

ENPI 08-14 BLACK SEA LABOUR MARKET REVIEWS

UKRAINE COUNTRY REPORT

Working document

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The contents of this report are the sole responsibility of the authors and do not necessarily reflect the views of the ETF or the European Union.

Foreword

This report is the outcome of a project, “Black Sea Labour Market Reviews”, which was initiated and funded by the European Training Foundation (ETF) to collect information and analysis of selected labour market and related human capital issues in six countries of the Black Sea region (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine).

This ETF Project is planned to be carried out in two phases: (i) preparation of country reports in 2008, (ii) regional analysis with cross-country comparisons in 2009. In the first phase, a common thematic outline was developed and used for the preparation of country reports, including quantitative and comparable data and other relevant qualitative information as well as their basic qualitative analyses. These country reports constitute the main preparatory work and stock-taking exercise for the regional level analysis. In the second phase, a comparative cross-country analysis of the labour markets with a regional ‘*Black Sea perspective*’ will be conducted on the basis of emerging issues from country reports.

For the Ukrainian part of the project, a local company, BEST LLC, was contracted to work with ETF on the Ukraine country report. This report was drafted by them, with the involvement of the following authors: Olga Kupets, Nataliya Leshchenko, Elena Osinkina, Svetlana Taran, and Vladislav Komarov. The draft report was then commented upon by an ETF team of experts (Jesús Alquézar, Ummuhan Bardak, Timo Kuusela and Agnieszka Majcher-Teleon) as well as an external experts, Dr. Constantin Zaman and Dr. Jan Rutkowski.

The team gratefully thanks Ms. Nadezhda Grygorovych, Ms. Natalya Kobryanskya and other staff of the Labour Statistics Department (Ukraine State Statistics Committee) for providing us with Labour Force Survey data and also information on methodological issues, potential uses and limitations. The team would also like to thank Ms. Natalya Zinkevich (Public Employment Service) for support, guidance and assistance.

A national workshop has been organised on 21 November, 2008 in Kiev to present the draft country report to the key national stakeholders and to discuss its key findings with them. The report is finalised after the workshop on the basis of comments received from the key stakeholders during and after the workshop. We are very grateful to Ms. Olena Malynovska (National Institute of International Security Problems) for detailed comments on an earlier draft of chapter 5, as well as to Tatjana Petrova (Ministry of Labour and Social Security), Larisa Lisogor (Institute of Demography and Social Research), Irina Petrova (University of Economics and Law “KROK”), Viktoria Bliznuk (Science Academy of Ukraine, Institute of the Economy and Forecasting), Kirill Tkachenko (Confederation of Employers of Ukraine) and Yuriy Marshavin (Institute of Career Development, PES) for their comments and notes made at the national workshop. The findings of the report were compiled in summer/autumn 2008, just before the financial and economic crisis erupted in Ukraine. Recent labour market trends that have arisen as a result of the crisis are the subject of special research.

Abbreviations and acronyms

ALMP	Active Labour Market Policy
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
ETF	European Training Foundation
EU	European Union
FDI	Foreign Direct Investment
FTUU	Federation of Trade Unions of Ukraine
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GNI	Gross National Income
GRP	Gross Regional Product
HBS	Household Budget Survey
IBRD	International Bank of Reconstruction and Development
ICLS	International Conference of Labour Statisticians
IDSS	Ukraine Institute of Demography and Social Studies
IFC	International Finance Corporation
IOM	International Organisation for Migration
ILO	International Labour Organisation
ISCED	International Standard Classification of Education
IZA	Forschungsinstitut zur Zukunft der Arbeit / Institute for the Study of Labour
KIIS	Kiev International Institute of Sociology
LFS	Labour Force Survey
NER	Net Enrolment Rate
OECD	Organisation for Economic Cooperation and Development
OLS	Ordinary Least Squares
PES	Public Employment Service
PIT	Personal Income Tax
PLMP	Passive Labour Market Policy
PPP	Purchasing Power Parity
SME	Small and Medium-sized Enterprises
UAH	Ukrainian Hryvnia (national currency of Ukraine)

ULMS Ukrainian Longitudinal Monitoring Survey
UNDP United Nations Development Programme
UNECE United Nations Economic Commission for Europe
USSR Union of Soviet Socialist Republics
WEF World Economic Forum
YoY Year-on-Year
USD USA Dollar
EUR Euro

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1. Background: data sources and key demographic and labour market indicators

1.1 Review of data sources

1.1.1 Official sources ¹

a) All-Ukrainian population census

The fieldwork for the All-Ukrainian Population Census 2001 was carried out between 5 and 14 December 2001 as the first national census of the population after the proclamation of independence. The previous census had been carried out in 1989 when Ukraine was part of the Union of Soviet Socialist Republics (USSR). The main objectives of this latest census were, first, to obtain true information about the fundamental changes that have taken place in the socioeconomic system of independent Ukraine and, second, to create an information base of demographic and socioeconomic data on population numbers, nationalities, languages, family composition, and distribution by age, gender, citizenship, education, means of subsistence, occupation, social status, migratory activity, etc, both for the country as a whole and for its administrative and territorial divisions. During the census, information was obtained on more than 48 million citizens of Ukraine and citizens of other countries who were in Ukraine on the date of the census. The next All-Ukrainian Population Census is scheduled for 2011.

b) Sample Labour Force Survey

Description. The sample survey of the economic activity of the population of Ukraine (known in international terms as the labour force survey, or LFS) was developed by the Ukraine State Statistics Committee in accordance with the recommendations of the International Labour Organisation (ILO) to satisfy a need for reliable data on the labour market. Its first wave was conducted in Ukraine in 1995. The main objective of the LFS is to divide the working-age population into three mutually exclusive groups — employed, unemployed, and economically inactive (not in the labour force) — and to provide descriptive and explanatory data on each. The main criteria and definitions used in the Ukrainian LFS correspond to those recommended by the ILO and used by EU members.

LFS data are used to calculate the unemployment rate as well as other standard labour market indicators such as the employment rate and the labour force participation rate. The LFS also provides employment estimates by employment status, type of economic activity, occupation, formal and informal sector, hours worked, reason for temporary absence, etc, all cross-classifiable by a number of demographic characteristics such as gender, age, educational attainment and place of residence (urban versus rural). The main drawback of the Ukrainian LFS in comparison with the surveys conducted in other countries is the absence of information on wage rates, union status, employer's form of ownership, and the means of subsistence. Estimates are produced for Ukraine and most estimates are also calculated for the 27 regions (24 oblasts (provinces), the Autonomous Republic of Crimea and two special-status cities, Kiev and Sevastopol).

Target population. The LFS sample is nationally representative and covers the civilian, non-institutionalised population between the ages of 15 and 70. It is conducted nationwide in both urban and rural areas. Survey coverage excludes the following: households in which all members are younger than 15 or older than 70 years; households with a single member who is not capable of giving objective information in response to the survey questions; pupils and students living temporarily elsewhere; people who serve in the Ukrainian army; and finally, institutionalised people (people permanently maintained in prisons, boarding institutions and institutions for the elderly).

¹ All official sources mentioned in this report are funded by the Ukrainian government. The main statistical body is the Ukraine State Statistics Committee (www.ukrstat.gov.ua). Data on registered unemployment, vacancies and passive and active labour market programmes are collected and provided by the Ukraine Public Employment Service (www.dcz.gov.ua).

Survey method. Data are collected directly from survey respondents (all adult members of selected households aged 15-70). LFS interviews are conducted by a field interviewer by means of personal visits to each household.

Reference and collection period. In 1995-1998 the LFS was conducted yearly, in 1999-2003, quarterly, and from 2004, monthly. Data for the monthly LFS is collected each month between the 21st and 30th/31st of the month, that is, in the week following the LFS reference week, which is normally the week (Monday to Sunday) containing the 15th day of the month.

Sample design and size. Sampling is based on the multilevel stratification procedure. Monthly surveys use a rotating pattern according to which selected households participate six times, as follows: a household participates three months in succession, then after a nine-month break it participates again for another three consecutive months. The size of a monthly sample is about 18,500 households. During 2007, 141,900 respondents aged 15-70 years took part in the survey, comprising 0.4% of the resident population of Ukraine in the specified age band. In 2007, the response rate among urban and rural households was 80.3% and 89.2%, respectively.

Data reliability. Since the LFS is a sample survey, all LFS estimates are subject to both sampling and non-sampling errors. Reliability of survey estimates as far as sampling errors are concerned is measured using a coefficient of variation (CV). According to estimates by the State Statistics Committee of Ukraine, almost all LFS estimates are reliable not only at the national level, but also by regions and socio-demographic characteristics (a coefficient of variation of less than 5%). The least reliable estimate is the unemployment rate by age, educational attainment and regions (the coefficient of variation reaches 50% in some cases).

Main definitions. The *economically active population* comprises all people of either sex aged 15-70 years who furnish labour for the production of economic goods and services during a specified time-reference period. Since the Ukrainian LFS uses a short reference period of one week, the definition of the economically active population corresponds to that for the currently active population, or, equivalently, the labour force (as opposed to the usually active population measured for a longer reference period such as a year). The *currently active population* (or *labour force*) comprises all people who fulfil the requirements for inclusion among the employed or unemployed populations as defined below.

A person aged between 15 and 70 years is considered *employed* if, during the reference period, he/she satisfies the following conditions:

- He/she performed some work for at least one hour and received payment (in cash or in kind) as a wage earner, self-employed (own-account) worker or entrepreneur in one's own or a family enterprise;
- He/she worked without direct payment for at least one hour in a family enterprise, business or farm for the purpose of producing and selling economic goods or services (contributing family workers);²
- He/she was temporarily absent from work during the reference period for any specific reason (in other words, had a formal job or business but was temporarily not at work).

The main criterion for being temporarily absent from work is maintaining formal labour relations with an employer or, in the case of entrepreneurship, the continuation of a business (apart from people engaged on a personal farm). The reasons for being temporarily absent from work include: paid vacation, maternity or parental leave, unpaid administrative leave, illness or injury, care of a sick family member, seasonal work, holidays, etc.

People engaged in unpaid community and volunteer services or in household duties are not classified as employed.

² Before 2004, 30 hours was the minimum time criterion for including people engaged in subsistence agriculture for profit or family gain in the employed population.

A person aged 15-70 years is considered *unemployed*, if he/she simultaneously satisfies the following conditions:

- He/she was without work (or income-generating activity) during the reference period;
- He/she was actively seeking work or trying to launch a business in the four weeks prior to interview;
- He/she was available for work (i.e. for paid employment or self-employment) within the next two weeks.

People without work and available for work who are not currently seeking work—because they have made arrangements to take up paid employment or will undertake self-employment activity at some date subsequent to the reference period or will take a training course organised by the Public Employment Service are also considered to be unemployed.

The economically inactive population (that is, people out of the labour force) consists of people aged 15-70 years who were neither employed or unemployed during the reference period. This group comprises the following functional categories:

- People with retirement or disability pensions or retired on preferential terms;
- Pupils and students;
- Homemakers (engaged in household duties and/or caring for children or sick family members);
- Discouraged workers;
- People who do not know where/how to seek work or who believe there is no suitable job for them;
- People with no need to work for other reasons.

Employment in the informal sector. The main international normative document which specifies the methodology for estimating employment in the informal sector in Ukraine is the Resolution on Statistics of Employment in the Informal Sector, adopted by the Fifteenth International Conference of Labour Statisticians (ICLS) in 1993.³ According to the national methodology, the population employed in the informal sector comprises all people who were employed in unregistered production units (enterprises) which, according to their size (number of employees), form the household sector. The informal sector is regarded as a group of unregistered production units (both non-agricultural and agricultural) which satisfy the following criteria:

- economic activity is market oriented (at least some of the goods or services produced are meant for sale or barter);
- the number of employed people is below a specified level (according to ILO recommendations, the upper limit for Ukraine is five employees);
- the enterprise (entrepreneurial activity) is not registered in accordance with specific national legislation.

Production units (enterprises) which produce goods and services exclusively for their own consumption are excluded from the informal sector.

The framework proposed by the ICLS resolution allows countries to adapt the basic operational definition and criteria to their specific circumstances. In particular, in the national methodology adopted in Ukraine, the following additional criterion is used: non-registration of employees (that is, without signing an official labour contract/agreement) with an employer working in the formal sector.

³ The resolution is available at <http://www.ilo.org/public/english/bureau/stat/download/res/infsec.pdf>.

The major information source for employment in the informal sector in Ukraine is the LFS. Statistics are made available on a regular basis (in the quarterly reports of the Ukraine State Statistics Committee) and are published in the annual statistical bulletins (starting from 2004).

c) State Statistical Establishment Survey

The State Statistical Establishment Survey is a firm-level census-type survey. It is mandatory and covers all registered economically active enterprises, financial and budgetary institutions and public organisations. As far as labour statistics are concerned, it gives information on the extent of wage employment and its dynamics over time, the average wage, amount and incidence of wage arrears, underemployment (both involuntary and voluntary), efficiency of the working time use, on-the-job training (including retraining and skill upgrading), extent of the collective bargaining process and the structure of the stock of employees according to qualitative characteristics. In general, there are five main statistical forms referring to labour issues which must be completed regularly by all predefined legal entities.⁴

In spite of certain positive features (including regularity, almost unchanging methodology over time and high reliability of data because of the census-like approach), the survey has significant drawbacks. First of all, most labour indicators are estimated only for a fraction of employed people, as it excludes people employed in statistically small enterprises,⁵ in entrepreneurs-physical people, under civil law contracts (sub-contractor agreements) and military personnel. Furthermore, since the survey registers only official information given by enterprises, it misses out on important information about labour and wages in the informal economy. Finally, according to the Ukraine Law on State Statistics, raw firm-level data are not available to researchers and other interested parties because of their confidentiality.

d) Sample Household Budget Survey

Description. The sample survey of household living standards (or, to use international terminology, the Household Budget Survey (HBS)) was launched in Ukraine in January 1999 by the Ukraine State Statistics Committee as a basis for monitoring living standards and poverty-related issues, calculating average prices and the inflation index and estimating social standards, etc.

The survey provides information on the living standards of households, the structure of income, expenditure and cash resources, consumption patterns, household structures, the presence of children, etc. Besides the main standard questionnaires of the HBS, certain modular thematic questionnaires are used periodically to obtain detailed information on the following issues: expenditures on repairing or constructing housing and subsidiary buildings, the presence of durable goods in the household, the health status of household members and the availability of health care services and self-identification of the level of income sufficiency.

Target population. The HBS sample is nationally representative, covering as it does the civilian, non-institutionalised population living in urban and rural areas. Not covered are people living in the Chernobyl Zone of Alienation, Ukrainian army personnel and institutionalised people (people permanently maintained in prisons, boarding institutions and institutions for the elderly).

Survey method. Data are collected directly from survey respondents (one reference person from the household fills out all the household questionnaires and all adult individuals aged 16 years and older answer several questions about individual incomes and their sources). HBS interviews are conducted by a field interviewer in personal visits to households.

Collection period. Quarterly surveys are conducted within the first month after the reference quarter.

Sample design and size. Sampling is based on the multilevel stratification procedure. The sampling period is one year, with each selected household in the sample participating in the survey for four consecutive quarters. The size of the annual sample is about 13,000 addresses of households. In

⁴ The periodicity of each form is different: monthly, quarterly, half yearly, yearly and two-yearly, correspondingly.

⁵ Statistically small enterprises in Ukraine are enterprises in which the average listed number of employees during a reference (financial) year does not exceed 50 and gross revenues do not exceed an amount equivalent to 500,000 euros (calculated according to the average yearly National Bank of Ukraine euro-hryvnia exchange rate).

2007, about 10,600 households have been surveyed (82.9% of selected addresses excluding non-residential premises).

1.1.2 Alternative sources⁶

a) Ukrainian Longitudinal Monitoring Survey

Description. The Ukrainian Longitudinal Monitoring Survey (ULMS) is a household panel established to monitor the changing behaviour of workers during Ukraine's transition from a centrally planned economy to a market-oriented economy and democracy. The first wave of the ULMS was conducted in 2003, the second in 2004 and the third in 2007. All three waves of the survey were carried out by the Kiev International Institute of Sociology (KIIS) on behalf of the international consortium of sponsors led by the Institute for the Study of Labour (IZA), based in Bonn, Germany.

The household questionnaire contains questions on the demographic structure of households, household incomes, consumption and expenditure patterns and living conditions. The core of the survey is the individual questionnaire, which endeavours to elicit very detailed information about the labour market experience of Ukrainian workers. Apart from standard sections about current labour market status (questions about primary and secondary employment, job-search activities and non-employment), there is an extensive retrospective part. Tracking labour market involvement of a worker at specific past points in time, in principle it enables a worker's labour market history between January 1998 and the date of interview in 2007 to be reconstructed. There is also a set of questions on education and skills, ownership structure and evolution at workers' firms, geographic mobility, health status, time preferences, risk and political and environmental attitudes. Finally, there are a number of questions about wage rates (for waged employees) and profits (for self-employed people and entrepreneurs), wage arrears, payments in kind, unpaid leave, etc, in order to address the specific adjustment mechanisms that have been used in Ukraine as well as in many Commonwealth of Independent States (CIS).

The ULMS thus represents a very complete data source for labour market developments in Ukraine. Moreover, it uses ILO definitions for basic concepts (employed, unemployed, and economically inactive), which enables comparisons between collected data and the data from other Ukraine sources and other countries.

Target population. The ULMS panel data set, similar to the Russian Longitudinal Monitoring Survey, is conceived as a nationally representative random sample of the Ukrainian population aged 15-72 years. Excluded are people living in the Chernobyl Zone of Alienation, Ukrainian army personnel and institutionalised people (people permanently maintained in prisons, boarding institutions and institutions for the elderly).

Survey method. Data are collected via face-to-face interviews with survey respondents (one reference person from the household fills out the household questionnaire and all individuals aged 15-72 to fill out individual questionnaires).

Collection and reference period. The fieldwork for the first wave of the ULMS lasted from 11 April to 1 July 2003, for the second, from 29 May to 16 October 2004, and for the third, from 11 May to 25 December 2007. As in many household panel surveys, information for different reference periods is collected in the ULMS, as follows: (a) retrospective information on employment changes in 1986, 1991, 1997 and 1998-2002 (first wave), 2003-2004 (second wave) and 2004-2007 (third wave) and about changes of residence since 1986; and (b) information for the reference week, whereby information is collected for the full week (Monday to Sunday) preceding the interview date.

Sample design and size. Household selection in 2003 was based on two sampling procedures:

- A longitudinal (or panel) sample (841 households with 1,453 individuals) drawn from the sample of households used for the World Bank/KIIS 1995-1996 panel study of incomes and expenditures of households in Ukraine;

⁶ Only selected data sources are presented here. Most are funded and coordinated by international organisations. Access to raw micro-level data is usually limited.

- A random sample (3,215 households with 7,188 individuals) covering all the Ukrainian regions and based on the multilevel stratification procedure with a proportionate probability sample (that is, probability of each settlement entering the sample was proportional to its size).

The other two waves of the survey (2004 and 2007) were implemented for the households included in the sampling for the ULMS 2003 basic research.

The household response rate in the first wave of the ULMS averaged about 66% (ranging from 40% in the Odessa Oblast to 95% in the Vinnitsa and Kherson Oblasts), and the response rate within households was 87%. But as often happens in panel studies with unchanging samples and complicated questionnaires, the response rate is falling markedly from one wave to another.

Data reliability. Despite certain strengths in the survey, ULMS data are likely to be less reliable than official LFS data because of the smaller size of the sample, the lower response rate and the less accurate methodology. Furthermore, the ULMS is not as regular as the LFS and the latest ULMS data are not available to the public.

b) Youth Transition from Education to Work Survey

Description. The first survey on the transition from education to work was carried out in Ukraine in 2007 by the Kiev International Institute of Sociology (KIIS) within the ETF Innovation and Learning Project "Transition from Education to Work" that was implemented in 2006-2007. The main objective of the survey is to obtain reliable data on the link between education and work and the determinants of successful or unsuccessful transition. The study provides insights into the complex and dynamic process of youth integration into the labour market and the performance of the national education and training system.

The questionnaire used for the survey covers the following issues: situation before leaving continuous education for the first time; monthly calendar of activities since leaving education; first employment and first significant employment after leaving education; current labour market situation; education and training since leaving education; and basic socio-demographic characteristics.

Target population. Nationally representative sampling covers both urban and rural areas of Ukraine, except for the area of Chernobyl. The target group includes individuals aged 15-34 who left education for the first time in the previous six years (that is, 2001-2006). Given that the bulk of individuals leave education in May, June or July, the shortest possible period since leaving education is about 9-11 months.

Survey method. Data are collected directly from survey respondents (young individuals) via face-to-face interviews.

Collection period. The fieldwork for the first survey was conducted between 24 March and 20 May 2007.

Sample design and size. Sampling procedure is based on probability sampling. The number of respondents was 2,015 out of 25,081 households contacted (8%). Taking into account the fact that not all households had a member in the target group, the actual response rate was 68.3%.

c) World Bank Labour Demand Survey

Description. A Labour Demand Survey was designed by World Bank staff and implemented in Ukraine on a pilot basis in April 2007. The main objective of the survey is to determine the strength of labour demand and the occupational profile for Ukraine. The four specific goals are: (1) to determine the rate of job creation and destruction; (2) to determine the strength of labour demand by producing data on job vacancies; (3) to identify the occupational profile of jobs destroyed, jobs created and vacancies; and (4) to assess the difficulty employers have with filling vacancies for certain occupations.

Target population. The target group includes 344,514 operating enterprises (economically active subjects), as based on Ukraine State Statistics Committee data for 2005.

Survey method. Data are collected via face-to-face interviews with survey respondents (representatives of enterprises, such as human resource managers or specialists from human resource or other relevant departments).

Collection period. Fieldwork for the survey lasted from 18 April to 18 May 2007.

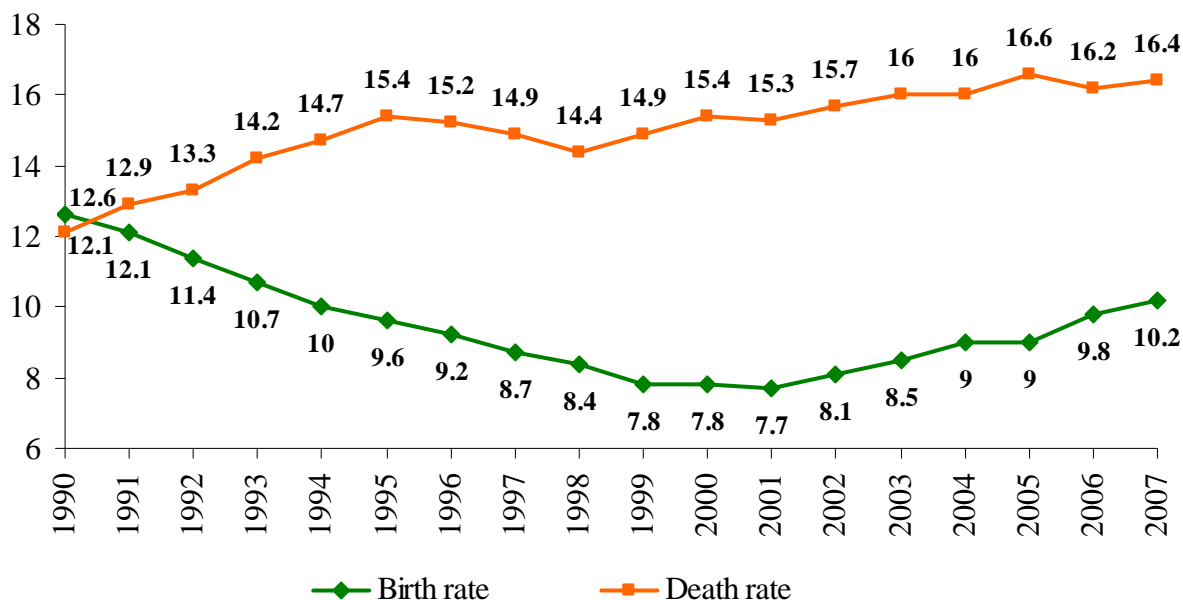
Sample design and size. The method used is multilevel combined sampling with target and probability sampling at certain stages. A sample is representative of different economic activity classes, firm sizes and ownership structures. The final number of respondents was 1,127 (225 each from the Kharkov, Ivano-Frankovsk and Vinnitsa Oblasts and the Autonomous Republic of the Crimea and 227 from the Nikolaev Oblast). In general, the sample structure corresponded to the population configuration fairly well, in view of the fact that, for all the specified characteristics, maximum sample data deviation from the official statistical data for selected regions (in 2005) was 1.9%. Representativeness error of the sample for a 0.95 confidence level did not exceed 3%.

1.2 Demographic trends and transition

1.2.1 Population and working-age population

The birth rate is low. Ukrainians prefer families with two children. After years of dramatic decline from 12.6‰ in 1990 to 7.7‰ in 2001, the birth rate started to increase from 2002, rising to 10.2 in 2007 (Figure 1.1), a figure which is still far below the levels observed in many developed countries. The fertility rate, which has the same dynamics as the crude birth rate, fell from 1.84 births per woman in 1990 to an extremely low level of 1.09 in 2001. Starting from 2002, the fall was reversed and the fertility rate is still increasing. Nevertheless, at 1.32 in 2007, it is not only lower than in the pre-transition years but also one of the lowest in Europe.

Figure 1.1 Crude birth and death rates (per 1000 people) 1990-2007



Source(s): Ukraine State Statistics Committee.

Several factors have contributed to the reversal in these rates in 2002 (Kurilo et al, 2007). First of all, those who were born in the 1980s—a decade of demographic boom resulting from a number of active population policy measures implemented by the Soviet government—entered childbearing age in the first decade of the new millennium. Secondly, the birth rate in the early 2000s was affected to a considerable degree by compensation in terms of births deferred in the difficult 1990s; the economic situation in Ukraine began to stabilise by 2001 and there was a steady increase in living standards and a gradual adaptation to the new social and economic environment, with many young and middle-

age people moving away from paternalistic attitudes. Finally, the considerable growth in the number of births, especially of second- and third-born children, was also helped by a significant twenty-fold increase in birth benefits from April 2005 and even more increase from January 2008, available to all women who gave birth to a live child, registered him/her with the public registry and applied within the specified period to the local social security department, regardless of the woman's labour market status, income level or social status.⁷

However, demographers (Kurilo et al, 2007) are of the opinion that the effect of these financial incentives will not endure, arguing that after all deferred births are realised,⁸ Ukraine will likely fall into a demographic hole, and particularly when the smaller and less healthy generation of the 1990s reaches childbearing age. By the average-case scenario the fertility rate is projected to decrease slightly until 2010 (1.29) and then increase but not significantly enough for population growth, reaching, at most, 1.51 births per woman in 2050 (IDSS, 2006a).

The death rate is high and increasing. In contrast with the birth rate, the death rate in Ukraine is extremely high in international perspective. In 2007, the crude death rate reached 16.4 per 1000 people (Figure 1.1), compared to about 9 in EU countries. Over the years 1998-2007, increases were recorded in practically all the age groups above 25 years, with extremely high rates among the working-age population in comparison with developed economies. Male death rates significantly exceed those for women, especially in the older age groups. Another particularly negative development in recent years is an increase in the infant (aged up to 1 year) mortality rate, from 9.8 per 1000 people in 2006 to 11.1 in 2007.

Exogenous factors and avoidable causes play an increasingly important role in explaining growing mortality. Leaving aside important endogenous factors connected with the poor health of population (with high levels of cardiovascular diseases, malignant neoplasm and respiratory and digestive diseases) and the high incidence of what are called social illnesses (tuberculosis, HIV/AIDS and other infectious and parasitic diseases)⁹, the striking fact is that exogenous factors, such as traffic accidents, self-inflicted injuries, disorders, accidents and intoxication as a result of alcohol abuse, are among the most important causes of premature mortality in Ukraine in recent years¹⁰. The primary concern is that the working-age male population is being decimated by diseases and accidents related to alcohol, poor work conditions and low standards of living.

According to local demographer estimates for 2006, 55% of deaths of Ukrainian people aged 25-64 years were avoidable (Libanova et al, 2008). In Ukraine in the period 1989-2006, indicators of avoidable mortality increased by 36% among males (reaching 819.8 cases per 100,000 people in 2006) and by 20% among females (268.2 cases per 100,000 people in 2006). Most cases of avoidable deaths (76% and 62.4% of cases among men and women, respectively) have causes that are amenable to primary prevention by reducing exposure. Causes amenable to tertiary prevention through improved treatment and medical care account for 23.5% and 18% of deaths among men and women, respectively, and causes amenable to secondary prevention through early detection and treatment account for 19% of female deaths but only 0.4% of male deaths.

Thus, more active implementation of preventive measures, such as control over alcohol, tobacco and drug abuse, reduced occupational exposure, prevention of traffic accidents, regular screening of at-

⁷ Between April 2005 and December 2007, birth benefit was paid at a flat rate of UAH 8,500 (UAH 3,400 paid as a first tranche within several days and UAH 425 paid monthly for 12 months) regardless of the number of children in a family. From January 2008, payment was differentiated depending on the number of children in a family and the order of a new-born child, with payments as follows: for the first child, UAH 12,240 (UAH 4,800 as a first tranche and UAH 620 monthly for 12 months); for the second child, UAH 25,000 (UAH 4,840 as a first tranche and UAH 840 monthly for 24 months); and for the third and subsequent children, UAH 50,000 (UAH 5,000 as a first tranche and UAH 1,250 monthly for 36 months).

⁸ A sociological survey on marriage, family, children conducted in Ukraine in April 2008 (based on a representative sample of about 3,200 people aged 15-50) shows that most respondents prefer to have two children and that more plan to have one child rather than three children. Furthermore, the average planned number of children is far lower than the average desired number of children in all social and professional groups. The main perceived obstacles to having the desired number of children are financial restraints, the lack of proper housing, the impossibility of guaranteeing appropriate conditions for the children's future, and the desire to achieve career goals.

⁹ Although public health spending (at 3.7% of GDP in 2006) in Ukraine is fairly high in international perspective, and out-of-pocket private spending is high, the health system in Ukraine suffers from inefficiencies in the management, financing, and delivery of health care, resulting in relatively poor health indicators and inequities in access to effective health care across oblasts and income levels (see World Bank, 2007c).

¹⁰ See detailed discussion of the causes of mortality in Ukraine at Libanova et al (2008).

risk individuals, etc, not to mention significant improvements in treatment and medical care could reduce by half the number of working-age population deaths in Ukraine.

Life expectancy is very low in comparison with developed countries. At just 68.1 years in Ukraine, it is 7-12 years lower than in the EU and in North America. Ukraine only fares better than Russia, a few other CIS members, Bolivia, Guyana, a few Asian nations and most sub-Saharan African countries (WEF, 2008, p. 65). Statistics on healthy life expectancy at birth is even less promising: at 59 years for both sexes (55 for male and 64 for female) in Ukraine, it is about 10-14 years lower than in EU countries (Libanova et al, 2008).

There is an alarming 11.5-year difference in life expectancy between women and men in Ukraine, with women expected to live on average 74 years, compared to 62.4 years for men. Estimates show that the main reason for such a huge difference in life expectancy is excessive mortality among men aged 25-64 years — accounting for 7 years of the total difference in 2006 (Libanova et al, 2008). Demographic studies also indicate that the total mortality difference between men and women of working age, resulting in pronounced differences in life expectancy between the sexes in Ukraine and in Russia, can be explained by the following factors: (a) more exposure of men to alcoholism, smoking, road accidents, murders and various accidents, hazardous and stressful occupations and activities (for example, in coal mining, construction, defence, public security and fire service activities, criminal sector, etc); (b) fundamental attitudinal differences between men and women in regard to their bodies, health and lives that make women more likely to benefit from preventive measures, early diagnosis, proper medical care and treatment; and (c) women's natural biological advantage.¹¹

Projected life expectancy at birth for the average-case scenario to 2050 in Ukraine is likely to increase to 71.5 and 79.5 years for men and women, respectively (world average life expectancy according to UN estimates is likely to be around 75 years for both sexes); the worst-case scenario is that it will stay roughly at the current low level (IDSS, 2006a).

Ukraine is on the verge of severe depopulation. Between independence (1991) and the end of 2007, the population of Ukraine declined from 52 million to 46.4 million, representing a loss of nearly 11% of the 1991 population. This significant decline in the population was due to negative natural change and negative net migration (accounting for 85% and 15%, respectively, of the total loss).¹² As a result, Ukraine has the highest natural population decrease rate in the world, at 0.8% annually (Ukraine's neighbours Russia, Belarus and Moldova are placed second, third and tenth, respectively).

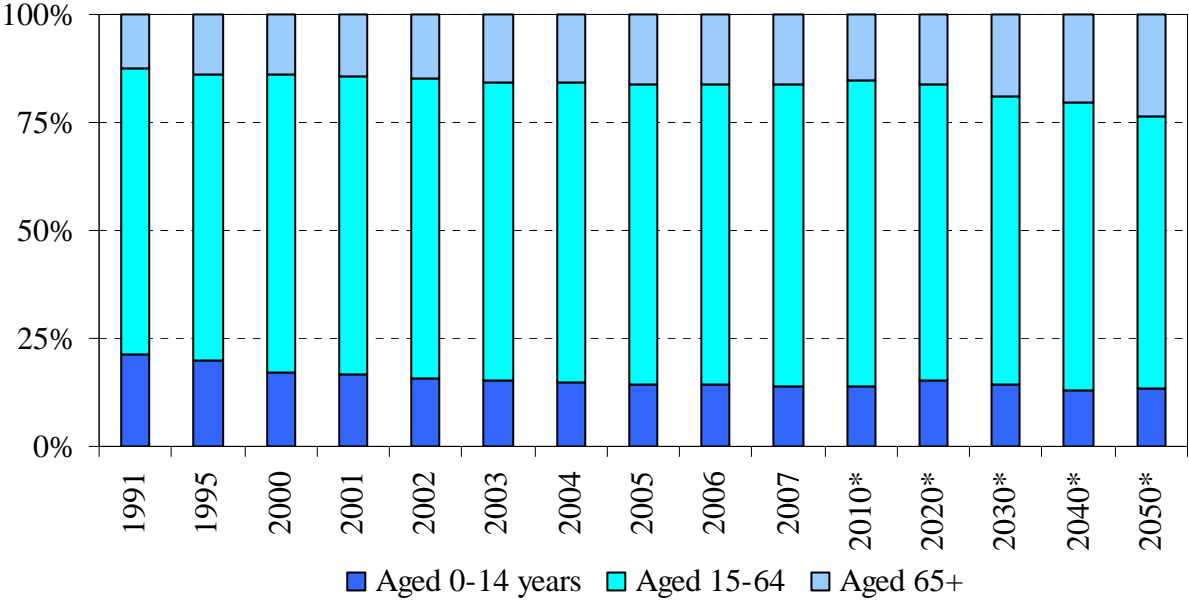
In the latest projection series made by the Ukraine Institute of Demography and Social Studies (IDSS, 2006a), Ukraine is expected to lose 9%-45% of its population between now and 2050. According to the average-case scenario, the decline will continue throughout the period 2010-2050, with the population forecast to reach 36.3 million by 2050. According to the best-case scenario, the population will fall at a slower pace and will reach 42.4 million by 2050; according to the worst-case scenario it could fall to 25.3 million by the end of the projection period.

The population is ageing. Trends in fertility, life expectancy and migration affect not only the population size, but also its age and gender structure. By the end of the year 2007, the median age in Ukraine was 39.1 years (35.8 years for men and 42.4 for women), a typical age for most European countries and twice the median age for the least developed countries. Low and declining fertility and birth rates starting from the mid-1990s are reflected in the declining share of the population under aged under 15 years (Figure 1.2); since Ukrainian independence, this share has decreased from 21.2% (1991) to 14.1% (end of 2007), and the absolute number of people aged under 15 years has fallen from about 11 million to 6.5 million people. Despite the low life expectancy, the share of the 65+ age group is increasing (12.6% in 1991, representing 6.5 million individuals, and 16.3% in 2007, representing 7.5 million individuals).

¹¹ An article by E. Andreyev explaining the reasons for difference in life expectancy between the sexes in Russia is available from <http://www.demoscope.ru/weekly/2003/0131/analit05.php> (in Russian).

¹² Only officially registered migration flows (associated with changes in permanent residence) are taken into account in this data.

Figure 1.2 Population by age group (% of total population)



Source(s): Ukraine State Statistics Committee for 1991-2007 data and Ukraine Institute of Demography and Social Studies for 2010-2050 data.

Note(s): End-of-year figures. Data for 2001 are based on the All-Ukrainian Population Census 2001. * Projections are based on the average-case scenario.

The share of the working-age population according to EU criteria (15-64 years) has also tended to increase. However, starting from 2000, this age group has been shrinking numerically at an annual rate of nearly 0.5%. According to the average-case scenario (IDSS, 2006a), the working-age population is projected to drop steadily, from 32.2 million at the end of 2007 to 22.8 million by 2050 (representing a fall of nearly 30%).

As can be observed in Figure 1.2, the Ukrainian population has aged steadily since independence and all of the main projection series indicate that this trend will be intensified. If demographic trends do not change — and most demographers agree that the fertility and mortality changes necessary to reverse population ageing in the coming decades are very unlikely — by the year 2050, people aged 65 and older will comprise 23.7% of the Ukraine population.

It should be noted that in developed countries such as Japan and those of Western Europe, the dominant factors in the current ageing pattern are declining mortality (particularly among women) and declining fertility (Preston et al, 1989; World Bank, 2007a). Thus, populations are ageing from both the bottom and the top with compensation.¹³ It is related to a demographic transition from a regime characterised by high rates of fertility and mortality to one with lower fertility and mortality rates and longer life expectancy.

In Ukraine, however, population is ageing in a different way. As has been stated above, mortality is high and rising and life expectancy is fairly low in Ukraine. Therefore, ageing occurs primarily from the bottom and results in significant population losses due to low birth and fertility rates, relatively high mortality and morbidity among the working-age population (mainly men) and emigration of working-age adults and their families.

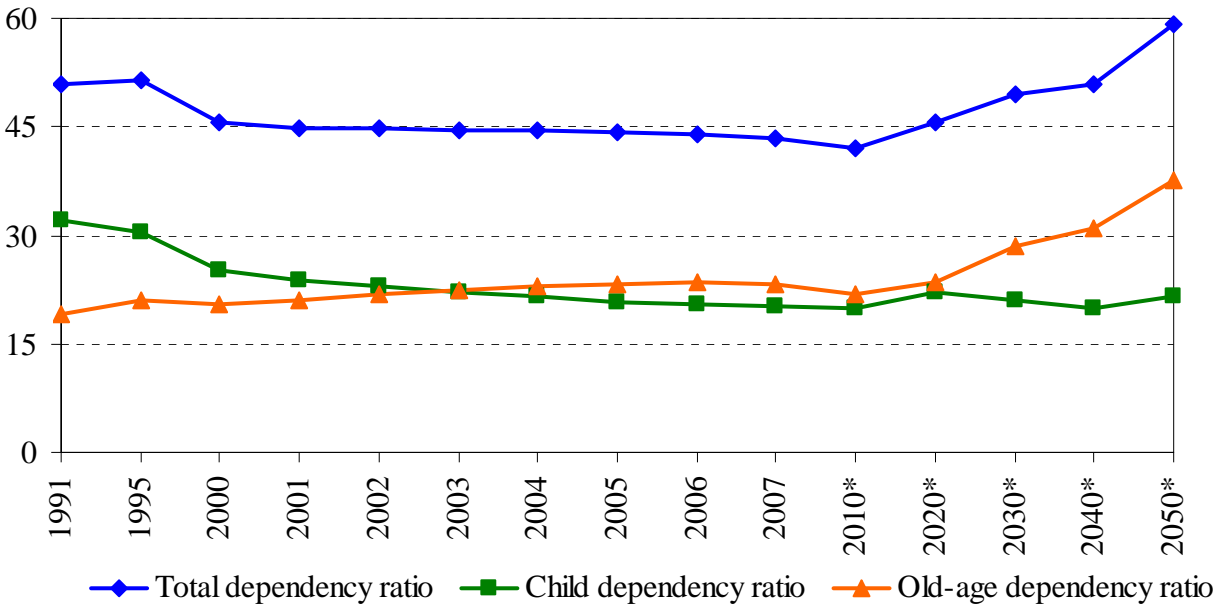
According to a study of population ageing in transition economies (World Bank, 2007a, p.4), Ukraine (together with other Black Sea countries such as Armenia, Azerbaijan, Georgia and Moldova) is listed

¹³ Cieslak (2004) described four basic types of population ageing: (i) ageing from the bottom without compensation (constant mortality and declining fertility); (ii) ageing from the bottom with losses (increasing mortality and declining fertility); (iii) ageing from the top with compensation (declining mortality and constant fertility); and (iv) ageing from the bottom and the top with compensation (declining mortality and fertility).

among the countries with an ageing population and lagging reforms. As has been correctly noted in this study, these countries “face the greatest threat from ageing not just because of their demographic shifts, but also because their reforms are not on pace to mitigate the effects of ageing”.

The old-age dependency ratio is growing. Population ageing has many important socioeconomic consequences, including the increased old-age dependency ratio (the number of individuals aged 65 and older compared to the number of working-age individuals, defined here as aged 15-64 years). Over the period 1991-2007, the old-age dependency ratio in Ukraine increased from 19 to 23.3 per 100 working-age people, and, according to the average-case scenario, it is projected to increase to 37.7 by 2050 (Figure 1.3). A high and increasing old-age dependency ratio creates social and political pressures on social support and pension systems as well as on the health care system.

Figure 1.3 Dependency ratio per 100 people aged 15-64



Source(s): Own calculations based on demographic statistics provided by the Ukraine State Statistics Committee for 1991-2007 and projections of the Ukraine Institute of Demography and Social Studies for 2010-2050.

Note(s): End-of-year figures. Data for 2001 are based on the All-Ukrainian Population Census 2001. The dependency ratio is calculated as the ratio of the population aged 0-14 and 65+ years to the population aged 15-64. The child dependency ratio is calculated as the ratio of the population aged 0-14 to the population aged 15-64. The old-age dependency ratio is calculated as the ratio of the population aged 65+ years to the population aged 15-64. * Projections are based on the average-case scenario.

The Ukrainian population is becoming more feminised with age. Excessively high and premature mortality of men compared to women is resulting in a significant distortion in the gender structure of the population. The overall gender ratio — the number of females per 1000 males — was 1,169 by the end of 2007. Moving upwards along the age pyramid, the gender ratio is gradually increasing, starting from 949 for the age group 0-14 years, with the trend reversing to 1014 for the 30-34 age band, to end with the extremely high ratio of 1966 for the elderly population (aged 65 and over). Consequently, population is even more feminised in older age bands. Taking into account that young people tend to marry and have their first children later than their counterparts in previous generations, the considerable numerical surplus of women aged 30 and over is likely to cause a further drop in birth and fertility rates, an increase in the number of births out of wedlock and accompanying increases in the number of single parents and social orphans.

Demographic policy in Ukraine is largely focused on monetary transfers to encourage higher fertility. Aware of the current and projected demographic problems, the Ukrainian government has made several attempts to mitigate depopulation and population ageing by providing pronatalist incentives in

the form of very generous birth benefits (see footnote 7). In addition, the Ukraine Labour Code inherited from the Soviet period entitles all female workers to paid, job-protected maternity leave of 70 days before birth and 56 days after birth. After this leave expires, a parent or grandparent can take leave until the child reaches the age of three, retaining a right to reintegration in the workplace and to monthly children's benefit funded by the government. There are also other socioeconomic support mechanisms for families with children, including a single-parent allowance, an adoption allowance and low-income family allowance. However, transfer-based incentives to encourage births seem to lack effectiveness in terms of raising fertility levels significantly and reversing demographic trends in the medium- and long-term (Kurilo et al, 2007; World Bank, 2007a). They need, therefore, to be combined with a set of policy measures in various areas that would address the issues that make couples reluctant to have more children. According to a UN study of demographic policy in Russia (UN, 2008) — a country with a similar socioeconomic environment and similar demographic trends as in Ukraine — an effective fertility policy should do the following: a) assist young families in acquiring housing or improving housing conditions; b) improve social support and benefits system for families with children; c) enable parents to combine work and parenthood; d) increase access to pre-school facilities; e) strengthen family values, particularly the social prestige associated with raising larger families; f) reduce abortion rates by building awareness of family planning; g) protect and improve reproductive health.

