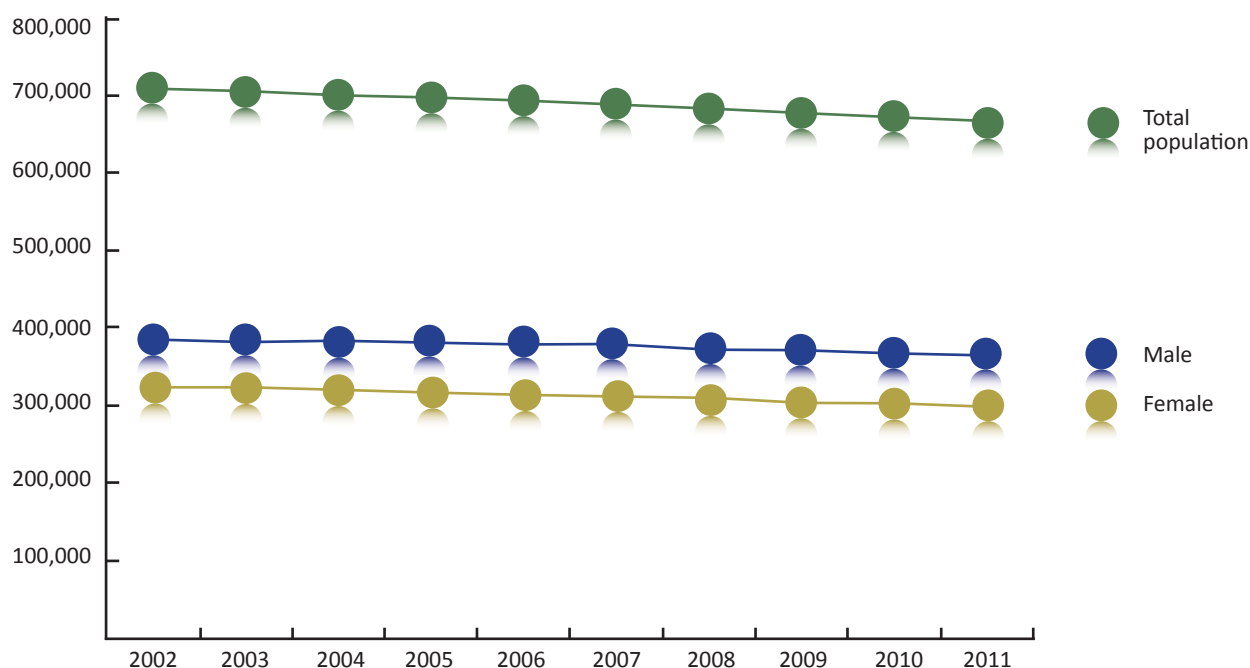
OVERVIEW

- Over the 2002–11 period, Kryvyi Rih’s population declined gradually but steadily, with the male population decreasing at a somewhat faster rate than the female population.
- Although the number of births increased and the number of deaths decreased over the 2006 to 2011 period, natural population growth in Kryvyi Rih has remained negative.
- Total net migration for Kryvyi Rih turned negative in 2007, and remained negative in the following three years. This was due entirely to a loss of Kryvyi Rih residents to other parts of Ukraine.
- In 2011, females accounted for 54.9 per cent of Kryvyi Rih’s population. While females under 45 years of age represented 50.2 per cent of the total population in that age group, females 45 or older represented 61.5 per cent of the total population in that age group.
- The average age of the city’s population was 40.1 years in 2011—slightly younger than the average in Dnipropetrovsk Oblast.

OVERALL POPULATION DYNAMICS

The population of Kryvyi Rih has been gradually declining. (See Chart 2.1.) From December 2001 to January 2011, the population of the city decreased by 44,019 people (a 6.2 per cent drop). ***The male population fell at a slightly faster rate than the female population.*** In 2011, females accounted for 54.9 per cent of Kryvyi Rih’s population. (See Table 2.1.) The population decline in Kryvyi Rih is attributable to both natural and migration factors. The number of deaths has been larger than the number of births throughout the sample period. Net migration—which includes both domestic and international migration—was positive in 2006, but has been negative since then.



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

Source: Main statistics office in Dnipropetrovsk Oblast.

TABLE 2.1. KRYVYI RIH POPULATION, 2006–11

Year	Population, number of people	Population growth, per cent	Males		Females	
			Number of males	Per cent of total population	Number of females	Per cent of total population
2006	694,101	-0.64	315,252	45.4	378,849	54.6
2007	689,141	-0.71	312,478	45.3	376,663	54.7
2008	683,212	-0.86	309,165	45.3	374,047	54.7
2009	677,416	-0.85	305,849	45.1	371,567	54.9
2010	671,779	-0.83	303,037	45.1	368,742	54.9
2011	666,393	-0.80	300,361	45.1	366,032	54.9

Source: Main statistics office in Dnipropetrovsk Oblast.

The population of Kryvyi Rih 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.

The number of births rose by 8.6 per cent in 2008, but declined the following two years. (See Table 2.2.) In 2010, the number of births was still somewhat higher than in 2006.

¹ All population data are shown as of January 1 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	6,946	3,559	3,387
2007	6,934	3,563	3,371
2008	7,532	3,824	3,708
2009	7,419	3,885	3,534
2010	7,002	3,614	3,388

Source: Main statistics office in Dnipropetrovsk Oblast.

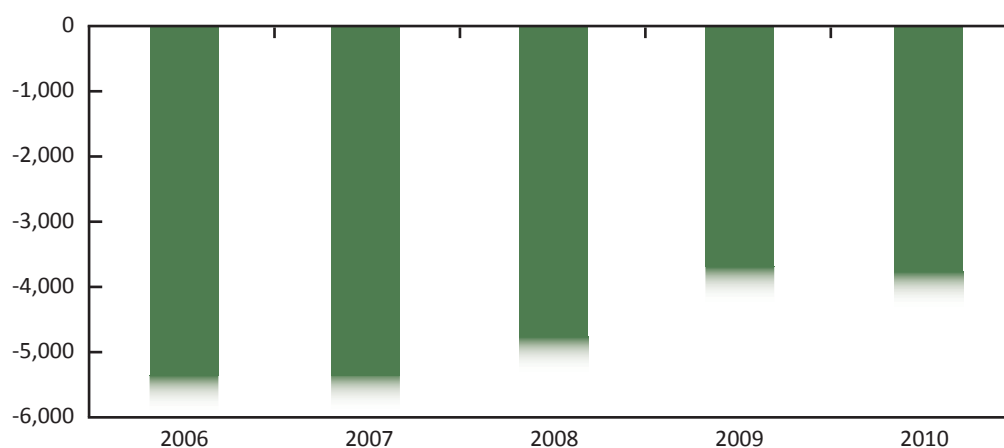
Over the 2006 to 2010 period, the number of deaths declined 11.0 per cent—from 12,485 in 2006 to 11,116 in 2010. (See Table 2.3.)

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

Year	Total number of deaths	Males	Females
2006	12,485	6,679	5,806
2007	12,482	6,749	5,733
2008	12,508	6,648	5,860
2009	11,528	5,920	5,608
2010	11,116	5,631	5,485

Source: Main statistics office in Dnipropetrovsk Oblast.

Chart 2.2 shows that, despite the increase in births and decrease in deaths between 2006 and 2010, the rate of natural population growth has remained negative. It did, however, improve (that is, become less negative) over this period.

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

Source: Main statistics office in Dnipropetrovsk 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 Kryvyi Rih from other parts of Ukraine and the number of people moving out of Kryvyi Rih to other parts of Ukraine. Over the sample period, net domestic migration was positive only in 2006. (See Table 2.4.) In 2010, the city lost 1,425 residents, relatively evenly split between males and females.

² Data on births, deaths, and migration are annual totals.

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

Year	Into Kryvyi Rih			Out of Kryvyi Rih			Net domestic migration		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
2006	6,728	3,171	3,557	6,167	2,896	3,271	561	275	286
2007	6,000	2,832	3,168	6,407	3,040	3,367	-407	-208	-199
2008	5,277	2,405	2,872	6,232	2,987	3,245	-955	-582	-373
2009	3,738	1,722	2,016	5,384	2,582	2,802	-1,646	-860	-786
2010	4,550	2,078	2,472	5,975	2,842	3,133	-1,425	-764	-661

Source: Main statistics office in Dnipropetrovsk Oblast.

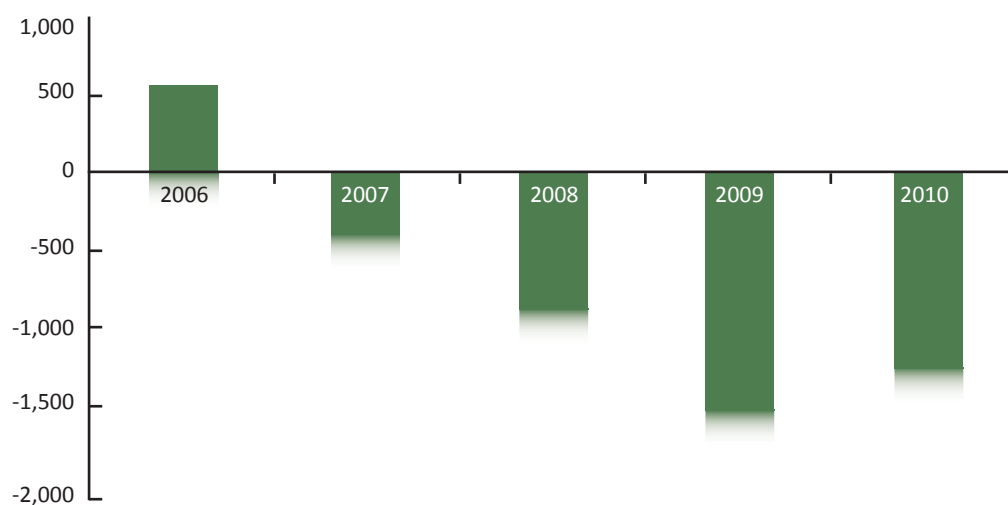
Net international migration is the difference between the number of people moving into Kryvyi Rih from other countries and the number of people moving out of Kryvyi Rih to other countries. Over the 2006 to 2010 period, foreign migration remained a small but positive contributor to Kryvyi Rih's population. (See Table 2.5.)

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

Year	Into Kryvyi Rih			Out of Kryvyi Rih			Net international migration		
	Both sexes	Males	Females	Both sexes	Males	Females	Both sexes	Males	Females
2006	519	253	266	501	182	319	18	71	-53
2007	464	244	220	438	163	275	26	81	-55
2008	480	224	256	345	134	211	135	90	45
2009	362	177	185	244	94	150	118	83	35
2010	410	215	195	257	110	147	153	105	48

Source: Main statistics office in Dnepropetrovsk Oblast.

Total net migration for Kryvyi Rih turned negative in 2007, and remained negative in the following three years. (See Chart 2.3.) This was due entirely to a loss of Kryvyi Rih residents to other parts of Ukraine. In 2010, Kryvyi Rih lost 1,272 residents.

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

Source: Main statistics office in Dnipropetrovsk Oblast.

Summary of Natural Population Change and Net Migration

Between 2006 and 2010, the factors responsible for Kryvyi Rih's population decline changed. (See Table 2.6.) In 2006, the population decrease was caused by negative growth in the natural population—that is, a high number of deaths than births. Net migration in 2006 was positive. **After 2006, however, the negative natural population growth was aggravated by out-migration from the city.**

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

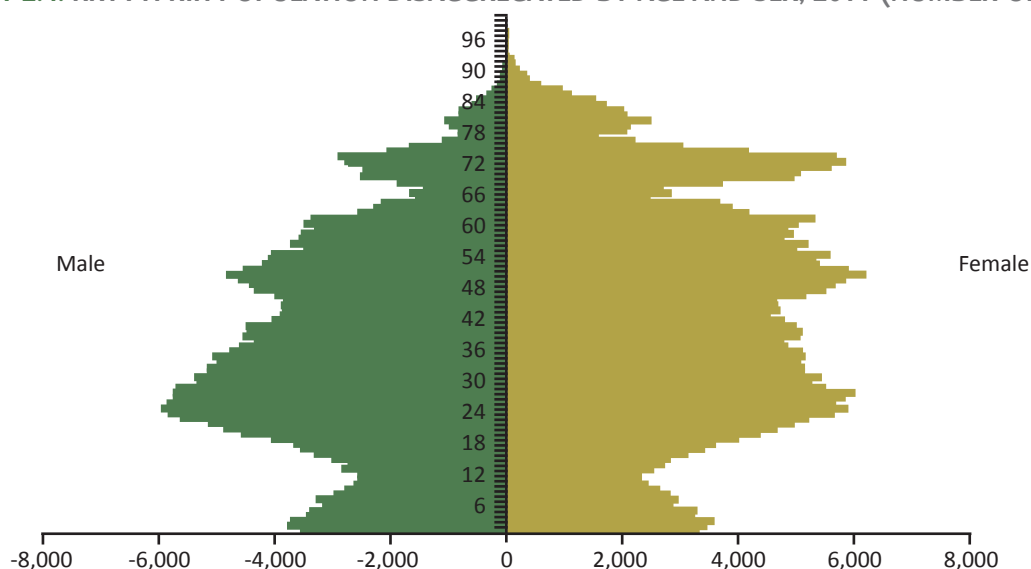
Population change	2006	2007	2008	2009	2010
Change in the natural population	-5,539	-5,548	-4,976	-4,109	-4,114
Net migration	579	-381	-820	-1,528	-1,272
Total population change	-4,960	-5,929	-5,796	-5,637	-5,386

Source: Main statistics office in Dnipropetrovsk Oblast.