However, the most severe and most neglected demographic challenge to be addressed is the high, premature mortality and the worsening in the qualitative characteristics of the working-age population rather than low fertility. Policies to reduce mortality and to improve the health of the population should target the problems at source. Consequently, the most important challenges in terms of reducing mortality and increasing life expectancy in Ukraine are as follows: a) to reduce poverty and social marginalisation caused by poor education and low skill level, involuntary long-term joblessness, and limited access to social and employment assistance; b) to improve hygiene and nutrition standards; c) to encourage healthy lifestyles and reduce alcohol and drug abuse; d) to implement and promote active preventive measures; e) to reduce the incidence of social illnesses such as tuberculosis, HIV/AIDS, hepatitis and other infectious and parasitic diseases; f) to improve geographic access to affordable (if not free of charge), effective and qualified medical assistance; and g) to reduce injuries and mortality from traffic and occupational accidents, accidents in a household and other exogenous factors.

The challenging demographic situation led to the adoption of the Concept of Demographic Development of Ukraine to 2015. The document adopted in 2006, which replaces a previous one adopted in 2004, defines the following main goals:

- to increase the birth rate and to strengthen families and positive family relations;
- to improve health, reduce mortality and increase life expectancy;
- to manage migration processes;
- to mitigate the negative consequences of population ageing;
- to coordinate measures related to demographic change at the regional level.

This document already contains most of the necessary elements to cope with the current and projected demographic challenges discussed above. However, the measures envisaged by the Concept have been never fully implemented. Failure to put them into practice and to do so immediately will lead to further depopulation and a worsening of the demographic situation. Although the Ukrainian government is aware of the current situation, its demographic policy tends to be unsuccessful and poorly coordinated since it largely focuses on problems that are relatively less important but that offer more political dividends. Moreover, it often fails to take account of the relationship between demographics, socioeconomic development, environmental conditions, national health care system characteristics and personal and public attitudes.

1.2.2 Economically active and inactive populations

The Ukrainian LFS uses two age limits for calculating the main indicators. The age band recommended by the ILO is 15-70 years; however, working age according to Ukrainian legislation is 15-54/59 years for women and men, respectively.

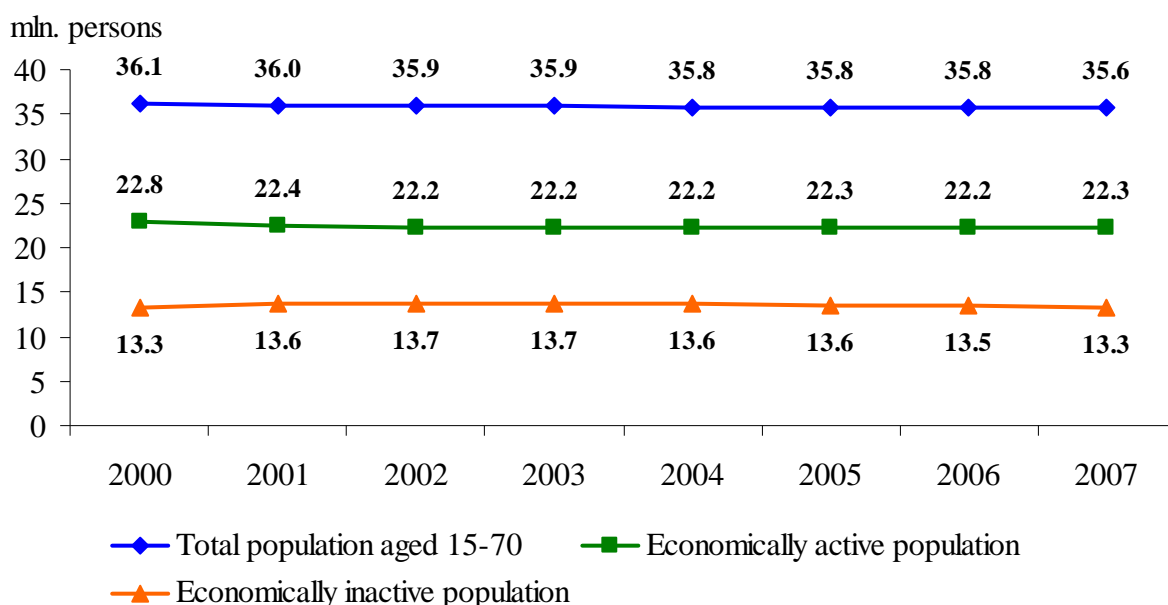
By the conventional LFS definition, the economically active population (or the labour force) in Ukraine is made up of employed and unemployed people aged 15-70.¹⁴ The economically inactive population (people out of the labour force) is composed of people aged 15-70 years who are neither employed nor unemployed.

Correspondingly, the economic activity rate (labour force participation rate) is calculated as the ratio of people who are in the labour force to the total population aged 15-70. The economic inactivity rate (labour force non-participation rate) measures the proportion of those out of the labour force (for whatever reason) compared to the total population aged 15-70.

Given different age bands for the working-age population according to Ukrainian labour legislation, most labour market indicators are calculated additionally for women aged 15-54 years and men aged 15-59 years.¹⁵

Negative demographic changes have already started to exert a long-run negative effect on the economically active population. Despite the strong economic growth registered in Ukraine since 2000 till the mid-2008 (see Chapter 3 for details), the number of economically active people has remained at roughly the same level, that is, around 22.2 million people (Figure 1.4). Although there has been a slight decline in the number of inactive people in the last few years, this has not offset the effect of declines in the total population and has not brought about an increase in the labour force. This situation is a serious challenge for a recovering economy since it may result in a shortage of labour in the near future.

Figure 1.4 Economic activity of the population (aged 15-70) 2000-2007



Source(s): Ukraine State Statistics Committee (LFS).

The economic activity of the working-age population is about the same as in developed economies. It is usually argued in the literature that the economic activity rate in Ukraine is low compared to that for

¹⁴ See Chapter 1.A for detailed definitions of the main concepts. The total number of employed includes both formal and informal workers.

¹⁵ Note that, although officially retired, many people aged 55/60 and above could be still working.

developed countries (see, among many others, World Bank, 2006a). Data on the economic activity of the population aged 15-70 confirm this statement (Table 1.1): in 2007, this rate in Ukraine was only 62.6%, considerably below the average for European and OECD countries.¹⁶ However, when the economic activity rate for people of statutory working age in Ukraine is compared with that for EU and OECD rates, we can conclude that the Ukrainian working-age population has roughly the same activity rates as in developed countries (Table 1.1).

The main reason for the discrepancy in rates for people aged 15-70 years and the working-age population is that existence of alternative means of subsistence for people aged 55/60+ years — in the form of pensions, non-cash benefits and other social transfers — and also the widespread age discrimination on the Ukrainian labour market and relatively poor health of older people discourage most of them people from being active in the labour market after reaching retirement age.¹⁷

Table 1.1 Economic activity rates for Ukraine, EU27 and OECD 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Ukraine (15-70 years)	63.2	62.3	61.9	61.8	62	62.2	62.2	62.6
Ukraine (working age population)	73.7	72.6	71.7	71.4	71.1	70.9	71.2	71.7
EU27 (15-64 years)	68.6	68.6	68.6	68.9	69.3	69.8	70.3	70.5
OECD (15-64 years)	70.1	69.9	69.9	69.8	70.1	70.2	70.5	na

Source(s): Ukraine State Statistics Committee (LFS) For Ukraine data, Eurostat for EU data and OECD Employment Outlook for OECD data.

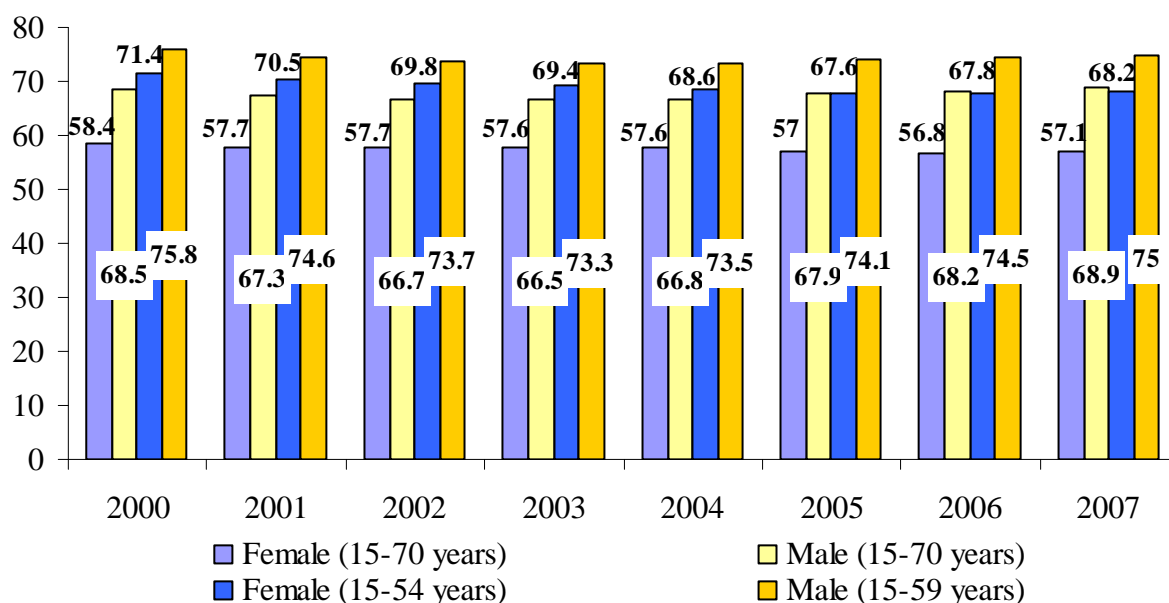
Note(s): The working age population in Ukraine is composed of men aged 15-59 years and women aged 15-54 years.

Men are traditionally more active in the labour market than women. More men than women are economically active, although the difference is not large (11.5 million men vs 10.8 million women in 2007). The economic activity rate for the male population aged 15-70 is 10-11 percentage points higher than for the female population (see Figure 1.5 and Table A.1 in Appendix), because women are more likely to stay out of the labour market to be studying longer, doing housework or taking care of children or older relatives, or just receiving a pension or social assistance when available. If we take account of the 5-year difference in retirement age for men and women, the gender difference in activity rates is much smaller (see Figure 1.5 for the working-age population).

¹⁶ The economic activity rate for people aged 15-64 years (the standard age band used in most EU and OECD countries) in Ukraine in 2004 and 2007 was 66.2% and 67.3%, respectively.

¹⁷ Given their short life expectancy and high mortality, an increase of the retirement age for men is not on the Ukrainian political agenda at present, unlike the issue of increasing the retirement age for women, which is the subject of much debate.

Figure 1.5 Economic activity rates by gender 2000-2007



Source(s): Ukraine State Statistics Committee (LFS).

Note(s): The figures above the columns refer to women and the figures inside the columns refer to men.

There has been a slight increase in male activity rates in recent years. However, the total change compared to 2000 is only 0.4 percentage points for people aged 15-70 years and a decrease of 0.8 percentage points for working-age males. The situation is almost the same for the female activity rates: despite a small increase in 2007, compared to 2000 the female economic activity rate fell both for the 15-70 and the 15-54 age groups (by 1.3 and 3.2 percentage points, respectively).

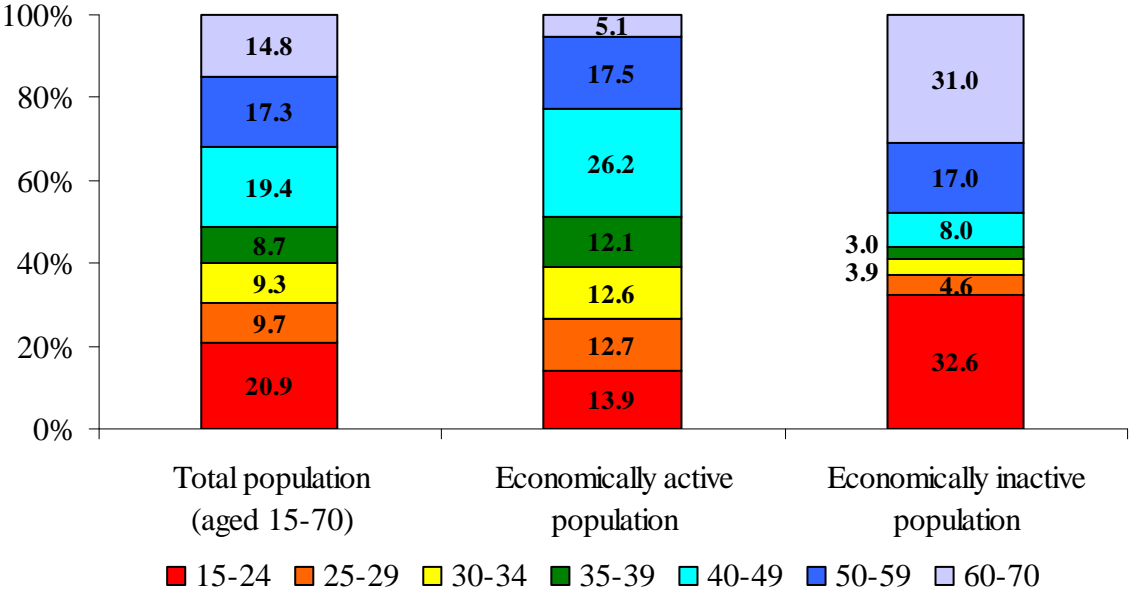
The Ukrainian female labour force participation rate compares favourably with that for many developed countries. Compared to the EU countries, working-age males in Ukraine exhibit lower economic activity than males from developed countries (75% in Ukraine versus 77.6% in the EU27 and 79.3% in the EU15). However, Ukraine makes relatively good use of working-age female labour: the economic activity rate for women aged 15-54 years in Ukraine (68.2% in 2007) is around 3-5 percentage points higher than the female economic activity rates (aged 15-64) in the EU countries.¹⁸ This is mainly attributed to the legacy of the Soviet system, which supported gender equality in education and work and maintained an adequate system of child care and out-of school activities (WEF, 2008). In addition, compared to men, Ukrainian women were more capable of making the adjustments necessary to overcome the hardships experienced during the transformation period, as they better coped with the need for flexibility and career change and so were able to find their place in the contemporary labour market.

As a result, in terms of female participation in the labour force Ukraine ranks 26 out of 131 countries analysed in the 2008 Global Competitiveness Report, and this rank has remained stable over recent years (WEF, 2008, pp.78-79). Nevertheless, we do not entirely agree with the statement of the authors of this report in regard to very efficient use of female talent being one of Ukraine's strong points. Given the higher life expectancy and better health of Ukrainian women compared to men, the labour potential of women aged 55 years and older is not efficiently exploited. In order to make female labour more efficient in Ukraine, the official retirement age should be raised at least to the same level as that for males at present (60 years) and policy measures to tackle potential age discrimination should be implemented.

¹⁸ For comparison purposes, the female economic activity rate in Ukraine calculated according to the EU age band of 15-64 years is just 62.2%.

The working-age population constitutes over 90% of the labour force. The shares of the youngest (15-24 years) and the oldest (60-70 years) age groups in the economically active population are naturally much lower than in the total population and economically inactive population aged 15-70 years (Figure 1.6). The share of the pre-pension age group (50-59 years) is nearly the same, whereas the shares of the other four age groups are significantly larger in the economically active population than in the total population and in the economically inactive population. The groups composed of people aged 40-49 years represent the largest share in the economically active population, at 26.2%.

Figure 1.6 Total, economically active and economically inactive populations by age (% of total) 2007



Source(s): Ukraine State Statistics Committee (LFS).

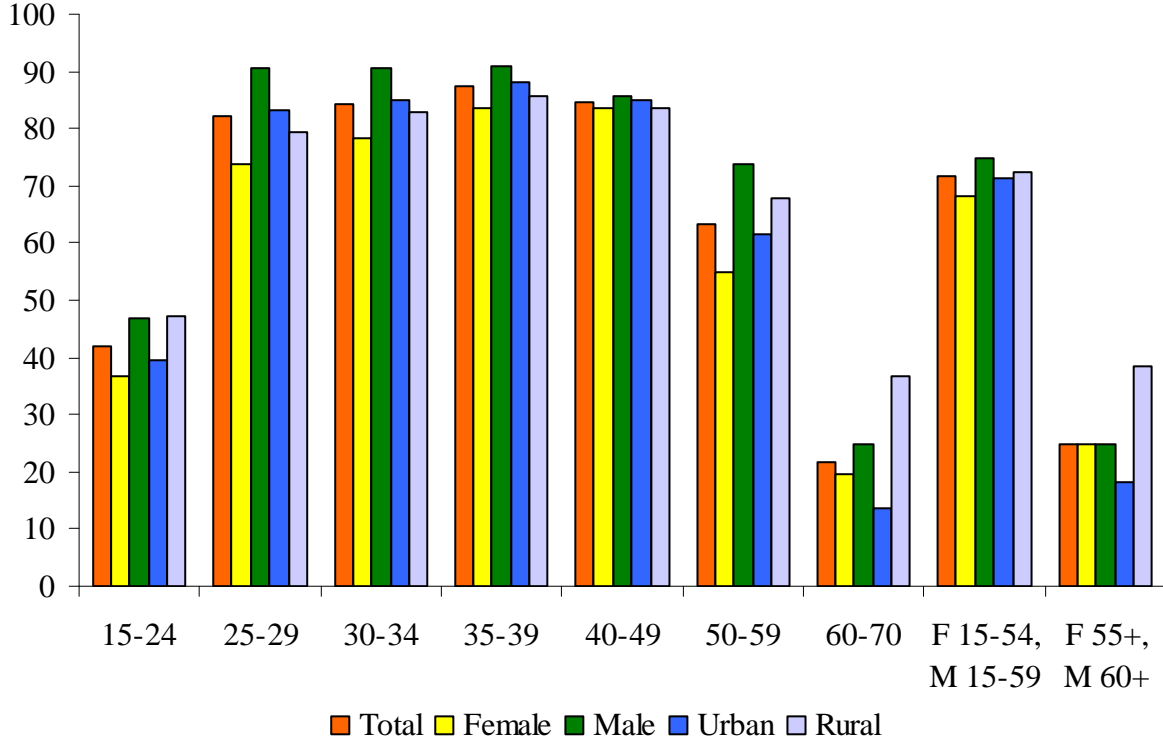
Thus, about 92%-93% of the total economically active population is comprised of people of working age (up to 55 years and 60 years for women and men, respectively). The growing share of those in the low-participation age group (60 and over) as a consequence of increased population ageing exerts a downward pressure on the aggregate activity rate. The entry of the large post-war generation into the 60+ age bracket is likely to intensify this trend.

Economic activity rates vary greatly according to age, with much lower participation rates for the youngest and oldest age group than for the prime-age groups (Figure 1.7). Over the period 2000-2007, activity rates fell for most prime-age groups (see Appendix Table A.1). The decline in the activity rate for people aged 25-39 years was due to a sharp decrease among women (for example, 5.7 percentage points in the age group 30-34 years), whereas for people aged 40-59 years the decline was largely attributable to men. Over the same period, the youngest and oldest age groups, on the contrary, showed a slight increase in activity rate, primarily due to a considerable rise in activity for these age groups in rural areas (for example, there was an increase of 11.8 percentage points among people aged 60-70 years). This trend of an increasingly higher activity rate for old people (mainly female) in rural areas is the main explanation for the growing aggregated activity rate up to 2005. Only in the last years has the overall increase in activity tended to be associated with increasing activity rates in the other age groups as well.

Ukraine lags behind EU averages in youth economic activity. Despite an increase in the economic activity rate for the youngest age group (15-24 years) in recent years in Ukraine, this rate continues to be relatively low (46.8% for men and 36.6% for women) compared to the EU (47.3% for men and 40.6% for women for the EU27). This low rate may be related to the willingness of young Ukrainians to pursue studies after compulsory secondary education because of fairly affordable (in terms of cost) and accessible (in terms of entry and studies) tertiary education and the increasing returns to this level of education (see Chapter 2 for a description of the characteristics of the education system, human capital and returns to education in Ukraine). A change by many young people from vocational to

tertiary education (and often to several graduate degrees in different fields of study) seems to contribute to a longer study period, and therefore, to a longer period out of the labour force. An underdeveloped market of part-time jobs for students in small towns and depressed regions exerts a negative influence on student activity rates.¹⁹ Another reason for the low economic activity rate among young people is possibly the fact that job market opportunities are limited, especially for the youth with little or no education, skills and work experience, incomes are generally lower and working conditions are poorer when compared to more mature workers. In the face of these labour market conditions and ineffective public youth policies, young people prefer to postpone entering the labour market and pursue studies, become parents and take child-related leave, or do nothing officially (depend on parents or spouses²⁰ or participate in criminal activities).

Figure 1.7 Economic activity rates by age 2007



Source(s): Ukraine State Statistics Committee (LFS).

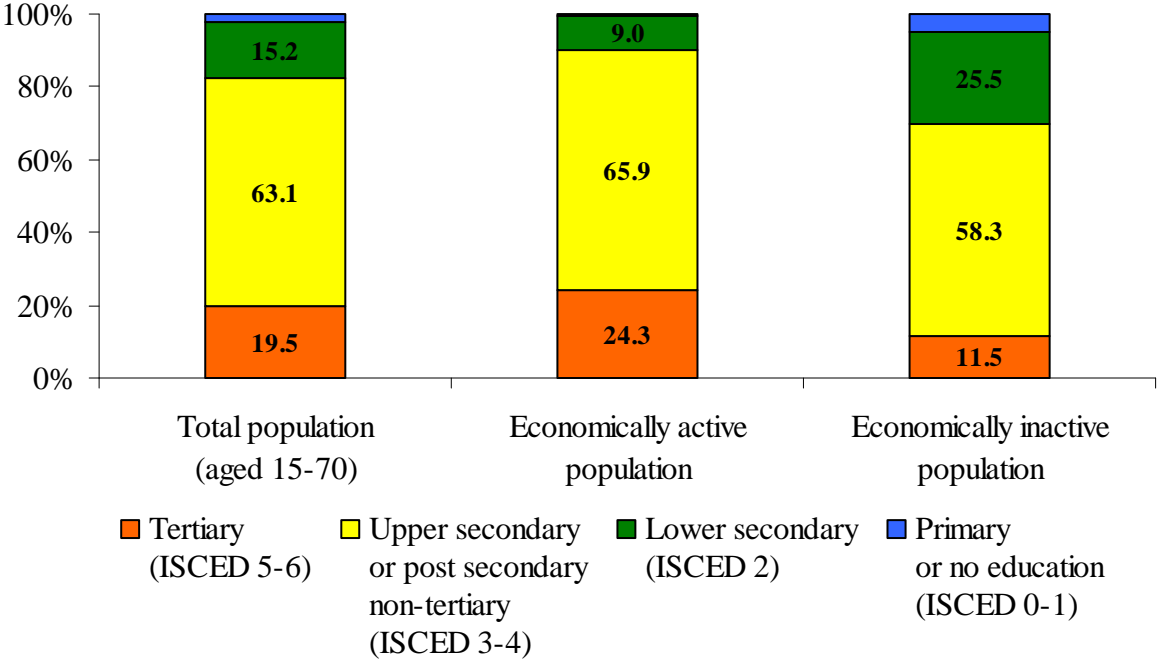
High school and college graduates (upper secondary or post-secondary non-tertiary education) comprise the majority of the economically active population (Figure 1.8).²¹ The same is with the total population and the economically inactive population. As would be expected, high-participation rate university graduates constitute the second largest group in the economically active population, whereas those who failed to attain upper secondary level are disproportionately represented among the economically inactive population. Noteworthy is the fact that economically active females (and also females in the total population aged 15-70) are better educated than males. Women comprise 53% of all economically active people with tertiary education, and the share of highly educated people is 4.6 percentage points higher for economically active females than males (26.7% and 22.1% respectively).

¹⁹ A tradition of combining studies and work — inherited from Soviet times — is fairly strong in Ukraine. It is maintained by the existence of evening and correspondence study courses and the provisions for studying workers in the Ukraine Labour Code, which oblige an employer to provide studying workers with additional paid vacation time and flexible working hours.

²⁰ It is important to note here that sources of support include not only traditional income from salaries/profits, pensions and social assistance but also remittances from abroad. Policy makers in Ukraine are currently concerned about the possibility of households becoming dependent on remittances. Regular money transfers from abroad are likely to reduce the motivation of young people to study or work and are often spent on non-productive consumption such as entertainment and recreation.

²¹ We include college graduates (according to the national classification, people with incomplete higher education) to those with post-secondary non-tertiary education according to ISCED in order to distinguish them from people with genuine higher education (according to the national classification, people with basic and complete higher education).

Figure 1.8 Total, economically active and economically inactive population by education (% of total) 2007



Source(s): Author calculations based on Ukraine State Statistics Committee data (LFS).

Note(s): Tertiary education includes complete higher and basic higher education; upper secondary or post-secondary non-tertiary education includes incomplete higher and complete secondary general education; and lower secondary education denotes basic secondary education.

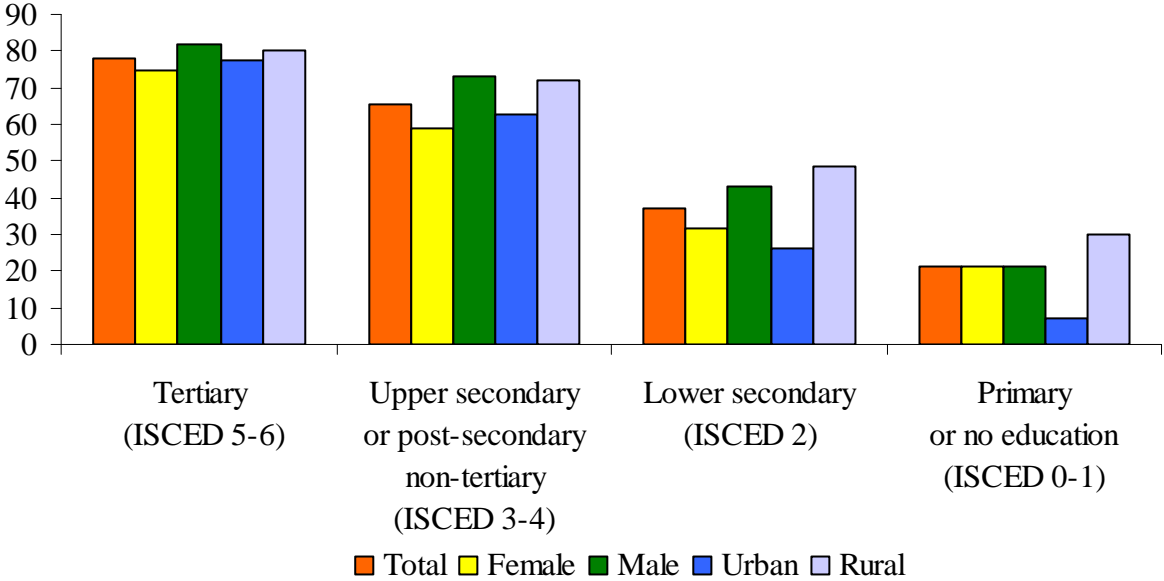
Between 2004 and 2007, there was a particularly large increase in the number (311,000 people) and the share (1.3 percentage points) of university graduates in the economically active population, and 70% of this increase was accounted for by females.²² Because of the surge in the number of young people with tertiary education entering the labour market, supply surpassed demand. This not only explains higher shares of young highly-educated people in the total and long-term unemployment populations, but also accounts for a large number of over-qualified workers: many men and women with university degrees take up jobs that are traditionally performed by high or vocational school graduates.²³

The economic activity rate increases with educational attainment. However, people with lowest educational attainment have increasingly high involvement in the labour market in recent years. As in most developed countries, there is a clear correlation between education level and economic activity in Ukraine: the higher the level of educational attainment the larger the rate of economic activity (Figure 1.9 and Appendix Table A.1). As would be expected, economic activity rates are higher among males and in the rural population in all the education groups. Moreover, the lower the level of education the greater the difference in activity rates between urban and rural areas. This trend points to the fact that there are more job opportunities and incentives in rural areas for low-educated people than in urban areas.

²² As shown in Chapter 2.A.I, the increase in the number of university graduates can be explained by increased gross enrolment to tertiary education, resulting from higher demand for higher education among young people and the corresponding response by the education system to these needs.

²³ According to the People’s Security Survey conducted by the Ukraine State Statistics Committee (based on a nationally representative sample of 9,400 adults), the share of overqualified respondents increased from 8.5% in 2003 to 8.8% in 2006, with more overqualified men (10.1%) than women (7.9%), and more overqualified people in manufacturing (11.1%) and services (10.1%).

Figure 1.9 Economic activity rates by education 2007



Source(s): Author calculations based on Ukraine State Statistics Committee data (LFS).

Note(s): Tertiary education includes complete higher and basic higher education; upper secondary or post-secondary non-tertiary education includes incomplete higher and complete secondary general education; and lower secondary education denotes basic secondary education.

The evidence of recent years is not consistent with the transition of the least educated workers out of the labour force. Economic activity rates have risen among individuals who lack even basic secondary education — from 17.1% in 2004 to 21.3% in 2007; the highest rises in activity rates occurred in rural areas (from 24.2% to 30.3%) and among females (from 16.5% to 21.3%). These changes have been brought about by the expansion of the informal sector and of subsistence agriculture where little education and few skills are required. The group of people with tertiary education has also experienced a rise in activity rates, whilst the other education groups have experienced slight declines compared to 2004.

Female inactivity is growing. As has been mentioned before, there are about 13.3 million people aged 15-70 (8.1 million people of working age) in Ukraine who are neither working nor seeking work; that is, they are economically inactive. Despite relative stability in the overall inactivity rates (which have changed very little over the period), there have been differences between those for men and women. The female inactivity rate grew from 41.6% in 2000 to 42.9% in 2007, whereas the male inactivity rate grew from 31.5% in 2000 to 33.5% in 2003 but then declined to 31.1% in 2007.

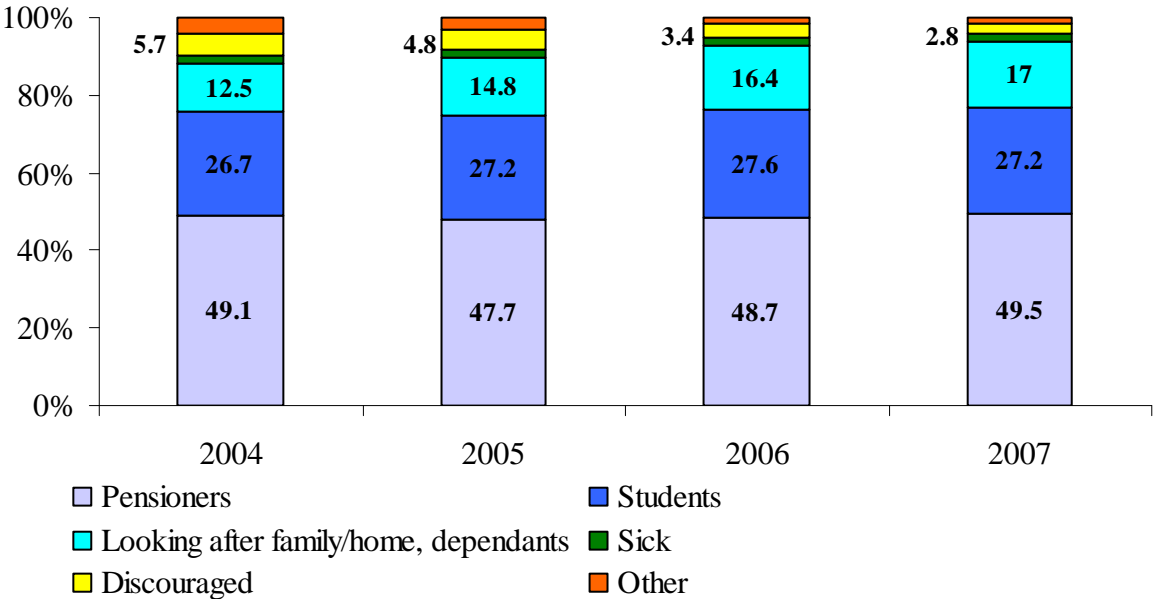
Thus, as in many other countries, Ukrainian women tend to exhibit relatively weaker labour force attachment than men. This trend may also reflect the fact that under the existing conditions (in particular, limited access to relatively cheap but high-quality childcare services, the lack of part-time jobs, discrimination against young women by employers who often fail to comply with the core female worker rights specified in the Ukraine Labour Code, etc), women find it increasingly difficult to reconcile employment and family obligations.

Differences in economic inactivity rates, as explained by supply side influences as well as local employment opportunities, are consistent with theory implications and the evidence for developed countries. Economic inactivity in Ukraine is more likely to occur among the youngest and oldest age groups, among the urban population, among those with little formal education or training, among women with small children and among those reporting poor health.

One in two inactive people is a pensioner. The largest share of the economically inactive population is that of non-working retirees, inactive people receiving disability pensions or people receiving pensions on preferential terms (Figure 1.10). This share of the total of inactive people by age goes from 1.7%

for the youngest age band (15-24 years) to 100% for the oldest age band (60-70 years); the total share of pension beneficiaries among the working-age inactive population is around 17.4%.

Figure 1.10 Economically inactive population by reason (% of total) 2004-2007



Source(s): Author calculations based on Ukraine State Statistics Committee data (LFS).

Note(s): Pensioners include retirees (pensioners on the basis of age) and pensioners for disability reasons or on preferential terms. Discouraged here include classical discouraged job seekers and people not seeking a job because they do not know where/how to do it, believe there is no suitable job, or hope to return to a previous job (including seasonal workers).

The share of inactive students increased between 2004 and 2006 and then fell back slightly to the 2005 level; by 2007 this group represented 27.2% of all inactive people aged 15-70 years (or 44.4% of the working-age inactive population). Students naturally predominate among the youngest inactive people (82.3% of people aged 15-24 of both sexes, with the higher proportion corresponding to young inactive males) and among those with basic higher education who are likely pursuing higher studies (71.6%).

The most worrisome economic inactivity trend in Ukraine is probably the large and growing share of dependents and family and home carers. Between 2004 and 2007, the total number of dependents and inactive homemakers grew by around a third, from 1.7 to about 2.3 million people. These people constitute the majority among relatively young inactive females (that is, in four age groups covering 25-49 years). This suggests that fewer women, particularly those with children, enter the labour market, relying on support from household members, relatives or the state.

A change compensating for the increasing number of dependents is a gradual reduction in the number of discouraged people and those inactive people who do not know where/how to seek a job, believe there is no suitable job, or hope to return to a previous job. In 2007, 395,000 individuals were inactive due to these reasons, compared to 776,500 people in 2004 (of these, 170,300 and 395,000, respectively, were discouraged in the classical sense, meaning that they had given up or had no success looking for work). This significant decline seems to have been an expected reaction of workers to the increased number of job opportunities resulting from sustained economic growth in Ukraine in recent years (the discouraged worker hypothesis). Since discouraged workers believe that any effort to find a job will be fruitless, an important factor determining their exits from inactivity is not an increase in the number of job opportunities per se, but its combination with the development of local job information networks and the implementation of effective active labour market policies (ALMPs) by the PES; this seems to be the case in Ukraine. The discouraged worker group is almost equally split between men and women. Discouraged workers tend to be concentrated among younger

(15-24 years) and middle-aged (40-49 years) people with less than high school education and who live in urban areas and regions experiencing high unemployment.

1.3 Employment trends

1.3.1 Employment

The Ukrainian labour market is characterised not only by slow-growing economic activity rates but also by steadily increasing employment rates.²⁴ Employment rates for people aged 15-70 years increased by 2.9 percentage points between 2000 and 2007, reaching 58.7% in 2007 (see Appendix Table A.2). Nevertheless, this rate is still considered low by international standards (the equivalent rate for the EU-27 is 65.4% among the people aged 15-64 years). Again, estimates for the working-age population defined according to the Ukrainian legislation are higher than for people aged 15-70 years (e.g. 66.7% versus 58.7% in 2007).²⁵ According to rough estimates based on LFS data, multiple job holding is not typical in Ukraine: no more than 3%-5% of the employed population has an additional job or income-generating activity, and most of them are engaged in subsidiary agriculture or other informal and casual activities (in trade, construction, personal or household services).²⁶

Employment rates among working-age females in Ukraine are fairly high in comparison with many EU countries. During 2000-2007, no significant divergence in patterns of employment across the two genders were observed: both female and male workers have increasing employment rates, with a particularly large increase in recent years (see Appendix Table A.2). As in the case of economic activity rates, male and female employment rates for people aged 15-70 years are relatively low compared to developed countries. However, employment rates among working-age females in Ukraine (63.6% in 2007) exceed the averages among European women aged 15-64 years (58.3% and 59.7% for the EU-27 and the EU-15, respectively). Ukraine underperforms in terms of female employment, however, in comparison with Scandinavian countries, where female employment rates are traditionally high (over 70%).

All age and education groups have benefited from economic growth in terms of employment. The group of youngest workers showed an increased propensity to enter employment in the period 2000-2007, as revealed by the rise in their employment rate from 30.4% to 36.6% (see Appendix Table A.2). A similar picture of a considerable growth in employment rates emerges for workers in the core age groups: 25-29 years and 35-39 years (an increase of 3.8 percentage points in each) and 30-34 years (an increase of 2.2 percentage points). Despite an increase of 2.1 percentage points in employment rate among the oldest people (60-70 years), an increase in the overall employment rate is explained mainly by increased employment of the working-age population, which makes up 91.8% of the total employed population aged 15-70 years.

Workers with primary education or less have the lowest employment rates but experienced higher increases between 2004 and 2007 (from 16.5% to 21.1%) compared to workers with higher levels of education. University graduates have traditionally had the highest employment rates: almost two thirds of all people with tertiary education (aged 15-70) is employed. The rise in the employment rate among workers in all education groups seems to reflect growing employment opportunities for different education and skill levels in the Ukrainian labour market.

Rural employment is higher due to subsistence agriculture. The apparent gap in employment rates between rural and urban population is very striking: the rural employment rate is about 4 percentage points higher than the rate for urban population. This gap is mainly accounted for by a substantial growth in subsistence agriculture, used as a buffer for labour released from collective and state farms. Unlike urban displaced workers, residents in rural areas seem to benefit from the possibility of land use as an alternative to standard paid employment.

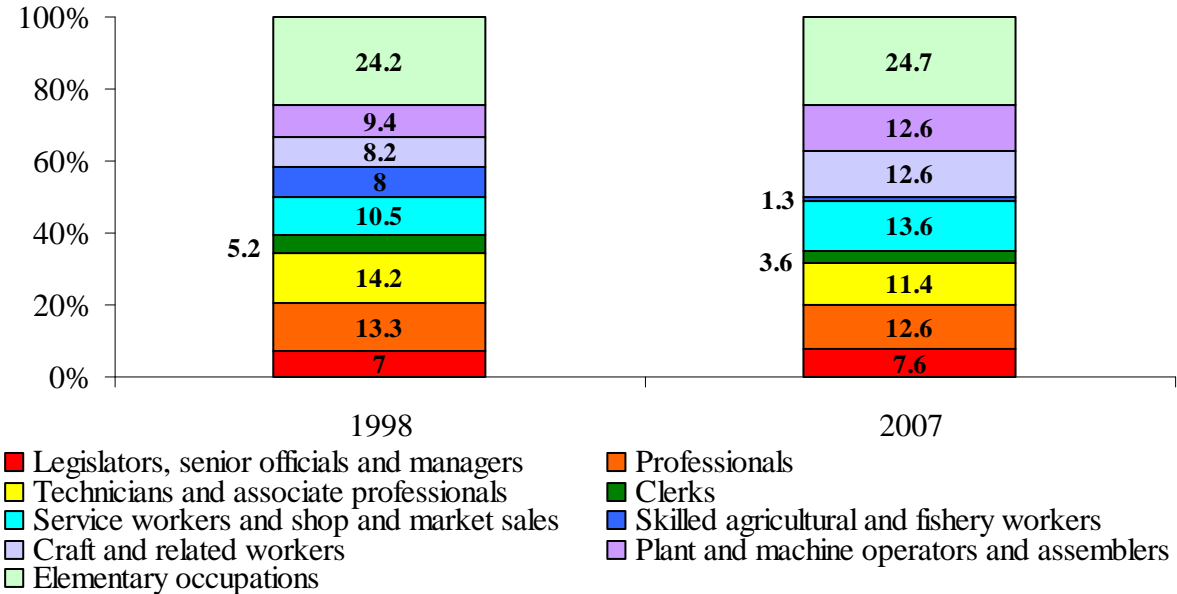
²⁴ Description of employed population distributions according to gender, age and educational attainment is omitted from this report, given that they roughly duplicate those described for the economically active population.

²⁵ The employment rate for people aged 15-64 years averaged 62.9% in 2007 (67.9% for males and 58.3% for females).

²⁶ This figure is likely to be underestimated, given the non-willingness of many respondents to provide information on additional (often informal) jobs and, therefore, incomes.

The occupational structure of employment has undergone discernible changes as a result of economic restructuring and labour reallocation between sectors and jobs. In 2007, like in 1998, around one in five employed workers in Ukraine was engaged in an activity that did not require special skills or education (Figure 1.11). This was the largest occupational group, employing over 5.1 million in 2007 (5.5 million in 1998). However, if in 1998 the second largest occupational group was technicians and associated professionals (accounting for 3.2 million workers and a share of 14.2%), this position in 2007 passed to less educated service workers and salespeople (accounting for 2.8 million workers and a share of 13.6%).

Figure 1.11 Employment by occupational group (% of total) 1998 and 2007



Source(s): Ukraine State Statistics Committee (LFS).

The number of white-collar and office workers (the top four occupational groups) fell from 9.1 million to 7.4 million between 1998 and 2007. A positive trend evident in the last few years, however, is a gradual increase in the numbers representing the first two occupational groups (legislators, senior officials, managers and professionals), suggesting that the demand for highly skilled white-collar workers is increasing in line with economic and investment growth in Ukraine.

Despite considerable growth in jobs for unskilled and manual labour, the total number of blue-collar workers also declined over the period (from about 13.9 million to 13.5 million). This occurred primarily due to a dramatic fall in the number of skilled agricultural and fishery workers, from 1.8 million to 272,000 people, uncompensated for by growing numbers of service workers and salespeople, craft and related workers and plant and machine operators and assemblers.

High employment share among less skilled manual workers suggests that the labour market is at an early transition stage. An employment breakdown between different occupational groups shows great disparity between Ukraine and EU countries. Compared to Ukraine, in the EU the top occupational groups — senior officials and managers (8.3%), professionals (13.5%), technicians and associated professionals (16.1%) and clerks (10.6%) — have higher shares, while the lowest occupational groups — plant and machine operators and assemblers (8.7%) and elementary occupations (9.8%) — have lower shares.²⁷ These data suggest that the Ukrainian labour market, lagging far behind developed and transition economies, is more comparable to developing countries where large proportions of people are employed in unskilled or semi-skilled jobs.²⁸

²⁷ EU-27 data for 2007 obtained from Eurostat.

²⁸ See detailed discussion of this phenomenon in Chapter 3.B.

Self-employment tends to be featured by low productivity. Employment structure by status in employment has much changed since the process of transition to a market economy commenced in Ukraine. Between 1990 and 2007, the share of employees (wage and salaried workers) fell sharply, from around 100% to 80.7%.²⁹ As can be observed in Table 1.2, these losses were almost completely offset by a growth in the share of self-employed. The corresponding changes in the rural population were even more pronounced.

Table 1.2 Employment by employment status (% of total) 1999-2007

	1999	2000	2001	2002	2003	2004*	2005	2006	2007
Total									
Wage and salaried workers	91.5	90.1	89.3	88	87.6	83.6	81.8	81	80.7
Employers	0.7	0.7	1	1	1.3	0.8	0.9	1	1
Own-account (self-employed) workers	6.9	8.1	8.5	9.2	9.6	15	16.8	17.6	17.9
Contributing family workers	0.9	1.1	1.2	1.8	1.5	0.6	0.5	0.4	0.4
Female									
Wage and salaried workers	91.1	89.4	89.1	87.6	87.4	83.8	80.6	80	79.5
Employers	0.4	0.4	0.6	0.6	0.8	0.7	0.7	0.6	0.7
Own-account (self-employed) workers	7.3	8.8	8.7	9.6	9.8	14.9	18.2	19.1	19.5
Contributing family workers	1.2	1.4	1.6	2.2	2	0.6	0.5	0.3	0.3
Male									
Wage and salaried workers	91.8	90.7	89.5	88.4	87.8	83.4	82.9	82	81.8
Employers	1	1	1.4	1.4	1.7	1	1.2	1.3	1.3
Own-account (self-employed) workers	6.5	7.5	8.3	8.8	9.4	15.1	15.4	16.2	16.5
Contributing family workers	0.7	0.8	0.8	1.4	1.1	0.5	0.5	0.5	0.4
Urban									
Wage and salaried workers	95.3	95.4	94.8	94.3	93.7	93.1	93.6	93.4	92.9
Employers	0.9	0.9	1.2	1.2	1.6	1.1	1.2	1.2	1.2
Own-account (self-employed) workers	3.6	3.6	3.9	4.3	4.5	5.6	5.0	5.2	5.8

²⁹ For comparison purposes, the average percentage of wage and salaried workers in the EU-27 was 83.1% in 2007.