POPULATION DISTRIBUTION BY AGE AND SEX

The population pyramid in Chart 2.4 shows the age distribution of Kryvyi Rih's male and female population. The population pyramid has two striking features. First, there is a bulge in the 68 to 76 age group, with a more pronounced bulge for females. Second, the population pyramid is relatively symmetrical for younger people, indicating that the difference in population shares for males and females in Kryvyi Rih is largely due to differences in the older age groups.

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



Source: Main statistics office in Dnipropetrovsk Oblast.

Table 2.7 presents population data for various age and sex cohorts in Kryvyi Rih for 2007, 2009, and 2011. Between 2007 and 2011, the share of young adults (those aged 15 to 24) decreased significantly while the share of population in each older cohort increased slightly. The most striking feature of the table is the difference between the female and male cohorts. **In 2011, females under 45 years of age represented 50.2 per cent of the total in the under-45 population, while females 45 or older represented 61.5 per cent of the total population over the age of 45.**

³ Territory of Kryvyi Rih, 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

Age and sex	2007		2009		2011	
	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	46,978	6.85	46,474	6.89	46,770	7.05
Females 0–14 years	44,336	6.47	43,580	6.47	43,718	6.59
Both sexes 0–14 years	91,314	13.32	90,054	13.36	90,488	13.64
Males 15–24 years	56,362	8.22	52,224	7.75	46,934	7.07
Females 15–24 years	55,144	8.04	50,935	7.56	45,316	6.83
Both sexes 15–24 years	111,506	16.26	103,159	15.31	92,250	13.90
Males 25–44 years	96,582	14.08	96,219	14.27	97,645	14.72
Females 25–44 years	104,196	15.19	103,183	15.31	103,551	15.61
Both sexes 25–44 years	200,778	29.28	199,402	29.58	201,196	30.33
Males 45–60 years	65,288	9.52	65,675	9.74	64,498	9.72
Females 45–60 years	85,213	12.43	87,017	12.91	85,894	12.94
Both sexes 45–60 years	150,501	21.95	152,692	22.65	150,392	22.66
Males over 60 years	86,095	12.55	43,567	6.46	43,080	6.49
Females over 60 years	45,568	6.64	85,192	12.64	86,160	12.98
Both sexes over 60 years	131,663	19.19	128,759	19.10	129,240	19.47

Source: Main statistics office in Dnipropetrovsk Oblast.

As of January 1, 2011, the average age of Kryvyi Rih's population was 40.1 years. The average age of females was 42.5 years and that of males was 37.1 years. Over the past five years, **there has been a very gradual increase in the average age of the city's population. However, the average age of Kryvyi Rih's population remains lower than that of Dnipropetrovsk Oblast (40.7 years) and the City of Dnipropetrovsk (40.5 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

Kryvyi Rih's dependency ratio in 2011 was 644 dependent people for every 1,000 people of working age.⁶ This total is made up of 240 people younger than the working age and 404 older than the working age.

In 2011, 60.8 per cent (405,362) of Kryvyi Rih's population were of working age, 14.6 per cent (97,136) were younger than the working age, and 24.6 per cent (163,895) were older than working age.⁷ (See Chart 2.5.) **While the number of males older than the working age is lower than the number of males younger than working age, the number of females older than the working age is nearly two and half times the number of females younger than the working age.** This striking difference can be explained in part by the lower 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 1.8 times that of males. This is due to the longer life expectancy for females.

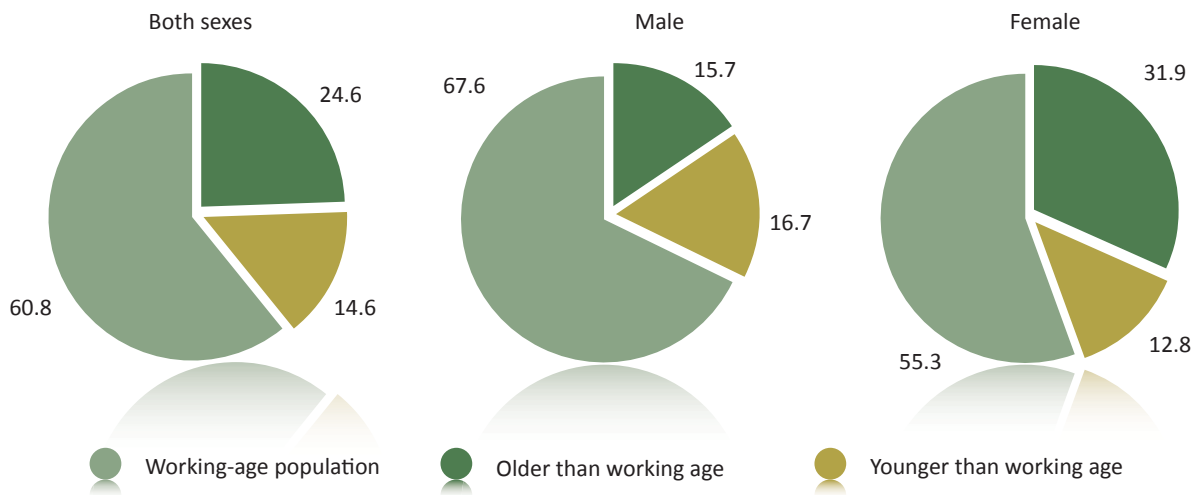
⁴ Territory of Kryvyi Rih, excluding other communities subordinate to the City Council. Age and sex distribution is shown as of January 1 for each year.

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.

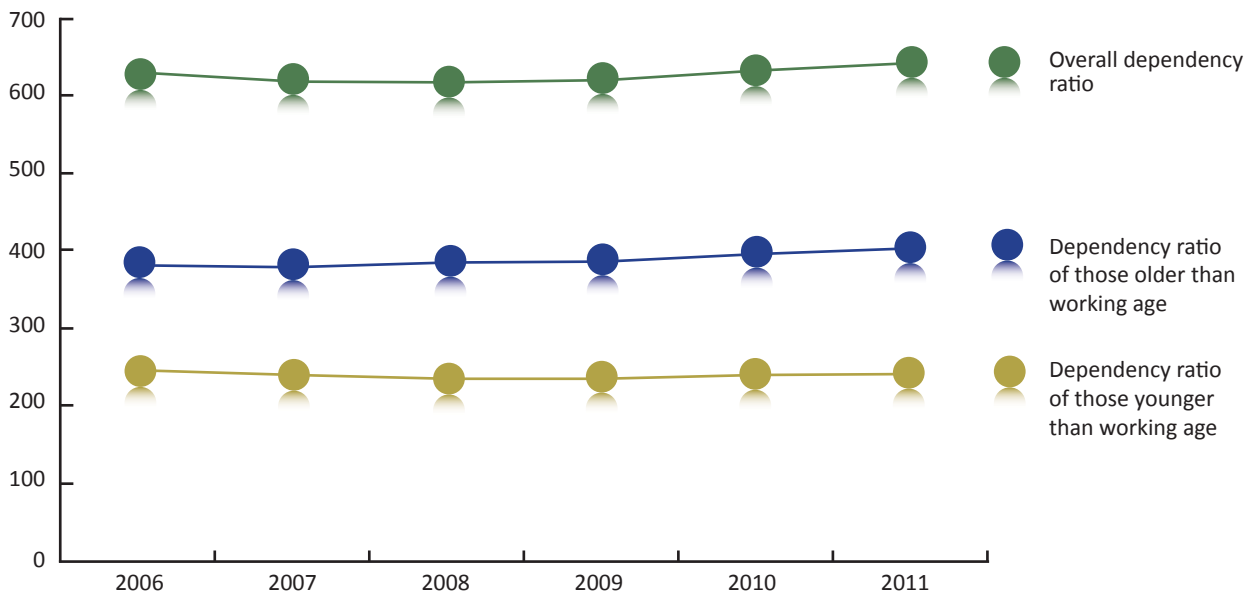
CHART 2.5. POPULATION BY WORKING AND DEPENDENT AGE, 2011 (PER CENT)



Source: Main statistics office in Dnipropetrovsk Oblast.

Chart 2.6 shows that the dependency ratio has been increasing, mainly due to a higher dependency ratio of those older than the working age. The dependency ratio of those younger than the working age has remained stable.

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



Source: Main statistics office in Dnipropetrovsk Oblast.

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

INDICATORS OF KRYVYI RIH'S DEMOGRAPHIC SITUATION

Table 2.8 compares the situation of Kryvyi Rih with that of Ukraine as a whole on five key demographic indicators. **The natural population growth in Kryvyi Rih is more negative than in the country in general**, while the migration outflow in the city is higher. **The dependency ratio, however, in Kryvyi Rih is lower than that of Ukraine, giving Kryvyi Rih a “stronger” rating**. The share of females in the population is higher in Kryvyi Rih than it is for Ukraine as a whole. The share of the population over 60 years of age is lower in Kryvyi Rih, which helps to explain the lower dependency ratio.

TABLE 2.8. KEY DEMOGRAPHIC INDICATORS

Indicator	Kryvyi Rih	Ukraine	Relative position of Kryvyi Rih
Rate of natural population change in 2010	-6.1 per 1,000 people	-4.4 per 1,000 people	Weaker
Net migration rate in 2010	-1.9 per 1,000 people	0.3 per 1,000 people	Weaker
Dependency ratio as of January 1, 2010	635 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	54.93 per cent	53.87 per cent	Weaker
Share of population over 60 years as of January 1, 2010	19.16 per cent	19.33 per cent	Stronger

Source: Main statistics office in Dnipropetrovsk Oblast.

ECONOMIC PROFILE

Chapter 3

OVERVIEW

- Kryvyi Rih's economy is dominated by the industrial sector, which accounts for 80 per cent of the output of non-financial enterprises and 53 per cent of total employment in the city. The mining and metallurgy industries are particularly important for the city's economy.
- Employment in the city is concentrated in large-sized enterprises, with 78 per cent of staff employees in large-sized enterprises, 17 per cent in medium-sized enterprises, and 5 per cent in small-sized enterprises.
- Kryvyi Rih has a well-developed services sector, with services making up 14 per cent of the total output of non-financial companies in 2010.
- When the global economic recession hit bottom in 2009, output in the key export sectors in Kryvyi Rih's economy fell dramatically; consequently, investment in fixed capital in the city also fell. However, investment rose during the recovery in 2010 but still remained below pre-recession levels.
- Kryvyi Rih is highly dependent on exports. Over the 2005–10 period, the city accounted for 46 per cent of the oblast's exports, 15 per cent of the oblast's imports, and 77 per cent of the oblast's foreign direct investment.
- Adjusted for inflation, wages grew by 6.9 per cent annually between 2005 and 2011.

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 Kryvyi Rih over the 2005–10 period. The table illustrates just how crucial the industrial sector is to the city's economy. ***Over this period, the industrial sector accounted for 70 to 86 per cent of all sales in Kryvyi Rih.*** The table also shows that ***the majority of sales in the industrial sector—and indeed across all sectors—were from the mining and metallurgy industries.***

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	38,025,861	40,178,373	53,943,960	73,012,875	49,984,091	83,104,549
Industry	26,957,676	30,163,204	43,209,043	62,335,902	40,501,446	71,116,314
Mining	13,611,916	12,837,228	20,891,035	35,095,460	21,700,359	41,806,700
Processing	12,875,315	16,711,886	21,635,786	26,162,963	17,620,935	27,977,732
Metallurgical production and the manufacture of fabricated metal products	11,222,957	14,514,705	18,984,071	22,340,408	14,710,522	23,940,579
Production and distribution of electricity, gas, and water	470,446	614,091	682,222	1,077,478	1,180,152	1,331,883

Source: Main statistics office in Dnipropetrovsk Oblast.

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 industrial sector accounted for 80 per cent of sales in Kryvyi Rih in 2009, it only accounted for 53 per cent of employment.** Still, it is by far the largest employer in the city's economy. Other key sectors include education, health care and social assistance, transport and communications, and real estate.

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	213,462	108,996	104,466
Agriculture, hunting, and forestry	246	92	154
Industry	113,311	75,140	38,171
Construction	9,370	7,092	2,278
Wholesale and retail trade; repair of cars, home appliances, and personal use items	8,092	3,650	4,442
Hotels and restaurants	1,310	206	1,104
Transport and communications	15,265	7,227	8,038
Financial activity	2,764	722	2,042
Real estate, leasing, engineering, and services to businesses	12,584	6,096	6,488
Public administration	5,015	1,069	3,946
Education	25,161	4,120	21,041
Health care and social assistance	16,867	2,123	14,744
Other economic activity	3,477	1,459	2,018

Source: Main statistics office in Dnipropetrovsk Oblast.

Table 3.3 presents details of staff employment in Kryvyi Rih's industrial sector by sex for 2009. **While mining and metallurgy represented nearly 90 per cent of all sales in the industrial sector in 2009, these two industries represented about 80 per cent of employment in the sector.** The manufacture of machinery and equipment industry, which accounts for over 5 per cent of industrial employment, is another important employer within the industrial sector.

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.

³ Yearly average.

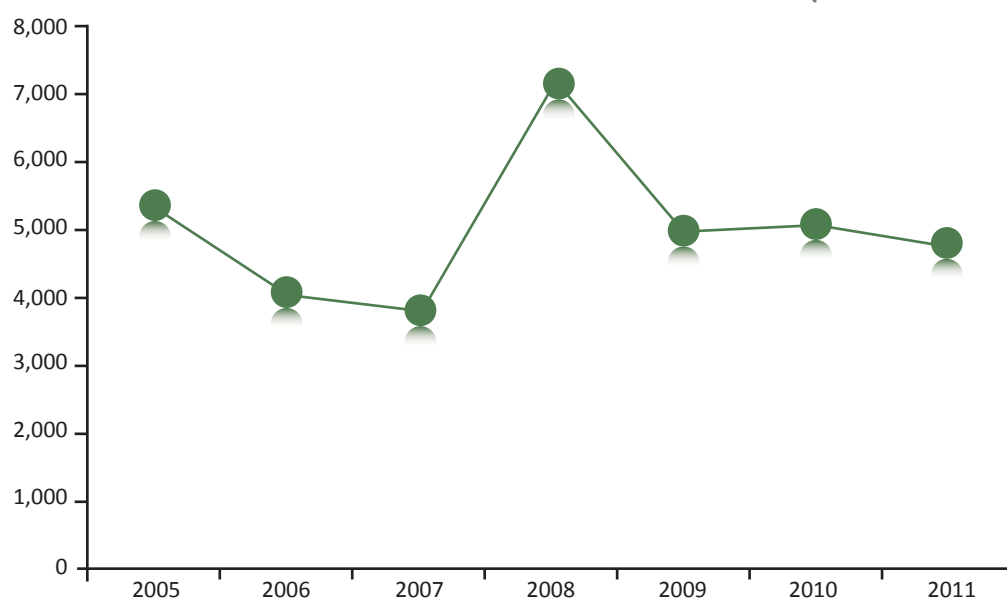
TABLE 3.3. NUMBER OF STAFF EMPLOYEES BY INDUSTRY AND SEX, 2009 (NUMBER OF PEOPLE)

Industry sector	Both sexes	Males	Females
Number of staff employees, in industry	113,311	75,140	38,171
Mining industry	48,558	34,179	14,379
Food industry and agricultural processing industry	2,203	754	1,449
Production of other non-metallic mineral products	1,355	873	482
Metallurgy and metal working	41,199	28,582	12,617
Manufacture of machinery and equipment	5,815	3,353	2,462
Manufacture of transportation equipment	1,112	716	396
Other manufacturing industries (combined)	3,701	1,859	1,842
Production and distribution of electricity, gas, and water	9,368	4,824	4,544

Source: Main statistics office in Dnipropetrovsk Oblast.

Unemployment

Registered unemployment reached its peak in 2008 when enterprises, reacting to the economic recession, began to lay off their workers. (See Chart 3.1.) At the end of 2008, the number of registered unemployed stood at nearly 7,200 people, but by the end of 2009, this number had fallen to nearly 5,000 people. The improvement in unemployment was a result of somewhat improved economic conditions. As of the end of 2010, unemployment changed only marginally, which suggests an absence of available working opportunities in the official economy that suit potential employees.

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

Sources: Kryvyi Rih's city employment center; main statistics office in Dnipropetrovsk Oblast.

There are substantial differences between the level of officially registered unemployment reported by the State Employment Service of Ukraine and the level of unemployment measured by the International Labour Organization's (ILO) internationally recognized methodology. At the end of 2010, registered unemployment documented by the employment centre as a share of the working-age population (16 to 54 for women and 16 to 59 for men) in Kryvyi Rih was 1.2 per cent. However, this may significantly understate unemployment. **In 2010, unemployment measured using the ILO methodology suggests that, at the oblast level, unemployment as a share of the working-age population (15 to 70) was 7.1 per cent in urban areas** compared to the 2 per cent unemployment rate in urban areas reported by the Dnipropetrovsk Oblast Employment Center.

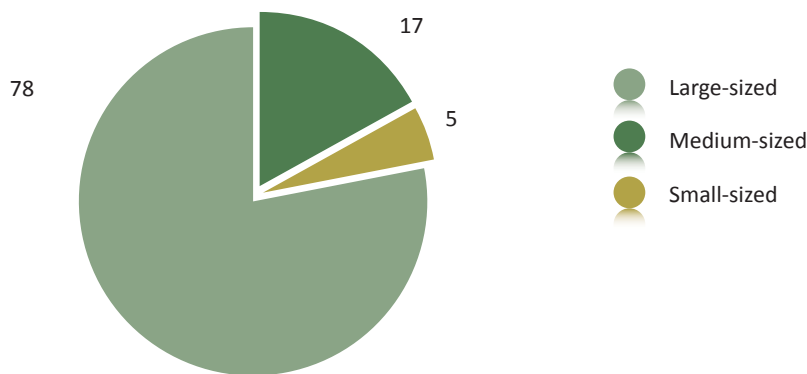
Unemployment in Kryvyi Rih is several times higher among women than among men (for example, during the 2000–07 period, 77 per cent of all registered unemployed were women). The gap can be partially explained by the importance of heavy industry—which is traditionally male-dominated. **The average duration of registered unemployment steadily declined,**

from 9.9 months in 2000 to 5 months in 2008. This can be explained by the growing demand for labour during this period. In 2009 and 2010, the average duration of registered unemployment increased to 6 months.

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 in 2009 is illustrated in Chart 3.2.⁴ The chart shows that **staff employment in Kryvyi Rih is dominated by large-sized enterprises/institutions, which in 2009 accounted for 78 per cent of all staff employment in the city.**⁵ This concentration of employment in large-sized enterprises reflects the importance of the mining and metallurgy industries—both of which are most efficient when producing at a large scale—in the city’s economy.

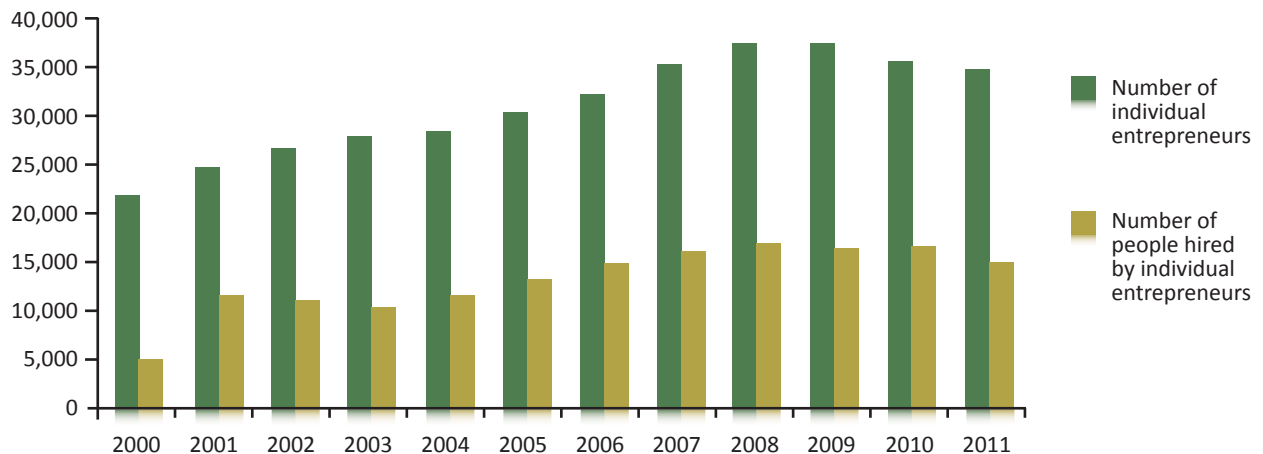
CHART 3.2. DISTRIBUTION OF STAFF EMPLOYEES BY SIZE OF ENTERPRISE/INSTITUTION, 2009 (PER CENT)



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

Besides staff employment, the other important category of employment is individual entrepreneurs and their hired workers. **Between 2006 and 2009, the number of individual entrepreneurs and their hired workers grew by 15 per cent.** However, during 2010 and into the early part of 2011, this category of employment fell slightly, as the small business sector was hurt by the recession. (See Chart 3.3.)

CHART 3.3. INDIVIDUAL ENTREPRENEURS AND THEIR HIRED WORKERS, 2000–11 (NUMBER OF PEOPLE)⁶



Source: Southern, Northern, and Central Kryvyi Rih City State Tax Inspectorate.

⁴ Beginning in 2010, data on employment by size of employer are no longer being collected at the city level.

⁵ Small-sized enterprises/institutions/organizations include those with 11 to 50 employees; medium-sized, 51 to 250 employees; large-sized, 251 and more employees.

⁶ Data on individual entrepreneurs and their hired workers are as of January 1 for each year.

Key Industries in Kryvyi Rih

MINING

The chief product of mining in Kryvyi Rih is iron ore. This ore is extracted either from open-pit or underground mines. Open-pit mining is more common, and is performed by Pivdenny OMEP. The open-pit mining process includes drilling blast holes, blasting, and shoveling massive amounts of dislodged ore. After extraction, open-pit mined iron ore is transported to the concentration stage. However, a number of mining companies, including Kryvyi Rih Iron Ore Combine, are engaged in the underground mining of relatively rich iron ore, which with an iron content of over 50 per cent does not require concentration.

Most of the iron mined in Kryvyi Rih has a low iron content of between 30 and 35 per cent. Thus, Ukrainian iron ore cannot be used in blast furnaces directly, and needs upgrading. The final product of the upgrading process—sinter or pellets—can be used in blast furnaces.

PROCESSING

The main manufacturing industry in Kryvyi Rih is iron smelting. Arcelor Mittal Kryvyi Rih, the largest full-cycle metallurgical enterprise in the Ukrainian mining and metallurgical industry, is the main iron smelter in the city. Its operations include a coke and by-product plant, a mining and ore concentration complex, a deep iron ore mine operation, and a metallurgical complex consisting of a sintering, blast-furnace, steelmaking, and steel rolling plant. **The steel mill consists of two blast furnaces, an open-hearth furnace, a base oxygen furnace, two bloomeries, and three rolling mills.**

In 2010, the company managed to increase the volume of its primary products to 6.1 million tonnes, or 21.7 per cent more than in 2009. In 2010, exports were 85 per cent of total sales (compared to 83 per cent in 2009). In 2010, Arcelor Mittal Kryvyi Rih supplied 60 countries, with the main markets being Africa, the Middle East, the Persian Gulf, former CIS countries, Iran, and Turkey (78 per cent of its total production was exported to these regions/countries). Sales of primary steel products to the domestic market increased by 11 per cent in 2010 compared with sales in 2009.

Key Enterprises in Kryvyi Rih

The city has several key large enterprises (described in Table 3.4). The table shows the name of the enterprise, its basic activity, and the income earned from those basic activities in 2010. Among them, the open joint stock company Arcelor Mittal Kryvyi Rih and several mining and ore concentrating companies are the largest.

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
Open joint stock company Arcelor Mittal Kryvyi Rih	Iron ore mining; pig iron production; steel production; coke production	24,280,132	36,647
Public joint stock company Pivnichyi (Northern) Ore Mining and Enrichment Works	Iron ore mining; wholesale trade; trucking	11,503,153	7,775
Public joint stock company Ingulets Ore Mining and Enrichment Works	Iron ore mining	10,397,625	6,792
Open joint stock company Pivdennyi (Southern) Ore Mining and Enrichment Works	Iron ore mining; building construction; medical care	6,211,397	8,428
Public joint stock company Centralnyi (Central) Ore Mining and Enrichment Works	Iron ore mining; other wholesalers; building construction	5,040,748	6,609
Open joint stock company Sukha Balka	Iron ore mining; building construction; steel construction	1,005,164	n/a
Public joint stock company Constar Turbine Plant of Kryvyi Rih	Production of gas turbines and equipment; production of other general-purpose machinery and equipment; post-secondary non-tertiary education	116,698	1,211
Open joint stock company Central Ore Repair Plant of Kryvyi Rih	Other wholesalers; manufacture of mining machinery and equipment; leasing of real estate	24,409	n/a

Source: www.smida.gov.ua.

INFRASTRUCTURE DEVELOPMENT

Residential Construction Sector

Most of the city's housing stock is relatively old, having been built during the time Ukraine was part of the USSR. **The housing infrastructure is not being renewed. Between 2000 and 2010, nominal output in the residential construction industry decreased on average by 3.2 per cent every year, and, in real terms, residential investment in the city increased during the 2005–10 by 42.6 per cent each year, on average.** The latter figure is somewhat misleading because real residential investment actually fell over the 2005–09 period before rising dramatically in 2010. The decline in real residential investment was especially severe in 2008 and 2009, reflecting the impact of the world recession on economic activity and employment in the city. In 2010 there was a massive revival, with real construction output increasing by 9.3 per cent and, real residential investment increasing nearly five-fold, partially as a result of the extremely low level of investment in 2009.

TABLE 3.5. MAJOR CONSTRUCTION INDUSTRY INDICATORS IN KRYVYI RIH, 2005–10

Indicator	2005	2006	2007	2008	2009	2010
Commissioning of residential buildings, total m ²	38,636	35,370	36,712	35,813	13,784	19,019
Commissioning of individual homes, total m ²	22,998	24,480	14,563	11,391	1,474	15,054
Commissioning of residential buildings, units	110	107	76	54	8	88
Real construction output, % change over previous year	7.5	-6.8	7.2	-14.9	-43.4	9.3
Investment in fixed capital into housing construction, UAH thousands	33,212	37,799	43,714	38,926	11,061	61,028
Real investment in fixed capital in housing construction, % change over previous year	-12.9	-6.0	-7.0	-25.6	-74.4	381.2

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

Transport

Kryvyi Rih has developed an extensive transport infrastructure that serves both cargo and passengers. The city uses both motor and electric vehicles in its public passenger transportation system. Every day, about 1,350 buses on 101 routes carry about 200,000 passengers. This bus system is supplemented by trolleybuses, trams, and streetcars. The city has 21 trolleybus routes with 70 trolleybuses, 14 tram lines with 50 cars, and a 17.7-kilometre express streetcar line in Kryvyi Rih with 11 stations.⁷

Kryvyi Rih's large mining industry has made it the biggest cargo and freight mover in Dnipropetrovsk Oblast. **Cargo transportation in the city accounts for 84 per cent of all cargo transportation in the oblast, while freight shipments by motor vehicles in the city accounts for 37 per cent of motor vehicle shipments in the oblast.** With its large mining industry, the transportation of iron ore is the main transportation activity.