	1999	2000	2001	2002	2003	2004*	2005	2006	2007
Contributing family workers	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1
Rural									
Wage and salaried workers	82.3	78.1	76.5	73.4	72.6	61.5	56.5	54	54.1
Employers	0.3	0.2	0.4	0.4	0.7	0.3	0.4	0.5	0.6
Own-account (self-employed) workers	14.7	18.3	19.2	20.5	21.9	36.9	42.0	44.5	44.4
Contributing family workers	2.7	3.4	3.9	5.7	4.8	1.3	1.1	1	0.9

Source(s): Ukraine State Statistics Committee (LFS).

Note(s): *The sharp increase in the share of self-employed workers between 2003 and 2004 is mainly attributed to changes in the LFS methodology concerning the definition of the employed population (see footnote 2).

However, given that the growth in self-employment is closely connected with the expansion in subsistence agriculture and in low-productivity sectors (typically trade and repair, hotels and restaurants, municipal and individual services, construction and transport), the increasing share and number of self-employed workers in Ukraine need to be viewed in less encouraging terms. The high proportion of self-employment in the labour market reflects an economy with a backward production structure, with many people employed in risky non-waged jobs without social benefits and employment protection. Since the Ukrainian economy has been unable to create enough decent salaried jobs for displaced workers, self-employment has remained almost the only survival option and is not motivated by entrepreneurial ambitions. In other words, self-employment in Ukraine is derived from push rather than from pull factors.

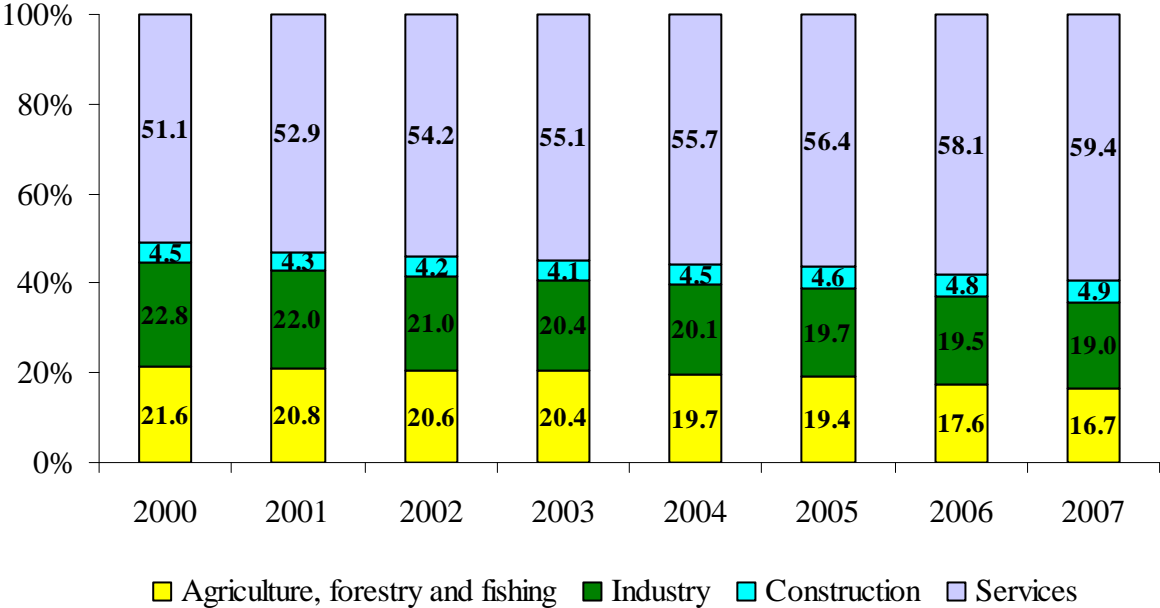
A fairly low proportion of employers (1% in Ukraine compared to 4.5% in the EU-27) reflects poorer start-up conditions, significant barriers to doing business and to firm growth and, in general, a less favourable investment and business environment than in Western economies.³⁰

Jobs are moving from industry and agriculture to services and construction. Between 2000 and 2007, agricultural employment contracted by 20%, while industrial employment contracted by a more moderate 14% (see the final two columns in Appendix Table A.3). According to official statistics on total employment by sector, the same two sectors continued downsizing throughout the entire transition period in Ukraine, and including recent years of strong employment growth. Significant employment losses in agriculture and industry were more than offset by substantial gains in construction (a 14% rise from 2000 to 2007) and in previously less developed market services sectors, such as financial intermediation (a 107% rise), trade, repair, hotels and restaurants (a 46% rise), real estate, rental and business activities (a 39% rise) and municipal and personal services (a 26% rise).

As a result of these changes, employment distribution by sector has considerably changed in Ukraine (Figure 1.12). As in many transition countries, the agricultural and industrial sectors have reduced their share of employment, while the shares of the services sector and construction have grown vigorously. The Ukrainian economy has thus made significant progress towards a more modern sectoral distribution; however, compared to EU countries, agriculture in Ukraine still accounts of a relatively large share of employment (16.7% in Ukraine versus 5.1% in the EU-27), and employment shares for other sectors are significantly lower (19% versus 27.8% for industry, 4.9% versus 8.2% for construction, and 59.4% versus 66.8% for services).

³⁰ See more on the business environment and investment climate in Ukraine in Chapter 5.B.

Figure 1.12 Total employment by sector (% of total) 2000-2007

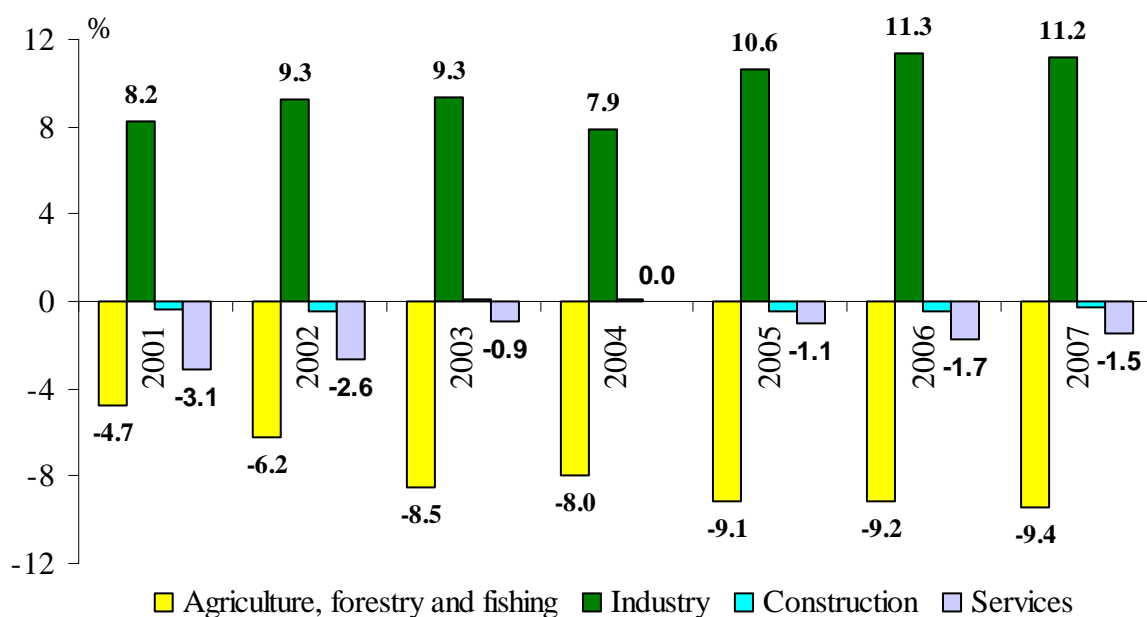


Source(s): Ukraine State Statistics Committee (LFS).

Note(s): Classification of sectors is according to NACE Rev.1. Agriculture, forestry and fishing covers sectors A and B, industry covers sectors C, D and E, construction refers to sector F, and services refers to the other sectors from G to Q.

Industry is the only sector which contributes more to gross value added than to employment. Comparison of the contributions of the four large sectors (agriculture, industry, construction and services) to gross value added and employment (Figure 1.13) reveals that industry’s share of gross value added has been consistently higher than its contribution to total employment (in 2007, 19% of the workforce produced 30.2% of gross value added in the economy); for construction the contributions are roughly the same, whereas agriculture and services sectors contribute much less to gross value added than to employment. The main explanation for this dissimilarity between industry and the other sectors is that labour productivity (measured as value added per worker) is usually higher in the goods sector than in the services sector. Unlike services and construction, where labour is the main production input and cannot be displaced by capital, productivity gains in industry arise from more efficient use of labour, more efficient use of existing equipment and/or from investments in less labour-intensive technologies.

Figure 1.13. Sectoral gross value added vs employment 2001-2007*



Source(s): Ukraine State Statistics Committee (LFS).

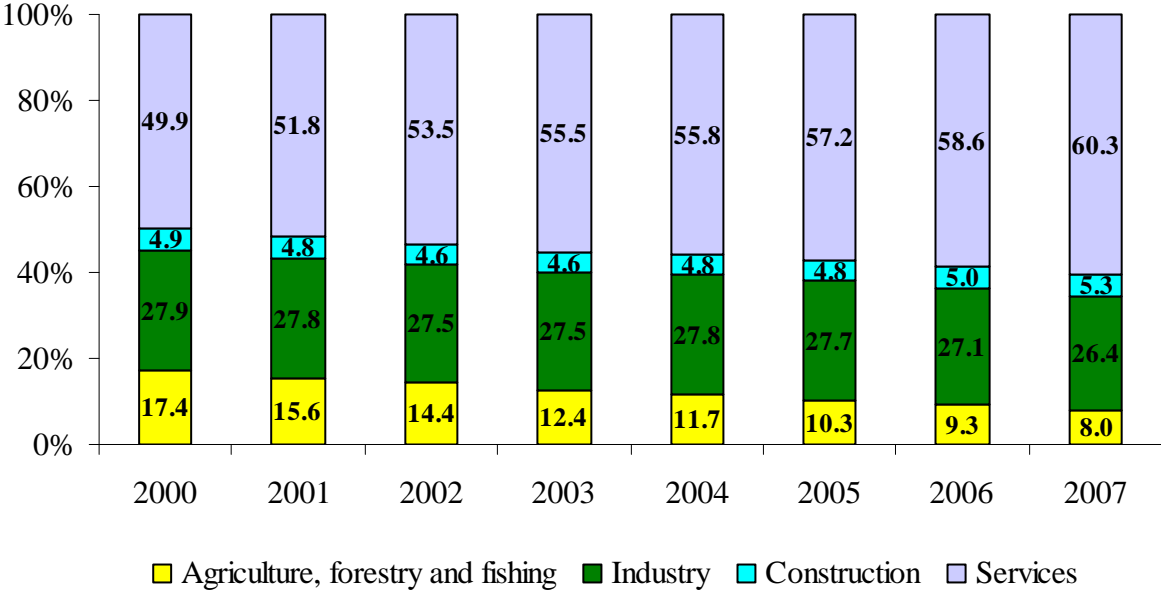
Note(s):* The values here are the difference between value added shares (in %) of sectors (see Figure 3.7) and their correspondent shares in total employment (see Figure 1.12).

Another important factor is related to how employment is measured. Since the employment data used for the above comparisons do not differentiate between full-time and part-time workers (as mentioned in Chapter 1.A, a person is considered employed in the LFS if he/she worked for at least one hour during a reference period), sectors that rely heavily on part-time or seasonal employment (specifically, agriculture, construction, trade and other market service industries) fall well behind sectors with proportionately greater numbers of full-time workers in terms of value added per worker. Finally, widespread shadow and informal activities in some sectors also contribute to an underestimation of the sector's value added and labour productivity. The relationship between value added and employment can thus be somewhat misleading in some sectors and so should be interpreted with care.

Analysis of more disaggregated data reveals that sectoral employment distribution is far from the needs of the innovation model of development (see Appendix Table A.3). The trade, repair, hotels and restaurants sector holds first place in terms of total employment, with a share of 21.8% (4.6 million people). It is followed closely by industry, with a share of 19% (just under 4 million workers). Most industrial workers are engaged in mining and quarrying, electricity, gas and water supply, food processing, manufacture of basic metals and fabricated metal products. Leaving aside agriculture, relatively large shares of employment are accounted for by education (8.1%), transport and communication (6.9%) and health and social work (6.5%). At the same time, the shares of modern services such as financial intermediation (1.6%) and real estate, renting and business activities (5.4%) are still low in Ukraine compared to advanced market economies. This reflects the bias in the Ukrainian economy towards sectors with relatively low capital expenditure and labour productivity but reasonably high and fast returns on invested capital.

Wage employment in agriculture has decreased markedly. Industry's share of wage and salaried workers has been remarkably stable, with only a slight decline over the period (see Figure 1.14). Agriculture's share has declined in roughly the same proportion as the increase for services. Due to bankruptcy and the subsequent shutdown of most collective and state farms during the 1990s and given the extremely slow growth in private agricultural enterprises, the number of employees in agriculture more than halved over the period (from 2.8 million in 2000 to 1.1 million in 2007). As a result, the share of employees in agriculture declined from 64% to 32% (to the total number of employed in agriculture) between 2000 and 2007.

Figure 1.14 Wage employment by sector (% of total) 2000-2007



Source(s): Ukraine State Statistics Committee (LFS).

Note(s): Classification of sectors is according to NACE Rev.1. Agriculture, forestry and fishing covers sectors A and B, industry covers sectors C, D and E, construction refers to sector F, and services refers to the other sectors from G to Q.

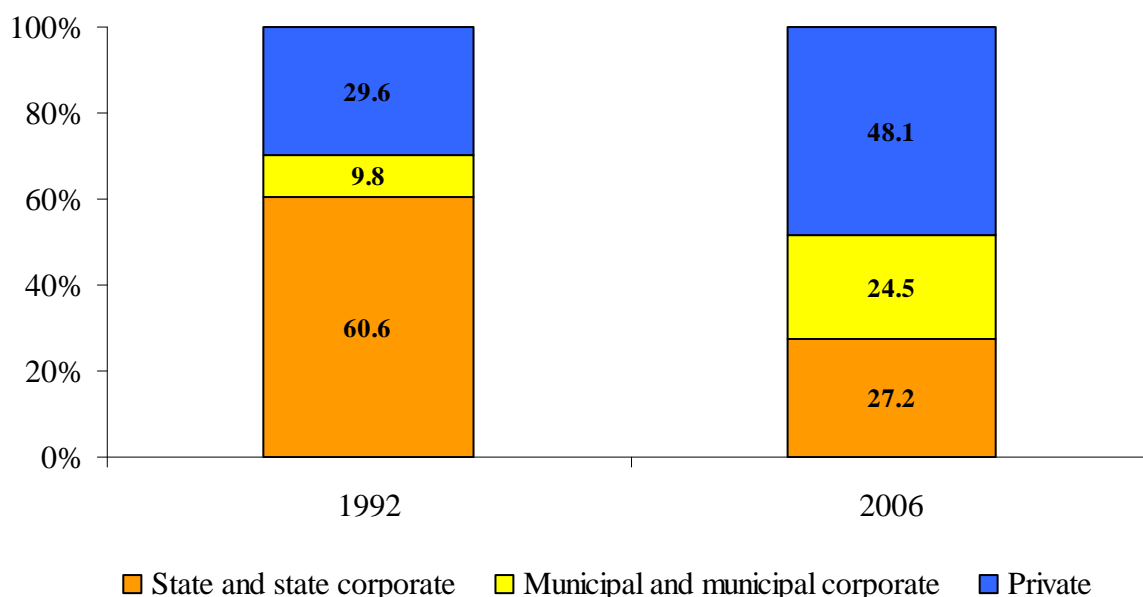
This trend is considered an extremely negative development for the rural labour market since it implies the risks of poverty, vulnerability and social exclusion. In order to survive, most former workers of collective or state farms have been forced to either become subsistence farmers or migrate abroad or to Ukrainian towns with more favourable labour market conditions. Only a few farmers have become successful in a way similar to farmers in developed countries. The restructuring of the economy has thus brought about significant changes in agriculture not only in terms of employment but also in terms of productivity and earnings.

Ukraine lags behind other transition economies with respect to private sector employment.³¹ The privatisation of state-owned enterprises that commenced in Ukraine in 1992 and the creation of private firms brought about dramatic changes in the ownership structure of employment. The state sector's share of employment decreased from 60.6% in 1992 to 27.2% in 2006, a decrease that was offset by corresponding increases in the shares of municipal and private enterprises (Figure 1.15). Given that the public sector consists of both state-owned and municipal organisations and enterprises, it still dominates the Ukrainian economy, with a share of about 51.9% in average listed number of staff employees in 2006.

Correspondingly, the private sector represents 48.1%, a share far lower than ten years ago in most other transition countries. For example, by 1997, the average private sector share of employment for Central and Eastern European (CEE) countries was 65% (Boeri and Terrell, 2002). Thus, according to official statistics, the Ukrainian economy is clearly lagging behind in terms of the development of the private sector compared to more advanced transition economies. More promising data on the ownership structure of employment is provided by the World Bank Labour Demand Survey: the private sector employed 74.1% of people in 2007, while the remaining 25.9% worked in state or municipal enterprises (Rutkowski, 2007, p.17).

³¹ Since the LFS data does not include information about employer's ownership type, the data here is based on the State Statistical Establishment Survey, which excludes military personnel and people employed in statistically small enterprises, by entrepreneurs-physical bodies or under civil law contracts. The latest available data on ownership structure is available only for the year 2006, given that the state classification of the ownership structures used up to April 2007 has been abolished.

Figure 1.15 Employment by ownership type (% of average listed number of staff employees) 1992 and 2006



Source(s): Ukraine State Statistics Committee (based on State Statistical Establishment Survey data).

Note(s): The data do not include employees of statistically small enterprises, those employed by entrepreneurs-physical people, people employed under civil law contracts and military personnel.

State ownership still predominates in forestry (88.4% of the average listed number of staff employees in a sector in 2006), support and auxiliary transport activities (82.1%), research and development (81.6%), public administration (74%), water transport (64.8%), and mining and quarrying of energy producing materials (65.1%). In addition, due to high incidence of municipal ownership, the share of the private sector employment is extremely low in traditionally public sectors as education (2.6% of the average listed number of staff employees in a sector in 2006), health and social work (4%) and recreational, cultural and sporting activities (15%).

*The small enterprise sector is small and shows low productivity.*³² Despite considerable growth in the number of small enterprises over the period 1991-2007 (Table 1.3), the small enterprise sector in Ukraine seems to be of little importance in terms of employment and production. For example, in 2007, the shares of small firms in total wage employment and in total production of goods and services were around 18.4%³³ and 4.4%, respectively — both extremely low by international standards. This suggests that the Ukrainian economy is still dominated by large firms, as small firms tend to be minuscule (with 6 employees on average) and to show poor productivity.

Table 1.3. Key data for statistically small enterprises 1991-2007

	Number	Number per 10,000 population	Number of wage and salaried employees	Percent share of total wage employment	Percent share of total production of goods and services
1991	47,084	9	1,192,400	na	Na

³² See footnote 5 for definition of statistically small enterprises in Ukraine.

³³ For comparison purposes, according to the World Bank Labour Demand Survey for 2007, the share of small enterprises (up to 50 employees) and medium-sized firms (51 to 250 employees) in total employment was 26.4% and 17.8%, respectively, whereas large firms (251 employees and over) represented 55.8% of total employment (Rutkowski, 2007).

1992	67,739	13	1,248,000	na	Na
1993	84,780	16	1,231,700	na	Na
1994	85,799	17	1,104,300	na	Na
1995	96,019	19	1,124,900	na	Na
1996	96,270	19	1,178,100	na	Na
1997	136,238	27	1,395,500	na	Na
1998	173,404	35	1,559,900	12.9	11.3
1999	197,127	40	1,677,500	14.1	11.1
2000	217,930	44	1,709,800	15.1	6.9
2001	233,607	48	1,807,600	17.1	7.3
2002	253,791	53	1,918,500	18.9	7.3
2003	272,741	57	2,034,200	20.9	7.7
2004	283,398	60	1,928,000	20.2	5.3
2005	295,109	63	1,834,200	19.6	5.5
2006	307,398	66	1,746,000	19.0	4.8
2007	324,011	70	1,674,200	18.4	4.4

Source(s): Ukraine State Statistics Committee.

Underemployment has diminished substantially by the beginning of 2008. Table 1.4 shows that there was an extremely high incidence of underemployment in terms of administrative unpaid leaves and involuntary part-time employment in the late 1990s. In particular, one in four or five employees was on administrative leave. Following positive legislative change in 2000 to restrict the use of long-term administrative unpaid leave, its incidence fell noticeably to 1.1% in 2007 (3.1% in construction, 2.7% in mining and manufacturing, and 1.1% in agriculture). Average work-time losses due to unpaid leave now constitute 152 hours per employee in the economy as a whole and 146 hours per employee in industry.

Table 1.4 Underemployment indicators 1994-2007

	Administrative unpaid leave		Involuntary part-time employment*	
	Number of employees	Percent share of the average listed number of employees	Number of employees	Percent share of the average listed number of employees
1994	3,430,000	21.5	1,035,000	6.4
1995	2,725,000	17.7	866,000	5.6
1996	3,391,000	23.8	1,232,000	8.6
1997	2,863,000	21.9	2,104,000	16.1
1998	2,793,000	22.4	2,178,000	17.5

1999	2,633,000	22	2,114,000	17.6
2000	2,199,000	16.1	1,819,000	13.3
2001	935,000	7.2	1,716,000	13.3
2002	622,000	5.1	1,519,000	12.4
2003	377,000	3.2	1,326,000	11.3
2004	221,000	2	997,000	8.8
2005	200,000	1.8	842,000	7.4
2006	137,000	1.2	620,000	5.4
2007	127,000	1.1	506,000	4.4

Source(s): Ukraine State Statistics Committee (based on State Statistical Establishment Survey data).

Note(s): The data do not include employees of statistically small enterprises, those employed by entrepreneurs-physical people, people employed under civil law contracts and military personnel.

*Data for 1994-1996 refer to year-end figures and, from 1997 onwards, to the average for the entire year.

As shown in the last two columns of Table 1.4, the dynamics of involuntary part-time employment in Ukraine seems to be less positive compared to unpaid leave. As one would expect, the increased incidence of involuntary part-time employment coincides with economic recession: with fewer standard full-time jobs available, workers are forced to take jobs with reduced working hours as alternatives to unemployment. However, when more standard full-time jobs become available during economic recovery, indicators of involuntary part-time employment would be expected to decline to zero. This has not happened in Ukraine so far: in spite of signs of a growing economy with an improving labour market (at least, up to the mid-2008), the number of people holding part-time jobs who would rather be working full-time remains high (4.4% of all employees in 2007). Involuntary part-time employees are mainly concentrated in industry (54.3% of all involuntary part-time employees in 2007), transport (17.6%), agriculture and related activities (9.8%) and construction (7.7%). Average work-time losses due to reduced working hours constitute 222 hours per employee in the economy as a whole and 221 hours per employee in industry. Since part-time employees are considered employed members of the labour force, their relatively high share is not reflected in unemployment or economic activity rates. Nonetheless, it represents an indicator of labour underutilisation, inadequate employment and earnings, and a shortage of more attractive job opportunities.

1.4 Unemployment

There are two major statistical sources for unemployment in Ukraine. The first statistical source is data for *registered unemployment* recorded by the Ukraine Public Employment Service (PES). According to the Ukraine Law on Employment of the Population, an unemployed person is defined as an able-bodied person of working age (16-54/59 years for women/men), without work and earnings, who is registered at PES as looking for a job and able and ready to start a suitable job. Since 2006, people with disabilities of working age who are registered at PES as looking for a job are also considered unemployed.³⁴ Data on almost all registered unemployment indicators has been available on a monthly basis since the early years of transition.

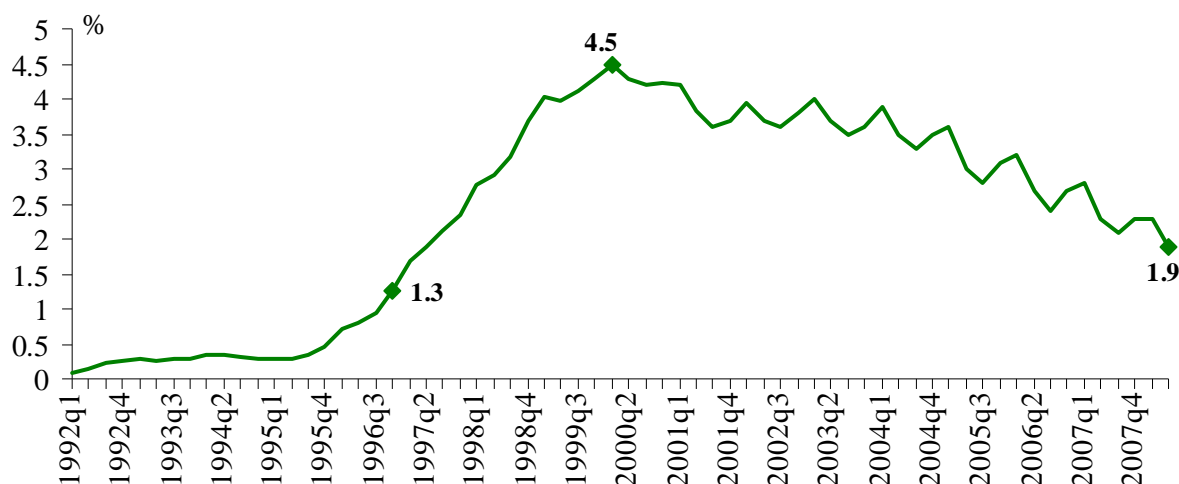
³⁴ Unemployment status is granted on the eighth day after applying to the local employment centre. It is denied to the following people: people aged under 16 years (with the exception of those who had worked before but had been laid off), people looking for their first job if they have no profession and if they refuse an offer of vocational training or employment, people legally entitled to a pension (including on preferential terms), people of statutory retirement age, and people who reject two offers of suitable jobs within seven days of registration.

The *registered unemployment rate* is defined as the ratio of the registered unemployed population to the average annual working-age population (before 2005, this ratio was calculated on the basis of the able-bodied working-age population by the end of the corresponding period).

The second statistical source of unemployment data is a calculation of the numbers of *unemployed people aged 15-70 defined according to the ILO criteria* (without work, currently available for work, and seeking work) derived from the LFS. Consequently, aggregated data on a yearly and quarterly basis has been available since 1995 and 1999, respectively. The *unemployment rate* is defined as the number of unemployed people as a percentage of the labour force (the economically active population).

Low unemployment over the economic transformation period is one of the main features of the Ukrainian labour market. Open unemployment, previously practically non-existent, accelerated in Ukraine and other transition economies following the collapse of the socialist system and the introduction of political, economic and social reforms at the beginning of the 1990s, when the former regime of full employment along with other features of the command economy became unsustainable. However, in contrast with CEE countries, where unemployment rates reached double-digit figures in the early years of the transition period, Ukraine recorded very slow growth in unemployment. Over the whole transformation period, the maximum registered unemployment rate was 4.5%, referring to the first quarter of 2000 (Figure 1.16).³⁵ Nonetheless, it would be erroneous to conclude from this data that Ukraine avoided the difficulties faced by most transition economies.

Figure 1.16 Registered unemployment (% of working-age population) 1992-2008



Source(s): Ukraine Public Employment Service.

Note(s): End-of-quarter figures, not seasonally adjusted. Spikes in the first and fourth quarters starting from 2001 are mainly attributed to inflows of seasonal workers (mainly rural).

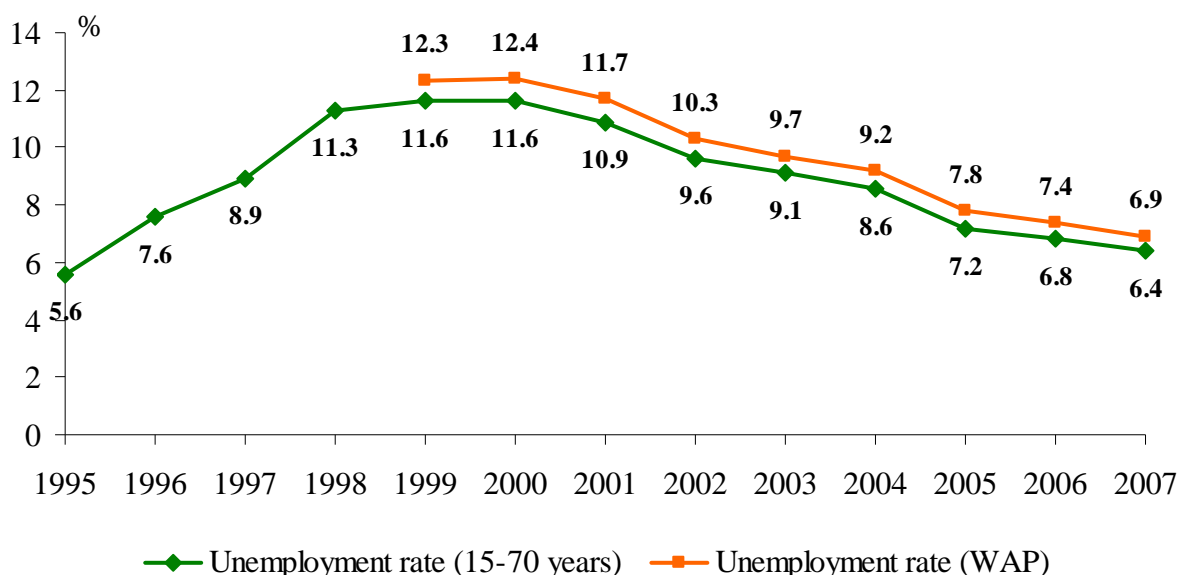
There are several explanations for the extremely low registered unemployment rates, which did not correspond to a huge output decline in the early transition years. The first explanation is that hidden unemployment, or underemployment, was widespread, caused by the extensive use of specific adjustment mechanisms such as wage arrears, and also unpaid leaves and involuntary part-time employment, as discussed above. A second reason — closely related to the first — is slow and delayed enterprise restructuring (World Bank, 2006a). A third explanation is that the true extent of unemployment was underestimated, given that many people who would be considered unemployed by conventional international standards were not covered by official statistics because they were not registered with public employment centres. Finally, use of the working-age population instead of the

³⁵ Since the first unemployment rate estimates according to the ILO methodology are only available from 1995, analysis of unemployment prior to 1995 was only possible using statistics on registered unemployment.

traditionally used labour force population as the denominator for calculating the registered unemployment rate accounts for additional underestimation of the unemployment rate.

LFS data reveal an unemployment rate that was several times greater than the registered unemployment rate but still low by European standards. The unemployment rate, calculated in accordance with the ILO methodology, rose steadily between 1995 and 2000, to reach 11.6% of the economically active population aged 15-70 years and 12.4% of the economically active working-age population (Figure 1.17). This steady rise, coinciding with a deep recession in the economy, was a result of labour shedding by enterprises in the second half of the 1990s. Subsequently, several years of robust economic growth caused a gradual decrease in unemployment, to 6.4% in 2007, with the number of unemployed almost halving (to 1.4 million people) from the 2000 figure.³⁶ There thus seems to be a noticeable improvement in labour market prospects even for workers in the unemployment pool. The natural decrease in the working-age population accompanied by large outflows of Ukrainian workers abroad and the increased effectiveness of the PES in helping unemployed people to obtain a job adds to the relatively low levels of unemployment in Ukraine.

Figure 1.17 ILO-defined unemployment (% of the economically active population) 1995-2007



Source(s): Ukraine State Statistics Committee (LFS).

Note(s): Figures are presented for the fourth quarter for 1995-1998 (yearly surveys) and as the average for the year for 1999-2007 (quarterly and monthly surveys).

Significant changes in the main reasons for unemployment seem to have occurred in line with the overall changes in the Ukrainian labour market. For example, in 1998 — a year of economic decline featured by a very high number of unemployed — the lion's share (41.8%) of workers was involuntarily laid off because of enterprise restructuring, liquidation or conversion and staff reduction (Figure 1.18). Although the share of such job losses fell to 28.9% in 2007, it is still relatively high, reflecting ongoing economic restructuring and labour reallocation in Ukraine.

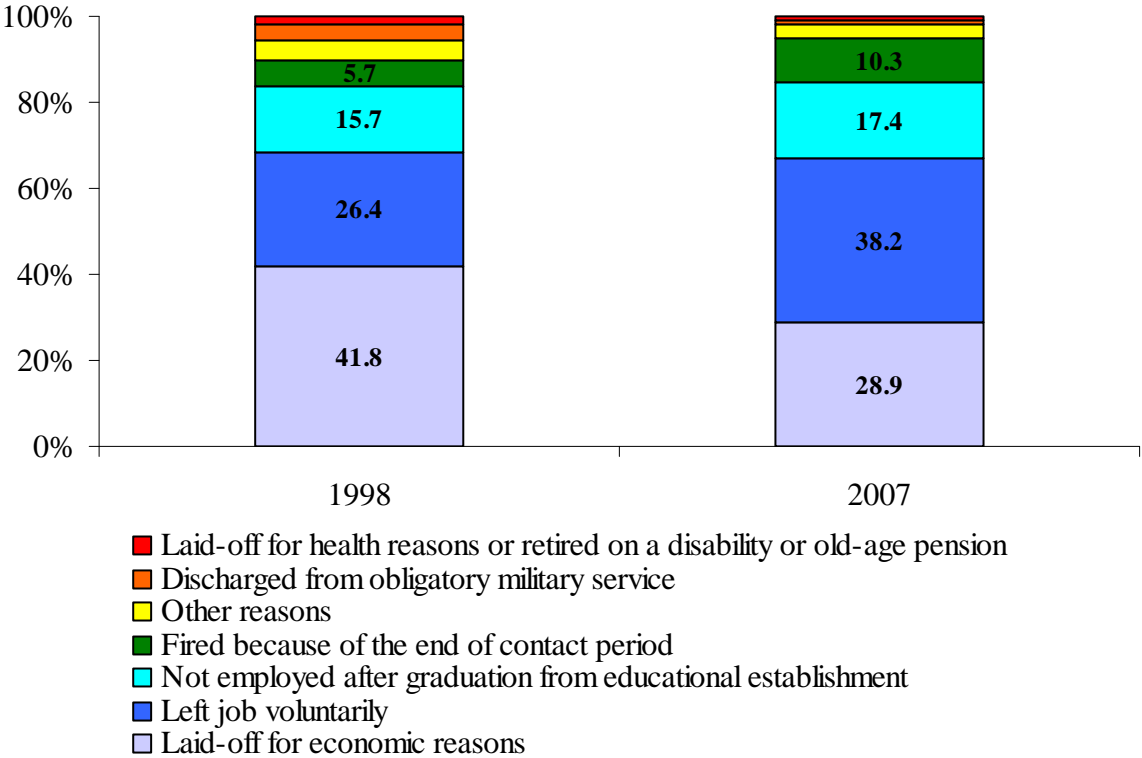
Over the same period, the share of job leavers who voluntarily left their jobs increased from 26.4% to 38.2%.³⁷ This trend is seen as a positive sign, reflecting an increase in the frictional component of unemployment. A doubling of the share of those who completed a fixed-term job and actively sought employment is clear evidence of the development of more flexible labour relations.

³⁶ The unemployment rate for people aged 15-64 years is about the same (6.5%), since few non-working people of retirement age continue searching for a job (see Appendix Table A.4).

³⁷ Taking into account the widespread practices of administrative unpaid leaves, shortened working hours, wage arrears, poor working conditions and other adjustment mechanisms used by employers in Ukraine, many workers are just forced to quit their jobs even under unfavourable conditions in the local labour market.

The only negative development in the observed period was an increase (from 15.7% to 17.4%) in the share of new entrants who could not find work after graduating from educational institution. Given growing labour demand and the shortage of skilled workers in Ukraine in recent years, this implies that the national education system is not very responsive to current labour market needs. As many new graduates are unemployed not because of a shortage of jobs in the economy but because they lack the skills necessary to fill the available jobs, this structural unemployment is unlikely to be reduced by further employment growth. Recent evidence also shows that many graduates have unrealistic requirements in regard to pay (their reservation wage is too high), the content of the job and other job characteristics.³⁸ According to the job search theory, a low probability of accepting a job offer is an important impediment to fast employment.

Figure 1.18. Unemployment by reason (% of total) 1998 and 2007



Source(s): Ukraine State Statistics Committee (LFS).

The unemployed are very rational in terms of job search methods and channels. Despite the fact that less than half of unemployed people (as defined according to ILO criteria) bother to register with the public employment centres, a surprisingly significant share of the unemployed in the LFS sample seek work through the Ukraine Public Employment Service (41% of all unemployed people searching for a job in 2007, as shown in Figure 1.19).³⁹ Furthermore, relatively less competitive groups on the labour market, such as females and rural dwellers, tend to rely on assistance from the PES more often than males and urban dwellers. Men often prefer other channels in their job search, for example, personal contacts (43.8%), job advertisements (12.2%) and direct contacts with employers (12.2%).

An analysis of job search methods in Ukraine shows that private employment agencies and recruiting firms are not especially popular among the unemployed: just about 1.3% of unemployed people used them in 2007. There are several potential explanations for the low use made of private employment

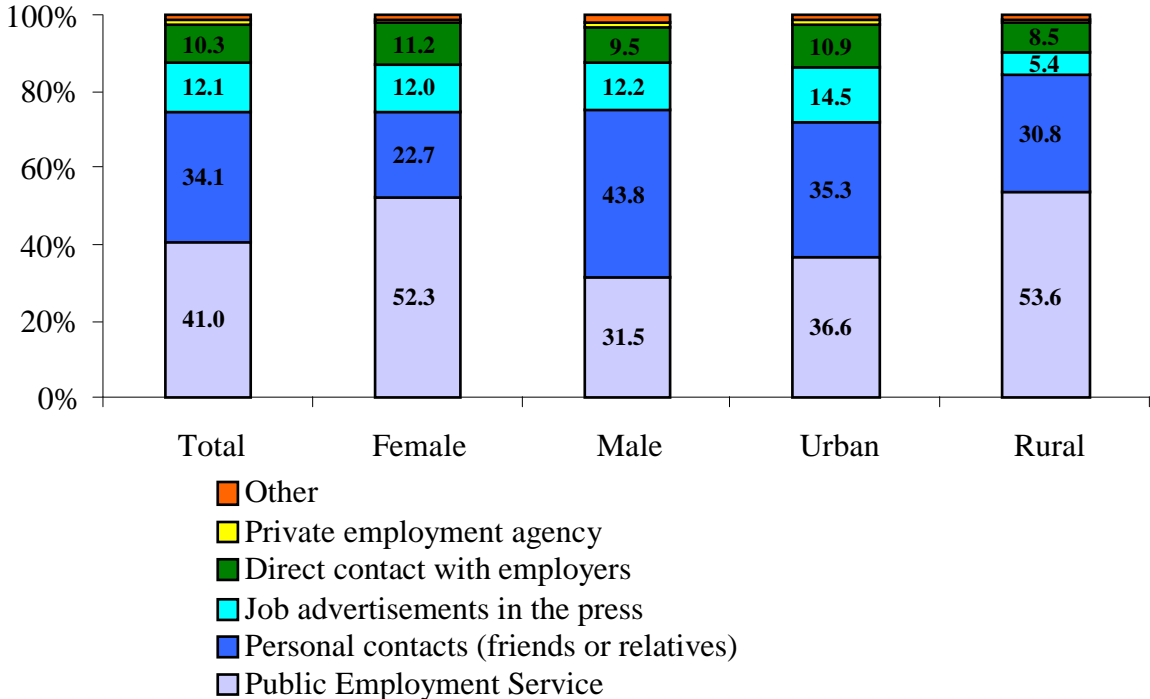
³⁸ See materials in Ukrainian at: http://www.mlsp.gov.ua/control/uk/publish/article.jsessionid=1418C26605CE3B840A8FCA6F8CC9D40B?art_id=74821&cat_id=34966, http://www.dcz.gov.ua/control/uk/publish/article?art_id=94753&cat_id=364661, and <http://www.zn.ua/3000/3050/63679/>.

³⁹ The job search methods used by the unemployed sampled in the ULMS in the period 1998-2002 (Kupets, 2006) differed from those in the LFS, with far fewer unemployed people seeking a job via the PES (10.8%) and using the help of friends and relatives (29.2%), and with more people relying on direct contacts with employers (16.4%) and job advertisements in the newspapers or on the Internet (37.6%).

agencies and recruiting firms: they are usually concentrated in large towns where the labour market is more dynamic; most of them charge high fees (whereas the PES assists in job search and placement for free and additionally pays unemployment benefits during period of job search); and finally, they are not usually very effective in matching hard-to-place people with jobs.

On the other hand, as Figure 1.19 reveals, personal contacts, the help of friends and relatives remain one of the most popular job search channels in Ukraine. Compared to the other job search channels, using informal social networks saves time and money and may offer patronage and placement guarantees. Moreover, as Roshchin and Markova (2004) found for Russia, using informal social networks, and mainly the help of friends, is likely to be the most effective job search strategy, which justifies the rationality of this choice by many job seekers.

Figure 1.19 Unemployment by job search method (% of unemployed seeking work) 2007



Source(s): Ukraine State Statistics Committee (LFS).

The incidence of unemployment is higher among men. In contrast with data on registered unemployment in Ukraine and on ILO-defined unemployment in most developed countries, Ukrainian LFS data point to higher unemployment rate among men than women (see Appendix Table A.4). The position of Ukrainian women in the labour market seems to be better compared to men because of the faster growth in typically female-dominated industries and sectors such as trade, hotels and restaurants, individual services, food processing, light industry and subsistence agriculture, on the one hand, and, on the other hand, due to very stable employment in public sectors with a traditionally high share of female employment, in particular, education, healthcare, social assistance, culture and public administration (bottom positions). In addition, Ukrainian women tend to be less demanding than men with respect to wages and job characteristics.

Although there are signs of discrimination against female workers in recruitment and dismissal in Ukraine (Human Rights Watch, 2003), it seems not to be significant in explaining unemployment, given that Ukrainian women are, on average, better educated than men and so less likely to be discriminated on the grounds of alleged lower labour productivity. Young women are, however, more likely to be discriminated on the grounds of being pregnant or having small children. The reason for this is labour legislation, which, by obliging employers to provide women with relatively generous maternity and child care leaves, discourages them from hiring young women. Since women usually

prefer withdrawal from the labour force (at least temporarily) when they experience difficulties in finding work, this discrimination is likely to contribute to an overall reduction in labour supply by young women (as has been well documented by the data on inactivity above) rather than to an increase in unemployment. Thus, the lower incidence of unemployment among women compared to men partially reflects the lower economic activity rate of women.