CONSUMPTION ACTIVITY

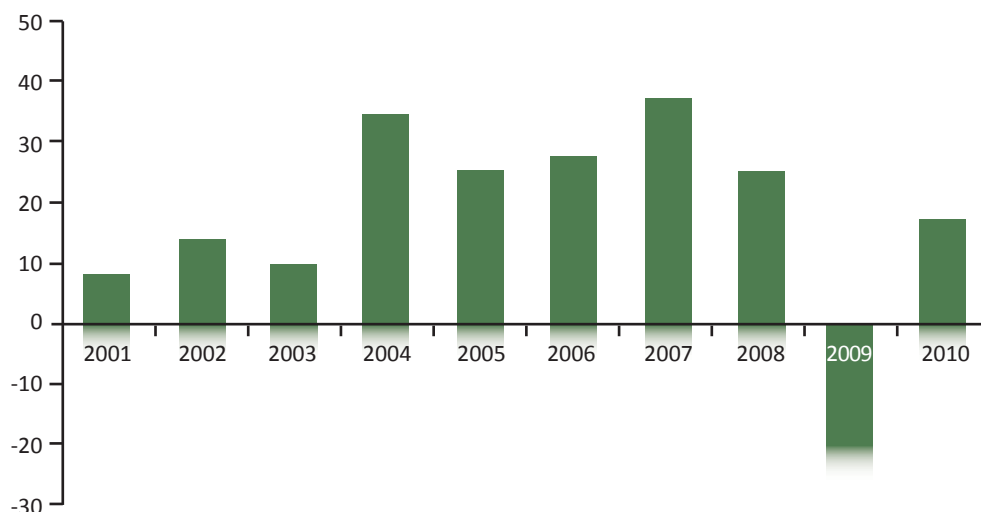
At the city level, retail sales data adjusted for inflation are a good indicator of consumption activity. Aggregate retail sales data for Kryvyi Rih indicate that retail sales in real terms increased between 2002 and 2008, but dropped in 2009 as the recession took its toll. Consumption growth resumed in 2010 as the broader economy recovered. (See Chart 3.4.)

⁷ This streetcar line includes a 6.8-kilometre underground section with four stations.

Although income is relatively high and agricultural production for personal consumption is relatively low, per capita retail sales in Kryvyi Rih have been lower than in several other cities of the Dnipropetrovsk Oblast. In 2010, retail sales were UAH 6,559 per person, which is 11.4 per cent below the oblast average.

Because of its strong industrial base, Kryvyi Rih has traditionally been an important centre for wholesale trade in the oblast. In fact, only the City of Dnipropetrovsk has a higher wholesale turnover than Kryvyi Rih. However, in recent years, wholesale trade in the oblast has become more centralized in Dnipropetrovsk and, consequently, since 2005, wholesale trade turnover in Kryvyi Rih has been steadily declining.

CHART 3.4. RETAIL SALES IN KRYVYI RIH, 2001–10 (PER CENT GROWTH FROM PREVIOUS YEAR)



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

SERVICES SECTOR

In 2010, services made up 14 per cent of the total output of non-financial companies. Three services stood out as being especially important to the city's economy in 2010. Transport activity represented 26 per cent, real estate transactions represented 17 per cent, and investigation and security represented 14 per cent of all services sold by the non-financial services sector. (See Table 3.6.)

TABLE 3.6. AMOUNT OF SOLD SERVICES⁸ BY FIRMS IN THE NON-FINANCIAL SERVICES SECTOR BY TYPE OF ACTIVITY IN KRYVYI RIH, 2010 (UAH THOUSANDS IN CURRENT PRICES AND PER CENT)

Economic activity	Amount of sold services	Share of total
Total volume of sold services by non-financial enterprises	2,013,146	100.0
Transport activity	528,163	26.2
Mail and communications	98,233	4.9
Real estate transactions	333,617	16.6
Engineering, geology, and geodesics	116,018	5.8
Technical tests and research	60,568	3.0
Investigation and security	289,789	14.4
Education	104,726	5.2
Health care and social protection	72,067	3.6
Sanitary services, disposal of litter, and destruction of wastes	51,497	2.6
Culture and sport, recreation and entertainment	69,583	3.5
Other services	288,885	14.3

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

⁸ Does not include trade and construction, which are described in other parts of this chapter.

INVESTMENT

Fixed 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 Kryvyi Rih over the 2005–10 period. Between 2005 and 2008, nominal fixed capital investment rose, with average annual growth exceeding 29 per cent. **When the global economy touched bottom in 2009, key export sectors in Kryvyi Rih's economy were hit hard and, consequently, investment in fixed capital in the city fell.** In 2010 there was a notable recovery and investments increased by 40.7 per cent in real terms. Capital investments increased to 3,351 million UAH in 2010 after falling to 2,436 million UAH in 2009. This is still below the 2008 peak of 3,855 million UAH.

CHART 3.5. INVESTMENT IN FIXED CAPITAL, 2005–10 (UAH MILLIONS IN CURRENT PRICES AND REAL PER CENT CHANGE OVER PREVIOUS YEAR)



Source: Main statistics office in Dnipropetrovsk Oblast.

Direct Foreign Investment

Kryvyi Rih is one of the two cities in Dnipropetrovsk Oblast that is competing for leadership in attracting foreign direct investment (FDI). FDI in Kryvyi Rih received a boost from Mittal Steel Germany GmbH's October 2005 4.8 billion USD privatization tender for a 93 per cent share of Kryvorizhstal. This deal is still the largest privatization in Ukraine—and provided significant momentum for FDI in Kryvyi Rih. Between 2005 and 2010, the city was the leader in FDI in the oblast, with Cyprus, the British Virgin Islands, and Germany among the most important sources of such investment to the city. In 2008 and 2009, FDI slowed significantly, reflecting a downturn in the world economy and the resulting reduction in demand for the city's mining and metallurgical output. In 2010 there was a slight increase in FDI, but its magnitude was not enough to offset the earlier drop.

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

Indicator	2005	2006	2007	2008	2009	2010
Foreign direct investments, USD thousands	5,012,679	5,066,575	5,657,819	5,200,589	5,143,409	5,169,511
FDI growth, USD thousands	-	53,896	591,243	-457,230	-57,179	26,102
Share in total oblast, %	85.4	77.7	79.7	76.1	72.9	69.0

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

INTERNATIONAL EXPORTS AND IMPORTS

Exports

Dnipropetrovsk Oblast is an important exporter of industrial goods, and Kryvyi Rih is an important contributor to overall oblast exports. **Over the 2005–10 period, Kryvyi Rih led the oblast in exports, accounting for 46 per cent of the oblast's total exports**—substantially more than the second most important exporting city in the oblast, Dnipropetrovsk, which accounted for 27 per cent. (See Table 3.8.) The global economic recession and resulting reduction in global demand led to a significant decline in Kryvyi Rih's exports in 2009. Exports increased sharply in 2010 as external demand recovered.

The main exported products are ferrous metals and mining output, and the largest exporting enterprise is the open joint stock company Arcelor Mittal Kryvyi Rih.

Imports

Two factors play an important role in import activity in Kryvyi Rih. First, residents of the city have relatively high incomes. Second, the large industrial enterprises in the city require imported materials for their production processes. Imports fell dramatically in 2009 as a result of the economic crisis and then partially recovered in 2010. However, despite this recovery Kryvyi Rih's exports in 2010 were still below their 2008 level. (See Table 3.8.) The reduction in demand for the city's exports during the crisis meant that fewer imported inputs were necessary for production. However, the overall imports figure likely understates the importance of international imports in the city's economy since many imported goods consumed by residents were officially imported by the cities of Dnipropetrovsk and Kyiv.

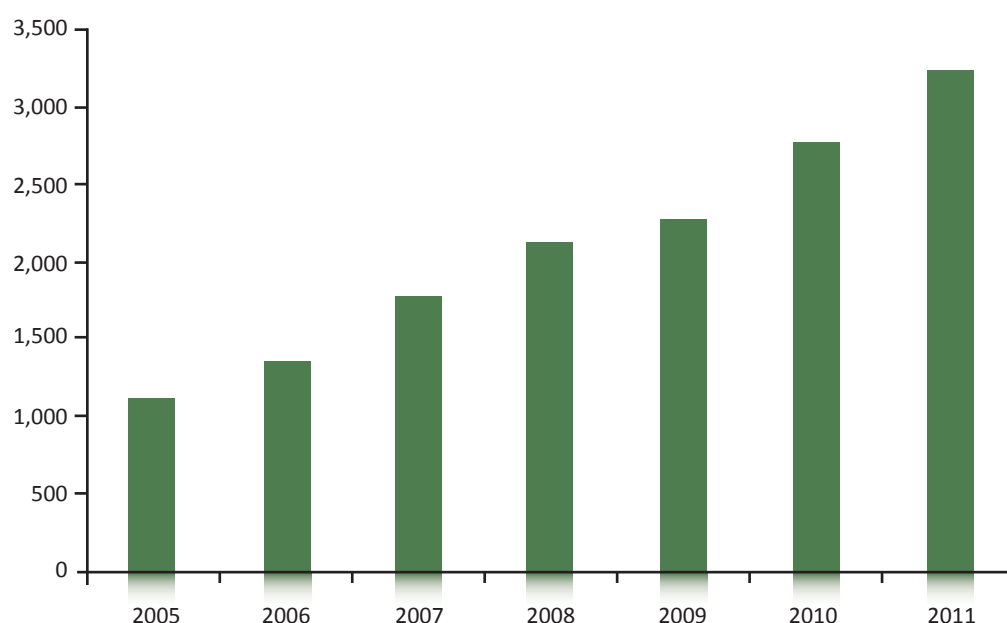
TABLE 3.8. INTERNATIONAL EXPORT AND IMPORT OF GOODS IN KRYVYI RIH, 2005–10

Indicator	2005	2006	2007	2008	2009	2010
Exports, USD thousands	2,695,432	3,009,896	4,374,747	6,138,747	2,299,009	4,085,100
Imports, USD thousands	311,337	552,291	872,257	1,343,937	566,112	930,171
Share of oblast exports, %	45.3	42.3	44.6	46.6	44.2	51.0
Share of oblast imports, %	11.4	14.9	16.1	15.0	14.0	16.0

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

WAGES

Nominal wage growth for staff employees in Kryvyi Rih 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 risen steadily, averaging 27 per cent growth per year, before slowing to just 7 per cent growth in 2009 and rebounding to 22 per cent growth in 2010 and to 16 per cent in 2011**. It should be noted that nominal wages only represent the “take home pay” of workers but not the purchasing power of their wages. **Adjusted for inflation, wages grew by 6.9 per cent annually between 2005 and 2011**.

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

Source: Main statistics office in Dnipropetrovsk Oblast.

Nominal wages for staff employees in almost all sectors of Kryvyi Rih's economy more than doubled over the 2005–09 period.⁹ The exception to this was the construction sector, which saw nominal wages for staff employees rise by only 50 per cent during this time.

Table 3.9 provides details on the dynamics of average monthly nominal wages over the 2005–10 period, as well as details of the differences in average monthly nominal wages between the sexes.¹⁰ **At the aggregate level, the differences between average wages for males and females are 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	1,117.65	1,346.43	1,770.20	2,124.59	2,276.84	2,787.11	3,236.01
Males	1,400.94	1,664.30	2,176.02	2,602.53	2,751.97	n/a	n/a
Females	810.43	999.67	1,331.57	1,614.77	1,781.11	n/a	n/a

Source: Main statistics office in Dnipropetrovsk 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.

⁹ Beginning in 2010, data on wages by sector of the economy are no longer reported at the city level.

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

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 Dnipropetrovsk Oblast; in-house calculations.

Table 3.10 provides details on the 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 financial activities sector was only 53 per cent that of male staff employees, while the average nominal wage for female staff employees in the hotels and restaurants and real estate, renting, and services for entrepreneurs sectors was 91 per cent that of male staff employees. Finally, wages for females in the agriculture, hunting, and forestry sector exceeds wages for males in that same sector. Still, caution must be exercised when interpreting the figures in this table because differences between wages for males and females might reflect differences in job types within any given economic activity rather than differences in wages for males and females who have similar jobs.

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

Economic activity	Both sexes	Males	Females
All sectors of economic activity	2,276.84	2,751.97	1,781.11
Agriculture, hunting, and forestry	1,184.82	1,129.80	1,217.69
Industry	2,826.42	3,116.37	2,255.63
Construction	1,312.28	1,367.37	1,140.76
Wholesale and retail trade; repair of motor vehicles, household appliances, and personal use	1,281.08	1,376.29	1,202.84
Hotels and restaurants	1,202.30	1,298.30	1,184.39
Transport and communication	2,078.29	2,397.86	1,790.96
Financial activities	2,711.67	4,123.65	2,212.43
Real estate, renting, and services for entrepreneurs	1,547.73	1,624.90	1,475.22
Public administration	2,534.91	3,192.59	2,356.74
Education	1,483.52	1,620.55	1,456.68
Health care and social assistance	1,359.92	1,625.59	1,321.67
Other types of economic activity	2,747.36	4,759.93	1,292.29

Source: Main statistics office in Dnipropetrovsk Oblast.

Table 3.11 provides details on the average nominal wages for staff employees by industry and sex for 2009. The table re-emphasizes the key point made by 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.

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

Economic activity	Both sexes	Males	Females
Industry, total	2,826.42	3,116.37	2,255.63
Mining industry	2,561.09	2,811.90	1,964.89
Food, beverages, and tobacco	1,588.00	1,691.09	1,534.35
Textile manufacture, production of garments, furs, and fur goods	1,248.33	1,286.26	1,244.52
Production of leather, leather goods, and other items	198.21	242.06	182.33
Wood processing and manufacturing of wood products, except furniture	777.8	805.56	723.03
Pulp and paper industry, publishing	2,369.09	2,423.20	2,329.64
Chemical industry	1,512.00	1,618.66	1,249.66
Production of rubber and plastic products	825.35	850.93	773.1
Production of other non-metallic mineral products	2,596.56	2,594.62	2,600.07
Metallurgy and manufacture of fabricated metal products	3,659.55	3,912.38	3,086.80
Manufacture of machinery and equipment	1,805.93	2,087.43	1,422.55
Manufacture of vehicles and equipment	650.53	724.69	516.46
Other industries	2,253.79	2,503.17	1,433.96
Electricity, gas, and water	2,309.03	2,533.91	2,070.30

Source: Main statistics office in Dnipropetrovsk Oblast.

CONCLUSIONS

Kryvyi Rih's economy is dominated by the industrial sector, which accounts for 80 per cent of the city's output by non-financial enterprises and 53 per cent of total employment. Within the city's industrial sector, **the mining and metallurgy industries play a particularly important role, as the industrial sector largely revolves around the mining of iron ore**, the upgrading of this ore, and the manufacture of steel and steel products. Given the importance of the mining and metallurgy industries—which need to be on a large scale to be most efficient—**employment in the city is concentrated in large-sized enterprises, with 78 per cent of staff employees engaged in working for these enterprises**. The mining and metallurgy industries have also made Kryvyi Rih a leader in exports within Dnipropetrovsk Oblast. **Over the 2005–10 period, Kryvyi Rih accounted for 46 per cent of the oblast's exports**. However, this export profile also makes Kryvyi Rih subject to external shocks. Thus, the global economic recession in 2009 had a significant impact on the city's output, exports, and investment—all of which fell substantially in 2009 and recovering only partially in 2010. Residential investment was also hard-hit by the most recent global recession.

Inflation-adjusted wages for workers in the city rose by almost 7 per cent per year over the 2005–11 period with cumulative growth of 55 per cent, and average wages for staff workers continue to exceed the national average. However, despite robust wage growth and a relatively “rich” population, nominal per capita retail sales lagged behind the rest of Ukraine.

INDICATORS OF KRYVYI RIH'S ECONOMIC PERFORMANCE

Table 3.12 shows a comparison between Kryvyi Rih's economic performance and Ukraine's economic performance for nine key economic indicators. ***Kryvyi Rih's employment performance over the past six years has been weaker than that of Ukraine.*** The purchase of a 93 per cent share of Kryvorizhstal by a German company in 2005 helped Kryvyi Rih's foreign direct investment performance (both in terms of average per capita growth rates and the level of investment per capita) outperform that of Ukraine over the past five years. ***Kryvyi Rih's strong mining and metallurgical export base has also enabled it to outperform Ukraine on both exports per capita and growth in exports per capita between 2005 and 2010.*** However, per capita retail sales have been weaker in Kryvyi Rih than in Ukraine.

Overall, the city's investment performance can be described as mixed, with real growth in per capita fixed investment being weaker but the level of nominal per capita fixed investment being stronger than for Ukraine as a whole over the 2005–10 period. Just as ***Kryvyi Rih's employment growth has been weaker than that in the rest of the country, wage growth over the past six years for staff employees in the city has been weaker than for Ukraine as a whole.***

TABLE 3.12. KEY INDICATORS OF KRYVYI RIH'S ECONOMIC SITUATION

Indicator	Kryvyi Rih	Ukraine	Relative position of Kryvyi Rih
Six-year average of employment growth (2005–10), %	-1.9	-0.8	Weaker
Six-year average of FDI per capita growth (2005–10), %	79.8	33.5	Stronger
Six-year average of FDI per capita (2005–10), USD	7,657.7	683.0	Stronger
Six-year average of exports per capita growth (2005–10), %	23.9	12.3	Stronger
Six-year average of exports per capita (2005–10), USD	5,544.8	1,012.7	Stronger
Six-year average of retail sales per capita (2005–10), UAH	4,117.1	4,181.3	Weaker
Six-year average of real fixed capital investment per capita growth (2005–10), %	7.4	1.6	Stronger
Six-year average of nominal fixed capital investment per capita (2005–10), UAH	4,185.9	3,409.6	Stronger
Six-year average of wage growth for staff employees (2005–10), %	22.9	28.8	Weaker

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

FISCAL PROFILE¹

Chapter 4

OVERVIEW

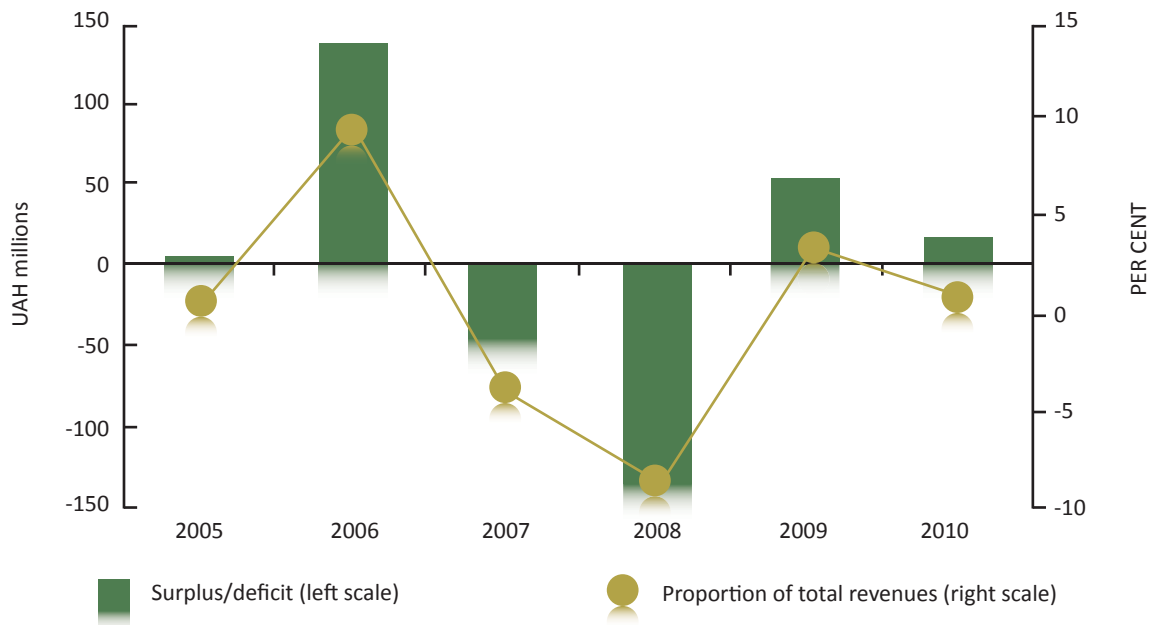
- City budget revenues were UAH 1,996 million. Given a population of 671,779, per capita budget revenues were UAH 2,972.
- Total expenditures were UAH 1,978 million—or UAH 2,897 per capita.
- In 2009 and 2010, Kryvyi Rih incurred budgetary surpluses equivalent to 3.0 and 0.9 per cent of revenues, respectively.
- Official transfers grew from 30.4 per cent of revenues in 2005 to 35.4 per cent in 2010. As part of these transfers, equalization grants grew from zero in 2005–08 to 5.5 per cent of revenues in 2009 and 8.8 per cent in 2010.
- Kryvyi Rih was a donor to equalization from 2005 to 2008 and a recipient of equalization payments from 2009 to 2010.
- As a proportion of total revenues, the Budget for Development (earmarked for infrastructure) declined from 12.2 per cent in 2006 to 0.7 per cent in 2009 and 0.6 per cent in 2010. This had a direct impact on capital expenditures, which declined to 4.4 per cent of the total from 20.3 per cent in 2006.
- Over the 2005–10 period, Kryvyi Rih's modifiable revenues averaged 13.9 per cent of total revenues. In 2010, this proportion was 15.2 per cent, which was equivalent to UAH 453.1 per capita.

BUDGET SURPLUS/DEFICIT

The City of Kryvyi Rih generated a budget surplus in four of the past six years. (See Chart 4.1.) The largest surplus was in 2006 (UAH 135.7 million). The deficits—in 2007 and 2008—peaked at UAH 134.1 million. In 2009 and 2010, the surpluses amounted to UAH 52.9 million and UAH 17.4 million (3.0 and 0.9 per cent of total revenues, respectively.) The deficits were funded internally with no recourse to external borrowing.

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 Kryvyi Rih for 2005–10, demographic data from the main statistics office in Dnipropetrovsk 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.

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



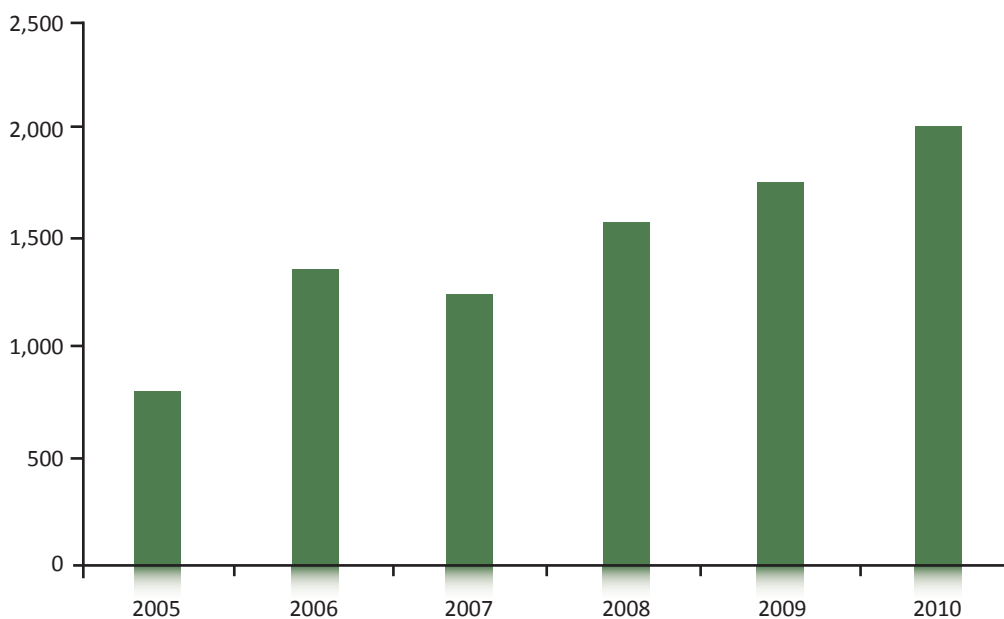
Sources: State Treasury Reports on Local Budgets Execution for City of Kryvyi Rih 2005–10; in-house calculations.

Note: Surplus/deficit information is displayed according to the information in State Treasury Reports on Local Budgets Execution and includes intra-budgetary lending.

REVENUES

From 2005 to 2010, budget revenues grew at a compound annual growth rate (CAGR) of 19.9 per cent. Revenues grew every year, except in 2007 when they declined by 8.1 per cent to UAH 1,244.5 million. This was mainly a result of a large drop in official transfers (from UAH 690.8 million to UAH 354.9 million), which was driven by a reduction in subventions related to payments for debts incurred for heating. In 2010, budget revenues increased by 14.5 per cent to UAH 2.0 billion over 2009. (See Chart 4.2.)

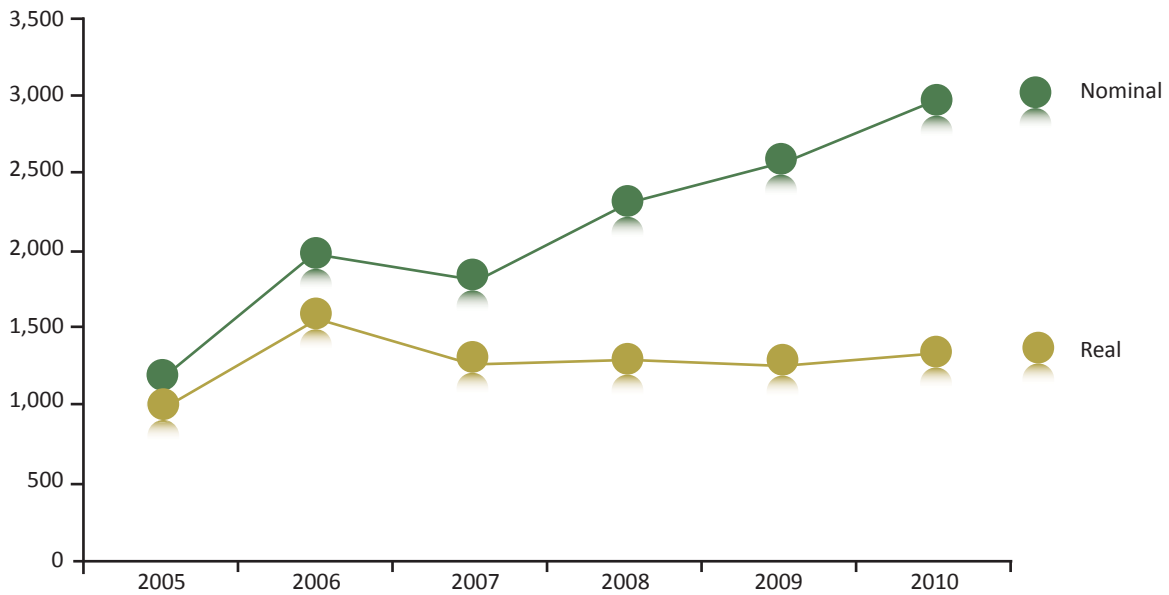
CHART 4.2. REVENUES, 2005–10 (UAH MILLIONS)



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

Nominal budget revenues per capita grew from UAH 1,152.1 in 2005 to UAH 2,972.0 in 2010. These correspond to a CAGR of 20.9 per cent. On a real basis,² however, revenue growth was a much slower 5.7 per cent annually—from UAH 1,015.1 in 2005 to UAH 1,340.3 in 2010, which implies a CAGR of 5.7 per cent. (See Chart 4.3.)