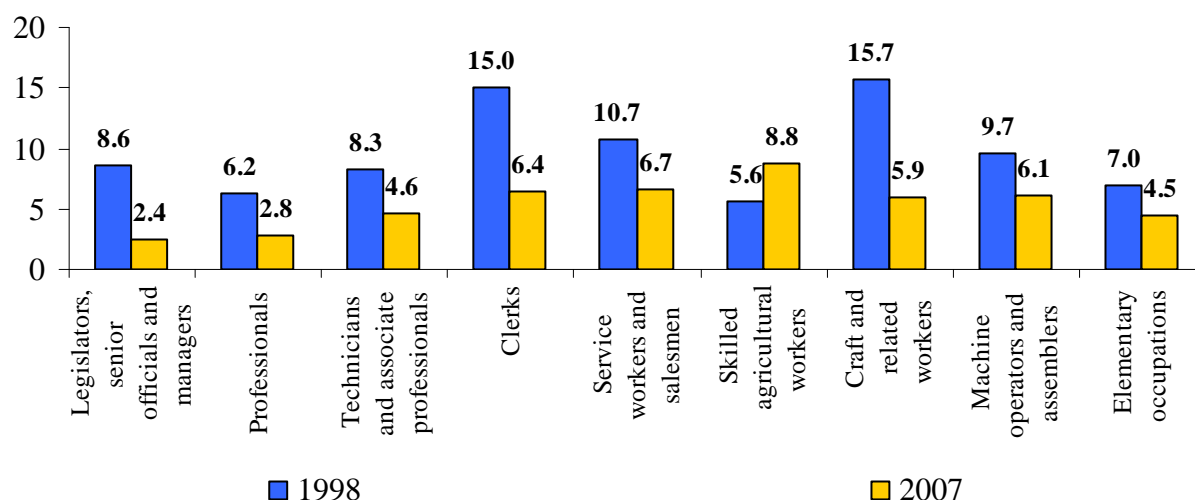
Young people are more prone to unemployment. The unemployment rates across age groups reveal patterns observed in many transition and developed countries. Young workers (aged 15-24 years) have unemployment rates that are nearly double those for workers in the core age group, while workers aged 60-70 years do not experience virtually any unemployment (Appendix Table A.4). Furthermore, young workers have the largest share in unemployment (27.4%) — twice as high as their share in the economically active population, whereas the share of the oldest age group in unemployment is close to zero. Thus, young people are most exposed to unemployment, particularly males living in urban areas and school leavers with no work experience or basic skills.

Unemployment rates for people without basic secondary education are lower than for better educated people. Although higher educational attainment is usually associated with lower unemployment rates, this generalisation has not held true for Ukraine in the last few years (Table A.4 in Appendix). Noteworthy is the fact that people with primary or no education have distinctly lower unemployment rates than any other educational group. This is explained by their small share in the total population (2.2% in 2007), a high inactivity rate (78.7% in 2007) and greater employment opportunities. Unemployment rates for people with complete secondary or incomplete higher education — upper secondary or post-secondary non-tertiary education according to the International Standard Classification of Education (ISCED) — were higher than those for people who had failed to attain the upper secondary level. Thus, the relative cost of being a high school dropout in Ukraine has not increased in terms of unemployment risk (as happens in developed countries); on the contrary, it has drastically decreased due to an increased demand for unskilled labour. Having a university qualification appeared to confer no significant advantage in terms of reducing the group unemployment rate in 2007 compared to 2004.

Overall, the educational group most affected by unemployment in Ukraine is that composed of people with complete secondary education (high school or vocational school diploma). This group accounts for 52.2% of the unemployment pool (and a corresponding share of the labour force of 43.8%) and has the highest unemployment rate (11% in 2004 and 7.6% in 2007).

The position of skilled agricultural and fishery workers has worsened considerably. As Figure 1.20 reveals, considerable changes occurred in unemployment rates among occupational groups between 1998 and 2007. In 1998, highly skilled occupational groups (white-collar as well as office and blue-collar workers) experienced severe unemployment compared to people with no special skills — indicating that the huge restructuring of the late 1990s mostly affected workers with high skill levels. By 2007, the unemployment rates for first six occupational groups seemed to reflect skill levels: higher unemployment rates were associated with less skilled occupations. A deep and ongoing crisis in agriculture seems to have contributed to the highest unemployment rate for skilled agricultural and fishery workers who did not give up looking for regular work as an alternative to employment in subsistence agriculture (8.8%). A substantial reduction in unemployment rates for all occupational groups other than agricultural workers is a sign of the ongoing expansion of the Ukrainian economy, mirrored in the growth of job opportunities for workers with various skill levels.

Figure 1.20 Unemployment by occupational group 1998 and 2007



Source(s): Author calculations based on Ukraine State Statistics Committee data (LFS).

Note(s): The data only include unemployed people who previously worked (new entrants are excluded).

One of the most positive recent developments has been the significant reduction in long-term unemployment. During the first years of economic growth (2000-2001) unemployment only fell among the short-term unemployed, but later the reduction among long-term unemployed even surpassed that for the short-term unemployed. In 2007, only 23% of the unemployed (313,000 people) searched for work for more than a year, compared to 54.8% (1.3 million people) in 2001 (Table 1.5).

Table 1.5 Long-term unemployment indicators 1995-2007

	Number of long-term unemployed	Incidence of long-term unemployment (in % to the total number of unemployed searching for a job)	Long-term unemployment rate (in % to economically active population aged 15-70)	Average job search duration (months)
1995	341,500	28	1.34	7
1996	544,800	32.7	2.09	8
1997	644,500	32.3	2.47	8
1998	1,045,400	37	4.03	9
1999	1,187,600	46.3	5.22	9
2000	1,327,500	50.5	5.74	10
2001	1,332,400	54.8	5.86	10
2002	1,179,300	53.5	5.19	10
2003	988,500	50.3	4.37	9
2004	768,700	42.5	3.46	8

2005	454,000	29.8	2.04	7
2006	372,500	25.8	1.67	6
2007	313,400	23	1.40	6

Source(s): Author calculations based on Ukraine State Statistics Committee data (LFS).

Note(s): The data refer to unemployed people who have been looking for work for more than 12 months.

The most worrisome trend is that people (particularly males) who have completed higher education have the highest incidence of long-term unemployment. For example, in 2005, the incidence of long-term unemployment was 33.4% for university graduates, compared to 29.6% for high school graduates and 11.3% for the people with primary education or no education. Older displaced workers with higher education may face particular difficulties in finding suitable work because their skills, specific to the technology and production structures used in the past, are largely obsolete. They need retraining in order to update their skills, but are usually reluctant to do so and prefer to stay in unemployment or in the less demanding informal sector. Young university graduates suffer from a number of problems: a) a serious skill mismatch between the knowledge acquired in their studies and the current needs of employers, resulting from deficiencies in the national education and training system; b) a lack of government support for youth; and c) unrealistic demands of young people (as discussed above).

Disproportionately represented among the long-term unemployed are urban residents, males (although the incidence of long-term unemployment is slightly higher among females), people aged 15-24 years and people aged 40-49 years (although the highest incidence of long-term unemployment is to be found among the oldest workers, mainly females) and unemployed people with a high school or vocational school diploma (Kupets, 2008).

Income from casual work and subsistence agriculture leads to a longer job search and unemployment period. The findings of a study on the determinants of unemployment duration in Ukraine (Kupets, 2006) broadly confirm the results obtained in developed and transition countries. Male, young, married and better educated individuals living in large cities are likely to leave unemployment faster. Those who have alternative sources of subsistence during unemployment — casual work or subsistence farming, household income or pensions — tend to stay unemployed significantly longer before finding a suitable job. The effect of unemployment benefits was found to be insignificant in the total sample of unemployed, including people with and without income from casual work or subsistence farming; it was significant and negative, however, in the sub-sample of unemployed people with no income from casual work or farming.

1.5 Transition between labour market statuses

In order to provide some indication of the extent and nature of aggregate labour market mobility between the three major labour market statuses (employment, unemployment, and inactivity) in Ukraine we examined the transition probability matrix obtained by H. Lehmann and co-authors (see Lehmann et al, 2005) on the basis of the ULMS data by estimating transitions from the reference week in April-June 2003 to the reference week in June-August 2004.⁴⁰ A number of particularly striking features emerge from the estimated transition rates reported in Table 1.6.

The high proportion of people remaining at the same status a year later, in particular for employment and inactivity, imply a relatively low level of mobility. In contrast to earlier periods in Ukraine (up to

⁴⁰ Under the standard Markov assumption that the probability of making a transition depends on an individual's current labour market status, the probability of observing an individual in status j in period $t+12$, conditional on him/her being in status i at period t , is given by $P_{ij}=F_{ij}/S_i$, where i and j denote labour markets statuses E (employment), U (unemployment), or N (inactivity), where F stands for the number of individuals observed in status i in the first period and in status j in the second, and where S is the stock of individuals in status i in the initial period. Further reading on this methodology includes, among many others, Bellmann et al (1995). The estimates presented here have not been corrected for the potential problems of attrition, misclassification and round-tripping.

2002) when unemployment was extremely stagnant and characterised by a high incidence of long-term unemployment (about 60%), probabilities of transiting out of unemployment between 2003 and 2004 reached levels similar to those of the less dynamic transition countries such as Bulgaria, Poland, and Slovakia (see Boeri and Terrell, 2002), and unemployment became less stagnant. The probability of transition from unemployment into employment was twice as high as in 1998-2002, suggesting that labour market prospects for the unemployed were improving significantly. However, compared to the CEE countries, far more unemployed people in Ukraine leave the labour force, probably because of discouragement, unattractive job offers, the existence of alternative sources of income or other (personal or family) reasons.

Table 1.6 Labour market transition by gender, age and education 2003-2004

	P_{EE}	P_{EU}	P_{EN}	P_{UE}	P_{UU}	P_{UN}	P_{NE}	P_{NU}	P_{NN}
Total	0.886	0.041	0.072	0.386	0.342	0.273	0.119	0.075	0.806
Male	0.897	0.039	0.065	0.425	0.369	0.206	0.128	0.100	0.772
Female	0.877	0.043	0.080	0.349	0.316	0.336	0.115	0.063	0.822
15-24 years	0.868	0.053	0.079	0.423	0.301	0.276	0.177	0.166	0.657
25-49 years	0.913	0.045	0.042	0.423	0.336	0.241	0.288	0.137	0.576
50-59 years	0.865	0.032	0.103	0.260	0.440	0.300	0.077	0.053	0.870
60+ years	0.733	0.010	0.257	0.000	0.214	0.786	0.033	0.010	0.958
Elementary education	0.819	0.059	0.122	0.415	0.245	0.340	0.064	0.060	0.876
Secondary education	0.887	0.043	0.069	0.366	0.364	0.270	0.158	0.084	0.758
Tertiary education	0.938	0.018	0.044	0.448	0.397	0.155	0.126	0.067	0.808

Source(s): Lehmann et al (2005), Tables II.6, 7, 8 based on ULMS.

Note(s): P_{ij} ($i, j = E, U, N$) is the probability of transition from state i in 2003 to state j in 2004, where E stands for employment, U for unemployment, and N for inactivity. Elementary education refers to no education, completed elementary education and incomplete secondary education; secondary education refers to complete secondary and non-tertiary education; and tertiary education refers to at least the equivalent of a bachelor's degree.

The probabilities of losing, interrupting or leaving a job and moving into unemployment or inactivity in Ukraine are similar to those for the CEE countries of the early 1990s. This would suggest that ongoing economic restructuring in Ukraine entails a significant degree of reallocation of workers between labour market statuses, jobs and occupations. In addition, overall outflows from inactivity, and flows into employment in particular, are much higher in Ukraine compared to the CEE countries. This suggests that many Ukrainians use inactivity as an alternative state to unemployment during either voluntary or forced periods out of work and that they enter employment without investing much effort in job searches (i.e. without a period of unemployment). It may indicate also that newcomers to the labour market move directly from studies to work. However, the fact that the probabilities of transition from inactivity to work and from inactivity to unemployment by the youngest age group are almost equal (see Table 1.6) do not support this hypothesis.

Considerable differences exist in transition rates according to gender, age and education. While women exit employment more frequently than men, they find it more difficult to be hired from unemployment and inactivity — a result observed in virtually all the transition countries. Women were also more likely to remain inactive than men — again in line with international evidence.

The group of retirees over 60 experiences larger outflows from employment than the other groups, with virtually all flows occurring out of the labour force. Younger women and women in the 50-59 age bracket also leave the labour force in large numbers when they leave a job. Flows into unemployment decrease with age, this supports the conclusion that young people are more exposed to unemployment, as mentioned above. At the same time, younger unemployed and inactive workers have better chances of finding employment within a year, whilst most workers aged over 50 years see no possibilities of obtaining work after its loss and they are forced to withdraw from the labour market.

Employment separation occurs more frequently for workers with elementary education, both male and female, and most of these workers leave the labour force. On the other hand, highly educated unemployed workers have a greater chance of obtaining employment than less educated counterparts - a finding which contradicts trends depicted by the official LFS statistics discussed above.

Thus, the job status transition picture between different labour market statuses in Ukraine is consistent with that in most developed and transition countries: women, young people and low-educated people are generally more likely to lose or leave their jobs, whereas men, older workers and better educated workers remain longer in unemployment while trying to find a suitable job.⁴¹

Conclusions

The current demographic situation in Ukraine shares negative trends both with developed countries — rapid population ageing, low birth and fertility rates, reproductive behaviour oriented to birth control — and with developing countries — high mortality, high incidence of infectious diseases, deteriorating general health and short life expectancy. Ukraine is on the verge of severe depopulation, and immigration at its current pace is not sufficient to reverse this trend.

The measures taken by the Ukrainian government to address these issues are focused primarily on transfer-based incentives to increase the number of births. However, the real demographic challenge is the mortality of the working-age population (in particular, men) — high but in many cases avoidable — which has not received the attention of policy makers. Since population ageing and population reduction have already started to exert a long-run negative effect on labour force numbers and structure, possibly resulting in a shortage of labour in the very near future, there is an urgent need for concerted action from the government to mitigate existing demographic problems together with important employment, social policy and migration issues.

Quantitative labour market indicators suggest that there have been some improvements in the Ukrainian labour market in recent years. Economic activity and employment rates have increased slightly, hidden and open unemployment have been reduced, long-term unemployment has fallen and the average duration of job search has decreased. In addition, many jobs and workers have moved from industry and agriculture to services and construction, from wage employment to self-employment and more flexible forms of employment and from the sector presented by large state-owned or privatised enterprises to the new private small-enterprise sector.

However, these overall indicators conceal imbalances and distress: full-time waged jobs are being replaced by more precarious jobs; most of the growth in employment is attributed to subsistence agriculture and self-employment in low-productivity sectors; many jobs in the new private sector are poorly paid, performed in poor working conditions and offer inadequate employment and social security. Furthermore, workers with little or no specific education or skills are in great demand on the labour market, while many highly educated and skilled people despair of finding a job in accordance with their field of study. Finally, some parts of the country are experiencing boom times and labour shortages, while other regions are still suffering from high unemployment and weak economic development.

⁴¹ More information on labour market transitions and their determinants in Ukraine can be found in Lehmann and Pignatti (2006).

2. Human capital, employment and economic transition

2.1 Investment in human capital

2.1.1 Quantitative characteristics of the educational system

Ukraine has a fairly well developed education system. The educational system in Ukraine (Appendix Figure A.1) is rather complicated. In 2001, general education was transformed from a 11-year to a 12-year education cycle that includes primary, basic secondary and high school. Children enter primary school at the age of 6-7 years. Compulsory education includes 4 years at primary school followed by 5 years at general secondary school. After basic secondary education, students may choose between 2-3 years at high school (complete general secondary education) or 3-4 years at vocational school (professional and technical education) or higher education institutions (incomplete higher education). After completing high school a person may pursue short study courses at vocational school or higher education institutions or, alternatively, pursue studies at advanced education institutions and receive bachelor's (basic higher education) or specialist/master's degree (complete higher education) depending on the length of studies.

Ukraine has a developed network of education establishments, composed of around 15,300 pre-school educational institutions and around 21,200 primary and general secondary schools. Post-compulsory education is provided by education establishments of different types, including 1,022 vocational schools, 553 higher education institutions and 351 advanced education institutions.

Ukraine's performance can be qualified as satisfactory in terms of quantity. Higher levels of education potentially confer a comparative advantage and are an important factor in social stability. The capacity of the educational system in Ukraine makes the transition from school to paid employment a relatively easy one, as the constitution guarantees free secondary education and vocational and tertiary education on a competitive basis. According to the United Nations Development Programme (UNDP) Human Development Index 2007, Ukrainian education is doing quite well by international standards.⁴² In terms of the Human Development Index component referring to adult literacy rate, Ukraine performs better than the vast majority of the 172 countries surveyed, though it falls behind a number of CIS countries (namely, Russia, Georgia and Tajikistan). As for the rate of enrolment in educational institutions, Ukraine is ranked of 39 out of the 172 countries surveyed. According to the Global Competitiveness Report (WEF, 2008) Ukraine is at the 31st place in the world in terms of the quantity of higher education; in fact, its quantitative educational indicators are comparable to those for the EU countries and are far superior to other CIS countries.

Ukrainians are well educated. The capacity of the Ukrainian education system ensures easy access to schooling and so there are fairly high enrolment rates compared to other countries at the same stage of development. Aggregated data reveal a high level of education among Ukrainians. According to the All-Ukrainian Population Census 2001, the share of the population with secondary or higher education was above 90% (see Appendix Table A.5) and about 85% of people aged 25-64 years had at least upper secondary education. Comparable with other post-Soviet countries including Russia (89%), Czech Republic (90%), Slovak Republic (86%) and Estonia (89%) (Table 2.1), this high level of education is explained by the fact that transition economies have inherited education systems that ensured almost universal literacy and good access to higher education.

Table 2.1 Population in selected countries with at least upper secondary education by age (% of total population) 2005

	25-64 years	25-34 years	35-44 years	45-54 years	55-64 years
Australia	65	79	66	61	50

⁴² See the Human Development Index for Ukraine at http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_UKR.html.

Austria ⁽²⁾	81	87	84	78	70
Belgium	66	81	72	60	48
Canada	85	91	88	84	75
Czech Republic	90	94	93	88	83
Denmark	81	87	83	78	75
Finland	79	89	87	78	61
France	66	81	71	60	51
Germany	83	84	85	84	79
Greece	57	74	65	51	32
Hungary	76	85	81	76	61
Iceland	63	69	67	63	49
Ireland	65	81	70	55	40
Italy	50	66	54	46	30
Korea	76	97	88	60	35
Luxembourg	66	77	68	60	55
Mexico	21	24	23	20	12
Netherlands	72	81	76	69	59
New Zealand	79	85	82	78	66
Norway	77	83	78	74	73
Poland	51	62	50	47	43
Portugal	26	43	26	19	13
Slovak Republic	86	93	92	85	68
Spain	49	64	54	41	26
Sweden	84	91	90	82	72
Switzerland	83	88	85	82	77
Turkey	27	36	25	21	15
United Kingdom ⁽²⁾	67	73	67	65	60
United States	88	87	88	89	86
OECD average	68	77	71	64	54
EU19 average	68	79	72	64	54

Brazil ⁽³⁾	30	38	32	27	11
Chile ⁽³⁾	50	64	52	44	32
Estonia	89	87	95	92	80
Israel	79	86	82	75	69
Russian Federation ⁽⁴⁾	89	92	95	90	72
Slovenia	80	91	84	75	69
Ukraine	85	90	92	88	64

Source(s): Author calculations based on All-Ukrainian Population Census 2001 data and OECD (2007a), Table A1.2.a.

Note(s): ⁽¹⁾Excluding ISCED 3C short programmes. ⁽²⁾ Including some ISCED 3C short programmes. ⁽³⁾ Year of reference 2004. ⁽⁴⁾ Year of reference 2003. OECD country data is from 2005 and Ukraine data is from 2001.

However, the influence of the Soviet past has declined in the last decade, as documented by the data presented in Table 2.1. For the age cohort 25-34 years, the share of people with at least upper secondary education in the post-independence period has declined to 90% in comparison to 92% for the age group 35-44 years. The level of education of youth aged 25-34 years is still higher in Ukraine than in many developed countries, however, although it is lower than that for Korea (97%), the Czech Republic (94%) and the Slovak Republic (93%).

But the level of education of the population is expected to fall given declining enrolment rates for primary and secondary education. The increase in the number of vulnerable families, greater social pressures, economic slowdown, the expansion of the shadow economy and the closure of schools in rural areas have negatively affected enrolment to education (see Appendix Table A.6). According to the Global Competitiveness Report (WEF, 2008), Ukraine obtains an extremely low 106th place on the NER for primary education, which amounts to only 83%, significantly below the averages for CIS (88%), CEE countries—new members of EU (93%) and the EU15 (97%).

The gross enrolment rate (GER)⁴³ for secondary education (all programmes) in Ukraine fell from 99% in 2000 to 93% in 2006, in a period when many other countries improved their secondary enrolment rates.⁴⁴ According to the Global Competitiveness Report 2008 (WEF, 2008), Ukraine is still ranked relatively high for secondary GER, at 54 of 131 countries.

In 2006, Ukraine performed somewhat worse but its performance was still comparable with most North American and Western European countries (101%) and better than some CEE countries, with the 93% GER for secondary education in Ukraine 5 percentage points higher than the CEE average.^{45,46} However, Ukraine is currently doing worse than most CEE countries; in particular, Ukraine is behind the Baltic countries (99-100%), Poland (100%), Belarus (96%), Czech Republic (96%), Slovenia (95%), Bulgaria (106%) and Hungary (96%).

⁴³ The UNESCO definition of the gross enrolment rate is the “number of pupils enrolled in a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education.” See [http://www.uis.unesco.org/glossary/Term.aspx?name=Gross%20enrolment%20ratio%20\(GER\)&lang=en](http://www.uis.unesco.org/glossary/Term.aspx?name=Gross%20enrolment%20ratio%20(GER)&lang=en).

⁴⁴ According to the OECD (2007a), there have been significant improvements in secondary enrolment rates in most OECD countries.

⁴⁵ The source of enrolment statistics for Ukraine and other countries is educational data compiled by UNESCO.

⁴⁶ Gross enrolment remains high in Ukraine due to the substantial number of over-age pupils, standing at 12% in 2006—one of the highest by international standards (more recent data is not available).

The situation looks similar when comparing the net enrolment ratio (NER)⁴⁷ for secondary education (see Appendix Table A.7). Ukraine's NER for secondary education declined from 91% in 2000 to 84% in 2006. By 2006, the NER for secondary education in Ukraine worsened but was still comparable to that for North American and Central European countries (91%) and was still higher than the average for the CEE (81%) — although a number of countries have improved their results in comparison to Ukraine, including Poland (94%), the Baltic States (92%), Slovenia (90%), Hungary (90%), Bulgaria (89%), Belarus (88%) and Croatia (87%).

For the period of 2000-2006, the GER for upper secondary education fell from 100% to 94%. The dynamics of enrolment in upper secondary education suggests that Ukraine is losing its competitiveness and that the level of education of the population is falling.

Vocational/technical upper secondary education coverage is negligible. Since 2000, the numbers of students entering vocational education remain substantially below the regional average. For example, in 2006, only 24% of pupils in all upper secondary schools in Ukraine were enrolled in upper secondary vocational/technical schools (Table 2.2). This indicator lags behind the CEE average by 15 percentage points (see Appendix Table A.8). Participation in vocational/technical upper secondary education is also substantially lower in Ukraine than in most other countries.

Table 2.2 Technical/professional orientation of upper secondary education in selected countries 2006

Country	Technical/professional upper secondary enrolment as % of all upper secondary enrolment
Czech Republic	79
Serbia	76
Slovakia	73
Croatia	73
Romania	65
Slovenia	61
Bulgaria	53
Poland	45
Russian Federation	44
Turkey	38
Latvia	34
Republic of Moldova	33
Estonia	31
Lithuania	28
Hungary	27
Belarus	2,7

⁴⁷ The UNESCO definition of the gross enrolment rate is the "number of pupils of the theoretical school-age group for a given level of education, expressed as a percentage of the total population in that age-group." See <http://www.uis.unesco.org/glossary/Term.aspx?name=Net%20enrolment%20rate&lang=en>.

Ukraine	24
North America and Western Europe	43
Central and Eastern Europe	39
South and West Asia	31
Central Asia	45
East Asia and the Pacific	49

Source(s): UNESCO.

Note(s): Technical orientation is calculated as the ratio of ISCED-3 technical/vocational students to the total ISCED-3 student population.

Indirect indicators suggest that technical/vocational education enrolment in Ukraine has fallen since Soviet times against a background of economic decline, high unemployment rates and increased demand for higher education. For instance, according to official statistics, the GER for vocational/professional educational institutions declined by 30% (to 454,400) in the period 1990-2007. The fall is underestimated by the official statistics because, for the period 1990-1995, the data only covers enrolment in Ukraine Ministry of Education vocational education establishments. Since 1996, however, the official statistics include enrolment in all vocational education establishments.

According to some expert estimates, more than one third of graduates from vocational/technical schools continue studies at universities. The trends are not likely to change radically in the near future. In the absence of necessary educational reforms, the enrolment rates to vocational education are steadily declining. Between 2000 and 2006, the quantity of students enrolled in vocational and technical schools declined by 3% (to 299,200) and the overall number of students fell by 15% (Table 2.3).

Table 2.3. Quantitative vocational/ technical education indicators 1990-2007

	Number of establishments	Number of students	Number of first year students	Number of graduates
1990	1,246	643,400	380,500	376,700
1991	1,251	648,400	377,400	338,100
1992	1,255	647,200	367,900	307,100
1993	1,185	629,400	340,800	307,000
1994	1,177	572,800	286,000	288,400
1995	1,179	555,200	300,500	277,300
1996	1,156	539,700	304,200	274,800
1997	1,003	528,100	311,200	264,500
1998	995	529,000	304,200	259,200
1999	980	527,700	307,300	263,500
2000	970	524,600	307,300	266,800
2001	965	512,300	309,100	278,800

2002	962	501,900	311,000	282,400
2003	953	493,100	311,200	275,600
2004	1,011	507,300	327,600	283,400
2005	1,023	496,600	314,200	286,600
2006	1,021	473,800	303,700	289,300
2007	1,022	454,400	299,200	285,100

Source(s): Ukraine State Statistics Committee.

Note(s): Data (except for graduates) refer to beginning of an academic year.

The share of people with third-level education is fairly high in Ukraine. Ukraine is well placed in the international league in terms of the educational level of older generations. In particular, about 43% of Ukrainians aged 25-64 had third-level education in 2001 (Table 2.4). This indicator is much higher than in CEE transition economies, such as the Czech Republic (13%), the Slovak Republic (14%), Poland (17%), Slovenia (20%) and Estonia (33%), but lower than in Russia (55%). As for the quality of education, this is discussed in Chapter 2.IV.

Table 2.4 Population with tertiary education by age in selected countries (% of total population) 2005

	25-64 years	25-34 years	35-44 years	45-54 years	55-64 years
Australia	32	38	32	31	24
Austria	18	20	19	17	14
Belgium	31	41	33	27	22
Canada	46	54	50	43	36
Czech Republic	13	14	14	13	11
Denmark	34	40	35	32	27
Finland	35	38	41	34	27
France	25	39	25	18	16
Germany	25	22	26	26	23
Greece	21	25	26	19	12
Hungary	17	20	17	16	15
Iceland	31	36	34	29	21
Ireland	29	41	30	22	17
Italy	12	16	13	11	8
Japan	40	53	47	38	22
Korea	32	51	36	18	10
Luxembourg	27	37	27	22	19

Mexico	15	18	16	14	8
Netherlands	30	35	30	30	24
New Zealand	27	31	28	27	21
Norway	33	41	35	30	24
Poland	17	26	16	12	13
Portugal	13	19	13	10	7
Slovak Republic	14	16	13	14	11
Spain	28	40	30	22	14
Sweden	30	37	28	28	25
Switzerland	29	31	32	29	22
Turkey	10	12	8	9	7
United Kingdom	30	35	30	28	24
United States	39	39	40	39	37
OECD average	26	32	27	24	19
EU19 average	24	30	25	21	17
Brazil ⁽¹⁾	8	8	9	9	4
Chile ⁽¹⁾	13	18	13	11	9
Estonia	33	33	36	35	29
Israel	46	50	44	44	43
Russian Federation ⁽²⁾	55	56	59	55	45
Slovenia	20	25	21	17	16
Ukraine	43	46	45	34	43

Source(s): Author calculations based on All-Ukrainian Population Census 2001 data and OECD 2007a (Table A1.3.a).

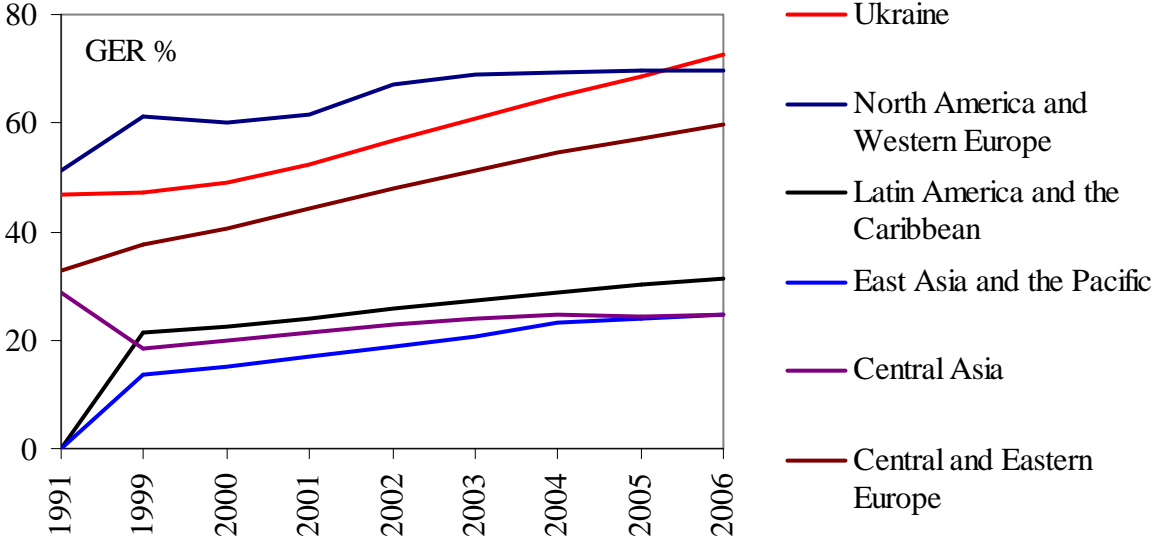
Note(s): The data for OECD countries is for 2005 and for Ukraine for 2001. ⁽¹⁾ Year of reference is 2004. ⁽²⁾ Year of reference is 2003.

As with other transition countries like Russia, the Czech Republic and Estonia, there is no information on the increase in tertiary education attainment among young people aged 25-34 years. As far as the rate of higher education among young people aged 25-34 years is concerned, the Ukraine ranking is somewhat lower but still compares favourably with other countries.

Demand for higher education is growing but growth is slowing down. Cultural particularities, the social perception of education as a tool of self-assertion, the recession of the 1990s and the development of public and private education became factors pushing up the demand for higher

education among youth. During 2000-2006, the GER for tertiary education increased by half, to 73% and as a result, it was three percentage points above the average GER for North American and Western European countries and 13 percentage points above the average for CEE countries (Figure 2.1). The Global Competitiveness Report 2008 (WEF, 2008) ranked Ukraine 17 out of 131 economies on the basis of the tertiary enrolment rate. However, the dynamics of Ukraine during 2000-2006 was less impressive than of certain CEE countries: the enrolment rate in Hungary has gone from 37% to 69%, in Romania from 24% to 52%, in Slovenia from 56% to 83%, and in Slovakia from 29% to 45%.

Figure 2.1. Gross enrolment to tertiary education 1991 and 1999-2006

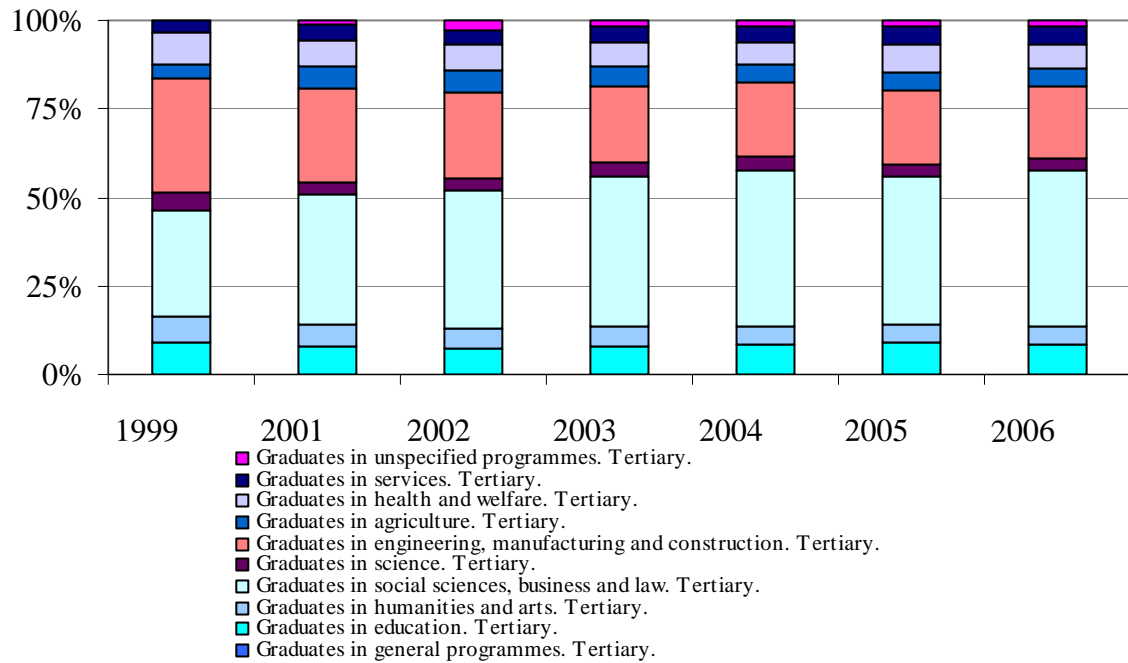


Source(s): UNESCO Institute for Statistics Custom Tables.

Note(s): Tertiary education here includes ISCED 5A and 5B.

Tertiary education in Ukraine is focusing more on social sciences, business and law. In terms of numbers, in recent years graduates from the more popular social science courses, business and law have displaced graduates from engineering, science, agriculture, humanities and the arts. As shown in Figure 2.2, the share of tertiary education graduates in education, health and welfare has remained relatively stable.

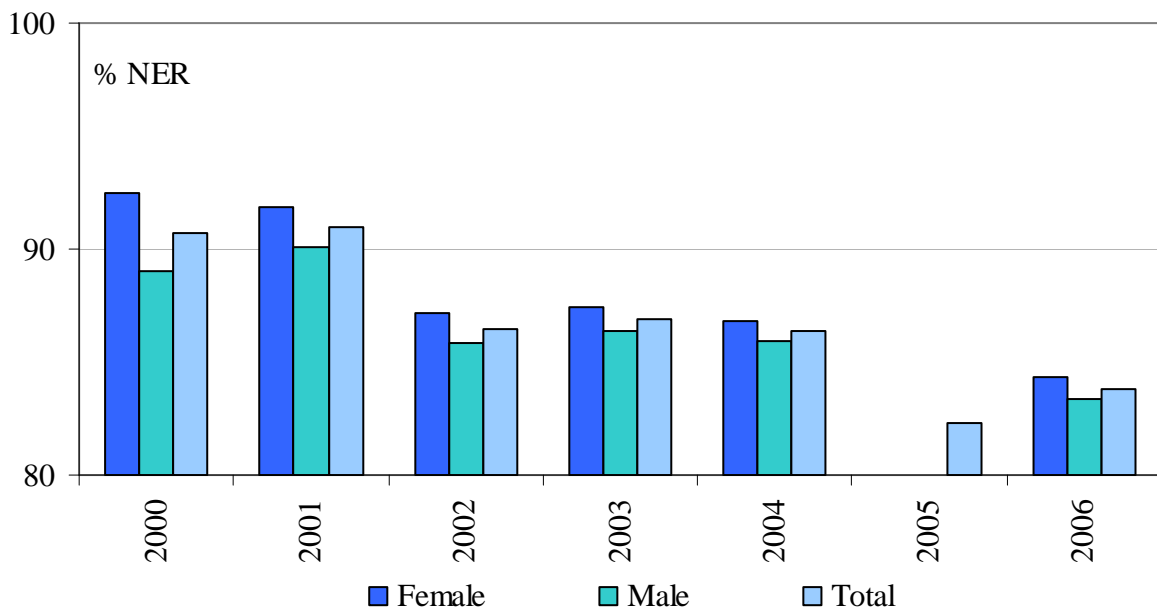
Figure 2.2. Tertiary education graduates by field of study 1990-2006



Source(s): UNESCO Institute for Statistics Database.

Education in Ukraine is highly feminised. In 2001, women were more educated than men in all age cohorts except among people older than 70 years. The average share of women with third-level education is 55%, compared to 41% for men. However, this phenomenon is expected to weaken, at least as regarding upper secondary education.

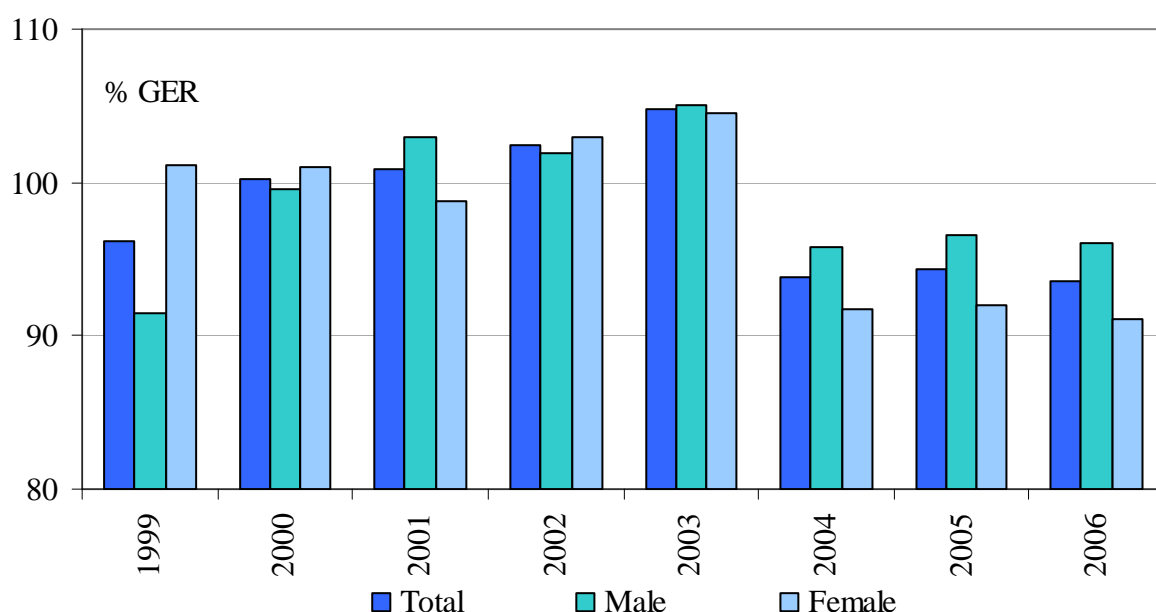
Figure 2.3 Net enrolment to secondary education by gender 2000-2006



Source(s): UNESCO Institute for Statistics Database.

However, as Figures 2.3 and 2.4 show, there has been a decline in enrolment rates to upper secondary education between 2000 and 2006, with a greater decline among females. For boys, the GER for upper secondary education declined by 4 percentage points to 96% and the NER for secondary education shrunk by 6 percentage points to 83%. In comparison, for girls, the GER for upper secondary education shrunk by 10 percentage points to 91% and the NER for secondary education fell by 8 percentage points to 84%.

Figure 2.4. Gross enrolment to upper secondary education by gender 1999-2006



Source(s): UNESCO Institute for Statistics Database.

Enrolment trends for upper secondary education by gender would indicate that, due to changing economic conditions and strengthening cultural traditions (the role of women in family life and traditions of early marriages in western Ukraine), the feminisation phenomenon will weaken to some extent.

Recent tertiary education gross enrolment rates support the hypothesis of further feminisation. Women with tertiary education constituted 56% of the age group 25-64 years in 2001, 14 percentage points higher than the respective share for men. In the younger age cohort of 25-34 years, 57% of women had tertiary education compared to 41% for men (Figure 2.5).

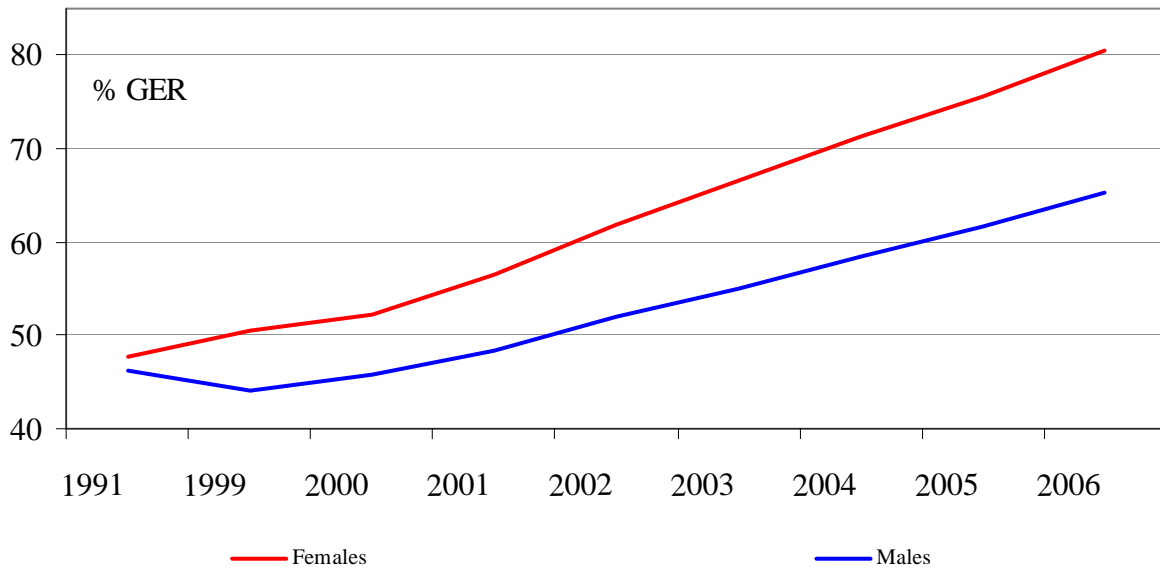
Ukrainian trends in terms of the feminisation of tertiary education reflect the typical pattern in CEE countries (Figure 2.6). Earlier studies also found this pattern to be typical in many other post-Soviet countries, with a 2%-3% percent gender gap favouring women observed in Albania, Croatia, the former Yugoslavia, Estonia, Latvia, Moldova, Kyrgyzstan, Slovakia and Slovenia, rising to 4%-5% for Russia (Magno et al, 2004).

These studies have revealed that in times of economic hardship during transition periods, young men were removed from education by their parents so that they could earn money abroad (as happened in Albania), work in agriculture, animal husbandry or construction work, with parents usually justifying their decision on the basis that young men had greater employment options than young women. Other hypothetical explanations included a preference among young men for entering employment earlier and the attempt by young women to compensate for gender discrimination by obtaining third-level qualifications.

Men and women are also different in their choice of studies, with women tending to choose pedagogy and humanities courses, and men predominating in courses on governance, finance and banking.

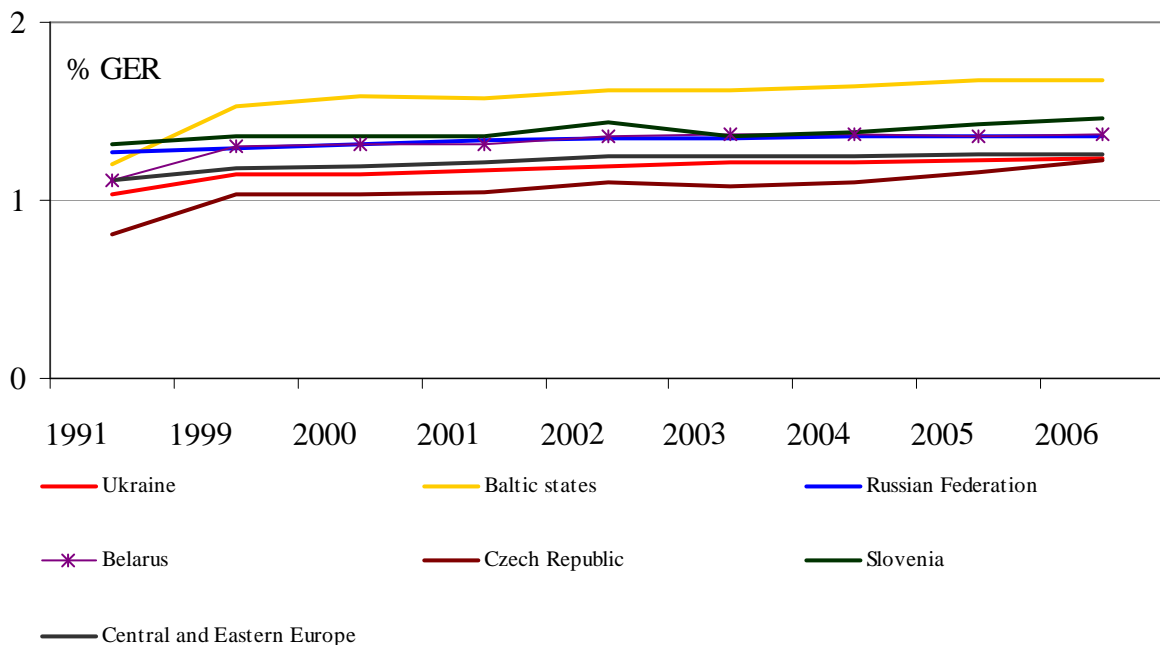
Furthermore, significantly more female students participate in academic contests during their secondary school years, have better grades and acquire more cultural capital.