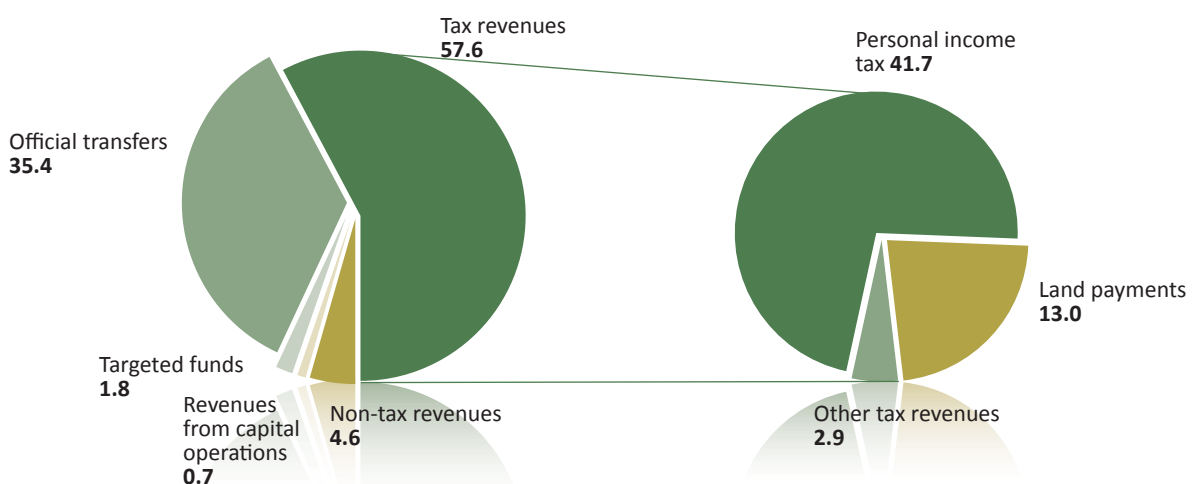
CHART 4.3. PER CAPITA REVENUES, REAL AND NOMINAL, 2005–10 (UAH)



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

As with the majority of cities in Ukraine, most of Kryvyi Rih’s revenues stem from taxes and official transfers. In 2010, tax revenues accounted for 57.6 per cent of total revenues and official transfers 35.4 per cent. (See Chart 4.4.) Non-tax revenues (e.g., fees, fines, licences) contributed just 4.6 per cent of total revenues, while revenues from targeted funds accounted for 1.8 per cent of budget revenues. Revenues from capital operations (e.g., land sales) contributed 0.7 per cent to total revenues.

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

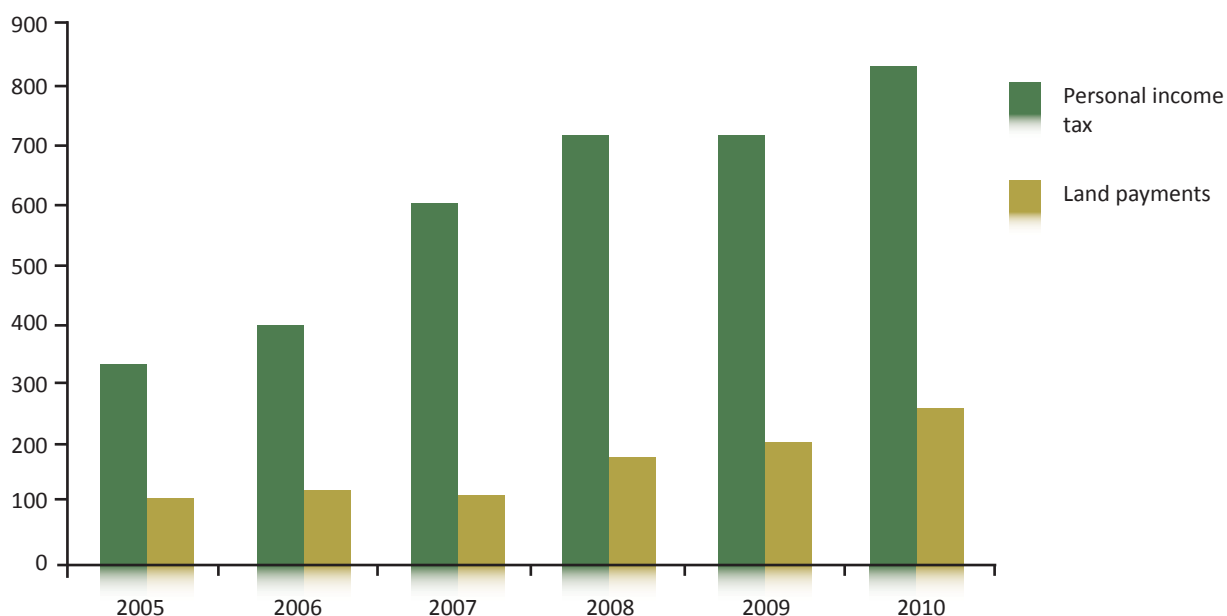


Sources: State Treasury Reports on Local Budgets Execution for City of Kryvyi Rih; in-house calculations.

² The cumulative inflation index used for this was calculated using annual CPI data from the State Statistics Service of Ukraine.

Revenues from personal income tax increased from UAH 328.6 million in 2005 to UAH 832.8 million in 2010, which suggests a CAGR of 20.4 per cent. This growth has been steady overall, with only one decline—in 2009. The fact that the city’s revenue growth declined by only 0.07 per cent during a year when real GDP in Ukraine contracted by 15.1 per cent in real terms suggests that the city was relatively shielded from the downturn.³ Revenues from land payments increased from UAH 106.1 million in 2005 to UAH 260.1 million in 2010, which suggests a CAGR of 19.6 per cent. This item declined only once—in 2007. A closer examination of the data show that this was mainly due to drop in land payments by legal entities which fell from 76.5 per cent of total land payments in 2006 (UAH 90.5 million) to 67.7 per cent in 2007 (UAH 75.0 million). (See Chart 4.5.)

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



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

From 2005 to 2010, official transfers⁴ from the state budget to the municipal budget increased from UAH 244.6 million (30.4 per cent of total revenues) to UAH 706.5 million (35.4 per cent of total revenues), which suggests a CAGR of 23.6 per cent. (See Table 4.1.) This growth was partly the result of higher grants (CAGR of 59.6 per cent), which increased from 2.1 per cent of revenues in 2005 to 8.8 per cent in 2010. The rapid rise in the share of revenues from both grants (including equalization from 2009 onward) and subventions shows a growing dependence on the central government, culminating in 2009 with the change in the city’s status from a “donor” to a “recipient” of equalization in 2009—at which point the city stopped paying into the equalization fund (see the last row of Table 4.1) and instead became the recipient of equalization (see “equalization grants” under “Grants” in Table 4.1). The extremely large share of official transfers in 2006 (51 per cent) is the result of both a one-time payment to reimburse debts incurred by heating costs, as well as the city making a large one-time transfer to the Budget for Development thanks to a large sale of land that year. This type of transfer is an internal transfer within the municipal budget and growth in such a transfer is an indication that the city is able to cover operating expenses as well as invest a portion of its funds in infrastructure development. Clearly, in 2006, the city was financially stable enough to carry development expenditures and invest in its economy.

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.” The 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	244.6	690.8	354.9	434.1	564.7	706.5
Proportion of total revenues, %	30.4	51.0	28.5	27.7	32.4	35.4
Grants	17.0	8.1	30.4	8.9	122.2	175.5
Proportion of total revenues, %	2.1	0.6	2.4	0.6	7.0	8.8
of which equalization grants	0.0	0.0	0.0	0.0	95.9	175.5
proportion of total revenues, %	0.0	0.0	0.0	0.0	5.5	8.8
Subventions	179.8	489.8	263.2	334.1	400.6	419.7
Proportion of total revenues, %	22.3	36.2	21.1	21.3	23.0	21.0
Funds directed to Budget for Development	0.7	142.4	6.2	12.4	0.0	0.1
Proportion of total revenues, %	0.1	10.5	0.5	0.8	0.0	0.0
“Other grants and subventions”	47.1	50.5	55.1	78.7	42.0	111.2
Proportion of total revenues, %	5.9	3.7	4.4	5.0	2.4	5.6
Memorandum:						
Total revenues	804.9	1,354.8	1,244.8	1,567.2	1,744.3	1,996.5
Transfers to the Equalization Fund	43.7	9.4	20.2	60.6	0.0	0.0

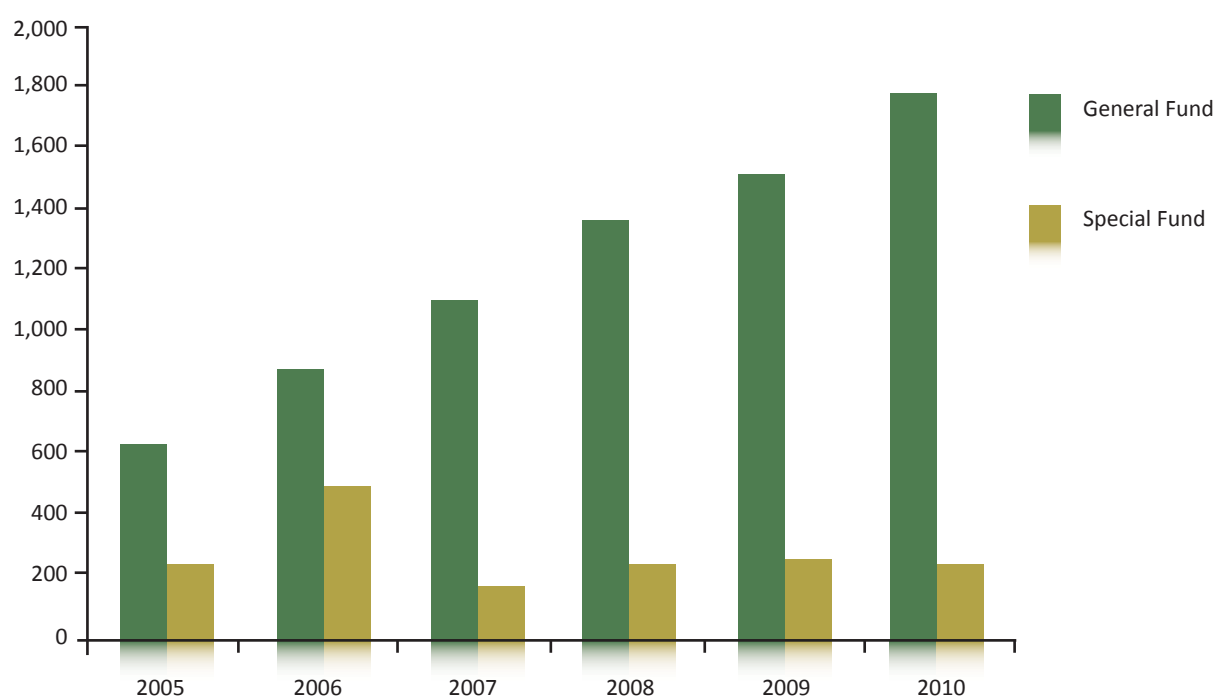
Sources: State Treasury Reports on Local Budgets Execution for City of Kryvyi Rih 2005–10; in-house calculations.

SPECIAL FUND

The Ukrainian Budget Code 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.

The Special Fund is primarily comprised of own revenues from budget funded institutions, subventions, and revenues earmarked for the budget for development. (See Table 4.2.) Between 2005 and 2010, total revenues of the Special Fund averaged 18.7 per cent of total revenues. Within this fund, property tax revenues were the most stable, with a standard deviation of just 2.0 per cent, followed by other revenues and targeted funds (4.8 and 5.8 per cent, respectively), revenues of budgetary institutions (8.7 per cent), Budget for Development (11.3 per cent), and subventions (18.2 per cent).



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

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

Revenues from subventions varied greatly—the result of large earmarked subventions designed to reimburse individual households for debts incurred for heating, water, and sewage expenses in 2006, 2008, and 2009. (See “Subventions” Section of Table 4.2.) Subventions for these three items accounted for 51.8 per cent, 34.1 per cent, and 35.9 per cent of total subventions in 2006, 2008 and 2009, respectively.

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

	2005	2006	2007	2008	2009	2010
Budget for Development	29.8	165.2	38.7	44.1	11.9	12.9
Property taxes	8.0	9.9	11.9	13.0	12.2	13.6
Own revenues from budget funded institutions	36.2	50.3	50.3	58.3	63.6	71.2
Targeted funds	13.2	15.3	22.0	38.7	21.8	35.7
Subventions	89.7	222.2	7.5	36.1	120.5	69.0
Other revenues	26.9	22.7	23.6	28.8	9.7	21.0
Total	203.7	485.5	154.1	219.0	239.7	223.4
Memorandum:						
Total revenues	804.9	1,354.8	1,244.8	1,567.2	1,744.3	1,996.5
Proportion of total revenues, %	25.3	35.8	12.4	14.0	13.7	11.2

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

BUDGET FOR DEVELOPMENT

The Budget for Development is a part of the Special Fund of the Budget. 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.

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

	2005	2006	2007	2008	2009	2010
Receipts from asset sales	29.1	22.5	23.8	28.2	11.3	6.2
Revenues from land sales	0.1	0.2	8.7	3.4	0.7	6.6
Investment subventions	0.0	0.0	0.0	0.0	0.0	0.0
Transfers from the General Fund	0.7	142.4	6.2	12.4	0.0	0.1
Total	29.8	165.2	38.7	44.1	12.0	12.9
Memorandum:						
Total revenues	804.9	1,354.8	1,244.8	1,567.2	1,744.3	1,996.5
Proportion of total revenues, %	3.7	12.2	3.1	2.8	0.7	0.6

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

Revenues from the Budget for Development represent on average 3.9 per cent of total revenues. In order of importance, between 2005 and 2010, the largest source of revenues to this budget item was sales of municipal property (“Asset Sales”) (63.2 per cent on average), followed by transfer revenues from the General Fund (22.3 per cent) and land sales (14.5 per cent). Predictably, transfers from the General Fund varied the most (with a 33.2 per cent standard deviation), followed by revenues from asset sales (standard deviation of 33.1 per cent)—likely a result of the volatility surrounding asset sales. The fact that the city had funds that could be transferred to the special fund proves that the city has, historically, had a stable operating performance. However, in recent years (2009 and 2010), the city was unable to transfer funds from the general fund to the special fund.