Figure 2.5 Gross enrolment rate to tertiary education by gender 2000-2006



Source(s): UNESCO Institute for Statistics Database.

Figure 2.6. Female/male gross enrolment to tertiary education in selected countries 1999-2006



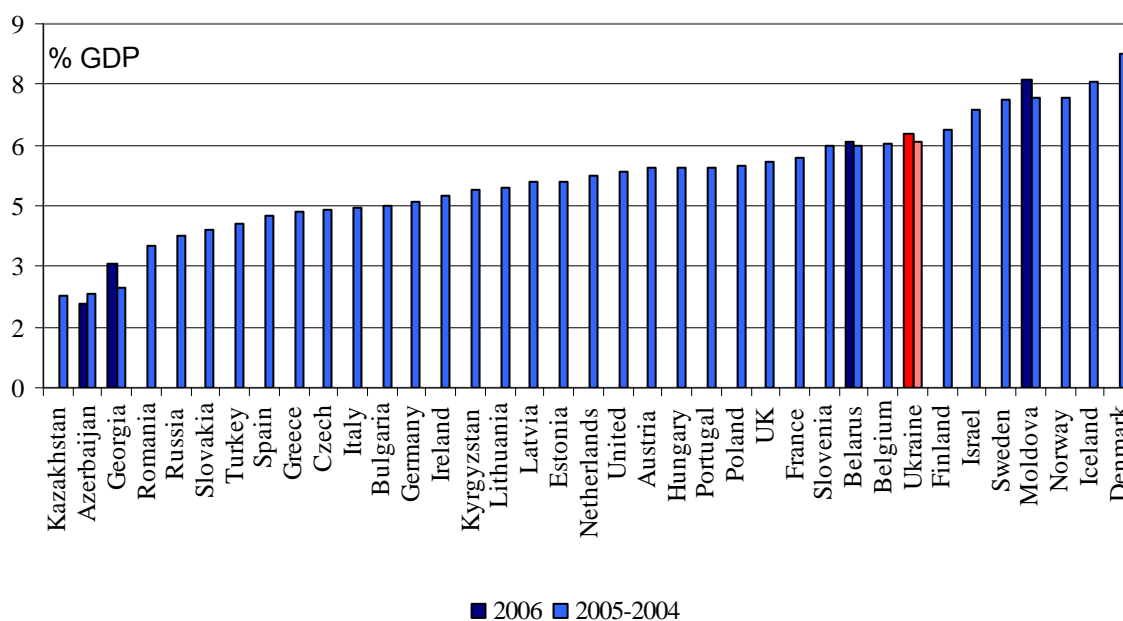
Source(s): UNESCO Institute for Statistics Database.

2.1.2 Public and private investment in education

The Ukrainian government spends more GDP on education than many other countries. The Ukrainian government is the main provider of educational services. The constitution guarantees free equal access to secondary education and provides vocational and tertiary education on a competitive basis.

Thus, local authorities are delegated the responsibility of ensuring equal access to quality secondary education. Budgetary funding of vocational and higher education is limited to scholarship students who score above a designated threshold in the entrance examination. These students get free studies and access to libraries, computers and other university/college facilities, receive a grant and also have the right to subsidised on-campus accommodation. The number of places for scholarship students in higher education is determined by three key factors: (1) an overall enrolment target set by the Parliament; (2) a limit on the maximum share (currently 49%) of fee-paying students in total higher education enrolments set by the Parliament; and (3) the available budget for higher education. Scholarship students are especially numerous in fields of study such as agriculture and industrial engineering, which were developed and promoted to meet the needs of the planned economy under the Soviet system. Students of vocational and tertiary education get stipends and specific support is provided for orphans.

Figure 2.7 Public expenditure on education (% of GDP) in selected countries 2004-2006



Source(s): UNESCO Institute for Statistics Custom Tables.

Following a substantial decline in the 1990s, expenditure on education as a share of GDP recovered, rising from 4.2% in 2000 to 6.2% in 2007,⁴⁸ and is now one of the highest in the world. Ukraine spends more of its GDP than any CEE country (average 5.2% in 2005) and more than the OECD on average (5% of GDP in 2006). Performance looks even more impressive when compared to more developed countries, such as the UK (5.6% in 2006), France (5.7% in 2006), the USA (5% in 2006), the Netherlands (5% in 2006) or Austria (5% in 2006) (Figure 2.7). According to the Global Competitiveness Report 2008 (WEF, 2008), the Ukraine world ranking was 52, with spending amounting to 4.4% of gross national income (GNI) or 20% of the government budget in comparison with OECD averages of 4.6% and 19%, respectively.

⁴⁸ There is some difficulty in comparing data from earlier periods. This is because, until 1999, the Ukrainian education system relied heavily on extra-budgetary funding but was included in a special budget fund in 2000, but, unfortunately, data on expenditure by education level is not available. That said, the fact that expenditure was inefficient is supported by facts presented later in this section of the report.

According to a recent estimate made by the World Bank (2007a), private expenditure on education in Ukraine constitute about 1.5% of GDP and is thus comparable to the other countries. Total educational expenditure as a share of GDP remains high by international standards, possibly indicating inefficiencies in public spending.

Expenditure in real terms is recovering. Between 2002 and 2007, educational expenditure in real terms increased by around 50% (Table 2.5). The greatest increase was observed for secondary education (332%), reflecting the attempts to improve access to basic education and increase positive external effects for society. In the period 2002-2007 the government also increased financing for vocational education—which had suffered most from under-funding during the restructuring process—raising real budget expenditures by 317%. The growth in real budget expenditure per child in primary education in general reflected real economic growth dynamics. However, the growth in real budget expenditure per student in higher education was lower than the real economic growth rate for the period.

Table 2.5. Real growth in consolidated budget expenditure on education (chain index 2002=100)

Year	2002	2003	2004	2005	2006	2007
Total	100	106	110	120	128	147
Primary education	100	108	110	118	130	155
Secondary education	100	110	129	170	244	332
Vocational education	100	105	132	179	242	317
Higher education	100	96	118	142	201	268
Post-graduate education (aspirantura/doctorantura)	100	124	128	155	222	316

Source(s): Author calculations based on Ukraine State Statistics Committee data and State Treasury reports.

Note(s): The deflator was estimated for the educational sector of the economy.

Real per student expenditure in Ukraine remains low. Real expenditure has not as yet reached the level of the early 1990s and also remains below the average for the region and for other transition countries. In 2005, Ukraine spent 14.8% and 23.9% of GDP per capita on primary and secondary education, respectively, in comparison with CEE averages of 20.7% and 29.1% of GDP per capita, respectively. Expenditure per student in primary and secondary education in Ukraine was USD 1,008 and USD 1,628, respectively, more than twice as low as expenditure in Eastern European countries in 2005 (see Appendix Table A.9).

A sizeable education budget is wasted by many inefficiencies in the system. According to Mercer (2008), arguments in support of the notion of inefficient use of funds are as follows:

- Technically inefficient use of the resources. A large chunk of the budget serves to pay the wages of too many teachers, rather than to update infrastructure and equipment. For example, the average pupil/teacher ratio of 10 to 1 is one of the lowest by international standards. At the same time, salaries in education remain very low and the fact that the average monthly nominal wage is UAH 806, 22% lower than the average wage (UAH 1041), does not attract talented people to the profession, undermines morale, motivation and quality, and favours misconduct.
- Inflexible ex-ante spending controls. The government sets highly inflexible ex-ante controls at the central level. The Ukraine Ministry of Education expenditure norms governing education, staffing and services were not changed during budget reforms despite their obvious budget implications. Furthermore, Ukrainian legislation prohibits the closure of schools and staff cutbacks. The

centralised fund allocation mechanism that grants funds as needed merely maintains the status quo and performance-based budgeting is not sufficiently developed. A sounder approach would be to allocate funds on a per student basis, entrusting local administrations with the task of spending where needed.

- Poor state order. Government funding of higher education is based predominantly on historical patterns. However, some positive changes seem to have taken place in vocational education: employer needs now govern enrolment to vocational and technical schools. The role of the Ukraine Public Employment Service in formulation of State order, although still insufficient, is increasing. Only recently, the Public Employment Service has started to provide government with the results of labour market monitoring, and it is considered important that the Ukraine Public Employment Service be involved in the development of labour market forecasts.
- Absence of a unified educational policy. At the central level, about 20 ministries are responsible for the provision of tertiary education and there is no one ministry responsible for the development of a unified educational strategy.
- Unclear responsibilities. This is true about the allocation of responsibilities among different levels of government (local vs. central), with the situation aggravated below the rayon (district) level, where potential efficiency gains from economies of scale are lost in the provision of secondary and primary education.
- Defective intergovernmental relations. Comparatively small expenditure inequalities across oblasts mask greater inequalities at the rayon level and affect equal access to primary and secondary education. Lacking at the local level is responsibility for providing vocational education and therefore optimising transition paths for young people.

The share of the private sector in education is small but increasing. The expansion rate of the private sector in education accelerated after 2000. As a result, the number of private tertiary educational institutions nearly doubled in the period 2000-2007, to 202 units (out of 904 educational institutions overall). Compared to the national average, private higher educational institutions are more represented in regions such as Kiev, Poltava, Rivne, Zaporizhzhia and Crimea. The share of students in private higher education establishments increased from 8.3% to 15.4% in the same period, making Ukraine comparable to new EU members in terms of private sector participation in higher education (see Section IV below for a discussion of the quality of private education). Around 14% of students in Estonia, Latvia and Poland are educated in private educational institutions. The scale of paid educational services is substantial in the new EU members. For comparison purposes, the share of private financing in England is 25%, in Italy, the Netherlands and Spain, 20%, in Hungary, 22%, in the Czech Republic, 15%, and in Slovakia, 7% (World Bank, 2005b).

The national statistics fail to report on privately-owned vocational educational institutions, although it is acknowledged that private sector participation in this sphere is even smaller than in other educational spheres. Examples of private vocational educational institutions, usually established on the basis of the former state/municipal vocational schools, are rare (e that owned by Azovstal Iron and Steel Works).

The share of pupils receiving general secondary education in private schools is negligible. In the 2007-2008 academic year, the share of private general secondary schools was just over 1%, and the share of students in private general secondary schools was less than 1% (Table 2.6).

Table 2.6. Private sector participation in education 2007/2008

	General secondary education		Higher education	
	Number of establishments	Number of students	Number of establishments	Number of students
Total	21,214	4,857,397	702	2,380,385

Private	245	23,656	202	433,413
Private sector share	1.2%	0.5%	22%	15.4%

Source(s): Author calculations based on Ukraine State Statistics Committee data.

Government education expenditure in Ukraine is underestimated. Income tax legislation provides a number of incentives to the private sector to invest in education, including the following:

a) Tax allowances for resources invested in education in the form of:

- Income exemptions on the amounts paid by an employer to educational institutions for employee training. The non-taxable amount of monthly training fees should not exceed 1.4 times the statutory monthly minimum subsistence wage.
- Tax credits on expenditure (on general secondary, vocational or higher education). Thus educational expenditure can be deducted from the taxable income of a taxpayer or a member of his/her family. The deduction should not exceed 1.4 times the statutory monthly minimum subsistence wage.

b) Low-interest education loans.

Under this scheme, students are provided with a government loan for their studies. The funds should be provided irrespectively of the ownership (private or public) of the entity chosen by the student. However, a lack of budgetary funds have hampered the development of this low-interest loan scheme. For 2007, for example, although financing amounting to UAH 14.7 million was approved, by the end of the year only UAH 9 million had been granted (Table 2.7). Many students enrolled in private educational institutions never received loans. Another problem is that the loans are usually paid back.

Table 2.7. Low-interest education loans from the state budget (in UAH) 2005-2006

2005		2006		2007	
Planned	Actual	Planned	Actual	Planned	Actual
13.5 m	8.3 m	14.7 m	7.3 m	14.7 m	9.0 m

Source(s): State Treasury

The private resources spent on education in Ukraine are sizeable. According to rough (and conservative) estimates based on HBS data, out-of-pocket expenditure on education excluding higher education amount to around 0.7% of GDP (World Bank, 2007b). Surveys in regard to general secondary education point to a rough estimate of around 0.8% of GDP. Out-of-pocket expenditure on general secondary education are mainly directed towards covering living costs (58%), equipment and materials (32%), tuition and extra training (5%) and gifts to teachers (6%). Out-of-pocket payments increase with the level of specialisation and years of studies. Furthermore, out-of-pocket expenditure was found to be significant and highly differentiated between urban and rural areas and depending on income level, with the highest expenditure in the richest quintile.

Out-of pocket expenditure on higher education in 2007 was estimated to be 0.75% of GDP (World Bank, 2007c), and the resources spent on higher education by the private sector officially constituted about UAH 5 billion (0.7% of GDP) or 39% of the total expenditure on higher education. Out-of-pocket higher education spending covers living costs (44%), equipment and materials (21%), extra training and tuition (29%) and gifts to staff (7%).

Funding education using private funds is becoming widespread. As in many countries, Ukraine has introduced a dual system, whereby fees are set for those who fail to gain admission to funded higher education, although this dual system does not apply to secondary and primary education. In primary education, parents pay for catering; in secondary education, parents may make charitable donations and pay for extra classes. A substantial proportion of private expenditure on higher education in

Ukraine is represented by the recently developed network of fee-based predominantly state-owned educational institutions. The contract system (referring to fee-paying students) is education provided by state-owned higher educational institutions to those who fail to enter university on academic merit. In Ukraine, the share of students in public higher educational institutions who pay fees is substantial (62%)—ranging between 52% and 71% depending on the region. The share of students studying on the basis of private funding in vocational and technical schools is very low (about 4%), reflecting a virtual absence of the private sector in this education sector.

Private fees for education set by individual educational institutions ranged from USD 400 to USD 1,500 per year in 2006 excluding living expenses (sometimes exceeding the amount of money paid per student from public funds). Not surprisingly, fee-paying students are heavily concentrated in fields of study such as management, economics and the humanities, which have grown rapidly in recent years to meet the needs of the new market economy.

In Poland, over 50% of all students pay some form of tuition fees, In Hungary, state-funded full-time students pay no fees and receive subsidies for books and living costs, while those who are not state-funded (for whatever reason) pay tuition fees and their own living expenses. In Latvia, state-financed places are limited, and those who fail to get a place have to pay tuition fees. By 2004 Latvia had increased the share of students enrolled in the fee-paying track to 77% and tuition fees accounted for 31% of the revenues of public institutions in 2002 (World Bank, 2005b).

2.1.3 Obstacles to education

Poverty and inequality in access to education. The costs of education have increased substantially since the Soviet period. Families now face high costs for items such as textbooks and other supplies, additional payments to teachers, fees for the provision of higher quality non-state educational services, etc. In 2005, for example, the average fee for higher education provided to fee-paying students was UAH 310 per month—compared to an average monthly income in Ukraine of UAH 662 and a statutory subsistence minimum income of UAH 483.

Many families cannot meet the costs of education and the sizeable out-of-pocket expenditure on education was found to be highly dependent on family income. This statement is supported by the results of a survey conducted by the Ukraine State Statistics Committee: access to high-quality education greatly depends on a family's economic status and, at the end of 2006, only 20% of respondents could afford to pay for higher educational services.

Table 2.8. Sufficiency of resources to pay for education (% of all respondents) 2002-2006

	More than sufficient	Sufficient	Not sufficient	Not at all sufficient	Difficult to answer
2002	0.8	12.9	...	86.3	...
2003	1.1	9.5	10.3	65.6	13.5
2004	1.0	11.9	12.0	61.8	13.3
2006	1.2	9.9	12.3	62.2	14.4

Source(s): Ukraine State Statistics Committee. Survey of the Social and Economic Security of the Ukrainian Population based on a nationally representative sample in 2006 of 9,400 people.

Budgetary financing of pre-school education has been reduced substantially and, consequently, pre-school education is now provided to relatively few children from low-income households: the pre-school enrolment rate for children from households in the lowest income quintile is 30%, compared to a rate of over 50% for children from the top three income quintiles. According to evidence presented in the academic literature, pre-school education plays an important remedial role in preparing children from vulnerable families for more successful life performance.

There is also strong empirical evidence of the importance of the family environment and social status on children's human capital characteristics (see Carneiro and Heckman, 2003; Smith et al, 1997;

Kertezi and Kezdi, 2006, among many others). More importantly, this effect is found to vary according to age. For example, the results of the study by Kertezi and Kezdi (2006) for Hungary suggest that a one-year delay in job loss by parents leads to a 1.5 to 2 percentage point decrease in the child's risk of dropping out—from 35% if the child is aged 3 years to 15% if aged 15 years. The association was found to be stronger for the ages 3-7 years.

Ukrainian young people now aged 15-31 years were aged 0-15 years in the difficult 1990s, a period characterised by high levels of open and hidden unemployment, substantial wage arrears, high poverty rates, etc. For those whose parents were particularly badly hit by these negative trends, we can expect nearly the same effect of the labour market and social status of parents on the human capital formation of the children as has been found in Hungary and other developed countries.

Living in a rural area. The rural population constitutes about 33% of the school-age population.⁴⁹ The magnitude of the problem of participation of rural compared to urban children in education is significant and is affected by two main factors:

Cultural traditions. Conservative attitudes about appropriate gender roles tend to be more prevalent in rural areas and negatively influence the possibilities of girls and women. Rural parents may prioritise education for a boy over education for a girl.

Unequal quality of education. Although Ukraine has a well developed school network, deficiencies in intergovernmental fiscal relations hamper equal access to secondary and primary education. One problem is that how capital is allocated for the development of school infrastructure (including repairs to fixed assets and equipment) is unclear and non-transparent. Furthermore, comparatively small expenditure inequalities across oblasts mask greater inequalities at the lower (rayon) level. Thus, families in rural areas face additional costs for school transport or accommodation for pupils who board. This issue exacerbates the existing problems arising from rural poverty: a school bus programme is still being developed, education quality in rural areas is usually very poor due to the lack of high skilled teachers (directly affecting the chances of rural high school graduates entering vocational/tertiary educational institutions) and, finally, access is limited as far as support materials (textbooks, computer software, Internet connection, etc) are concerned.

Corruption and special rules. Corruption in higher educational institutions in Ukraine is widespread. The non-government Gorshenin Institute in Kiev conducted a poll on corruption in higher education, in September 2008, in main cities in Ukraine and in Kiev and Sevastopol. Included in the survey was a sample of 1,000 people. The results indicated that 73.5% of Ukrainians with studies or whose children had studied in higher educational institutions had to buy gifts or make unofficial payments to teachers and/or rectors, leaving a mere 26.1% who had not paid bribes. Of the Ukrainians whose family members had studied in a higher education institution and who had paid bribes, 10.3% stated that they had to bribe often, 76.1% from time to time, and 11.2% rarely. According to the survey, 19.3% of bribes were suggested by a teacher, 33.1% by a student and 36.4% by a third party (group leaders or representatives of student bodies). According to the survey, the main reasons for paying a bribe in educational institutions include passing entrance exams to universities (42.3% cases), passing exams in higher educational institutions (36.2% cases) and avoiding expulsion (3.7%). According to reports of the Ministry of Internal Affairs, education is one of the spheres that is highly vulnerable to corruption. Recently, the government undertook some steps to improve the situation. Thus, starting from 2008, students in higher educational institutions will be enrolled on the basis of the results of an independent examination.⁵⁰ However, anecdotal evidence suggests that the new rules will make it difficult for high-achieving high school students (such as winners of International Science Olympiads or those who obtain maximum grades in independent tests) to enrol in their desired higher educational institution. The main reason for this is that Ukrainian legislation favours certain groups of people in terms of entering colleges and universities on preferential terms. Under such conditions, even superior test results would not guarantee a place to a school leaver. The following individuals are enrolled in universities and institutes on the basis of an interview or on preferential terms: participants in hostilities and family members of those who have died in hostilities, orphans and social orphans, children with disabilities and people who have experienced childhood disability, Chernobyl children, children of dead coal miners (to the mining department), children of coal miners who died at the

⁴⁹ In 2001, rural areas accounted for 39%, 35% and 27% of children aged 6-9, 10-14 and 15-19 years, respectively.

⁵⁰ The National University of Kyiv-Mohyla Academy continues to enrol students based on the results its own tests. Education institutions may state additional enrolment requirements, for example, an interview.

Zasyadko mine (to all departments), and children of military servicemen and law enforcement employees who died while performing official duties. According to the official statistics students from special-treatment groups—such as Chernobyl victims and rural youth enrolled according to special quotas set for rural populations—alone represented 5% of enrolment to higher educational institutions in 2007. Their number also exceeds 13% of first-year public students

Barriers to mobility. The mobility of students is restricted in a number of ways. The choice of higher educational institutions is often influenced by the availability of accommodation for students. The relative poverty of many families and poor infrastructure also create substantial obstacles. The average monthly stipend in 2008 was UAH 150 for students of vocational and technical schools and UAH 200-300 for students of higher educational institutions. This compares with a statutory monthly minimum subsistence wage of UAH 633 (effective January 1 to March 31, 2008). Furthermore, the regional allocation of educational institutions often restricts on-the-job training and distance learning is poorly developed in Ukraine, reflecting the limited access of many Ukrainians to the Internet and computers.

Poorly developed infrastructure for people with special needs. Although there are a number of special secondary and vocational educational institutions for people with physical and/or mental disabilities, higher educational institutions that facilitate studies by people with disabilities are practically non-existent. Furthermore, public transport and other infrastructures do not take into account the special needs of people with disabilities. In Ukraine, for example, no university has special equipment and premises that enable people with special needs to obtain higher education.

Early selection in elite general secondary education. Since independence, new forms of secondary educational institutions (gymnasium, lyceum, collegium, etc) have appeared, in which the focus on elitism is explicitly spelled out and admission to which is based on entrance examinations. Early selection examinations exacerbate social inequalities and exclusion, magnifying the effects of socioeconomic status on learning outcomes. Poorer students tend to select, or be selected by, less demanding programmes. Meanwhile, unequal financing compromises fairness. Both comprehensive and elite upper secondary schools are financed via state funds, but financial allocations are higher for elite schools.

2.1.4 Quality of the human capital stock

The quality of the educational system in Ukraine is generally agreed to be questionable, although difficult to measure. Different sources of information provide different assessments.

The government assessment of education quality is high. The Ukraine State Statistics Committee Survey of the Social and Economic Security of the Ukrainian Population indicates a high degree of relevance between the skills obtained in education and the corresponding occupations. Most respondents (69.8%) with certain qualifications stated that their skills level corresponded to their occupation. The survey also indicated that motivation to work in the studied profession had increased from 62.4% to 66.7% in the period 2003-2006. Respondents also stressed the increased importance and applicability of knowledge obtained in education to their work. Thus, in 2006 about 74% of respondents mentioned that a substantial part of the knowledge obtained in education was relevant to their work.

International comparisons raise questions about the quality of education. Unfortunately, Ukraine has not still received results of the Programme for International Student Assessment (PISA) which compares the quality of education between different economies, as the first results for Ukraine are only expected in 2009. The Trends in International Mathematics and Science Study (TIMSS) international reports for fourth and eighth grades in 2007 will be released in December 2008 and its International Database and User Guide will be available in March 2009.⁵¹

The quality of education was also assessed in the Education For All Global Monitoring Report: The Quality Imperative (UNESCO, 2005),⁵² in which Ukraine does quite well in an international context. However, an international comparison is only indirect evidence of quality as it is mainly based on

⁵¹ See more on PISA at http://www.pisa.oecd.org/pages/0,3417,en_32252351_32235907_1_1_1_1_1,00.html and on TIMSS at <http://nces.ed.gov/timss/>.

⁵² A summary is available at: http://www.unesco.org/education/gmr_download/summary.pdf.

quantitative indicators such as public expenditure on education in GDP terms, income levels, etc. The information provided by well-known international ranking systems is not exhaustive. The positive ranking in the UNDP Human Development Index 2007 is based on the general literacy rate and the rate of educational enrolments, both very crude proxies for assessing the quality of education. The ranking provided by the Global Competitiveness Report (WEF, 2008) is somewhat more informative, and the ranking for Ukraine in the top half (62) places it well ahead of transition countries such as Bulgaria (64), Kazakhstan (70) and Azerbaijan (94), although it still lags behind its EU neighbours.

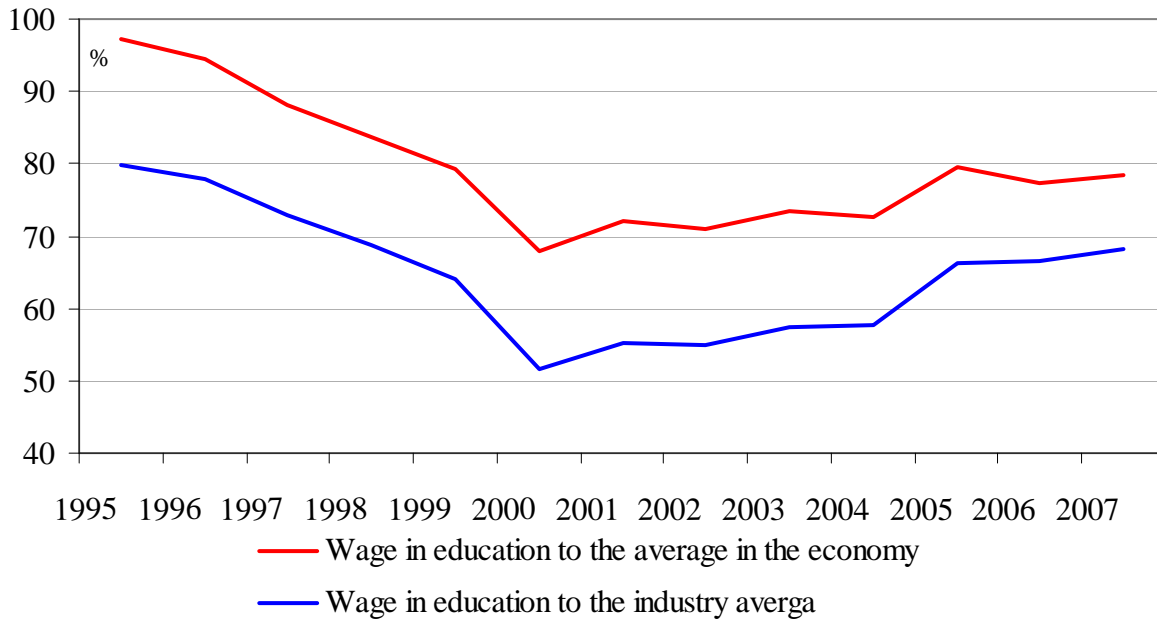
Thus, international reports point to a fairly good capacity of the Ukrainian educational system to meet the needs of a competitive economy. According to the Global Competitiveness Report 2008 (WEF, 2008), the quality of the overall system (mathematics and science education in particular) is good. Specifically, Ukraine obtained a score of 4.0 (ranking 47), almost on a par with the EU12 average (4.1) and slightly below the EU15 average (4.7).

However, as noted in this report, the quality of the educational system in Ukraine is below the standards necessary for the business community—a group well positioned to appreciate its adequacy for the needs of the economy. A key ingredient of productivity is the quality of management schools, for which Ukraine has a worldwide ranking of 85. To quote the same report: “Currently in Ukraine no management training institutions meet international standards. Temptation is great for outstanding students to go abroad to seek better education with the risk that they will not come back” (WEF, 2008, p. 71). The education system in Ukraine thus needs to meet the needs of the market economy by improving management education and it is also recommended to promote closer involvement of business in education, for example, through the provision of on-the-job training, which is insufficient in the country.

The Global Competitiveness Report 2008 also provides indirect evidence of the poor quality of education. For instance, insufficient priority is attached to fundamental equipment needs (furniture, central heating or sports facilities). Internet access is, in fact, a good proxy for the quality of school infrastructure: Ukraine is ranked 78, lagging considerably behind EU15 and EU12 member states.

There are also indirect signs of the low quality of education. Low wages in education do not attract highly skilled specialists. After a considerable decline in the 1990s, wages in the educational sector started to increase in 2001 due to a gradual increase in the statutory minimum wage against which public sector wages are indexed, the implementation of a unified wage grid for public sector employees (see Chapter 3.B) and an overall increase in public spending on education. However, educational sector wages are still low in comparison with other sectors, and the gap between average wages and those for the rest of the economy is substantial, at 22% at the end of 2007 (Figure 2.7). The difference with the industry wage is even more dramatic and was more than 30% in 2007 (Figure 2.7).

Figure 2.8 Education sector wages compared to the average wage 1995-2007



Source(s): Author calculations based on Ukraine State Statistics Committee data.

Compared to GDP per capita, wages in the educational sector are also low (82.7% in 2007). For comparison purposes, teacher earnings were 130% of average per capita GDP in the OECD countries, 107% in the Czech Republic, 83% in Poland and 91% in Hungary (OECD, 2006a, Table D.3). It has been observed that, in some countries (especially transition ones), if salaries are low in education, the best graduates enter the private sector (mostly finance and banking), the average graduates enter the civil service and the less successful graduates enter the educational sector. According to the World Bank (2007c), low salaries in the educational sector in Ukraine have contributed to an increase in informal payments and a shortage of skilled teachers.

Other signs of relatively low quality of education in Ukraine include the following:

- A skills mismatch exists. The quantity of graduates with higher education is too high in comparison with the real needs of the economy for highly educated people, whereas demand for skilled blue-collar workers is unmet (see Chapter 3.B).
- The Ukrainian educational system is biased towards humanities and so is unable to satisfy the increasing needs of the labour market in terms of engineers and other technical specialists.
- The educational system does not develop practical skills in graduates.
- None of the Ukrainian universities is included in popular international ratings of universities (for example, the Shanghai Academic Ranking of World Universities top 500⁵³). University and college diplomas are not indicative of a high level of accumulated human capital due to the widespread corruption in higher education. Furthermore, Ukrainian universities have poorly developed relations internationally and the level of publication by Ukrainians in well known journals is low.

The quality of education in private higher educational institutions in Ukraine seems to be poorer than in public establishments. According to an employers' assessment of the top 20 universities in 2008, private higher educational institutions were assigned ranks of 41 and lower.⁵⁴ The Ukraine Ministry of

⁵³ See the rankings at <http://www.arwu.org/rank/2007/ARWU2007TOP500list.htm>. Universities are ranked by several indicators of academic or research performance, including alumni and staff winning Nobel Prizes and Fields Medals, highly cited researchers, articles published in Nature and Science, articles indexed in major citation indices, and the per capita academic performance of an institution.

⁵⁴ The highest rank of 41 was awarded to the National Academy of Management in Kiev.

Education consequently plans to test educational institutions prior to renewing state licenses on the basis of students knowledge tests, assessments of material and technology and evaluation of academic staff.

Other indirect indicators of the relatively poor quality of private higher educational institutions include:

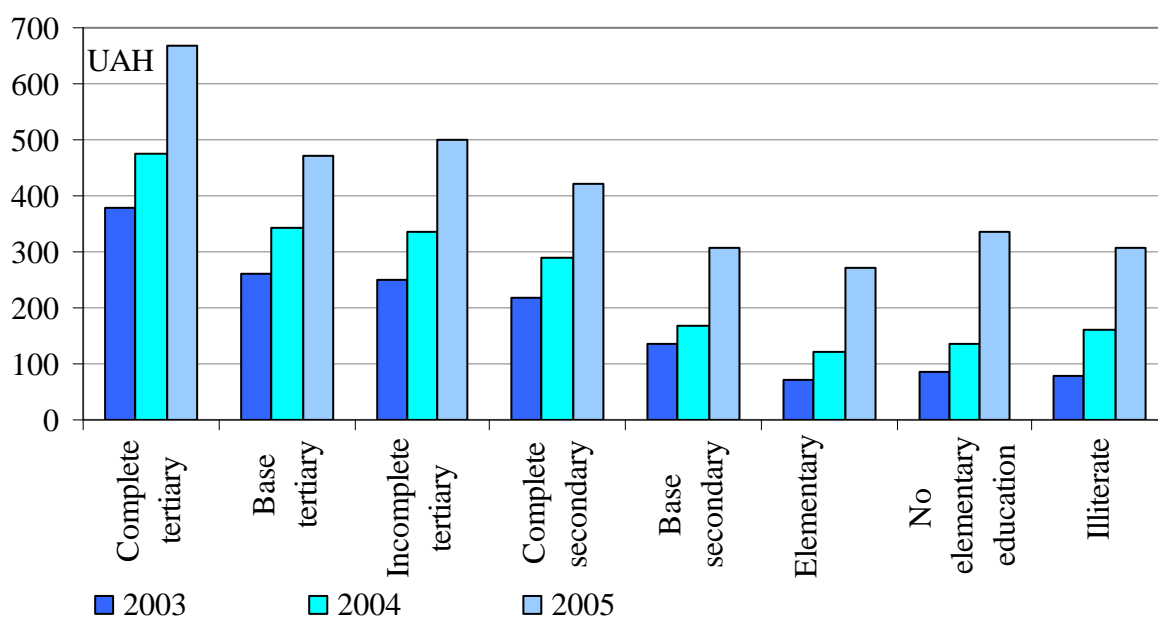
- Infrastructure is poor, as many establishments provide private higher education in premises formerly used for kindergartens, enterprises, etc rather than in buildings specifically designed for higher education.
- Salaries are low, with the average pay in private educational institutions lower than in the public education sector (and also long-service bonuses, scientific degree and academic rank bonuses, etc.
- Poor quality makes it difficult for private educational institutions to attract high-quality instructors.
- Fees in private educational institutions may be lower than in higher-ranked public universities.

2.2 Returns to education

Better educated people are paid more. Although wages in Ukraine are lower than in the majority of developed countries, differentiation depending on the level of education is significant. In particular, the average wage of people who have completed higher education is twice as high as the wage of those without a high school diploma (Figure 2.8).

Education in general provides good protection against poverty, as people with a higher education level are less likely to be poor and are most likely to be rich (World Bank, 2007d). However, there is considerable income differentiation within educational groups, explained mainly by sectoral and regional distribution of wages and by weak trade unions in Ukraine.

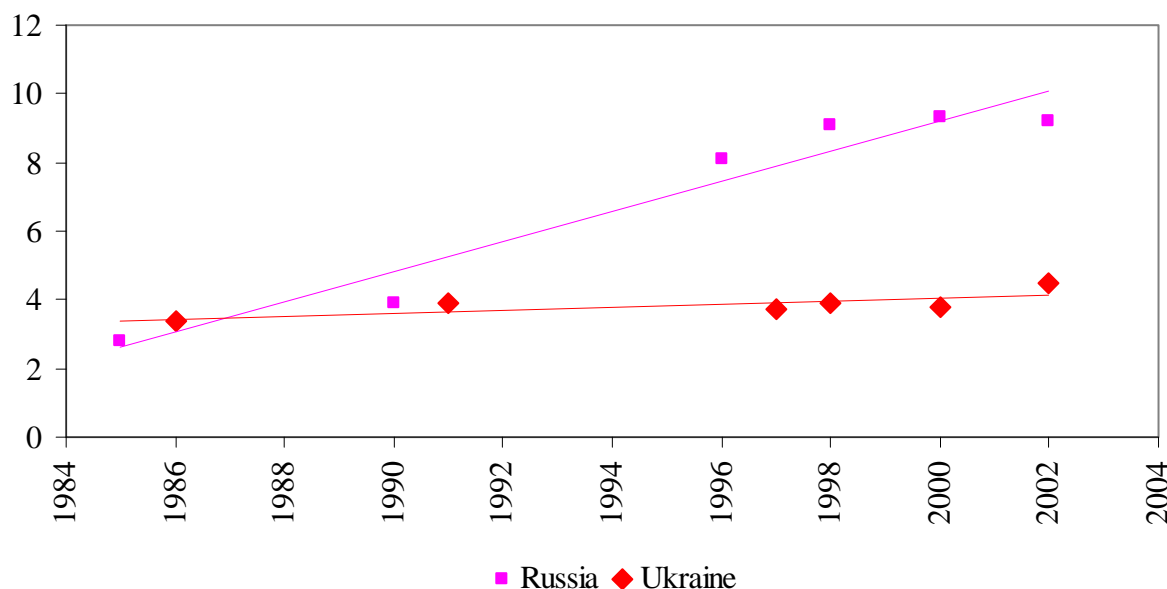
Figure 2.9. Young worker (15-34 years) wages by education level 2003-2005



Source(s): Ukraine State Statistics Committee.

Returns to education are increasing. Several empirical studies on returns to education in Ukraine have been conducted, although the most recent estimates correspond to the early 2000s. According to the results, returns to education in Ukraine are rather low in comparison with other countries. According to Gorodnichenko and Sabirianova (2005), the average return for each additional year of schooling in 2002 in Ukraine was 5%. This level of returns to education in Ukraine was about twice as low as the regional average of 8%-10% (Flabbi et al, 2007) and Russia's 10%.

Figure 2.10. Returns to education for Ukraine and Russia 1984-2004



Source(s): Gorodnichenko and Sabirianova (2005).

The list of possible explanations for low returns to education in Ukraine include low demand for highly skilled labour, low labour mobility, and poor initial conditions (in other words, returns to education are likely to depend on having a developed private sector, foreign direct investment (FDI) flows, a fairly rapid reform process, and openness to international trade).

Even so, evidence suggests that returns to education are increasing in Ukraine, due to the implementation of a unified wage grid for public sector employees, increasing openness of the economy and the development of high-technology sectors. The process could be speeded up with other reforms in the economy. A literature review of country specific and cross-country studies indicates that returns to education increased from the pre-transition period to the early transition period. The study by Fleisher et al (2005) found the sharpest increase in returns to education to occur in an early stage of transition and a tendency to carry on rising after this initial period.

Our preliminary ordinary-least-squares estimates for Ukraine, based on the 2006 HBS survey, suggest that returns to education in Ukraine have increased to 8.6% (Table 2.9), which makes Ukraine comparable to other transition countries. As would be expected, female wages are a third lower than male wages, although results could be biased in an upwards direction due to the difficulty of accounting for benefits in kind. Furthermore, enterprises with FDI pay about 10% more to their employees.

Table 2.9. Basic Mincerian earnings functions 2006, OLS preliminary results

Regression with robust standard errors (weighted)

Number of observations 9426

F(6, 9419) = 227.43

Prob>F = 0.0000

R-squared = 0.1342

Root MSE = .69585

Dependent variable	Coefficient	Standard error	t-statistic	P>t	95% confidence interval	
log wages						
Female	-.3281616	.0157397	-20.85	0.000	-.3590148	-.2973084
Years worked	.0206087	.0024607	8.38	0.000	.0157852	.0254323
Years worked ² /1000	-.5486589	.0575406	-9.54	0.000	-.6614509	-.435867
Adjusted years of schooling	.0863375	.0029377	29.39	0.000	.080579	.0920961
Private	-.5560445	.2789346	-1.99	0.046	-1.102816	-.0092725
Firm with FDI	.0969778	.0174876	5.55	0.000	.0626982	.1312573
Constant	7.719884	.0455428	169.51	0.000	7.630611	7.809158

Source(s): Author calculations based on HBS 2006 (sub-sample of workers aged 16+ years).

2.3 Transition from school to work

Data in this section is drawn from a study conducted in Ukraine and Serbia on the transition from school to work (ETF, 2008) and also on international comparisons that address questions on transition paths, the most popular transition paths, the results of studies and the main opportunities, incentives, and obstacles for graduates from the education system.

Ukrainian transition from school to work suggests low unemployment but high inactivity rates. Young people benefit from the protective provisions of labour legislation favouring their employment. Furthermore, youth employment is facilitated by the opportunity to work in the informal sector, where employers avoid legislative requirements that stipulate contractual obligations. Although youth employment is high, job quality is poor, with young people usually receiving poor pay and little training.⁵⁵

The transition process in Ukraine is short. According to the ETF survey, almost 60% of school graduates find a significant job within 6 months after leaving education. However, for a substantial proportion of school leavers the transition period is longer, with 43% of individuals not finding a significant job within two years after leaving education. The share for non-significant jobs is relatively low, with 8% of young people having a non-significant job 6 months after leaving education. The unemployment rate at a year after exiting the education system is fairly low. Men find work relatively more quickly than women in Ukraine. However, no significant gender differences were found in relation to job characteristics.

⁵⁵ This part C "Transition from school to work" uses the findings of the ETF Youth Transition from Education to Work Survey presented in Huitfeldt et al (2008). The data was collected for 2007

Large differences exist between urban and rural areas. About 66% of school leavers in towns and cities find a job within 6 months. The corresponding share in rural area is only 45% and the share of school leavers who have not found a job in rural areas within 2 years remains high.

Education plays an important role in terms of rapidly finding work. Post-secondary education graduates (including university graduates) do fairly well in finding work, followed by graduates from secondary vocational schools. Noteworthy is the fact that graduates from secondary general education perform poorly in comparison with other educational categories: 74% of university graduates and 52% of secondary vocational school graduates find a significant job within 6 months after leaving education, compared to 38% of secondary general graduates (Table 2.10). Nonetheless, a relatively high proportion of people from these educational groups fail to find a job soon after graduation, which is possibly explained by a significant number who fail to enter higher educational institutions waiting until the following year to try again.

Table 2.10. Time to first significant job by educational attainment

	Less than secondary	Secondary vocational	Secondary general	College	University
Minimal effort	0.0	6.4	3.7	9.1	25.6
1-3 mths	26.0	38.2	24.6	52.8	39.6
4-6 mths	5.9	7.1	9.4	7.6	8.3
First 6 months	31.9	51.7	37.7	69.5	73.5
7-12 mths	1.3	6.4	8.3	7.1	5.9
1-2 yrs	4.9	12.1	9.3	5.3	6.3
>2 yrs	61.9	29.8	44.7	18	14.3

Source(s): Huitfeldt et al (2008)

For any kind of first job obtained within 6 months after leaving education, the difference between university and secondary vocational school graduates is 15 percentage points (Table 2.11). Less well educated individuals, in addition to having a lower probability of finding a job, are relatively more likely to take low-quality non-significant jobs.

Table 2.11. Time to first ever job by educational attainment

	Less than secondary	Secondary vocational	Secondary general	College	University
Minimal effort	0.9	7.3	4.8	9.0	26.6
1-3 mths	32.7	49.5	31.4	58.2	44.4
4-6 mths	6.7	7.6	10.5	7.4	8.4
First 6 months	40.3	64.4	46.7	74.6	79.4
7-12 mths	7.5	6.9	9.6	6.1	5.2
1-2 yrs	5.2	11.8	9.1	4.5	5.4
>2 yrs	47	16.9	34.7	14.7	10

Source(s): Huitfeldt et al (2008)

The quality of jobs available to young people is poor. A number of facts came to light in the ETF report that could be used to support the hypothesis that only low quality jobs are available to young people, as follows:

Informal employment is substantial. The proportion of young people in self-employment appears to be small in Ukraine. The quality of the first significant job appears to be higher than the first ever job (Table 2.12). The vast majority of self-employed are skilled and unskilled blue-collar workers, followed by professionals, street sellers and shop/café/restaurant owners. Most self-employed workers in both categories do not hire employees.

Table 2.12. Status of first ever and first significant employment

Education	Primary		Elementary vocational		Secondary vocational		Secondary general		College		University	
	First ever	First significant	First ever	First significant	First ever	First significant	First ever	First significant	First ever	First significant	First ever	First significant
Registered employee	33.9	40.4	53.6	50.0	61.4	70.1	46.1	53.4	76.7	78.9	77.0	80.7
Unregistered employee	52.7	48.9	35.7	36.4	34.9	27.2	43.1	38.6	21.6	19.7	18.3	15.4
Self-employed	9.8	6.4	7.1	13.6	2.7	2.8	7.8	4.8	0.9	0.9	4.2	3.5
Family business helper	3.6	4.3	3.6	0.0	0.7	0.0	2.6	2.1	0.9	0.5	0.4	0.2

Source(s): Huitfeldt et al (2008)

In general, the employment status of young graduates and the quality of their employment are both affected by educational attainment levels. Secondary vocational training and university graduates have better chances of obtaining formal employment than those with only general secondary education and those who have completed short vocational training courses. Primary and secondary school leavers are at a high risk of informal employment and have the lowest probability of obtaining a registered job. Women are often found among registered employees in their first ever and significant jobs, whereas men are found to be over-represented among the self-employed.