MODIFIABLE REVENUES

Modifiable revenues are taxes or levies that the executive bodies of local self-governance units may increase or decrease at will. These include taxes and fees such as local taxes and duties, as well as income from leasing land or buildings.⁵ The share of modifiable revenues in Kryvyi Rih’s total revenues averaged 13.9 per cent of total revenues over the 2005–10 period.

Kryvyi Rih’s modifiable revenues consist mainly of land payments (UAH 260.1 million in 2010, which is equivalent to 85.4 per cent of all modifiable revenues), proceeds from a unified single tax on entrepreneurs (UAH 25 million, or 8.22 per cent of the total), and revenues from local taxes and duties (UAH 11.7 million, or 3.9 per cent of the total). (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.

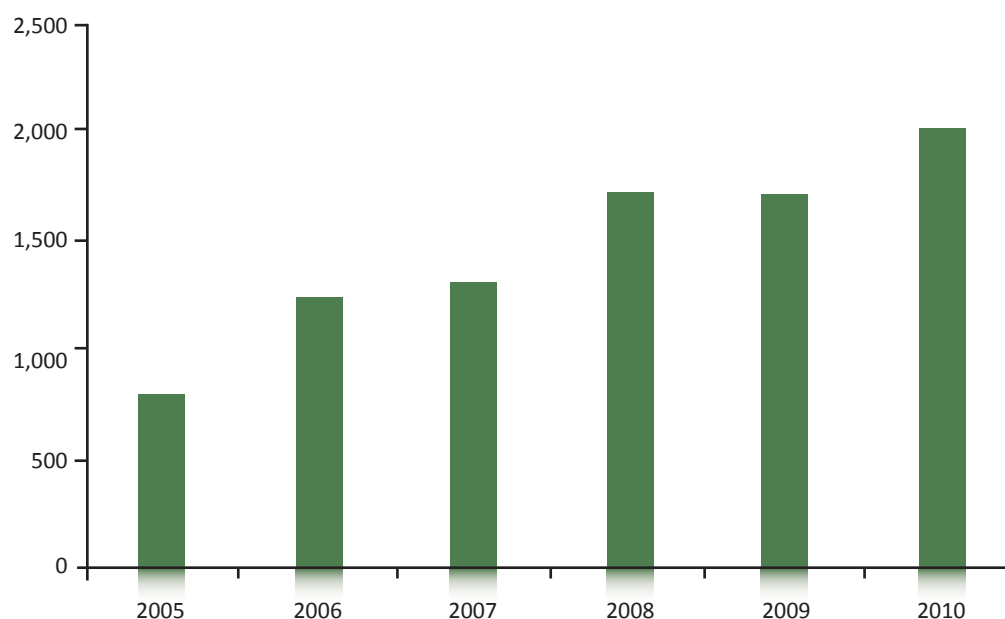
TABLE 4.4. MODIFIABLE REVENUES, 2005–10 (UAH MILLIONS AND PER CENT)

	2005	2006	2007	2008	2009	2010
Land payments	106.1	118.3	110.7	175.8	201.3	260.1
Local taxes and duties	9.2	10.0	12.2	12.7	12.1	11.7
Receipts from community property lease	0.1	2.1	5.9	9.1	13.2	7.6
Unified single tax on small entrepreneurs	17.7	17.2	20.3	25.6	23.8	25.0
Total	133.2	147.6	149.1	223.2	250.5	304.4
Memorandum:						
Total revenues	804.9	1,354.8	1,244.8	1,567.2	1,744.3	1,996.5
Share of total revenues, %	16.5	10.9	12.0	14.2	14.4	15.2

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

EXPENDITURES

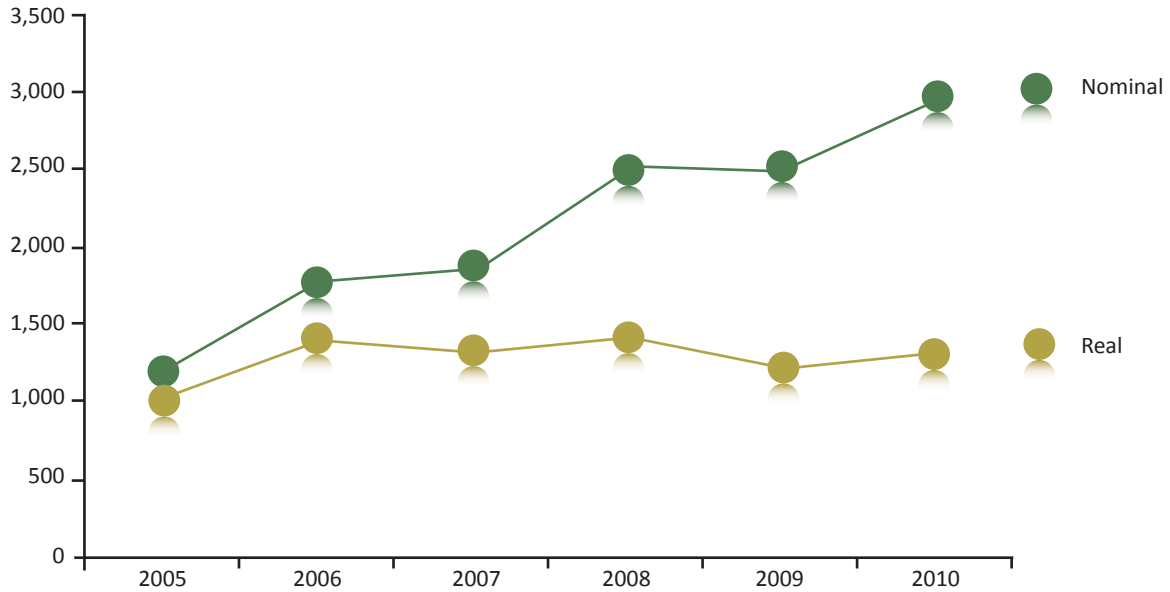
Kryvyi Rih's expenditures grew at a CAGR of 19.9 per cent from 2005 to 2010, from UAH 799.7 million in 2005 to UAH 1,978.9 million in 2010. (See Chart 4.7.)

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

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

On a per capita basis, expenditures have increased from UAH 1,144.8 per capita in 2005 to UAH 2,945.8 million in 2010, which is equivalent to a CAGR of 20.81 per cent. (See Chart 4.8.) However, when adjusted for inflation, the growth is not as striking. Expenditures increased by a CAGR of only 5.31 per cent—from UAH 1,008.6 in 2005 to 1,306.3 in 2010.

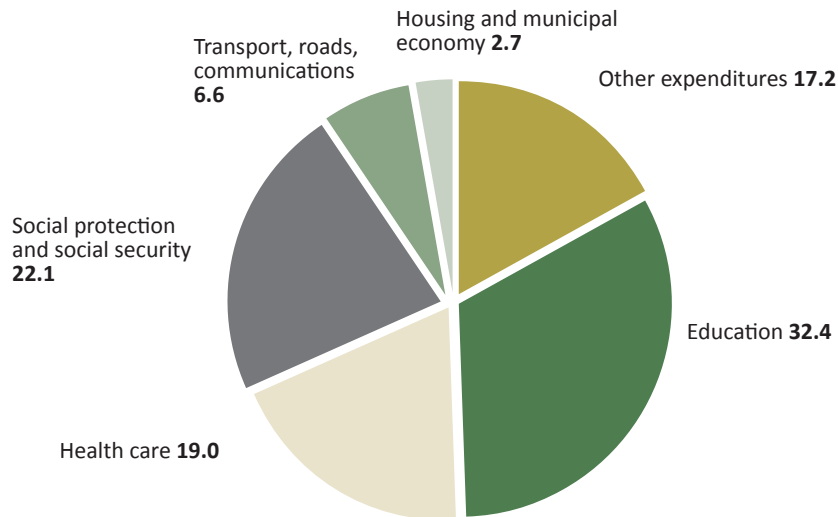
CHART 4.8. PER CAPITA EXPENDITURES , REAL AND NOMINAL, 2005–10 (UAH)



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

The bulk of expenditures in 2010 went to education (32.4 per cent), social protection and security (22.1 per cent), and health care (19.0 per cent). Together with expenditures for transport and roads (6.6 per cent) and housing and municipal economy (2.7 per cent), these five categories totalled 82.8 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 Kryvyi Rih; in-house calculations.

By item, expenditures on social protection and security experienced the fastest growth of all expenditures from 2005 to 2010 (CAGR of 38.8 per cent). (See Chart 4.10.) This increase—which also occurred in many cities across Ukraine—followed a review of basic social standards by the central government. Growth in health care expenditures was 24.5 per cent (CAGR), followed by education (23.0 per cent). Together, expenditures on these three categories represented 73.5 per cent of total expenditures in 2010, up from 57.8 per cent in 2005.

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

Chart 4.10a. Education

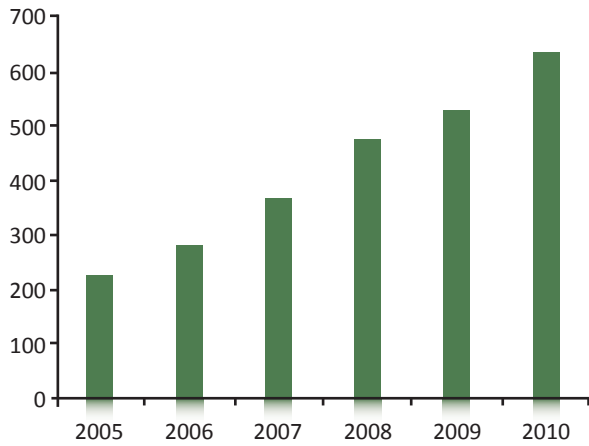


Chart 4.10b. Health Care

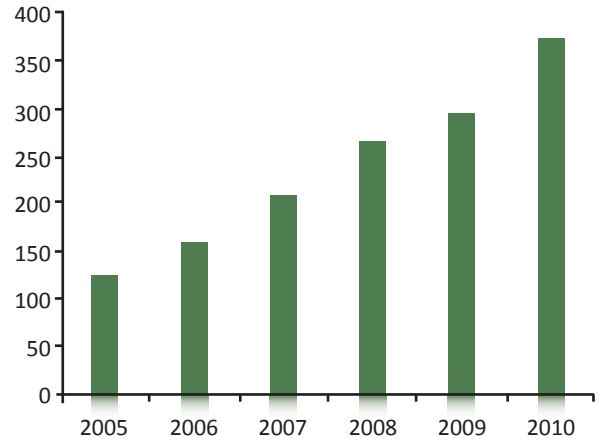


Chart 4.10c. Social Protection and Security

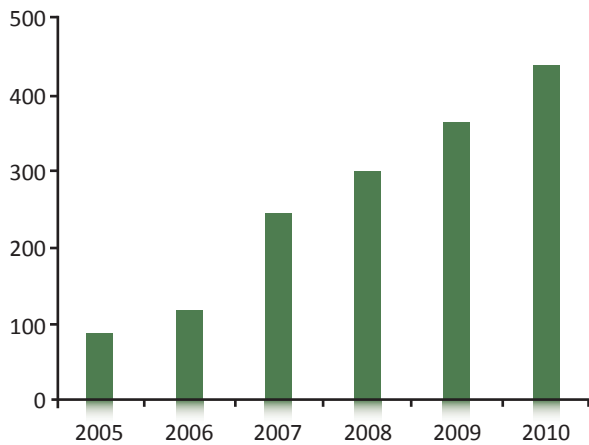


Chart 4.10d. Housing & Municipal Economy

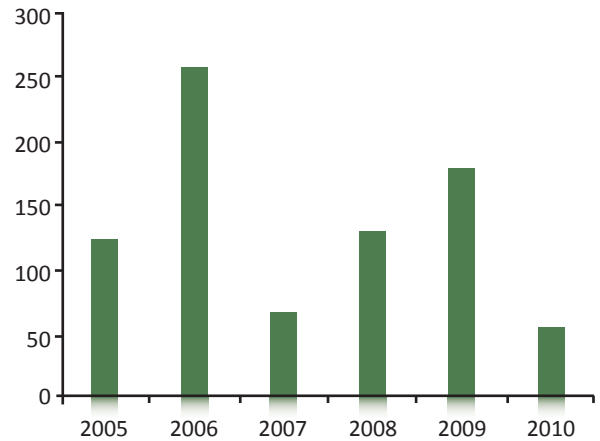
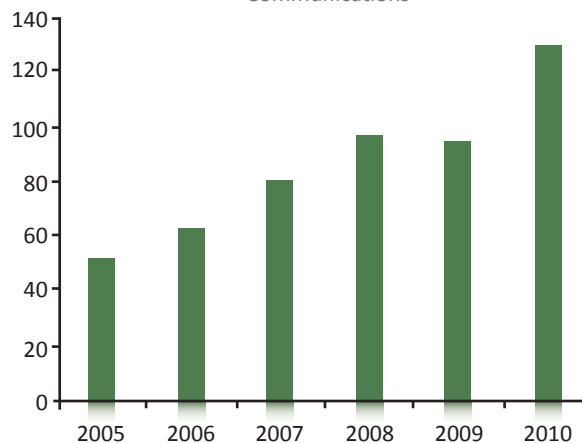