Unregistered (informal) employment is rated as a disadvantage. The survey results suggest that unregistered employment is considered to be a disadvantage that hampers future employment possibilities for young people. The reasons are the following:

- Unregistered employees earn around 61% less than registered workers and the labour income of women is 58% of the level for males.
- The incidence of training for unregistered employees is lower than for registered employees, with only 15%-20% of unregistered employees receiving on-the-job training.
- Being employed as unregistered worker implies losing out on many non-cash benefits available to registered workers.

The skills mismatch of young graduates is significant. It is fairly easy to find a first significant job in Ukraine at the cost of being overqualified. Better educated people crowd out less educated people, who are forced to accept more precarious jobs. The level of over-qualification in Ukraine is high/ For the university graduates the level of over-qualification is 49% (Table 2.13), compared to about 30% in Poland, Slovakia and the UK (Quintini, 2007). Gender differences were not studied, but it was found that rural/urban status and registered/unregistered status have substantial negative impacts on the skills match.

Table 2.13. Minimum education required for first significant job

Highest qualification obtained	% employment	Highest qualification required by employer						Total	No.
		1	2	3	4	5	6		
1. Primary or less	43.9	97.8	0.0	0.0	2.2	0.0	0.0	100	45
2. Elementary vocational	60.0	52.9	29.4	11.8	5.9	0.0	0.0	100	17
3. Secondary vocational	74.0	35.9	3.7	51.9	7.8	0.4	0.4	100	270
4. General secondary	59.7	55.2	1.0	1.0	41.2	1.0	0.5	100	194
5. College	84.3	22.5	0.8	8.1	8.9	58.9	0.8	100	236
6. University	86.2	18.1	1.9	5.9	7.8	15.4	51.0	100	592
Total		30.8	2.2	14.6	12.6	17.2	22.6	100	1354

The numbered headings correspond to the grouping listed in the extreme left.

Source(s): Huitfeldt et al (2008)

Young people are forced to work part-time. Part-time employment among young people is quite pronounced, with 12% employed part-time in their first ever job and 9.5% employed part-time in their first significant job. As in developed countries, Ukrainian women are more likely to be employed part-time. The major reason for taking part-time work was inability to find full-time work followed by inability to combine full-time work and studies and family reasons. In Ukraine women work 3-4 fewer hours than men in their first ever job, although the gender gap decreases with the level of education.

Employment mobility between first and subsequent jobs is low and the risk of unemployment stagnation is also relatively low. Young people with university qualifications are the least mobile but have the lowest rates of unemployment stagnation. The most mobile young employees are secondary vocational school leavers, primary education leavers and college graduates. The gender difference in job mobility is not significant, although women tend to have higher rates of stagnant unemployment.

In their first year in the labour market a substantial proportion of the population of young people changes employment. As in many European countries, a lion's share of job changes is associated with upward occupational mobility, although lateral mobility is also high. Gender differences are marginal. Young school leavers also tend to be upwardly mobile in income terms. Almost half of young people are employed in occupations with the same occupational titles as their first jobs.

The employment of young people is secured by special conditions. There seem to be additional factors favouring youth employment in Ukraine, including the labour legislation (a low level of unemployment protection), new sector expansion, the ability of employees to evade certain labour legislation provisions (such as dismissal restrictions, high payroll taxes, requirements to hire young people and provide them with additional benefits).

Ukrainian school leavers are more likely to be employed in the non-private sector. Recruitment to state, municipal or partially privatised organisations and enterprises is supported by legislative requirements to recruit young employees. In addition, public sector enterprises and organisations provide more stable perspectives and sizeable non-cash benefits.

Ukrainian young people are more likely to be employed in medium and large firms. Around 22% of young people are employed in firms employing up to 10 people and 50% in enterprises with up to 50 employees. A hypothetical explanation of this pattern might be found in the larger size of non-private organisations and enterprises, a greater probability of compliance with the labour legislation favouring youth employment, and more on-the-job training.

Ukrainian young people are more likely to be employed in rapidly expanding and informal sectors. Youth employment is rather pronounced in traditional industries, in particular, mining, construction, electricity, gas and water supply, transport, storage and communication, public administration and defence, health and social work, and education (Table 2.14). Substantial numbers also work as skilled agricultural and craft workers, machine operators and assemblers.

However, employment in trade, construction, hotels and restaurants (sectors characterised by a relatively high degree of informality) is much more significant for young people than for the overall population. Young people are also more likely to be employed in the expanding financial intermediation sector. These sectors are also more likely to employ young people in their first ever job than older people. A comparison of youth employment by sector with the rest of the population also indicates a relatively low proportion of young people employed in agriculture and hunting, although this discrepancy could be attributed to a sample selection problem.

Education pays. University graduates earn more than other young people, although the difference is not very large. Expressed as a percentage of the earnings of university graduates, the pay of primary education leavers is 74%, elementary vocational education leavers 81%, secondary vocational education leavers, 82%, college graduates 84%, and secondary general school leavers 59%.

Table 2.14. Youth employment by sector 2007

	First ever job	First significant job	Total population
Agriculture, Fishing	8.2	7.5	16.7
Mining, manufacturing	16.5	17.2	19.0
Electricity, gas and water supply	2.0	2.2	
Construction	9.5	9.8	4.9
Trade, hotels and restaurants	27.5	27.3	21.8
Transport and communication	5.5	5.7	6.9
Financial intermediaries	2.4	3.0	1.6
Real estate and business activities	1.5	1.3	5.4
Public administration and defence, compulsory social security	4.7	4.6	5.0
Education	8.7	8.0	8.1
Health and social work	6.8	7.6	6.5
Other community activities	5.8	4.9	4.0
Private households with employed people	0.4	0.2	
Extra-territorial organisations and bodies	0.5	0.5	

Source(s): ETF and Ukraine State Statistics Committee (total population data).

Better educated young people are eager to obtain a return on their investment in education. There is a high incidence of multiple job holding among young people. In particular, 16.7% of young people take a second job in addition to their main activity. The probability of holding a second job is higher among unregistered employees. Furthermore, a second job is more likely among high school and university graduates, who are probably the most keen to obtain a return on their education. No gender differences were observed.

Training provided to young people is rare and of poor quality. The share of young people of both genders who attend courses and seminars outside of formal education is small. A total of 20% of young registered employees receive no training at all and less than half are trained during paid working hours. There is even less training for unregistered workers (58%), and it is mostly provided outside paid working hours (39% of unregistered employees). Training is taken predominantly for reasons related to present or future employment, with only a very small proportion of young people undertaking courses for personal or social reasons (28%).

A sizeable number of unemployed and inactive workers were in a job when they were last trained, although training clearly did not help them retain their employment. The training provided to unemployed and inactive people is negligible. Thus, fewer than 40% of inactive workers are provided with any kind of training, and the percentage for unemployed is even lower (15%).

Conclusions

The national education system is characterised by relatively positive quantitative indicators. However, statistics suggests that Ukraine is losing ground in terms of competitiveness in this area. Since independence, the gross enrolment rates for secondary education have considerably declined. Economic transformation has redirected demand from professional and technical (non-tertiary) workers to people with tertiary education, whereas among tertiary education graduates, demand has shifted away from engineering, the basic sciences, agriculture and humanities towards the social sciences, business and law. In addition, there have been some changes in education participation rates for males and females. Specifically, the participation of females in secondary and upper secondary education has fallen whereas their participation in tertiary education has grown.

Data on public expenditure on education as a share of GDP would suggest a high priority accorded to investment in education in Ukraine. Although real educational expenditure has recovered in recent years, it is still below the level of the early 1990s and is low by international standards. In addition, there is considerable waste in education expenditure, given incomplete public finance reform, technical inefficiency and the absence of proper policy design. The government has also failed to provide equal access to education, with the list of obstacles including poverty, corruption, rural residence, mobility barriers, poorly developed infrastructures for the people with special needs and early selection in secondary schools.

Despite some positive features of the Ukrainian education system in terms of quantitative aspects, there are indirect signs of a relatively low and deteriorating quality of education provision. These include poor adaptation of the system to the needs of the labor market, resulting in a substantial skills mismatch, weak involvement of the business community in education, outdated equipment and infrastructures, poor salaries for teachers, poor school management and the absence of Ukrainian universities in international rankings.

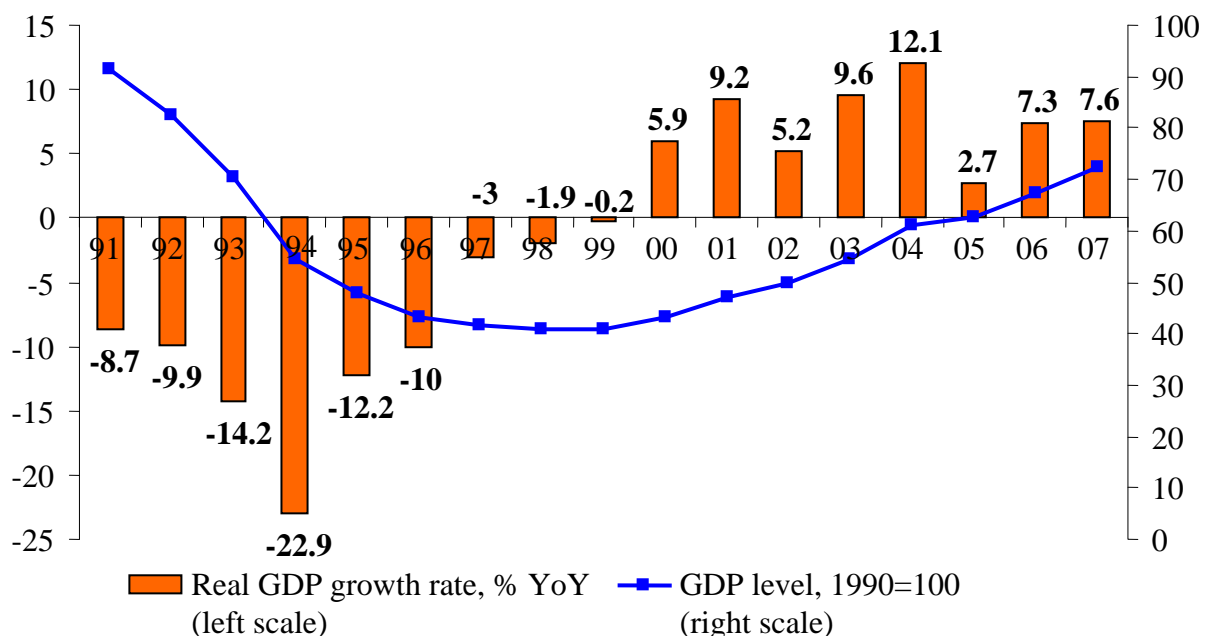
Nonetheless, some positive aspects of the transition from education to work, such as the relatively short transition period and the high levels of employment in recent years, are likely to be attributed to externalities (economic growth; restructuring of the economy and the development of new types of economic activities, occupations and jobs; negative demographic trends favouring youth employment; a developed informal economy; and weak enforcement of the labour legislation) rather than to the capacity of graduates to put acquired knowledge and skills into practice. As with the other age groups, high youth inactivity/unemployment-to-job transition rates may well mask problems of low-quality employment (poor wages and working conditions, weak social protection and a high risk of dismissal) and a growing skills gap (illustrated by the high proportion of people not working in their knowledge field).

3. Labour market restructuring and changing employment patterns

3.1 The macroeconomic situation and economic restructuring

Ukrainian GDP is growing although it still remains far below its pre-transition level. Ukraine has experienced a deep transformation shock on its path from a command to a market economy. In the early 1990s the country went through a period of hyperinflation and high budget deficits.⁵⁶ The break up of the former USSR led to a disintegration of production and trade links between former Soviet republics and predetermined the collapse of national industrial sectors. As a result, Ukraine ended up among the least unsuccessful transition economies, with GDP growth recovering only after almost a decade of continuous decline.⁵⁷ By 2007, real GDP was only 72.4% of its 1990 level (Figure 3.1).

Figure 3.1. Annual real GDP growth 1991-2007



Source(s): Ukraine State Statistics Committee.

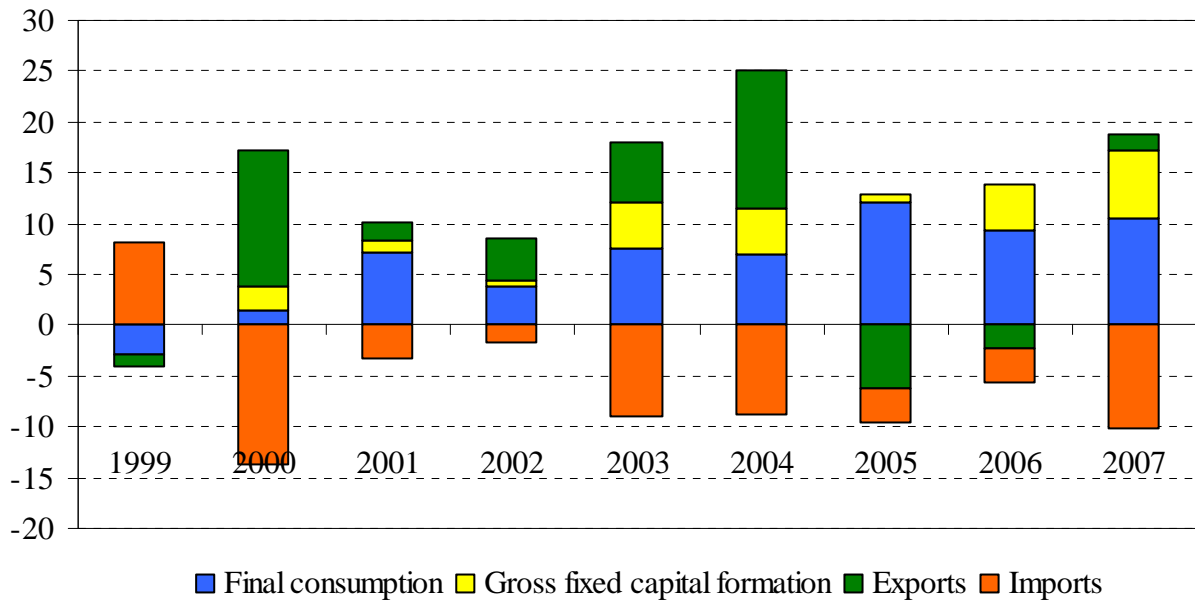
GDP growth has resumed in 2000 due to: (1) successful macroeconomic stabilization efforts, (2) industry restructuring that has accelerated utilization of spare capacities, and (3) favorable external conditions – e.g. cheap gas supplies, increased world demand and rising prices for metals, deep depreciation of the national currency – fueling growth in real exports.

In recent years, growth has been driven mainly by strong private consumption resulted from increases in household real income and consumer credit, and intensified investment demand as a consequence of ongoing industry modernisation and booming construction.

⁵⁶ In 1993 consumer prices grew by a record 10,250%, and in 1994 the overall budget deficit totalled 15% of GDP.

⁵⁷ Economic growth resumed in 1992 in Poland, in 1993 in the Czech Republic, Slovakia, Slovenia and Romania, in 1994 in Hungary, Bulgaria and the Baltic States, in 1996 in Kazakhstan, in 1999 in Russia and in 2000 Ukraine.

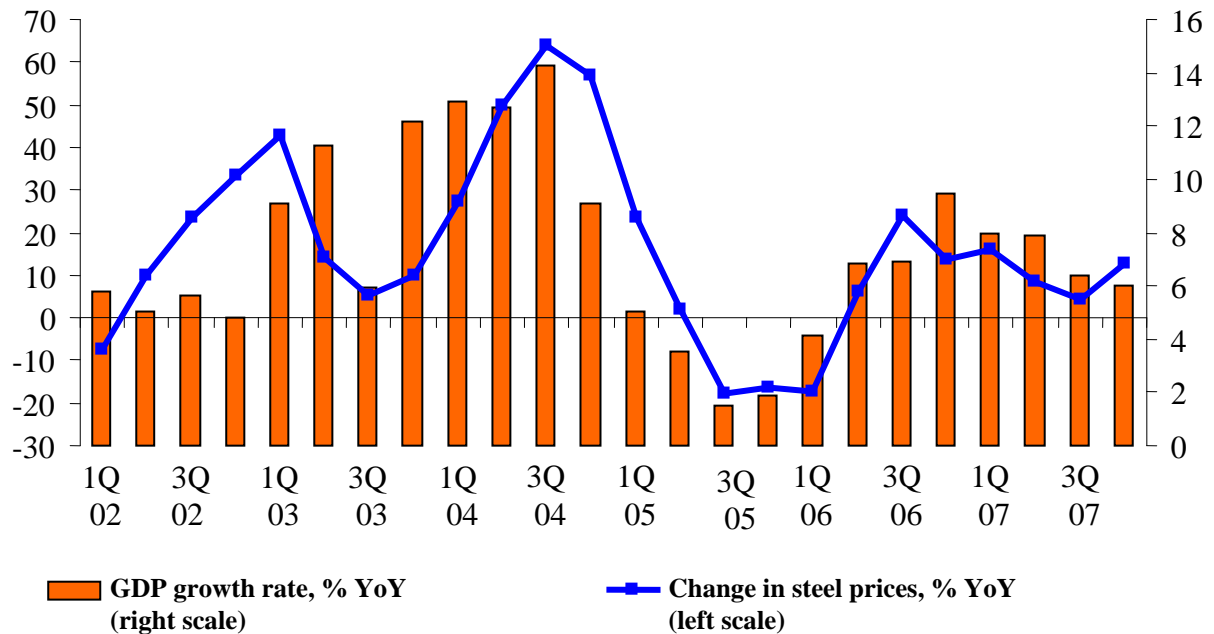
Figure 3.2 Demand-side contribution to GDP growth (% YoY real change)



Source(s): Author calculations based on Ukraine State Statistics Committee data.

Despite sharp falls since 2004, real exports still have a profound impact on GDP growth. The indirect effects of trade performance on growth (via expanded investment in export industries, increased demand for domestic inputs, transfers of new knowledge and technologies etc) remain significant. However, poor export diversification makes growth quite sensitive to changes in demand and the price of steel on the world market (Figure 3.3).

Figure 3.3. Annual GDP growth and steel prices 2002 -2007



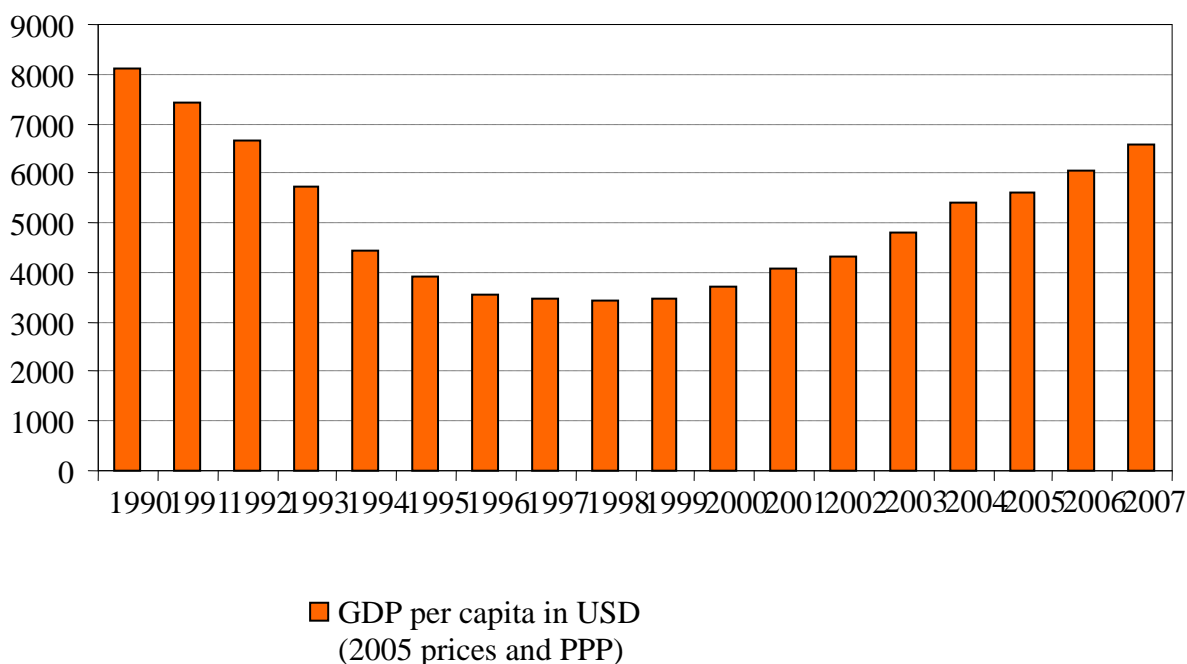
Source(s): Ukraine State Statistics Committee and CRU Steel Price Index.

Overall, in the period 2000-2007 the average annual growth rate in Ukraine was 7.45%, exceeding real growth rates observed for the same period in most of the CEE countries.⁵⁸

Real GDP growth in 2008 is expected to decelerate slightly, to 6%, and continue thereafter to fall to 4%-5% in the mid-term perspective,⁵⁹ reflecting a soft-landing scenario and a gradual cooling off in consumer demand, as well as stabilisation of the current high world steel prices at a lower level.

Ukraine lags behind developed and most transition countries in terms of GDP per capita. GDP per capita was USD 6,559 in 2007 (at 2005 prices and PPP), or 80.9% of the 1990 level (Figure 3.4).

Figure 3.4 GDP per capita 1990-2007



Source(s): UNECE.

As illustrated in Figure 3.5, GDP is still low compared to most countries in the region and is likely to take a long time to catch up on the CEE countries that have recently become EU members. Other things remaining equal, Ukraine may catch up with the PPP-adjusted GDP per capita of Romania in 6 years, Bulgaria in 7 years, Poland in 13 years, Slovakia in 18 years, and Hungary, the Czech Republic and Slovenia in 22 years.⁶⁰ By the year 2020, according to Yalta European Strategy⁶¹ estimates presented at FTA meeting in Kyiv in April 2008, Ukraine will only have attained 54% of the EU27 GDP per capita.

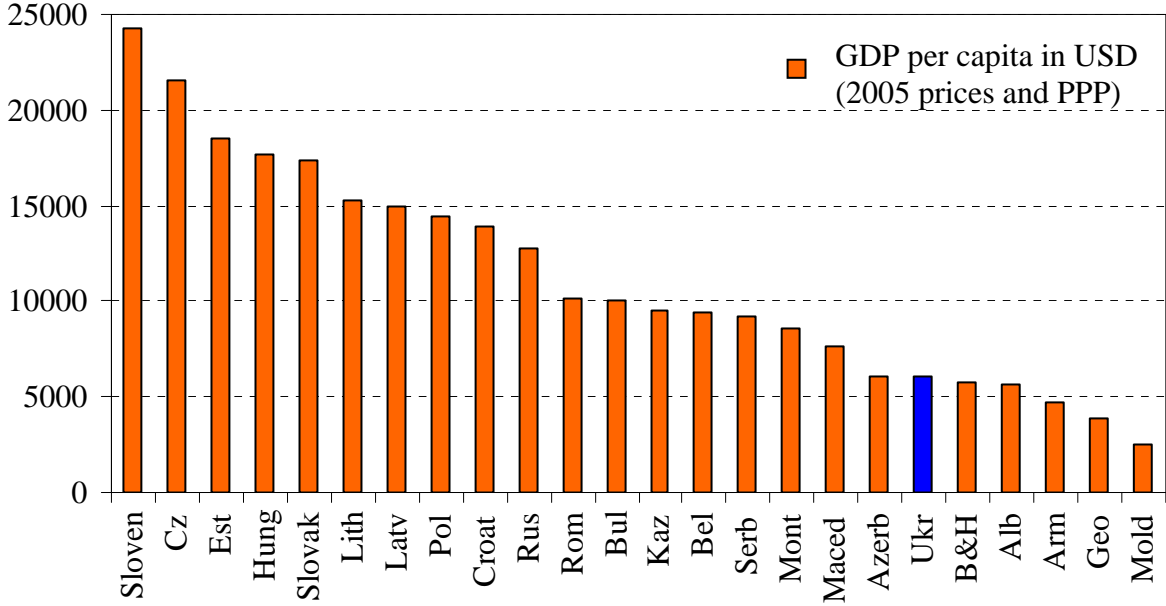
⁵⁸ Annual average growth rates, according to the United Nations Economic Commission for Europe (UNECE) were as follows in the period 2000-2007, at 2005 prices and PPP: Belarus 6.65%, Bulgaria 5.5%, Croatia 4.65%, Czech Republic 3.6%, Hungary 4%, Moldova 5.7%, Montenegro 2.7%, Poland 4.05%, Romania 4.9%, Russia 7%, Slovakia 5.55% and Slovenia 4.25%. Growth was stronger in Azerbaijan (17.4%), Armenia (12%), Estonia (8.45%), Kazakhstan (10.1%) and Latvia (9%).

⁵⁹ Ukraine Ministry of the Economy (Consensus Forecast Quarter 2, 2008).

⁶⁰ This implies stable average rates of PPP-adjusted GDP growth per capita for the period 2000-2006.

⁶¹ See <http://www.yes-ukraine.org/en/index.html>.

Figure 3.5. GDP per capita for selected countries, 2005

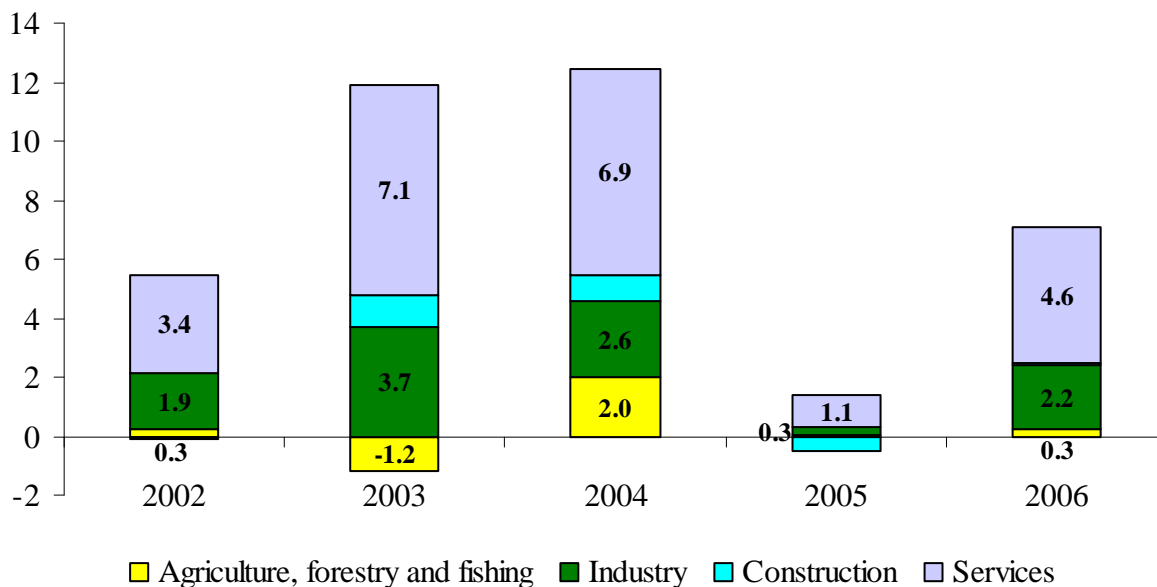


Source(s): UNECE.

The services sector share of the economy is increasing, in contrast with agriculture. Ukraine has traditionally been an agrarian country with a highly developed heavy industry complex. Nevertheless, on the supply side, since 2001 growth has been very much supported by booming market services with the largest contribution coming from trade, financial and real estate activities (Figure 3.6).⁶² Catch-up growth in the services sector has been driven both by steadily rising household real incomes and living standards, which have pushed demand for retail, lending and mortgage services etc, and by the need to develop trade, logistic and transport infrastructures for manufacturing industries.

Figure 3.6. Sectoral contributions to GDP growth (% , current prices) 2002-2006

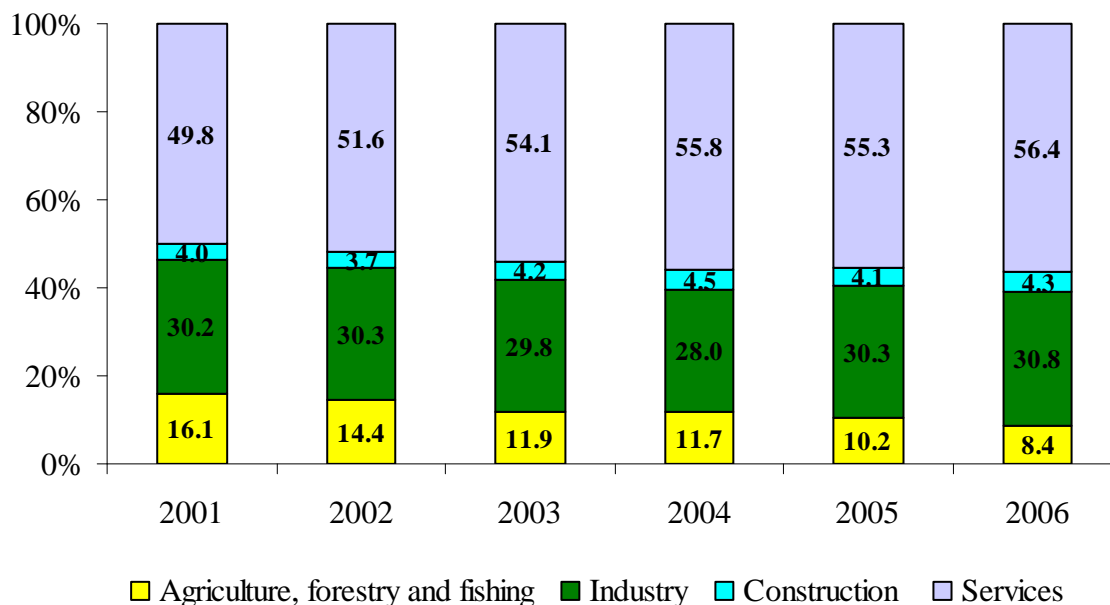
⁶² The services sector contributed almost two thirds to real GDP growth in the period 2001-2006. However, this data should be interpreted with care, as widely used transfer pricing schemes have led to an underestimation of value added for manufacturing and agriculture and an overestimation for the wholesale trade.



Source(s): Author calculations based on Ukraine State Statistics Committee data.

Since the commencement of economic recovery the share of services in gross value added has gradually expanded. The latest data available (for 2006) services showed growth to 56.4% of value added, from 49.8% in 2000 (Figure 3.7). However, the services sector still lags behind most developed countries, where the share of services is around 70% of GDP.

Figure 3.7 Gross value added by sectors (% of total) 2001-2006



Source(s): Author calculations based on Ukraine State Statistics Committee (National Accounts) data.

Note(s): Payments for financial intermediation services and subsidies on products have not been deducted and taxes on products have not been added.

The growing share of services is a positive trend which reflects progress towards post-industrial development. In contrast with manufacturing industries that are capital and energy intensive, service sectors more rely on knowledge (information) and innovation. As a result, the share of intermediate

consumption is lower and the share of value added is higher in the services sector compared to manufacturing.⁶³

In recent years, the share of industry in gross value added has been relatively stable, at around 28%-30%. Growth is mainly supported by metallurgy, machine building and food processing, which contribute 80% to value added in the industrial sector.

The lack of necessary reforms and supporting government policies for the agricultural sector has resulted in its continuing stagnation. Its share of gross value added has almost halved, from 16.1% in 2001 to 8.4% in 2006. Besides (as has been discussed in Chapter 1.B), labour productivity is low — due to part-time and seasonal employment and a large degree of informal activity — and so agriculture contributes significantly less to gross value added than to total employment (see Figure 1.13).

Foreign trade plays a key role in economic performance. Since 2000, Ukraine's foreign trade turnover has reached or even exceeded the level of GDP growth (Table 3.1). Foreign trade dynamics has been highly correlated with macroeconomic developments in Ukraine. Following a sharp contraction as a result of the collapse of the USSR, Ukrainian exports and imports stabilised, then grew slowly in the mid-1990s, declining to a low point in 1997-1999. Exports and imports resumed their growth in 2000 and have grown rapidly since then. According to the Ukraine State Statistics Committee, exports of goods and services more than tripled over the period 2000-2007, while imports of goods and services increased 4.3 times.

Table 3.1. External trade in goods and services 1997 and 2000-2007

	1997	2000	2001	2002	2003	2004	2005	2006	2007
Exports (USD bn)	19.0	18.1	19.8	22.0	27.3	38.0	40.4	45.9	58.3
Imports (USD bn)	18.5	15.1	16.9	18.2	24.5	31.1	39.1	48.8	65.6
Export growth (%)	-0.9	18.8	9.7	11.1	24.1	39.0	6.3	13.7	27.2
Import growth (%)	-1.4	16.6	12.0	7.4	34.7	26.9	25.8	24.8	34.5
Exports (% GDP)	38	58	52	52	55	58	47	43	41
Imports (% GDP)	37	48	45	43	49	48	45	45	46
Trade balance (USD m)	423.9	2952.4	2886.5	3844	2836.7	6918.6	1291.8	-2884.5	-7263.6
Trade balance (% GDP)	0.8	0.9	7.6	9.1	5.7	10.6	1.5	-2.7	-5.2

Source(s): Author calculations based on Ukraine State Statistics Committee data.

Note(s): All trade data refer to trade in goods and services.

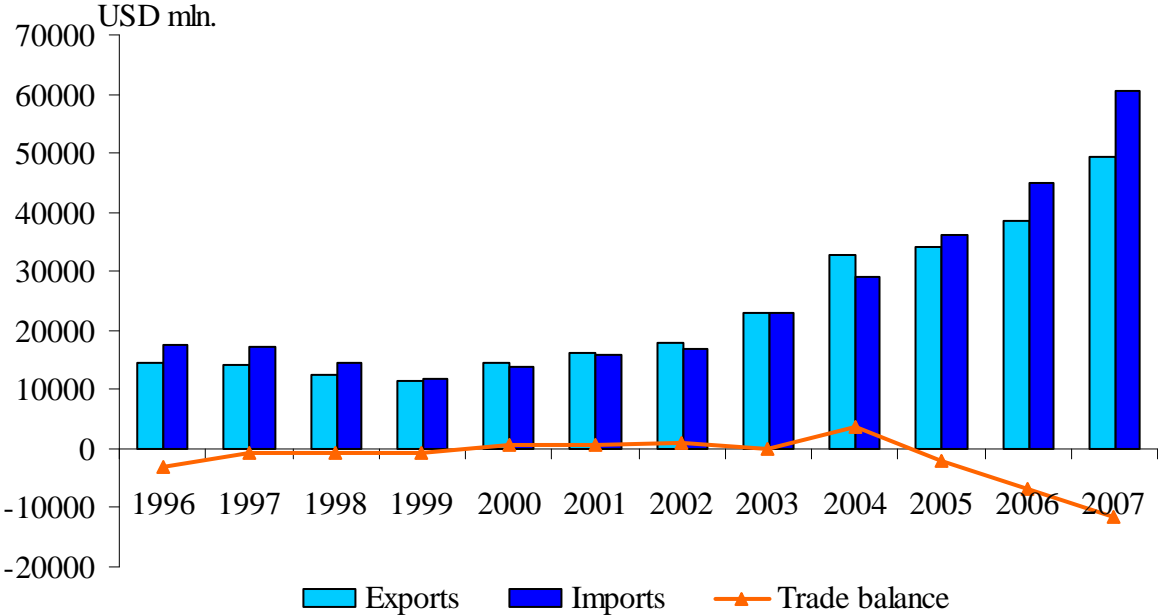
Strong merchandise export performance has been a primary factor in economic recovery since 2000. A surge in merchandise exports from 2000 (by about 26% y-o-y) has been driven by growing world prices for Ukraine's main exports (metals and chemicals). Other contributing factors include real depreciation of the hryvnia following the 1998 financial crisis (making exports to non-CIS markets more price competitive) and increased external demand for Ukrainian exports from major trade partners, especially Russia, which was experiencing a recovery in economic growth (World Bank, 2004). Apart from favourable external conditions, export expansion in 2000 could also be partly attributed to improved economic performance by traditional industrial sectors (metallurgy, oil processing and chemicals) driven by privatisation, enterprise restructuring, management change and

⁶³ In 2005, intermediate consumption as a share of total output was 69% for manufacturing industries and 49.9% for service sectors, whereas value added was 31% and 50.1%, respectively.

improved capacity utilisation. However, these positive changes merely produced a one-off effect and Ukrainian exports remain highly vulnerable to changes in external conditions. The World Bank study (2004) concluded that the heavy concentration of primary goods and metals among exports, the low contribution to export growth from new export products, and inadequate investment by large traditional exporters in modernising production capacities all constitute a threat to the sustainability of export performance in the medium term.

Foreign trade dynamics has been largely determined by fluctuations in merchandise trade. Trade in goods has fairly consistently accounted for more than 80% of total trade turnover. In the period 2000-2004, Ukrainian merchandise exports grew faster than merchandise imports, resulting in the accumulation of trade and current account surpluses (Figure 3.8). As a result, the total trade balance reached a record level of USD 6.9 billion or 10.6% of GDP in 2004 (Table 3.1).

Figure 3.8 Merchandise trade 1996-2007



Source(s): Ukraine State Statistics Committee.

This positive picture was reversed in 2005, when a deterioration in external conditions (particularly for metals) led to a significant slowdown in merchandise export growth (from 41.6% in 2004 to 4.8% in 2005) and a merchandise trade deficit (USD 1.9 billion).⁶⁴ In 2006-2007, the merchandise trade balance continued widening, reaching USD 11.3 billion or about 8% of GDP in 2007. As a result, Ukraine ended 2007 with a USD 7.3 billion overall trade deficit (5.2 % of GDP) and a USD 5.9 billion current account deficit (4.2% of GDP).

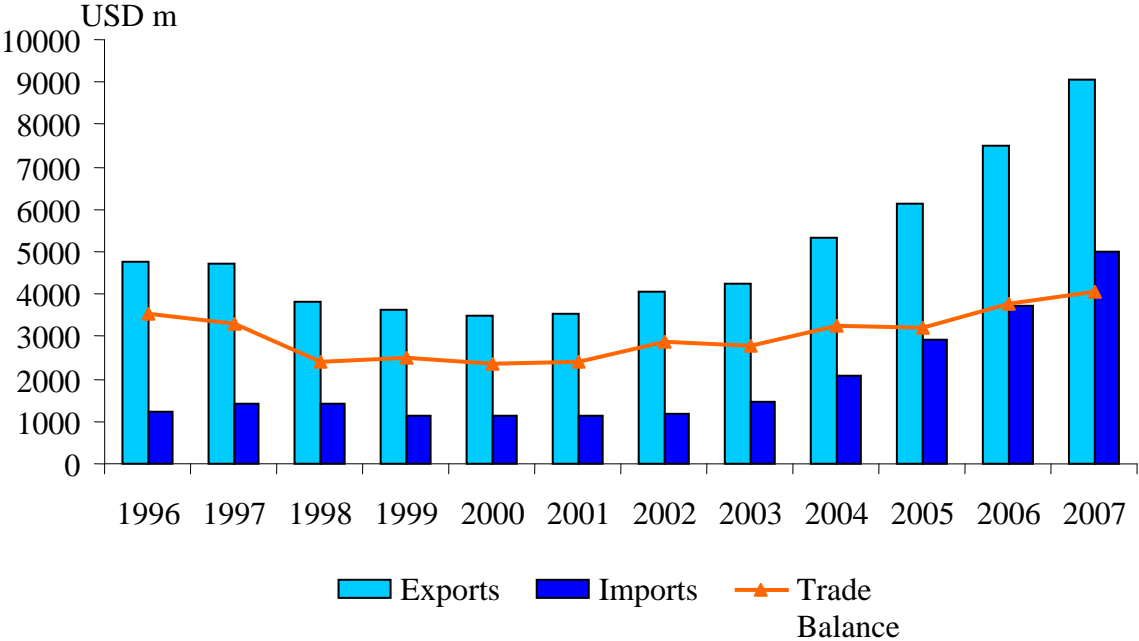
Ukraine’s trade position was weakened mainly by fast growing imports significantly outpacing export growth. The fast acceleration in import growth in recent years has been attributed to rising energy prices (oil products and natural gas account for about one third of total imports), robust investment demand for major investment commodities (machinery and transport equipment) driven by a need to modernise production capacities and introduce energy saving technologies, and booming consumer demand for durables. In 2007, there was also a considerable improvement in Ukraine’s merchandise export performance thanks to growing world prices for metals, chemicals and agricultural products and buoyant demand for Ukrainian machinery and transport equipment from fast-growing CIS countries (exports accelerated by 28.4% YoY in 2007, compared to import growth of 34.7%).

Trade in services is resulting in a healthy trade surplus (Figure 3.9). Transportation formerly constituted the largest share of service exports, but gradually declined from about 84% in 2001 to 68% in 2007. A substantial proportion of transportation is represented by pipeline services (gas transit from

⁶⁴ The overall trade balance was positive, however, due to a surplus in trade in services (of USD 3.2 billion).

Russia to Europe), followed by rail, air and sea transportation services. Business services (accounting, advertising, judicial and research) represent another important group of service exports, which has grown from 5.2% in 2001 to 13% in 2007. Travel services and financial and insurance services (accounting for 3.7% and 4.5%, respectively) have also shown growth. Service imports, which are more diversified than service exports, include transportation, financial services and business services, accounting for 22.9%, 18.2% and 16.4% of imports, respectively.

Figure 3.9 Services trade 1996-2007



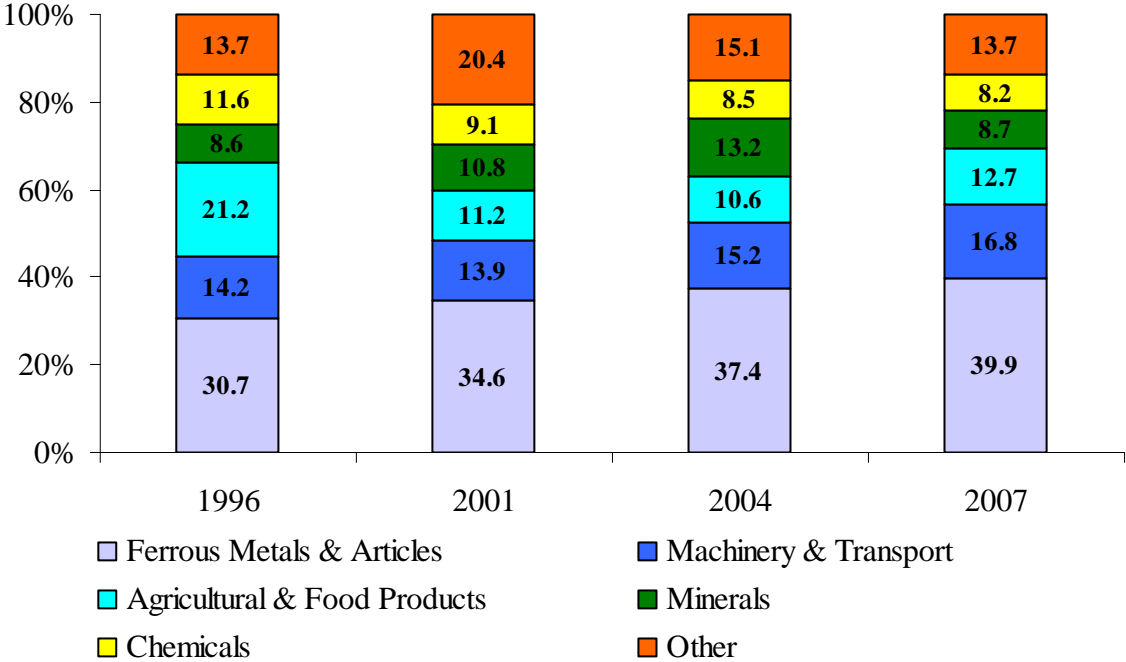
Source(s): Ukraine State Statistics Committee.

Ukraine’s merchandise trade is characterised by a high degree of concentration by commodity group. Over the last decade of rapid export expansion, the sectoral distribution of Ukraine’s exports has remained mainly unchanged and its export structure is still highly dependent on sensitive commodities like metals, chemicals and minerals. This dependence can be explained by the structure of industrial production capacity inherited from Soviet times (large enterprises manufacturing a few specific products and supplying them to other parts of the Soviet Union) (Segura et al, 2006). Ukrainian export-oriented industries have not diversified their products, merely export destinations (by entering new markets in Europe and Asia).

Exports of ferrous metals and articles and chemicals have traditionally dominated exports. In 2007, these exports accounted for about 40% of total exports. Minerals constituted about 9% and chemicals about 8%. The most notable changes in the Ukraine’s export structure in recent years include, on the one hand, the increasing share of machinery exports (almost 17% in 2007), and, on the other hand, the declining importance of mineral exports (Figure 3.10; see Appendix Table A.10 for more detailed commodity groups). High economic growth and booming investment demand in CIS countries and especially in Russia (major destinations for Ukrainian machinery exports) ensured fast growth in these exports in 2007 (+53% YoY in 2007). The share of agricultural and food products in total Ukrainian exports revealed a slight increase from 2001 (up to about 13%) but its overall performance has been moderate.

Ukraine’s highly concentrated structure of exports of sensitive commodities explains its vulnerability to changes in global market conditions and its exposure to trade protectionism in international markets (since mineral and metal markets account for the lion’s share of trade protection measures in the world).

Figure 3.10. Major commodity exports (% of total merchandise exports)

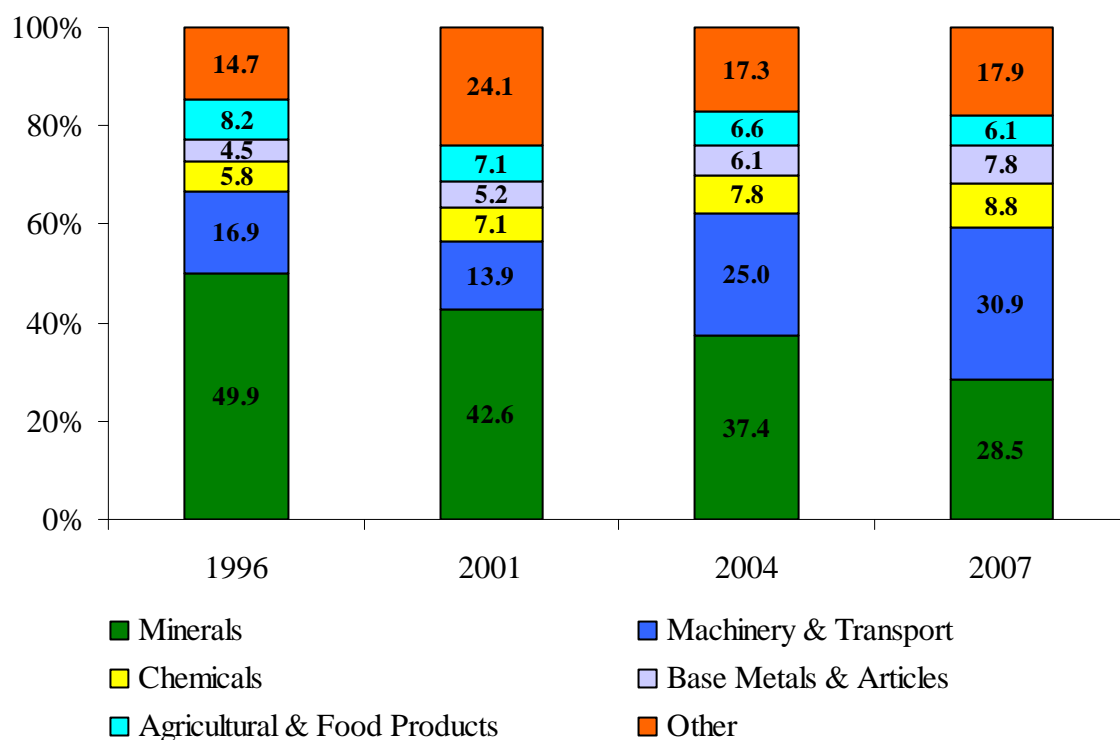


Source(s): Ukraine State Statistics Committee (2001, 2004 and 2007) and United Nations Comtrade (1996).

Note(s): HS product groups are as follows: chemicals, 28-38; minerals, 25-27; agricultural and food products, 1-24; ferrous metals and products, 72-73; and machinery and transport, 84-89.

Mineral products (mostly fuels) have dominated imports, reflecting a high dependence of the Ukrainian economy on imported energy resources. Despite rapidly growing energy prices the share of mineral products has gradually declined in the last decade (from about 50% in 1996 to 28.5% in 2007), reflecting a significant contraction in physical volumes of energy imports into Ukraine (Figure 3.11; see Appendix Table A.11 for more detailed commodity groups). Robust investment demand in the national economy have led to a rising share of investment goods in imports. Strong consumer demand for automobiles has caused imports to surge in recent years and, as a result, the share of machinery and transport imports (31%) exceeded the share of mineral products in 2007. Other import categories include chemicals and base metals.

Figure 3.11. Major commodity imports (% of total merchandise imports)

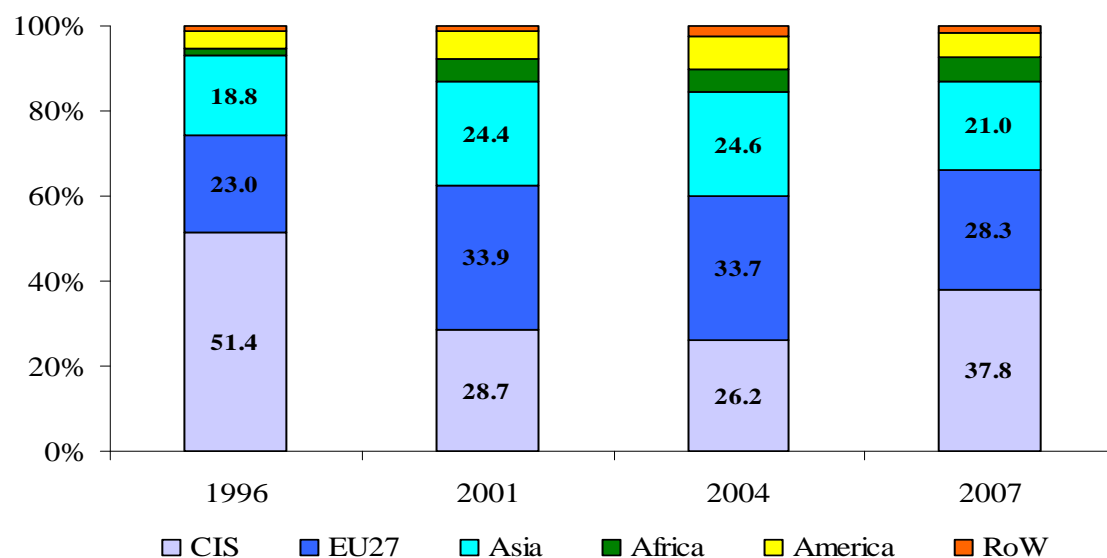


Source(s): Ukraine State Statistics Committee (2001, 2004 and 2007) and United Nations Comtrade (1996).

Note(s): HS product groups are as follows: chemicals, 28-38; minerals, 25-27; agricultural and food products, 1-24; ferrous metals and products, 72-73; and machinery and transport, 84-89.

Ukraine's external trade is fairly diversified in terms of partners. The EU and the CIS countries are the country's main regional export destinations, followed by Asian and African regions (Figure 3.12).

Figure 3.12. Merchandise exports by region (% of total merchandise exports)



Source(s): Ukraine State Statistics Committee.

Overall, the role of CIS countries in total Ukrainian exports has been gradually decreasing as Ukraine has redirected its trade from traditional to new markets. In 2007, CIS countries accounted for about 38% of Ukraine’s exports, down from 50% in 1996. CIS countries continue to maintain strong trade links with Ukraine, however, due to the existence of traditional channels of commerce, including traditional intra-industry trade channels, and due to the similarity and mutual recognition of technical standards and free trade arrangements.

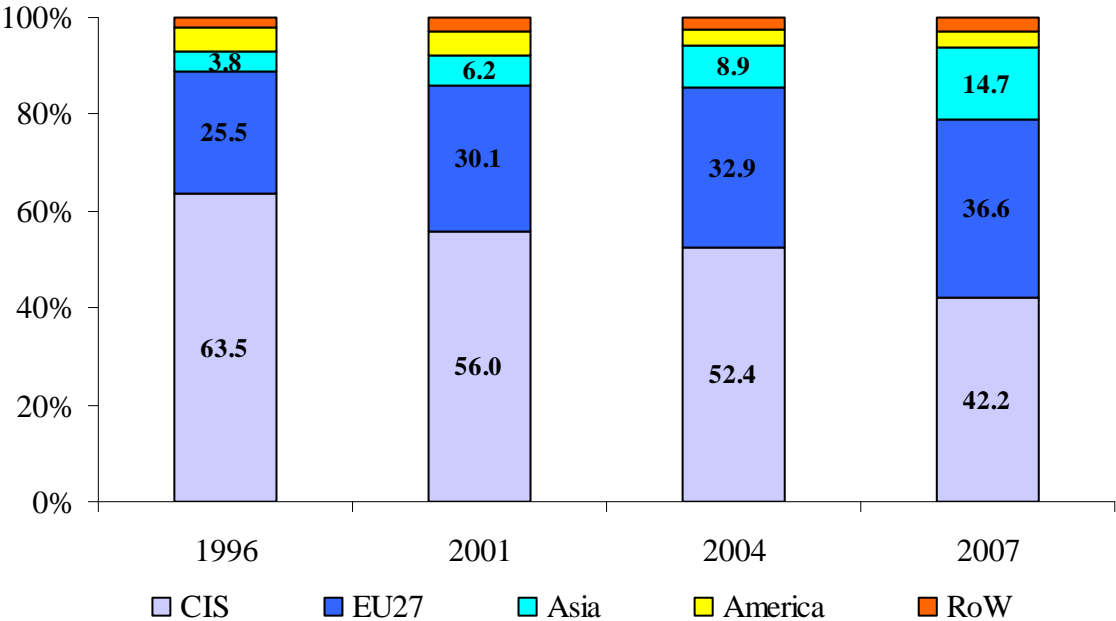
CIS countries remain the major markets for Ukrainian exports such as food products and machinery and transport equipment. Poor geographical export diversification makes these sectors very sensitive to trade protection measures applied by importing CIS countries.⁶⁵

Ukraine’s exports to the EU are dominated by ferrous metals and articles and mineral products. Ukraine also supplies agricultural products (sunflower oil), electrical machinery and organic chemicals.

The increasing share of CIS countries among Ukraine’s export partners in recent years has accounted for the growing demand for Ukrainian machinery and transport equipment. Meanwhile, the reduced share of EU countries as Ukraine export destinations is explained mostly by the slowdown in aggregate demand in Europe (Segura et al, 2006).

However, the share of imports from CIS countries has been also contracting, from 63.5% in 1996 to 42.2% in 2007 (Figure 3.13). Imports from the CIS countries (mainly Russia and Turkmenistan) were dominated by energy materials. At the same time, the share of the EU has been gradually increasing, from 25.5% in 1996 to 36.6% in 2007. EU countries are major suppliers of investment goods to Ukraine.

Figure 3.13 Merchandise imports by region (% of total merchandise imports)



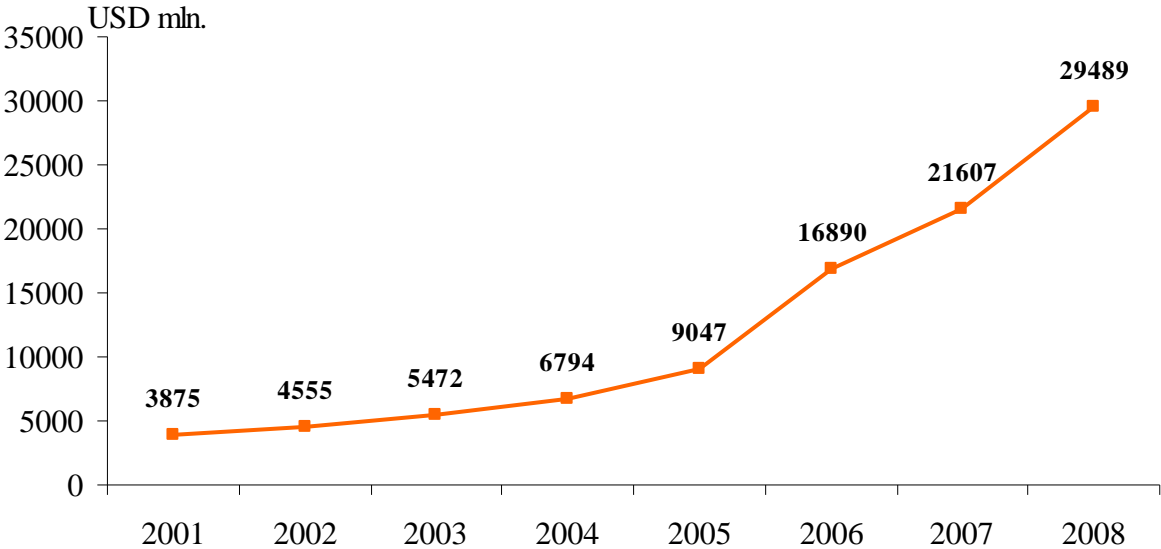
Source(s): Ukraine State Statistics Committee.

Ukraine’s main trade partner is Russia. Russia took 25% of total Ukrainian exports in 2007. The second largest export partner in 2007 was Turkey (7.4%), and other important partners included Italy (5.4%), Germany and Poland (each 3.3%), Kazakhstan (2.9%) and Hungary (2.5%). Russia is also the largest origin of Ukraine’s imports (27.8% in 2007), followed by Germany (9.6%), Turkmenistan (7%), China (5.5%), Poland (4.8%), Italy (2.9%) and Kazakhstan (2.6%).

⁶⁵ For example, in 2006 Russia banned imports of milk and meat products from Ukraine, accusing Ukrainian producers and veterinary and health authorities of insufficient control over food safety.

FDI in Ukraine is growing at a fairly fast pace. The stock of FDI in Ukraine as of 1 January 2008 amounted to USD 29.5 billion (or 20.9% of GDP). FDI in Ukraine slowly but steadily increased until 2005, when Ukraine attracted a large amount of FDI (USD 7.8 billion), over half of which (USD 4.8 billion) was received as a result of re-privatisation of Ukraine's largest metallurgical plant Kryvorizhstal and its purchase by Mittal Steel Germany GmbH, and then again became rather modest (Figure 3.14).

Figure 3.14. Cumulative FDI (as of 1 January) 2001-2008



Source(s): Ukraine State Statistics Committee.

According to the Ukraine State Statistics Committee net inflow of FDI in Ukraine in 2007 constituted USD 7.9 billion, which represented a 67.1% increase over net FDI inflows in 2006. Foreign investors injected USD 8.7 billion in direct investments into Ukraine's economy in 2007, while withdrawing USD 1.2 billion.

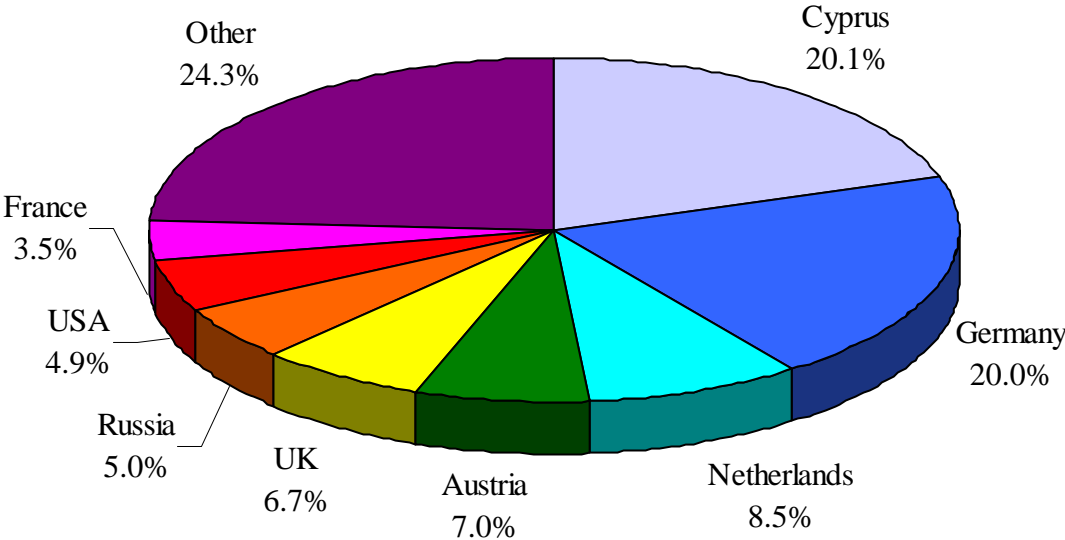
However, Ukraine's cumulative FDI still remains rather low compared to other countries in the region. Ukraine's FDI stock per capita is only USD 636.5, compared to Hungary's USD 8,700 and Russia's USD 1,293 (Crane and Larrabee, 2007).

Cyprus and Germany were the largest investors in Ukraine in 2007, each accounting for about 20% of total FDI. Investment from Cyprus usually originates in other countries that take advantage of offshore tax legislation and, in fact, is mainly a combination of Russian and Ukrainian investment (Crane and Larrabee, 2007). Investment from Germany doubled in 2005 with the purchase of Kryvorizhstal in 2005. Other important flows have come from the Netherlands, Austria and the UK (Figure 3.15).

The three sectors attracting the most FDI are manufacturing, financial services and trade and repair, together accounting for 50.2% of total FDI (Figure 3.16). Within the manufacturing sector, the most attractive sectors for foreign investors are metallurgy (5.7% of total FDI), food processing (5.3%) and machine building (3.6%).

If the manufacturing sector is excluded, the financial sector holds the lead position, following a trend established in 2006, and its share has almost doubled from 2001 (to more than 16%). This increase is mainly attributed to acquisitions of Ukrainian banks by foreign financial groups. By the end of 2007 such transactions resulted in the total value of FDI into financial sector of over USD 4 billion.

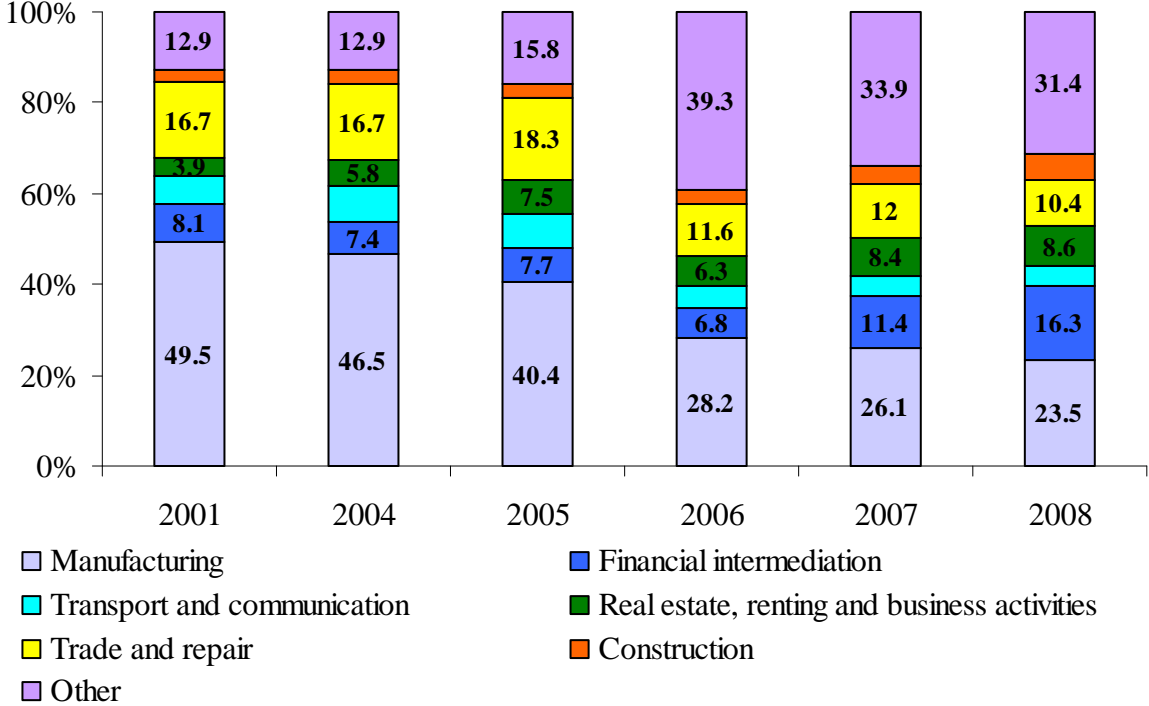
Figure 3.15 Major investing countries 2007



Source(s): Ukraine State Statistics Committee.

Note(s): Cumulative FDI as of 1 January, 2008.

Figure 3.16 Cumulative FDI (as of 1 January) by sector 2001-2008



Source(s): Ukraine State Statistics Committee.

Ukraine inherited a huge public enterprise sector and privatisation became a priority. Following independence, industrial privatisation in Ukraine was conducted in the following stages (see Toms et al, 2002; Dubrovskiy et al, 2007; Baker and McKenzi, 2008):

- 1992-1994. Initial stage or small-scale privatisation, typically implying the leasing and subsequent purchase of state property by the management and employees of the companies.

- 1995-1997. Mass privatisation, with all Ukrainian citizens receiving privatisation certificates that could be exchanged for shares in state companies, and, in parallel, the cash sale of many small state-owned enterprises through auctions to private individuals.
- 1997-2002. Large-scale cash privatisation, aimed at raising revenues for the state, with the government transforming medium and large companies into joint stock companies and selling minority stakes through auctions and competitive tenders. From the end of 1998, Ukraine began putting out to tender both block and majority stakes in blue-chip companies.
- 2000-2002. Adoption of the State Privatisation Programme, aimed at privatising strategic industries, monopolies, infrastructure sectors and large technological complexes, which had advanced considerably by the end of 2002 in terms of revenues raised and the sale of stakes in large-scale enterprises.
- 2003-2004. Rush sales of state property to business groups connected with the authorities and to government officials (on-request privatisation), marking the start of the crisis in the privatisation process.
- 2005-2007. A deepening of the privatisation crisis, which was characterised by the absence of a new privatisation mechanism and a lack of trust between different political forces, leading to a blocking of the whole privatisation process (except for small-scale sales), given that there was a fear that re-establishing a selective approach or preferences in privatisation could favour competitors.

The outcome of privatisation. The following data is based on Dubrovskiy et al (2007), WT/ACC/UKR /152 (2008) and State Property Fund of Ukraine (2008):

- A total of 113,900 companies were privatised in the period 1992-2007, including state-owned (27,900) and municipal (86,000) property. Most (85%) were privatised during the 1992-2004 period, that is, 97,500 companies (state property 26,100 and municipal property 71,400).
- By sector, industry accounted for 8,800 companies (mining, 154; manufacturing, 8,410; and production and distribution of electricity, gas and water, 263); construction, 3,750 companies; wholesale and retail trade, and repair, 38,371 companies; hotels and restaurants, 7,085 companies; transport and communications, 1,997 companies; and the financial sector, 363 companies.
- In terms of size and importance for the economy, 83% of the privatised companies were small companies (94,700); 10% were large and/or strategic companies (11,500); 4.4% were unfinished constructions (5,000); 1.1% were shares in and parts of companies (1,300); and 1.3% were organisations of the social sphere (1,500).
- As a result of the privatisation process, 11,178 joint-stock companies were established, 2,380 of which had been previously under municipal ownership and 8,794 under state ownership.
- Receipts from the privatisation process were UAH 40 billion, of which UAH 38.7 billion were allocated to the General Fund of the State Budget for addressing social issues.
- With more than 8,000 agricultural enterprises (99%) privatised, the process is almost complete in this sector, particularly in processing enterprises, enterprises providing agro-technical and agrochemical services, service enterprises and enterprises in the fish industry.

The private sector in the Ukrainian economy is playing an increasingly important role. As a consequence of privatisation and the creation of new firms, the private sector, defined as a non-state sector including companies with a private stake of over 50%, is now playing a significant role in the Ukrainian economy. In quantitative terms they account for 95.8% (345,344 companies) of the total number of enterprises in Ukraine excluding banks and budget institutions (see Table 3.2). In some economic sectors such as trade and repair services, financial intermediation, construction, transport

and telecommunications, the share of private companies is even higher (98.9%, 99.4%, 98.2% and 96.8%, respectively).

Table 3.2. Selected private sector indicators 2006

Indicator	Percent share of all registered enterprises excluding banks and public institutions
Number of enterprises	95.8
Value of fixed assets	45.2 (in 2004)
Profits for main activity	89.0
Profit ratio for main activity	7.2
Average number of employees	74.6
Value of output	88.5
Exports	92.5
Imports	83.6

Source(s): Ukraine State Statistics Committee and Dubrovskiy et al (2007).

Note(s): The private sector is defined as a non-state sector consisting of corporate companies with a privately held stake of over 50% of the statutory capital.

The real scope of the private sector, however, can be assessed if different forms of property are compared according to fixed asset value. According to the latest available official data (2004), the private sector accounted for only about half of all fixed assets in Ukraine (and this number is still quite representative because of slow progress in privatisation between 2005 and 2007), indicating that the public sector still possesses a huge amount of fixed assets and mainly consists of the largest (in terms of capital and labour) and most strategic companies (Dubrovskiy et al, 2007).

The structure of the private sector in 2006 according to three different dimensions was the following:

- **Sector.** By number of enterprises, 36.3% of all private enterprises in 2006 operated in the trade and repair services, 19.3% in real estate, lease and business services, 14.6% in industry, and 10% in construction. By employment, industry accounted for the largest portion of the workforce engaged in the private sector (43.5%), followed by trade and repair services (16.9%) and agriculture, forestry and fishery (12.4%).
- **Size.** The overwhelming majority of private companies were small enterprises (85.8%), followed by medium enterprises (14%) and large enterprises (0.2%).
- **Organisation.** The most popular organisational forms were private enterprises (40%), limited liability enterprises (53%) and joint stock companies (5%).

The private sector accounted for 88.5% of the total output sold (including goods and services) in 2006, compared to 10.4% for state companies and 1.1% for municipal companies (see Appendix Table A.12 for more details on the structure of production by type of ownership and by economic sectors). Private companies accounted for 92.5% of exports and 83.6% of imports of goods. The private sector appears to be more efficient as compared to the economy as a whole. Profitability for enterprises in the private sector reached 7.2% in 2006, compared to 6.6% for the economy, 5.3% for state enterprises, and -6.6% (a loss) for municipal enterprises. Other important characteristics of the private sector in Ukraine are summarised in Table 3.2.

A significant reduction in absolute poverty has occurred. Economic growth and concerted efforts have brought about a reduction in poverty, which had sharply increased as a consequence of the continuous economic decline that occurred in the first decade of independence. Using World Bank methodology based on an absolute poverty line that reflects the costs of meeting minimum human needs, in 1999 the poverty rate in Ukraine was about 30% and increased to 31.7% in 2001. By 2005 it had declined sharply to less than 8% (Table 3.3).⁶⁶ The data on real wages and real incomes demonstrated strong growth in the period 2006-2008,⁶⁷ suggesting that the poverty rate is likely to decline further. Robust poverty reduction in recent years reflects the strength of the recent economic recovery as well as the efforts of the Ukrainian government aimed at preventing poverty among the working population, elderly retirees, people with disabilities, families with children, etc, via generous increases in minimum wages, public sector wages, pensions and social transfers (World Bank, 2005a and 2007d). Strikingly, poverty has decreased as a result of rising social transfers, even though the system of social assistance in Ukraine is considered inadequately targeted, with support provided to relatively self-sufficient categories of population and with some really needy groups excluded.

Table 3.3. Poverty rates and Gini coefficient 1999-2007

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Poverty rate/absolute poverty line (% of population) ⁽¹⁾	30.3	31.5	31.7	25.5	19.5	14	7.9	NA	NA
Poverty rate/relative poverty line (% of population) ⁽²⁾	27.8	26.4	27.2	27.2	26.6	27.3	27.1 (27.4)	28.1	27.3
Gini coefficient ⁽³⁾	0.285	0.293	0.303	0.299	0.298	0.29	0.299	0.302	0.252

Source(s): World Bank 2005a and 2007d for the World Bank measurement, Ukraine Institute of Demography and Social Sciences for the national measurement and the Ukraine State Statistics Committee (HBS) for the Gini coefficient.

Note(s): ⁽¹⁾ The World Bank measurement is equivalent to 1,813 UAH per year per person measured in 2003 prices and based on a minimum consumption basket that guarantees a daily intake of 2,508 calories (World Bank, 2007d, p.6). ⁽²⁾ The national measurement is equivalent to 75% of the median level of total expenditures. ⁽³⁾ In 1999-2006 inequality is measured on the basis of the average total expenditure per capita, in 2007 – average per capita total income.

As shown in the recent World Bank poverty assessment (World Bank, 2007d), poverty declined across all regions and industries, the remaining poor became less poor (as documented by a reduced poverty gap and declining poverty severity), and all groups benefited from the general rise in incomes in recent years. As might be expected, poverty rates are quite high for households with five or more members, families with several children aged 0-6, people with little education and the unemployed (especially the long-term unemployed).

As a result of policies implemented that have contributed to increasing the income of the population, a reduction in inequality in household income also occurred in 2007: the Gini coefficient in terms of total income decreased from 0.302 in 2006 to 0.252 in 2007 (Table 3.3), the P90/P10 ratio for financial income – from 4.5 in 2006 to 4.2 in 2007, and the share of financial income of the top 10% compared to the share held by the bottom 10% - from 8.7 in 2006 to 6.1 in 2007.

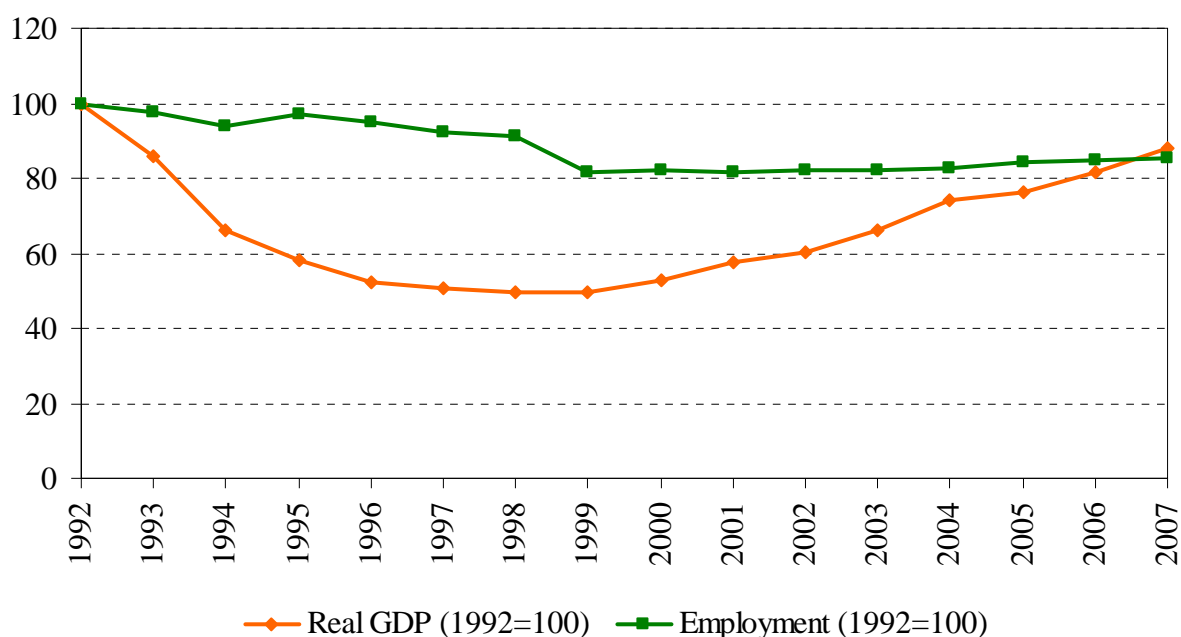
⁶⁶ The Ukrainian methodology for measuring the poverty rate on the basis of the relative poverty line results in a rate that has remained almost unchanged over the period (see Table 3.3). Although useful for its simplicity, the Ukrainian methodology does not accurately reflect the dynamics of poverty, according to experts (World Bank, 2005a, p.1): "Some of the major disadvantages of the existing relative line are: (i) it does not enable comparisons over time, making the linkages with growth and sectoral development very unclear; (ii) it is not linked with any notion of minimum consumption, lacking any real content in terms of living standards; (iii) the relative line could be affected by distributional changes without changes in the fraction below an absolute poverty line".

⁶⁷ The real wage index (year-on-year) was 118.3% in 2006 and 112.5% in 2007. The index for the first half of 2008 compared to the same period in 2007 was 109.5%. Comparable real income index changes were 111.8% for 2006, 112.6% for 2007 and 114.7% for the first half of 2008.

3.2 New job creation and mobility from old to new sectors

Employment losses were much lower than output losses in the early transition period. Transition towards a market economy necessarily involves substantial restructuring in the economy and a significant degree of labour reallocation across jobs, sectors, industries and geographic regions. However, in contrast to CEE transition economies, Ukraine — like other CIS countries — experienced a fairly slow decline in employment compared to large falls in GDP in the early transition years (Figure 3.17). By 1999, when the transition-associated depression had bottomed out, official real GDP had fallen to about 40% of its pre-transition level, whereas employment had only fallen by 20%. As a consequence, open unemployment on a massive scale was slow to emerge (see Chapter 1.C.II) and labour turnover appeared to be considerably lower than in other transition countries.

Figure 3.17 Employment and real GDP 1992-2007 (1992=100)



Source(s): Author calculations based on Ukraine State Statistics Committee data.

Note(s): The observation period starts in 1992 so as to make data comparable with real wages (see Figure 3.18), for which there are no data prior to 1992.

A large body of both theoretical and empirical literature put forward various explanations for the divergent labour market adjustment paths between CEE and CIS countries. The transition literature attributes asymmetries to differences in economic policies, particularly in terms of tightening budget constraints on state enterprises (Blanchard, 1997). Under conditions of soft budget constraints, rigid employment protection legislation and strong political support, many unprofitable enterprises in CIS countries tried to keep redundancies to a minimum at the cost of lower real wages and productivity (see Figure 3.18). Widely used adjustment mechanisms such as administrative leaves and forced short-time work, wage arrears and payment in kind helped enterprise managers and the government to avoid sharp employment reduction despite large production losses.

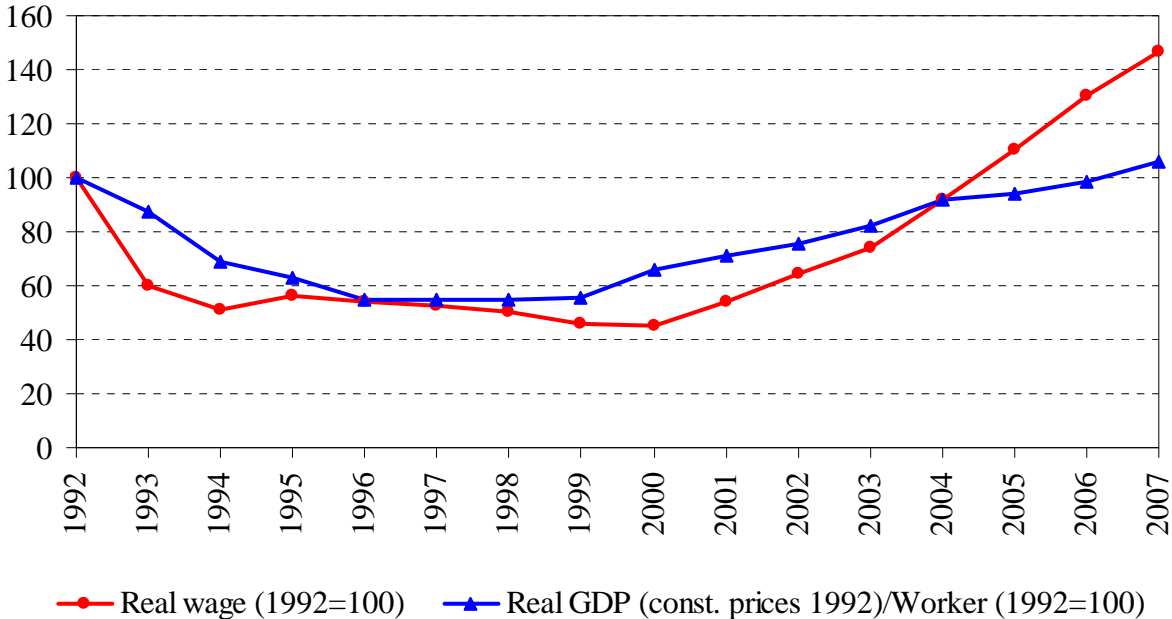
Boeri and Terrell (2002) added to the debate about the differences in labour market adjustment by concluding that many puzzles of transition could be explained by supply-side rather than demand-side factors, pointing to different labour costs in Central Europe compared to the CIS resulting from the different social policy models adopted in these countries.

There is now an emerging consensus in the literature that Ukraine is one of the transition countries that lagged behind in implementing the required reforms (Boeri and Terrell, 2002; Havrylyshyn, 2005). Delays in reforms created an environment of rent-seeking and oligarch society with “capitalism for the

few” and also contributed to a freezing of restructuring and job reallocation processes, sluggish growth of the new private competitive sector but rapid expansion of corruption and shadow activities.

The Ukrainian economy is experiencing virtually jobless growth. After Ukraine came out of its prolonged and severe transition depression in 2000, its economy grew each year (with the exception of 2005) at a high rate in terms of real GDP (see Figure 3.1 and discussion above). By 2007, GDP had reached 88% of the 1992 level. However, total employment has not increased substantially since then, approaching about 85.3% of its 1992 level in 2007 (Figure 3.17). The dynamics of wage employment was even poorer, showing a continuous decline and representing a total loss of 10.6 million jobs between 1990 and 2005 (or nearly 43% of all wage and salary jobs for 1990). Only in 2006-2007 did this trend stabilise, at the level of a total number of jobs around 14 million. There is evidence, therefore, of jobless growth in Ukraine — a fairly common phenomenon among transition economies. The major reasons, widely discussed in the literature (see, among many others, World Bank, 2006a), include: a) labour hoarding inherited from the 1990-s and defensive restructuring of large state-owned and privatized enterprises representing the old sector (to become more competitive, firms improve productivity and reduce total labour costs by shedding redundant labour or improving the utilisation of existing factors of production without hiring new workers); b) switching to new labour-saving technologies, especially in the manufacturing sector; and c) the small size of the new private sector and its slow growth due to administrative barriers, a burdensome tax system, high tax rates, corruption, regulatory policy uncertainty, poor access and high cost of finance (which constrains enterprise creation and growth. As a result, the number of new jobs created has been insufficient to absorb all previously displaced workers.⁶⁸

Figure 3.18 Real wages and GDP per worker 1992-2007 (1992=100)



Source(s): Author calculations based on Ukraine State Statistics Committee data.

Note(s): The observation period starts in 1992 because no data on real wages were available prior to 1992.

Real wages have been growing faster than productivity. Further wage growth that outpaces productivity may dampen labour demand and make domestically produced goods and services less competitive. Figure 3.18 shows that aggregate labour productivity, measured as the ratio of real GDP to employment, declined between 1992 and 1998 by 45%, but started to show strong growth from 1999. What is particularly interesting is that productivity started to increase one year earlier than real GDP, two years earlier than average real wages, three years earlier than total employment and much earlier than wage employment. This supports the hypothesis of improving productivity in the old sector

⁶⁸ See more on obstacles to company growth and doing business in Ukraine in Chapter 5.B.

by shedding redundant labour and better utilising existing factors of production. However, productivity gains were not translated into higher wages until 2001.

After the pattern of declining real wages reversed in 2001, the index of real wages grew at a much faster rate than labour productivity. As a result, real wages were almost on a level with productivity in 2004, and since then they have grown in excess of productivity. Fast growth in both GDP and real wages accompanied with virtually no growth in employment suggests that enterprise restructuring and economic growth have benefited, for the most part, workers employed in the formal sector (insiders) at the cost of unemployed people, marginal workers and those engaged in various forms of quasi-employment (outsiders). Real wage growth in excess of productivity growth seems to hint at the ability of workers to extract some benefits once the economy starts growing.

While fast wage growth in the private sector — represented largely by manufacturing, construction, trade, financial and other market services — is justified by relatively fast productivity growth, the same is not true of the public sector (see Raiser, 2007). As a result of step-by-step increases in the minimum wage (see Appendix Table A.13) — against which most public sector wages are indexed — and implementation of a unified wage grid for public sector employees (implemented in phases in September 2005, June 2007 and September 2008), wages in the public sector grew faster than in the private sector. Since the public sector still employs the bulk of workers, such rapid wage growth has led to a substantial increase in the public sector wage bill as a share of the state budget — at the expense of urgent public spending on infrastructure, maintenance and equipment, and on new capital investment. This is seen by experts as a potential constraint to future productivity growth in the economy overall (Raiser, 2007). Moreover, further wage increases above productivity growth in the economy are likely to hold up further employment growth and negatively affect the economy's competitiveness.

Microeconomic analysis of gross job flows within Ukraine and comparison with other transition economies could shed some light on the flexibility of firms, sectors and the labour market. A number of seminal empirical studies of job creation and job destruction in Ukraine have been conducted — employing firm-level data (Konings et al, 2003; Brown and Earle, 2004; World Bank, 2005a; Rutkowski, 2007; Christev et al, 2008) and individual-level data (Lehmann et al, 2005). Although these studies have some important drawbacks — including only partial coverage of economy (for example, industrial enterprises), small and non-representative samples or relatively old data (see Table 3.4) — they provide important conclusions on gross job flow patterns in Ukraine. These include:

- Downsizing of enterprises and labour shedding in manufacturing in the 1990s have resulted in fairly large job destruction rates, comparable to those in the flexible USA and UK labour markets, and negative net employment growth rates. Employment losses would be even greater if people on administrative leaves, those with shortened working hours and with wage arrears were taken into consideration properly. Job creation rates have been small from an international perspective, amounting to, at most, 4% in 2000 when industrial output started to grow (Tables 3.4 and 3.5). Despite the enormous cumulative employment contraction of roughly 50% in industry and about 27% in the economy as a whole throughout the period (the 1990s), jobs have been reallocated at an increasing pace as demonstrated by the high and growing excess job reallocation rates.
- The better overall performance of the Ukrainian economy after 2000 has been mirrored in some improvements in the labour market. As a result of a jump in job creation between 2001 and 2002, net employment growth became positive for the first time in 2002. Given the continuing relatively high job destruction rates, job turnover and excess job reallocation have also jumped. Thus, employment growth has been accompanied by an important process of job reallocation, with jobs simultaneously being created and destroyed.