Chart 4.10e. Transport, Public Roads, Communications

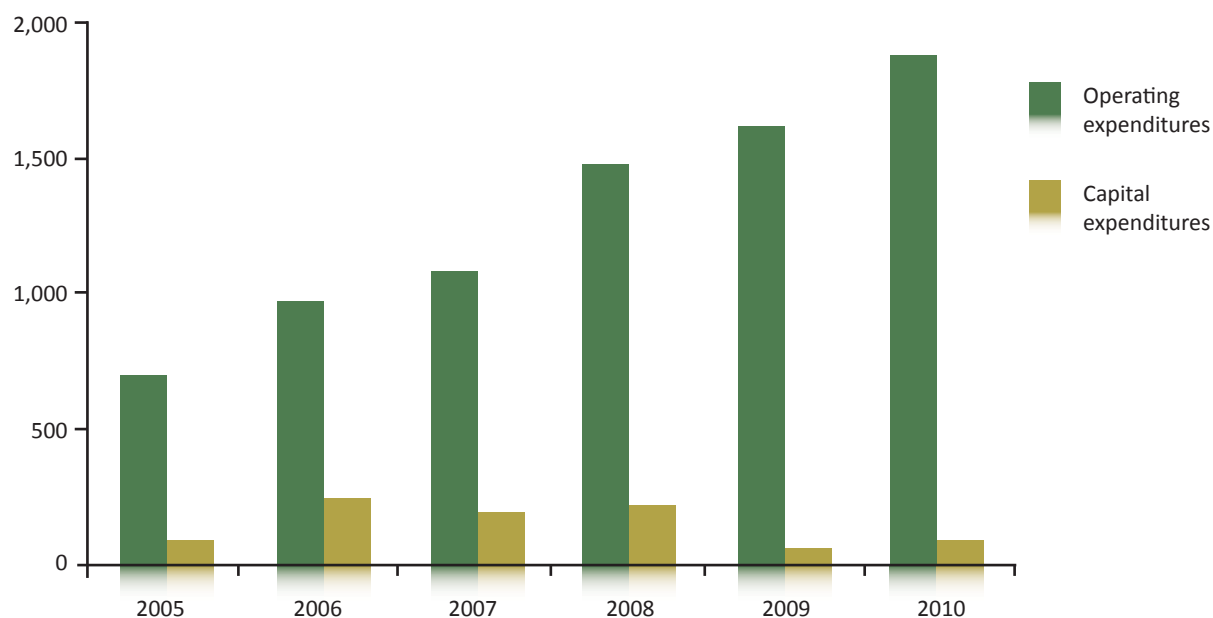


Source: State Treasury Reports on Local Budgets Execution for City of Kryvyi Rih 2005–10.

Expenditures on housing and the municipal economy initially rose as a proportion of total expenditures from 15.5 per cent in 2005 to 21.1 per cent in 2006; but thereafter dropped to an average of 7.8 per cent from 2007 to 2009 and just 2.8 per cent in 2010. Similar to other Ukrainian cities, the spending hikes in 2006, 2008, and 2009 were in part driven by payments to households for debts incurred from the purchase of heat and other utilities in those years.

Capital expenditures decreased sharply from 2006 to 2010—from 20.3 per cent of total expenditures in 2006 to 4.4 per cent in 2010. (See Chart 4.11.) On a CAGR basis, this is equivalent to expenditures falling by 18.8 per cent each year.

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



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

INDICATORS OF KRYVYI RIH'S FISCAL HEALTH

Kryvyi Rih is in a stable fiscal position. The city generated budget surpluses in both 2009 and 2010, earning it a “strong” rating (Table 4.5), despite the fact that total expenditures were virtually equal to total revenues—generating a ratio of 99.1 per cent and earning the city a “neutral” rating in this particular category. As well, the 15.4 per cent proportion of modifiable to total revenues fell short of the “strong” rating threshold, earning the city a “neutral” rating on this indicator. In contrast, the city earned a “strong” rating for balancing operating expenditures with operating revenues and obtaining a favourable ratio between operating surplus and tax revenues. At 35.6 per cent, the ratio of “budget transfers/operating revenues” fell just short of the “strong” designation—beginning at 33 per cent—and was given a “neutral” rating. The slide in capital expenditures from 2006 to 2010 was what caused the capital-expenditures-as-a-share-of-total-expenditures ratio to change from “strong” to “weak.” Finally, the city scored a “strong” rating for having no debt.

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

	2005	2006	2007	2008	2009	2010	Benchmark				Position (2010)
							Strong		Weak		
Deficit/surplus per capita, UAH	7.3	195.7	-64.8	-196.1	78.3	26.2	>	0	<	0	Strong
Total expenditures/total revenues, %	99.4	90.0	103.6	108.6	97.0	99.1	<	95	>	100	Neutral
Modifiable revenues/operating revenues, %	17.4	14.3	12.6	14.8	14.5	15.4	>	40	<	10	Neutral
Operating expenditures/operating revenues, %	92.3	94.2	92.1	98.7	94.3	95.4	<	100	>	100	Strong
Operating surplus/tax revenues, %	12.3	10.5	12.1	1.9	9.4	7.9	>	5	<	2	Strong
Budget transfers/operating revenues, %	31.9	67.0	30.0	28.9	32.6	35.6	<	33	>	50	Neutral
Capital expenditures/total expenditures, %	11.5	20.3	15.6	12.7	3.5	4.4	>	15	<	5	Weak
Debt servicing/operating revenues, %	0	0	0	0	0	0	<	10	>	15	Strong
Debt servicing/capita, UAH	0	0	0	0	0	0	No data	n/a	No data	n/a	

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

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

Main budget indicators	2005		2006		2007		2008		2009		2010	
	Total, UAH mil	Per capita, UAH	Total, UAH mil	Per capita, UAH	Total, UAH mil	Per capita, UAH	Total, UAH mil	Per capita, UAH	Total, UAH mil	Per capita, UAH	Total, UAH mil	Per capita, UAH
Revenues												
Budget revenues, total	804.9	1,152.1	1,354.8	1,951.8	1,244.8	1,806.3	1,567.2	2,293.9	1,744.3	2,574.9	1,996.5	2,972.0
Budget revenues growth, year-over-year, %	n/a	n/a	68.3	69.4	-8.1	-7.5	25.9	27.0	11.3	12.3	14.5	15.4
of which city revenues without transfers	560.3	802.0	664.0	956.6	889.9	1,291.3	1,133.0	1,658.4	1,179.5	1,741.2	1,290.0	1,920.3
of which official transfers	244.6	350.1	690.8	995.2	354.9	515.0	434.1	635.4	564.7	833.7	706.5	1,051.7
of which grants	32.7	46.9	29.5	42.4	58.2	84.5	54.1	79.2	149.5	220.6	259.5	386.3
of which subventions	211.2	302.3	518.9	747.6	290.5	421.5	367.6	538.1	415.3	613.0	446.9	665.2
of which funds directed to Budget for Development from the general budget fund	0.7	1.0	142.4	205.2	6.2	9.0	12.4	18.2	0.0	0.0	0.1	0.2
Share of total revenues, %												
of which city revenues without transfers, %	69.6		49.0		71.5		72.3		67.6		64.6	
of which official transfers, %	30.4		51.0		28.5		27.7		32.4		35.4	
of which grants, %	4.1		2.2		4.7		3.5		8.6		13.0	
of which subventions, %	26.2		38.3		23.3		23.5		23.8		22.4	
of which funds directed to Budget for Development from the general budget fund, %	0.1		10.5		0.5		0.8		0.0		0.0	
Main city budget revenue items												
of which city revenues without transfers	560.3	802.0	664.0	956.6	889.9	1,291.3	1,133.0	1,658.4	1,179.5	1,741.2	1,290.0	1,920.3

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of which personal income tax	328.6	470.4	402.4	579.7	602.4	874.2	716.9	1,049.3	716.4	1,057.5	832.8	1,239.7
of which tax on owners of the vehicles and other self-propelled machines and mechanisms	8.0	11.4	9.9	14.2	11.9	17.3	13.0	19.0	12.2	18.0	13.6	20.3
of which land payments	106.1	151.9	118.3	170.5	110.7	160.7	175.8	257.3	201.3	297.2	260.1	387.1
of which payment for trade patent for some types of entrepreneurial activity	8.1	11.5	7.8	11.2	9.8	14.3	9.9	14.6	3.3	4.9	3.5	5.2
of which local taxes and fees	9.2	13.2	10.0	14.4	12.2	17.8	12.7	18.6	12.1	17.9	11.7	17.4
of which unified single tax for small businesses	17.7	25.3	17.2	24.8	20.3	29.4	25.6	37.4	23.8	35.2	25.0	37.3
of which receipts from lease payments for using integral property complexes and other state property	0.1	0.2	2.1	3.0	5.9	8.5	9.1	13.3	13.2	19.5	7.6	11.3
of which payments for services provided by institutions subsidized from the budget	17.5	25.0	22.8	32.8	27.3	39.6	37.1	54.3	36.5	53.9	44.3	65.9
of which receipts from disposal of property owned by the Autonomous Republic of Crimea and property owned by municipalities	29.1	41.6	22.5	32.4	23.8	34.5	28.2	41.3	11.3	16.7	6.2	9.2
of which receipts from land sales	0.1	0.1	0.2	0.3	8.7	12.7	3.4	4.9	0.7	1.0	6.6	9.8
of which other budget revenues	35.9	51.3	50.8	73.2	56.7	82.3	101.3	148.3	148.7	219.5	78.7	117.1
of which official transfers	244.6	350.1	690.8	995.2	354.9	515.0	434.1	635.4	564.7	833.7	706.5	1,051.7
General and Special funds revenues												
General Fund revenues	601.1	860.5	869.2	1,252.3	1,090.7	1,582.8	1,348.2	1,973.4	1,504.6	2,221.1	1,773.1	2,639.4
Special Fund revenues	203.7	291.6	485.5	699.5	154.0	223.5	219.0	320.5	239.7	353.8	223.4	332.6
of which Budget for Development, %	3.7		12.2		3.1		2.8		0.7		0.6	
Expenditures												
Budget expenditures, total	799.7	1,144.8	1,218.9	1,756.1	1,289.4	1,871.0	1,701.2	2,490.0	1,691.3	2,496.6	1,978.9	2,945.8
Budget expenditures growth, year-over-year, %	n/a		52.4		5.8		31.9		-0.6		17.0	
Main budget expenditure items												
of which public administration	28.1	40.2	45.3	65.2	54.5	79.1	74.9	109.7	75.3	111.2	94.8	141.2
of which law enforcement activities and state security maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
of which education	227.2	325.2	280.1	403.5	368.6	534.8	477.7	699.2	530.4	783.0	640.7	953.7
of which health care	125.8	180.0	160.4	231.1	209.2	303.5	267.0	390.9	296.4	437.5	376.2	560.0
of which social protection and social security	85.0	121.6	116.7	168.2	246.1	357.1	300.7	440.1	362.1	534.6	438.0	652.0
of which housing and municipal economy	123.7	177.1	256.8	370.0	66.1	95.8	131.0	191.7	178.4	263.3	54.4	81.0
of which culture and arts	16.9	24.3	22.9	33.0	29.6	42.9	41.6	60.8	46.6	68.8	59.2	88.2
of which mass media	1.1	1.5	1.4	2.0	1.6	2.3	1.9	2.8	2.0	3.0	3.1	4.6
of which physical education and sport	7.1	10.2	9.8	14.1	11.9	17.3	15.7	23.0	17.4	25.7	22.8	33.9
of which construction	32.9	47.2	45.9	66.1	120.8	175.3	111.4	163.1	14.2	21.0	14.2	21.1
of which agribusiness and forestry, fishing and hunting	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0
of which transport, public road system, communications, telecommunications and IT	52.0	74.5	63.4	91.4	80.0	116.1	97.8	143.2	94.8	139.9	130.1	193.7

of which other services related to economic activity	0.1	0.1	0.2	0.3	0.8	1.1	1.0	1.5	1.7	2.6	0.6	0.8
of which environment protection and nuclear security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
of which prevention and elimination of emergency situations and disaster consequences	0.3	0.4	0.5	0.7	0.5	0.8	0.7	1.0	0.7	1.0	0.9	1.3
of which debt service	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
of which targeted funds	36.6	52.4	39.8	57.3	42.2	61.2	57.9	84.8	42.0	61.9	50.7	75.5
of which expenditures not referred to in main groups	0.0	0.0	0.4	0.6	0.0	0.0	0.0	0.0	1.0	1.4	6.0	8.9
of which other budget expenditures	62.9	90.0	175.3	252.6	57.6	83.6	121.6	177.9	28.3	41.8	87.3	129.9
General and Special Funds expenditures												
General Fund expenditures	600.0	858.8	871.6	1,255.7	1,070.7	1,553.7	1,420.6	2,079.3	1,444.6	2,132.5	1,764.3	2,626.3
Special Fund expenditures	199.7	285.9	347.3	500.4	218.7	317.4	280.6	410.7	246.7	364.2	87.7	130.5
Structure of the budget expenditures based on economic classification												
Operating expenditures, total	708.0	1,013.5	971.1	1,399.0	1,088.3	1,579.2	1,485.0	2,173.7	1,631.7	2,408.9	1,891.3	2,815.7
Capital expenditures, total	91.7	131.3	247.9	357.1	201.1	291.9	216.2	316.5	59.6	88.0	87.7	130.5
Budget surplus/deficit												
Budget surplus/deficit	5.0	7.2	135.7	195.5	-44.8	-65.0	-134.1	-196.3	52.9	78.1	17.4	25.9
as % of revenues	0.6		10.0		-3.6		-8.6		3.0		0.9	
Total population at the beginning of the year, number of people	698,599		694,101		689,141		683,212		677,416		671,779	

Note: Budget Surplus/Deficit is defined here as Revenues minus Expenditures minus Intra-budget Transfers.

Note: The values of "Grants" and "Subventions" in this Addendum differ from those in Table 1. Revenues from budget codes 41020300, 41020900, and 41030300 which had been included in "Other Grants and Subventions" category in Table 1 have been distributed to "Grants" and "Subventions", as appropriate, in the Addendum.



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



Canadian International
Development Agency

Agence canadienne de
développement international