Table 3.4. Job flow rates in Ukraine (%): literature review

Source	Period	Coverage and data source	Year	Job creation rate	Job destruct. rate	Job turnover rate	Net employ. growth rate	Excess job reallocation rate
Konings, Kupets, Lehmann (2003), Table 4	1999-2000	Manufacturing, firm-level Amadeus sample (1,259 firms)	1999	2.3	10.4	12.7	-8.1	4.6
			2000	4	7.3	11.3	-3.3	8
	1999-2000	Non-manufacturing, firm-level Amadeus sample (980 firms)	1999	3.1	11.8	14.9	-8.7	6.2
			2000	9.2	9.5	18.7	-0.3	18.4
Brown and Earle (2004), Table 1	1993-2000	Manufacturing, firm-level census-type data, only continuing firms (average yearly number 7,289)	1993	1.1	8.3	9.4	-7.2	2.1
			1994	1.2	11.6	12.7	-10.4	2.3
			1995	1.3	11.1	12.4	-9.8	2.6
			1996	1.6	11.2	12.7	-9.6	3.1
			1997	1.6	11.2	12.8	-9.7	3.2
			1998	1.7	10.0	11.7	-8.3	3.4
			1999	2.4	10.1	12.5	-7.7	4.9
			2000	3.4	8.6	12.0	-5.2	6.8
			ave.	1.8	10.3	12.0	-8.5	3.6
Christev, Kupets, Lehmann (2008), Table 1	1994-2000	Mining, manufacturing, electricity, gas and water supply, firm-level census-type data, only continuing firms (average yearly number 8,095)	1994	0.9	10.8	11.8	-9.9	1.9
			1995	1.6	9.8	11.4	-8.2	3.2
			1996	1.9	10.5	12.3	-8.6	3.7
			1997	1.8	11.3	13.2	-9.5	3.7
			1998	2.2	9.1	11.3	-6.9	4.4
			1999	3.0	9.4	12.4	-6.4	6.0
			2000	4.1	8.1	12.2	-4.1	8.1
			ave.	2.2	9.9	12.1	-7.7	4.4
Lehmann, Kupets, Pignatti (2005),	1998-2002, 2004	All sectors, individual-level data from ULMS	1998	0.7	5.2	5.9	-4.5	1.3
			1999	2.0	4.2	6.2	-2.2	3.9
			2000	3.3	4.8	8.1	-1.5	6.6

Figure 3.1			2001	2.0	3.8	5.8	-1.8	4.0
			2002	4.0	5.2	9.1	-1.2	8.0
			2004	12.0	4.8	16.8	7.2	9.6
			ave.	4.0	4.7	8.6	-0.7	5.6
Lehmann, Kupets, Pignatti (2005), Table III.5	1998-2003	Mining and manufacturing, firm-level data from the ILO Ukraine Labour Flexibility Survey (average yearly number of firms 1,510)	1998	2.5	9.0	11.5	-6.4	5.1
			1999	3.5	6.1	9.5	-2.6	6.9
			2000	3.9	6.5	10.3	-2.6	7.7
			2001	3.4	7.6	11.0	-4.2	6.8
			2002	6.9	10.9	17.8	-4.1	13.7
			2003	3.7	6.5	10.2	-2.8	7.4
			ave.	4.0	7.8	11.7	-3.8	7.9
Rutkowski (2007), Table 1	2007	All sectors, firm-level data from the World Bank Labour Demand Survey (1,250 firms)	2007	5.5	2.7	8.3	2.8	5.5

Definitions. The job creation (destruction) rate is the sum of all employment gains (losses) in all expanding (contracting) firms in an economy or sector divided by the total employment in an economy or sector. The job turnover (gross job reallocation) rate is the job creation rate plus the job destruction rate. The net employment growth rate is the job creation rate less the job destruction rate. The excess job reallocation rate is the job turnover rate less the absolute net employment growth rate.

Table 3.5. Job flow rates in selected countries (%): literature review

Source	Country	Period	Coverage and date source	Job creation rate	Job destruction rate	Job turnover rate	Net employment growth rate	Excess job reallocation rate
Brown and Earle (2002a), Table 3	Russia	1991-1999	Manufacturing, firm-level census-type data (approx. 16,500 firms)	2.4	10.3	12.7	-8	4.7
Brown and Earle (2002b), Table 3	Russia	1990-1999	Manufacturing, firm-level survey data (530 firms)	3.1	10.1	13.2	7	6.2
Acquisti and Lehmann (2000), Table 3	Russia	1997	Manufacturing and mining, large and medium firms, firm-level sample (2,029 firms)	2.6	10	-7.5	12.6	5.1
Konings, Lehmann, Schaffer (1996), Table 2	Poland	1991 (1988-1991)	Manufacturing, state firms, firm-level census-type data	1	17.6	18.6	-16.5	2.1
Faggio and Konings (2001), Table 3a	Poland	1994-1997	Manufacturing (except mining and utilities), firm-level Amadeus sample	3.3	5	8.3	-1.7	6.5
	Estonia			5	7.9	12.9	-2.9	9.9
	Slovenia			3.4	4.8	8.2	-1.4	6.4
	Bulgaria			2.4	5.6	8	-3.2	4.6
	Romania	1995-1997		3	8.1	11.2	-5.1	6.1
Haltiwanger and Vodopivec (2003), Figure 1a	Slovenia	1997-1999	Manufacturing, matched employer-employee data (4 sources)	10.3	10.5	20.8	-0.2	20.6
Haltiwanger and Vodopivec (2002), Table 6	Estonia	1994	Manufacturing, individual-level data from LFS	10.1	11	21.1	-0.9	20.2

Bilsen and Konings (1998), Table 5	Bulgaria	1991-1994	Manufacturing , firm-level survey	1.5	6.7	8.1	-5.2	2.9
	Romania			0.3	7.4	7.8	-7.1	0.7
	Hungary			1.1	6.6	7.7	-5.5	2.2
Bojnec and Konings (1999), Table 2	Slovenia	1991-1996	All sectors, firm-level survey (100 firms)	1.3	5.4	6.7	-4.1	2.6
Rutkowski (2007), Table 1	Georgia	2006	World Bank country studies, source unknown	8.7	6.6	15.2	2.1	13.1
	Moldova	2001		6.7	11.2	17.8	-4.5	13.3
	Croatia	2001		3.5	4.9	8.4	-1.4	7
	Bulgaria	2000		6.8	10.8	17.6	-4.1	13.5
	Lithuania	1999		9.7	10.7	20.4	-0.9	19.5
	Poland	1999		5.3	10.1	15.4	-4.8	10.6
Faggio and Konings (2001), Table 2	Belgium	1989-1995	All sectors, firm-level Amadeus sample	3.7	3.4	7.1	0.3	5.7
	Netherlands	1988-1995		6.5	2.7	9.1	3.8	5.2
	Germany			4.6	4.1	8.7	0.4	6.2
	UK	1987-1995		5.4	5.4	10.8	-0.1	9
Davis and Haltiwanger (1992), Table I	USA	1973-1986	Manufacturing , Annual Survey of Manufacturers	9.2	11.3	20.5	-2.1	18.4

Definitions. The job creation (destruction) rate is the sum of all employment gains (losses) in all expanding (contracting) firms in an economy or sector divided by the total employment in an economy or sector. The job turnover (gross job reallocation) rate is the job creation rate plus the job destruction rate. The net employment growth rate is the job creation rate less the job destruction rate. The excess job reallocation rate is the job turnover rate less the absolute net employment growth rate.

Job growth dating from 2002 has been largely driven by an expanding informal sector and self-employment. According to estimates based on the ULMS between 2003 and 2004, nearly 60% of all new jobs were created in the informal sector (World Bank, 2006a). As shown in Table 3.6 (based on the LFS data), the informal sector contributed more jobs than the formal sector to the Ukrainian economy between 2000 and 2007, with the exception of 2002-2003, when the informal sector experienced employment losses, and 2006-2007, when the formal sector surpassed the informal sector in employment growth (in numbers).

Table 3.6. Net employment growth 2000-2007

Net employment growth	2000-2001	2002-2001	2003-2002	2004-2003	2005-2004	2006-2005	2007-2006
Total employment	-448,300	119,700	72,100	132,400	384,300	50,400	174,300
Informal employment	291,300	208,300	-23,600	478,400	496,800	187,000	38,400
Self-employment	63,400	150,800	87,300	1,108,700*	429,900	174,300	93,400

Source(s): Author calculations based on Ukraine State Statistics Committee (LFS) data.

Note(s): * The considerable increase in self-employed numbers in 2003-2004 is mainly attributed to changes in the LFS methodology concerning the definition of the employed population (see footnote 2).

- ***Although job reallocation accelerated noticeably in 2002 it is still considered less intense than in other transition economies.*** In 2007, the job creation rate was 5.5% and the job destruction rate was around 2.7% (Rutkowski, 2007). This means that less than 3% of all jobs were reallocated away from contracting (and likely less productive) firms toward expanding (and likely more productive) firms. For comparison purposes, the job reallocation rate in countries such as Georgia, Moldova, Bulgaria and Poland was at least twice higher as in Ukraine (Table 3.5). Thus, microeconomic evidence for job flows is consistent with the view that reforms have stimulated restructuring and reallocation. Nonetheless, the relatively slow pace of reforms has been reflected in delayed and less productivity-enhancing job reallocation.
- ***Most job reallocation in Ukraine occurs primarily within relatively narrowly defined sectors rather than between sectors.*** This reflects a pattern in many other developed and transition economies (see, for example, Faggio and Konings, 2001; Brown and Earle 2002 a,b; Davis and Haltiwanger, 1992, among many others). The statement is supported by the results of a decomposition analysis of excess job reallocation (Konings et al, 2003; Lehmann et al, 2005), suggesting that most job reallocation takes place because of idiosyncratic factors that lead some firms to expand and other firms to contract within sectors, rather than as a result of job transition from one sector to another. Davis and Haltiwanger (1992, 1999) provide an extensive review of the theories related to the reasons for firm-level heterogeneity in labour demand changes, as follows:
 - uncertainty surrounding the development, adoption, distribution, marketing and regulation of new products and production techniques;
 - active learning, vintage capital and selection effects among younger and older plants;
 - differences in entrepreneurial and managerial ability;
 - idiosyncratic cost or demand disturbances;
 - slow diffusion of information on technology, distribution channels, marketing strategies and consumer tastes.

Any of these theories seem to be potential explanations for high rates of excess job reallocation within narrowly defined sectors in Ukraine. Testing them and selecting the most plausible one in the Ukrainian case requires further research, however.

- **Job flows in Ukrainian manufacturing tend to be highly persistent.** The one-year persistence rates for annual job flows show that roughly 70%-85% of newly created jobs last for at least one year, and about 90% of newly destroyed jobs fail to reappear a year later (Konings et al, 2003; Brown and Earle, 2004). Two-year persistence rates tend to be somewhat lower, but still reflect persistent firm-level employment changes in manufacturing, especially in the case of firm downsizing.
- **Job creation is usually stronger in relatively small newly established private firms.** This is in contrast with large state-owned and privatised firms, which downsized in the earlier transition period. However, according to recent estimates based on the World Bank Labour Demand Survey 2007, larger state-owned and municipal enterprises (with more than 250 employees) are experiencing more employment gains than smaller private firms (with up to 50 employees), given that the former destroy fewer jobs than the latter (Rutkowski, 2007). Thus, small private firms have very volatile growth performance but more intense job reallocation compared to larger firms. This suggests that the relatively young sector of small private firms is much more dynamic than the old sector of state-owned and privatised giants — a finding corroborated in many other transition economies.
- **Firms with higher labour productivity tend to have larger employment growth and smaller job reallocation** (Brown and Earle, 2004). As in many developed countries, the relative openness of sectors and firms to international trade is found to be of minor importance in determining gross job flows in Ukraine (Christev et al, 2008). Nevertheless, there is evidence that sectors which are more exposed to trade and competition in EU markets reallocate jobs faster, mainly through job creation. Sectors engaging more in trade with the rest of the world and the CIS in particular, however, show increased job destruction rates.
- Job flow rates vary greatly across the larger sectors (agriculture, manufacturing, services, construction, etc) and across industrial sectors. According to estimates by Brown and Earle (2004) for the period 1993-2000, the only growing industrial sector (according to the old classification) was the electrical sector. The industrial sectors most affected by the economic restructuring in terms of employment losses (with job destruction rates that were much higher than job creation rates) included machine building, light industry (textiles and leathers), wood and paper industry, and manufacturing of construction materials. As documented in a study by the World Bank (2005a, Table 2.5), there was a weak tendency for sectors with larger shares of total employment to experience both negative employment growth and relatively low job turnover.

Employment growth is particularly strong in trade and repair, financial intermediation, municipal and individual services, and construction. This is confirmed by recent estimates of sectoral job flows in Ukraine (see Table 3.7 below and Rutkowski, 2007). Employment in the public sector (public administration, education, health and social work) has remained almost unchanged, implying that these sectors are actually out of the job reallocation process and that there are forces other than the market that cause jobs to be created or destroyed. Many of the expanding sectors, especially in market services, experience not only high job creation, but also relatively high job destruction, both translated in very high job turnover and excess job reallocation (Table 3.7). This trend is common to virtually all the transition economies, in which a market services sector that was practically inexistent previously is on the rise.

Rates of employment growth calculated on the basis of official job creation and destruction data are significantly different from those estimated on the basis of aggregate employment statistics by sectors (see Table 3.7 and also Table A.3 in Appendix). According to the first source, the number of jobs created in agriculture and manufacturing in 2006 exceeded the number of jobs destroyed by 50,300 and 61,600 respectively. According to the second source, however, the same two sectors exhibited employment losses of 168,000 and 64,000 people, respectively, between 2006 and 2007. Furthermore, the yearly employment growth rate for the financial sector according to the first source is not so impressive as the rate given by the second source (4.6% vs 20.4%). The reasons for this huge discrepancy in figures may lie in different methodological approaches, definitions and sources of

statistical data.⁶⁹ It may be partially attributed to the undertaking of the Ukrainian government to create about a million jobs annually in response to election pledges (by President Yushchenko).⁷⁰ Even so, this is the only official source of statistics which provides data on job creation and job destruction covering all sectors and all type of jobs, with the exception of informal and casual employment.

Table 3.7 Sectoral job creation and destruction 2006

	Share in employment	Share in job creation	Share in job destruction	Job creation rate	Job destruction rate	Job turnover rate	Net employment growth rate	Excess job reallocation rate
Total	100	100	100	5.48	2.82	8.29	2.66	5.64
Agriculture	17.62	6.98	4.95	2.17	0.79	2.96	1.38	1.59
Manufacturing and mining	19.47	13.26	15.22	3.73	2.20	5.93	1.52	4.41
Construction	4.76	4.39	2.50	5.04	1.48	6.52	3.56	2.96
Trade and repair. Hotels and restaurants	21.24	53.12	55.81	13.69	7.40	21.10	6.29	14.81
Transport and communication	6.89	7.50	8.16	5.96	3.34	9.30	2.62	6.67
Financial intermediation	1.38	1.45	0.57	5.75	1.17	6.92	4.59	2.34
Real estate, renting and business activities	5.03	4.54	3.01	4.95	1.69	6.64	3.26	3.37
Public administration	4.99	1.37	2.78	1.50	1.57	3.07	-0.07	3.00
Education	8.15	0.42	0.66	0.28	0.23	0.51	0.05	0.46
Health and social work	6.54	1.20	0.99	1.01	0.43	1.43	0.58	0.85
Municipal and individual services	3.92	5.78	5.35	8.07	3.84	11.91	4.22	7.69

Source(s): Own calculations based on the number of jobs created and destroyed in 2006 (Public Employment Service, 2007, Table I.44) and employment in 2006 by sectors (Ukraine State Statistics Committee, LFS 2006, Table II.2).

Definitions. The job creation (destruction) rate is the sum of created (destroyed) jobs in sector j divided by total employment in sector j. The job turnover (gross job reallocation) rate is the job creation rate plus the job destruction rate. The net employment growth rate is the job creation rate less the job

⁶⁹ Employment statistics are primarily based on individual-level survey data (LFS), whereas statistics on the number of jobs created and destroyed is based on firm-level obligatory reporting to local government authorities.

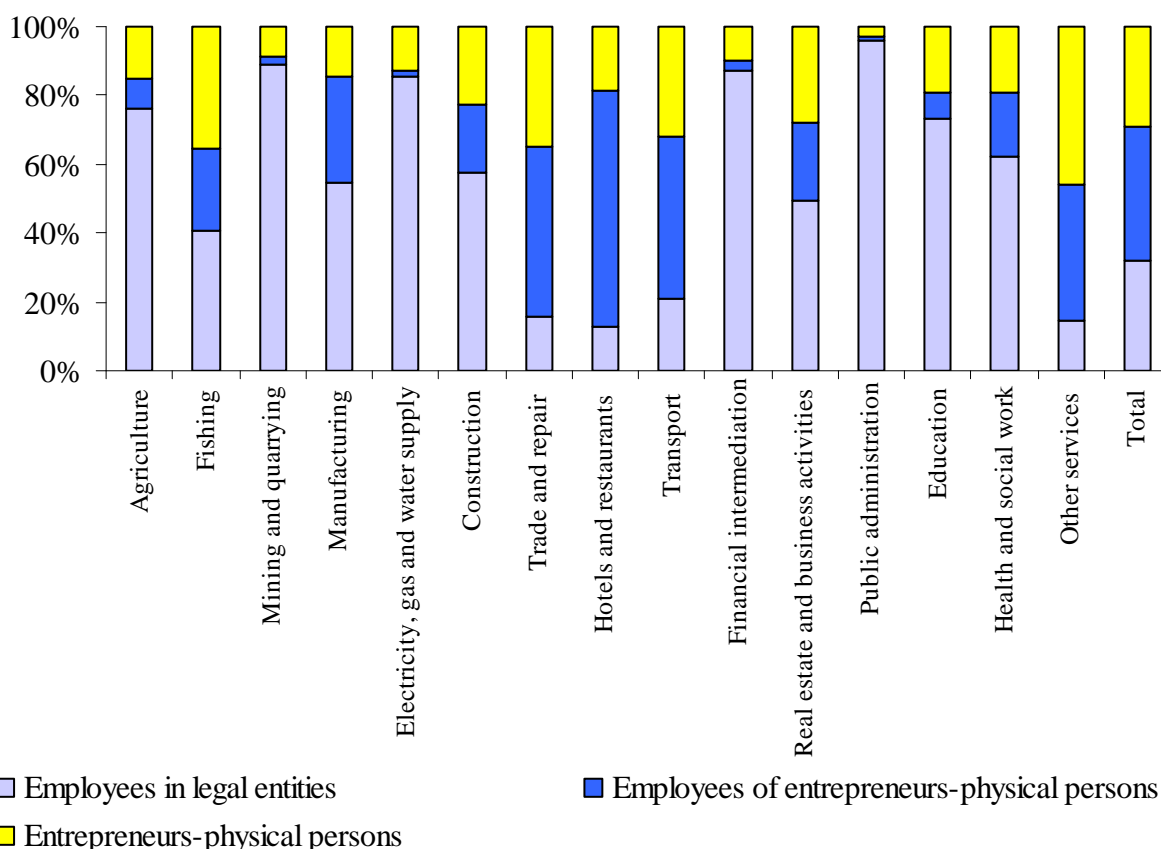
⁷⁰ The pattern of job creation in the early years of the new millennium was one of under 200,000 jobs created annually (156,000 in 2001, 163,000 in 2002, 181,000 in 2003, and 199,000 in 2004). However, after Presidential Decree No. 1073/2005 on Improvement of State Regulation of Employment and the Labour Market in Ukraine, according to which the government has been obliged to facilitate creation of over 1 million jobs annually over the period 2006-2009, the number of created jobs has significantly increased to over 1.1 million jobs.

destruction rate. The excess job reallocation rate is the job turnover rate less the absolute net employment growth rate.

A comparison of the shares in job creation, destruction and in total employment gives a rather consistent picture with the revealed sectoral job flow patterns (Table 3.7). The trade and repair sector contributed significantly both to job creation and destruction, with shares that were more than double the share of employment. The other sectors whose shares in job creation and job destruction exceeded their shares in total employment were transport and communication and municipal and individual services. The finance sector contributed a large number of new jobs, but its contribution to job destruction was negligible relative to its employment share. The contribution of manufacturing and mining to job destruction was roughly in line with its employment share, while its contribution to job creation was much smaller. Finally, agriculture seems to have contributed much less to job creation and destruction relative to its employment share.

Sectors also differed considerably in terms of types of created jobs (Figure 3.19). In the economy as a whole, about 40% of the jobs created were for employees of entrepreneurs-physical people, about 32% were for employees in legal entities, and the rest were created by entrepreneurs-physical people for themselves. Jobs created for employees of entrepreneurs-physical people dominated in hotels and restaurants (68.4%), trade and repair (49.8%) and transport and communication (47.3%). The latter two sectors were characterised also by a high share of jobs created by own-account workers (35% and 32%, correspondingly). The municipal and individual services sector was characterised by the highest and dominant share of jobs created by entrepreneurs-physical people for themselves (45.6%). In all other sectors, created jobs went to employees in legal entities, with shares varying from 40.9% in fishing to 96.2% in public administration.

Figure 3.19 Job creation by sector and type of jobs (% of total) 2006



Source(s): Author calculations based on the number of jobs created (Ukraine Public Employment Service, 2007, Table I.44).

There are two broad-based clusters of sectors by type of created jobs. The first cluster is represented by more dynamic and flexible consumer-related sectors with higher working capital

turnover and more possibilities for tax evasion and informal activities, where most jobs are created by entrepreneurs-physical people for themselves or for paid employees. These include hotels and restaurants, trade and repair, transport and communication and municipal and individual services. The second cluster is represented by sectors where jobs are typically created by corporate entities. It consists of the remaining sectors (Figure 3.19), with the exception of fishing and real estate and business activities, which are in the borderline area between the two clusters.

Jobs are created predominantly for skilled manual workers such as craft and related workers, plant and machine operators and assemblers. As recent survey and official data show, these two professional groups account for 53% of jobs created in 2007 (Rutkowski, 2007) and for 47.4% of vacancies notified to the Public Employment Service by the end of 2007 (Ukraine Public Employment Service, 2008, Table IV.22). A puzzle for many international experts is how a notable increase in market services employment can coincide with high demand for skilled manual workers and relatively weak demand for skilled non-manual workers.

We support Rutkowski (2007) in suggesting the following solution to this puzzle. First of all, it reflects the structure of employment by occupational groups and economic activity in Ukraine (see Figures 1.11 and 1.12 in Chapter 1), with important manufacturing and mining sectors and a growing construction sector; consequently, the share of blue-collar workers is growing. Another possible solution to the puzzle is that while demand for both skilled manual and non-manual labour might be high, it is more difficult to find highly skilled manual workers than it is to find professionals, technicians and associate professionals. There are several explanations for this situation:

- ***The number of experienced blue-collar workers has significantly decreased for a variety of objective reasons.*** Because of significant downsizing in manufacturing enterprises, caused by economic stagnation during the 1990s and by jobless growth during the early 2000s, many skilled manual workers have moved to jobs in adjacent sectors, to essentially different jobs in expanding sectors, to jobs abroad or to non-employment. Analysis of labour market transition probabilities by sector within Ukraine shows that 73% of workers employed in manufacturing in 2003 remained employed in manufacturing in a year, while 16.8% relocated to other sectors (mainly agriculture, trade and repair, transport and other services), 6.4% moved to inactivity and 3.9% tried to find another job being unemployed (see Appendix Table A.14). Low wages, wage arrears, poor working conditions in many industrial enterprises, a relatively low retirement age and negative demographic changes have also accounted for this washing-out of skilled craft workers, machine operators and assemblers. On the other hand, technological changes and economic restructuring have rendered obsolete many skills specific to old technologies and production structures. As a result, many previously highly skilled workers, unless retrained, have remained structurally unemployed or have frequently engaged in precarious activities which do not require specific skills.
- ***There is a shortage of highly skilled manual workers among newcomers to the labour market.*** The main factors driving this shortage are an inadequate response of the education and training system to changing labour market needs, the partial destruction of the vocational education system as a whole (see Chapter 2.A for quantitative indicators on vocational education), and the almost complete destruction of the career guidance system for young people. As a consequence, the structure of graduates by educational attainment does not correspond to the structure of unsatisfied labour demand. For example, out of 888,000 graduates of vocational schools, colleges and universities in 2007, 53% and 15% received a university diploma and a college diploma, respectively, and only 32% received a vocational school diploma. Labour market needs are quite the opposite, however. Furthermore, many graduates tend to have professions that are not in demand or lack essential skills required by employers. This forces them to work in fields not corresponding to their formal education⁷¹ or to experience unemployment after graduation from an educational institution (see Chapter 1.C on unemployment). Employers, meanwhile, face particular difficulties in filling job vacancies with skilled workers.

⁷¹ According to Rutkowski (2007), the World Bank Transition from Education to Work Survey indicates that over 50% of vocational school graduates report that they are not working in a profession associated with their studies; for university graduates the rate is around 36%.

There is a clear evidence of a substantial skills mismatch in Ukraine. The findings of the World Bank Business Environment and Enterprise Performance Survey (BEEPS) in 2005 show that 20% of Ukrainian employers consider the skills of available workers as a major obstacle to their business growth – a higher percentage than in other countries of the region (Rutkowski, 2007). A shortage of skills such as engineers, technologists, IT specialists, welders, electricians, turners, mechanics, painters, etc. coexists with an excess of supply in other skills, in particular economists, accountants, financial specialists, managers, lawyers, unskilled agricultural workers, etc. One important source of the skills mismatch is the restructuring of the economy resulting in differences in the skill content of newly created jobs compared to those jobs that are disappearing. The skills mismatch may also reflect a shift in student preferences and the non-responsiveness of the national education and training system to changing labour market needs. An analysis of statistics of the number of students in education institutions by field of study and expected degree points to an unchanging pattern in the structure of graduates for at least another 2-5 years, which will only aggravate the problem. Furthermore, the most important factor accounting for the existing skills mismatch in Ukraine is probably the rigidity of wages and their low responsiveness to the changing demand and supply conditions (Rutkowski, 2007). Low returns to some blue-collar skills that are in high demand together with poor working conditions result not only in the current reduction in availability of such skills but also in its future reduction because of the low prestige among young generations.

The ongoing restructuring of the economy, accelerated technological progress, globalisation and the opening of the world labour markets to highly skilled Ukrainians are likely to further contribute to aggravating problems such as the lack of qualified human capital, a skills mismatch, persistent and stagnant unemployment and underutilisation of labour resources. These, in turn, further restrict investment and growth in firms, development of modern sectors with high value added, and, consequently, overall improvements to economic performance and social welfare. Thus, policy priorities should be timely alleviation of all these problems, in particular the skills mismatch, and prevention of their negative outcomes via concerted efforts in education and labour market areas.

3.3 The informal economy and informal employment

The growth of a shadow economy, informal sector and informal employment is a specific feature of Ukraine's transition from a centrally planned to a market economy. The informal sector emerged in Ukraine as the result of a deep economic crisis but it is a significant and still growing component of the economy nowadays. This situation suggests that the legal and institutional frameworks and current policies seem to be in conflict with the economic and social environment and with the needs of the population and production units, resulting in incentives for informal activities (Fuenzalida-Puelma, 2004).

As shown in the study by the World Bank (2006a), the informal sector plays an extremely important role in creating jobs, providing income to the population (especially those hardest hit by the transformation of the economic system and the restructuring of the economy) and reducing inactivity and chronic unemployment. It does not, however, imply that people engaged in the informal sector are no longer living in poverty, are satisfied with their current labour market position and would not prefer a regular job in the formal sector. Nevertheless, employment in the informal sector is often the optimal decision, given the constraints faced by individuals in terms of skills and education, job preferences and local labour market conditions.

The population on the whole also gains from the informal sector, as they are consumers of the relatively cheap goods and services produced and provided by people engaged in this sector. Informal enterprises as well as formal enterprises hiring unregistered employees benefit from the avoidance of tax and social security contributions, greater flexibility in the labour and goods markets, sometimes illegal occupation of premises and the use of electricity, water and other raw materials at lower rates — all of which are seen to lower production costs and bestow a competitive advantage over other firms.

Following the System of National Accounts (SNA) 1993, the concept of a shadow economy includes the following:

- a) The illegal production and marketing of prohibited goods and services and the engagement in certain economic activities without the appropriate permits.
- b) Market-based legal production of goods and services deliberately concealed from public authorities to avoid certain kinds of payments (taxes, social security and other mandatory contributions), compliance with certain standards (minimum wages, maximum working hours, safety standards, etc) or compliance with certain administrative procedures (completing statistical questionnaires or other administrative forms, etc).

Because of certain disadvantages implied by direct approaches to the measurement of a shadow economy, indirect approaches are usually used. According to estimates by Schneider (2004), based on the DYMIMIC approach and currency demand method, production in the shadow economy (excluding underground criminal economic activities and the informal household economy) in Ukraine amounted to 52.2% of official GDP in 1999-2000 and to 54.7% in 2002-2003.

According to the most recent estimates of the Ukraine Ministry of the Economy, based on an integrated approach, the size of the shadow economy declined from 36% of official GDP in 2002 to 31% in 2003-2004, increased to 34% in 2005-2006 and again declined to 32% in 2007.⁷² The general trend towards a reduction in the share of the shadow economy is attributed mainly to specific measures implemented by the government. The major obstacles to a reduction are political instability, the negative expectations of producers and consumers with regard to macroeconomic developments, a range of institutional factors, ineffective privatisation and inadequate protection of property rights, over-regulation of entrepreneurial activity and unfair competition in some markets.

The informal economy, which is part of the shadow economy, refers to the informal household economy consisting of all household services and production. According to the national methodology based on the framework set by the Fifteenth ICLS Resolution and the SNA 1993, the informal sector includes unregistered production units in the household sector that produce at least some of their goods and services for sale or barter, employ five or fewer workers, and are not registered under specific forms of national legislation.

Taking into account specific features of the development of informal labour relations in Ukraine and recent discussions in the literature about the concepts of informal sector, informal economy and informal employment (ILO, 2002a and 2002b), a broader definition of employment in the informal sector has been accepted for Ukraine: the population employed in the informal sector consists of workers in informal enterprises (all people who, during a given reference period, were employed in at least one informal sector unit, irrespective of their employment status and whether it was their main or secondary job) as well as all unregistered employees in formal enterprises working under verbal contracts.

As has been mentioned (see Chapter 1.A), the main official information source for absolute and relative indicators of employment in the informal sector (the number of people employed in the informal sector and the rate of informality calculated as the ratio between this number and the total number of employed people) in Ukraine is the LFS. Other sources include household income and expenditure surveys and multi-purpose household surveys (for example, the ULMS).

However, even with this more inclusive definition, the national labour statistics fails to reveal the real magnitude and structure of employment in the informal sector, given that, in transition countries, it is usually not limited to typical informal activities (see Box 3.1). As pointed out by Fuenzalida-Puelma (2004), the dividing lines between the formal and informal sectors have become less apparent. Formal enterprises in both private and public sectors often use informal practices such as paying a proportion of wages unofficially, hiring people registered as entrepreneurs or under civil law contracts, etc. Individuals usually have a primary job in the formal sector, but many of them also work in the informal

⁷² According to the measurement methodology approved by the Ukraine Ministry of the Economy in 2006 but still being revised, the integral coefficient of a shadow economy is calculated as a sum of weighted coefficients obtained for four commonly used estimation methods. These methods include financial, currency demand (Gutmann method), electricity consumption, and the method based on discrepancies between household expenditures on goods and the retail trade size (http://me.kmu.gov.ua/control/uk/publish/category/main?cat_id=78295). Various methods give completely different estimates of the shadow economy. For instance, in 2007 the estimate according to the latter method amounted to 36%, while according to the other (financial/ electricity consumption/ and currency demand) methods it was 34%/28%/26%, correspondingly (see more at http://me.kmu.gov.ua/file/link/120191/file/Tend_2007.doc).

sector, normally in some sort of self-employment, e.g. tutoring by school and university teachers, providing part-time baby-sitting services by kindergarten teachers, providing medical services at patient's home or even at the hospital by doctors, providing translation services by people with knowledge of a foreign language, taxi driving by men of any primary occupation, etc. This informality is seen as a norm rather than a crime as most informal activities are relatively open, not illegal (i.e. not criminal) and not harmful to society. Informality in Ukraine seems to leak into most economic activities, absorbing more and more segments of the population and having become de facto institutionalized (Fuenzalida-Puelma, 2004).

Box 3.1. Spectrum of informal activities in Ukraine*

Urban informal sector activities, including street vending, cross-border trading, production of goods and services for individuals or firms in the formal sector, other subsistence activities by normally non-employed people, informal activities in addition to a main job in the formal sector (tutoring, driving, repairing, sewing, etc), activities of self-employed but not officially registered professionals (doctors, lawyers, accountants, artists, architects, etc).

Rural informal sector activities, mainly related to individual/family subsistence farming for sale or barter.

Informality within de-novo private formal establishments, where employers and workers collude to avoid full or partial payment of taxes and social contributions by: (a) hiring workers without a labour agreement, (b) hiring people registered as entrepreneurs or under civil law contracts, and (c) officially paying a proportion of a worker's salary (usually amounting to the statutory minimum wage or slightly above) and paying the rest as an unrecorded cash payment (in the envelope).

Informality within large state-owned or privatised establishments, where, in violations of national labour legislation, formally employed workers receive no wages or partial wages, are paid in kind, are forced to work part-time or are on unpaid administrative leave.

Criminal or shadow economy activities, such as money laundering, bribery, prostitution, smuggling, trafficking in humans, arms or drugs, etc.

* Based on Fuenzalida-Puelma (2004, p.3). Revised and augmented by authors of the report.

Employment in the informal sector in Ukraine has increased dramatically over the period 2000-2007. According to LFS data (Table 3.8), in 2007 the informal sector employed 4.7 million people, representing 22.3% of total employment for people aged 15-70.

Table 3.8. Size of the informal sector 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Number of employed in the informal sector, million people	3	3.3	3.5	3.5	3.9	4.4	4.6	4.7
Informality rate (in % to total employment)	14.8	16.4	17.3	17.2	19.4	21.5	22.3	22.3

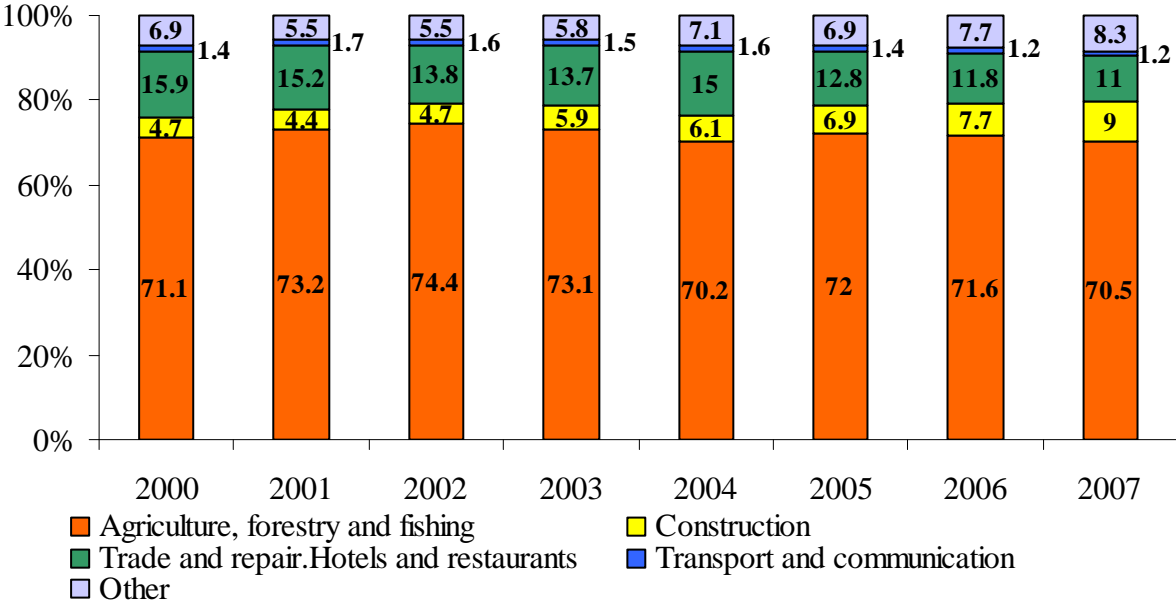
Source(s): Ukraine State Statistics Committee (LFS). Data represent people aged 15-70.

The informality rate in non-agricultural sectors is fairly low. Comparing the share of informal employment in non-agricultural employment, at 8% in Ukraine compared to 30%-93% in developing countries,⁷³ we can conclude that due to more favourable labour market conditions in urban areas,

⁷³ Data on informal non-agricultural employment for selected countries are available in ILO (2002b) or from UNDP (<http://hdrstats.undp.org/indicators/205.html>).

the Ukrainian population has a low propensity to take up non-agricultural activities in the informal sector (mainly, trade, construction and transport, as illustrated in Figure 3.20).⁷⁴

Figure 3.20 Informal employment by economic sector 2000-2007



Source(s): Ukraine State Statistics Committee (LFS).

The extremely high numbers engaged in unregistered agricultural activities is evidence of a severe crisis in agriculture. There has been significant growth in informal activities in rural areas — representing 70.5% of employment in the informal sector and 94% of total employment in agriculture — mainly in the form of subsistence agriculture taken up as a last resort for survival. Figure 3.21 reveals that, unlike urban areas, contributing family workers, self-employed people and employers in rural areas constitute much larger share of informal employment than wage and salaried workers.

⁷⁴ Here we need to distinguish carefully between a shadow economy and informal sector, which is one of many components of a shadow economy. Many people who receive a shadow income (wages or profit) are not covered by informal sector employment statistics. The high level of shadow incomes received by households is reflected in the high estimate of a shadow economy (36%), as calculated according to the method based on discrepancies between household expenditures and the retail trade size. It is also necessary to take into account the fact that many firms (in the services sector in particular) may register employees but not operations, mainly for tax evasion reasons. This results in a high share of the shadow economy in GDP, even if non-agricultural informal employment is fairly low.

Figure 3.21 Informal sector employment by status 2007



Source(s): Ukraine State Statistics Committee (LFS).

Men are more likely to take up riskier but better rewarded jobs in the informal sector. In contrast to the general trend found in most developing countries, where informal employment is a larger source of employment for women than for men (Maloney, 2004; ILO, 2002b), the proportions of women and men employed in the informal sector and their informality rates are almost equal in Ukraine, with a slight numeric superiority of men (Table 3.9). Over-representation of women among informal workers is often attributed to limited job opportunities in the formal labour market, to the downsizing of the public sector as a traditional employer of women, and to the greater importance of certain non-pecuniary job characteristics (such as flexibility and autonomy) for women, which, in many cases, are available only in the informal sector (Jütting et al., 2008). These arguments are also valid for Ukraine.

Table 3.9. Informal sector employment by gender 2004-2007

	2004	2005	2006	2007
Share in the informal sector (% of total informal sector employment)				
Female	47.4	49.4	48.6	48.6
Male	52.6	50.6	51.4	51.4
Informality rate (% of total employment in the corresponding gender group)				
Female	18.6	21.7	22.4	22.3
Male	20.2	21.2	22.2	22.3

Source(s): Ukraine State Statistics Committee (LFS).

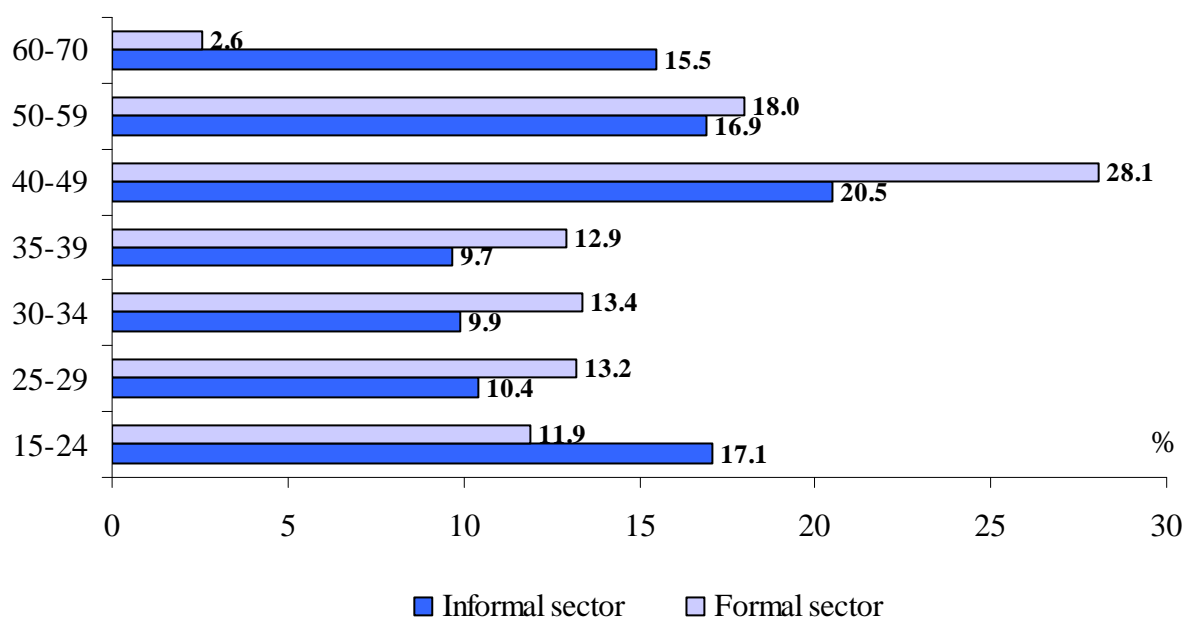
However, the higher number of males in the Ukrainian informal sector has to be explained and, in our opinion, this discrepancy could well be linked to the quality of jobs in the formal sector in Ukraine and the different job preferences of men and women. Since many jobs in the formal sector are poorly paid and of low prestige, men are more likely to take up riskier but better rewarded jobs available in the

informal sector, whereas women may still prefer formal employment because of fringe benefits, better working conditions and employment protection.

As Figure 3.21 shows, more women than men in informal employment are self-employed, employers or contributing family workers. Furthermore, while the share of non-wage employment in female informal employment is increasing over time at the expense of wage employment, the same indicator for men is moving in the opposite direction. The increase in non-wage employment among women in the informal sector seems to be related to their greater involvement in activities with the highest shares of non-wage employment, that is agriculture in rural areas and trade in urban areas.

Informal employment is the major source of work for people of retirement age (females and rural dwellers in particular). Detailed analysis of formal and informal employment by age group reveals that only the age groups at the two extremes of the age structure (15-19 years and 60-70 years) have larger shares in informal than in formal employment (Figure 3.22). Strikingly, the share of elderly people (60-70 years) in informal employment is six times higher than in formal employment, and this is the only age group for which informal employment is the major form of employment, with 63.5% of all employed people working in the informal sector (Figure 3.23). The widespread engagement of elderly people in informal employment seems to be mainly involuntary, and it probably is a response to age discrimination and to the fact that the official retirement age is too low (55 years for women and 60 years for men). For all other age groups formal employment is the predominant form of work.

Figure 3.22 Formal and informal employment by age (% of total) 2007



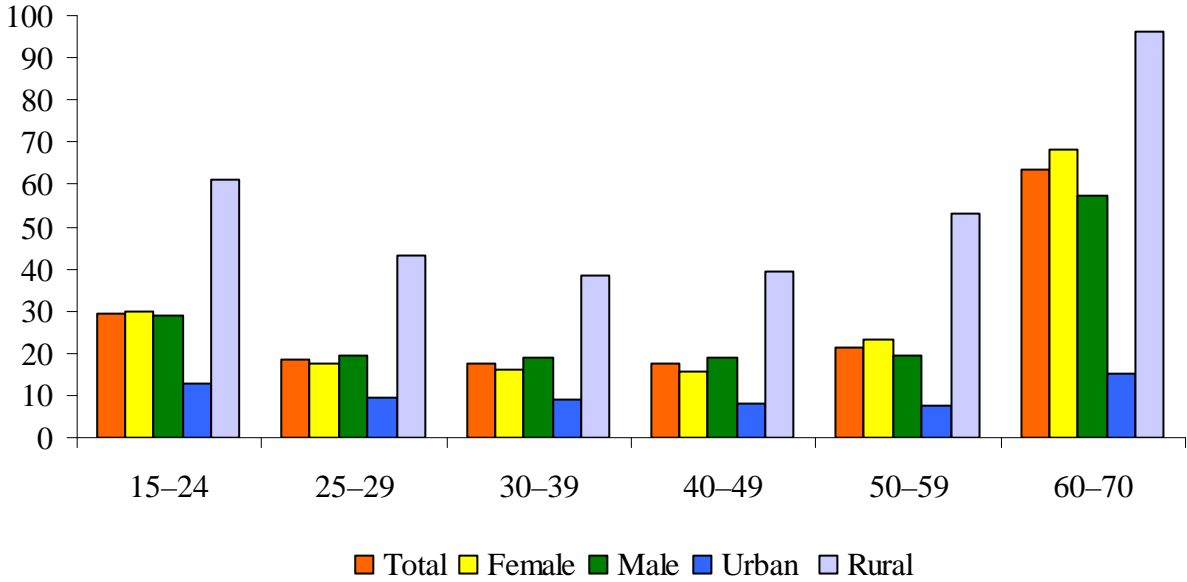
Source(s): Author calculations based on Ukraine State Statistics Committee data.

These findings apply mostly to both sexes, except for two main distinctions, which are mainly attributed to a lower retirement age and higher life expectancy for women. First, the incidence of informal employment among elderly women (60-70 years) is much higher than among men of the same age group. Second, in contrast to the male and total populations, women aged 50-59 years have larger share in informal than in formal employment. As a result, women constitute the majority of informally employed people in the oldest age groups (50-70 years), whereas men dominate in the other age groups (15-49 years).

An analysis of informality rates by age groups in urban and rural areas (Figure 3.23) shows that, unlike the urban employed population, which is mainly involved in formal activities (the informality rate is below 15% for all age groups), the rural population at the two extremes of the age structure (15-24 years and 60-70 years) is mainly engaged in informal employment (the informality rate for the older age group is 96.2%). While certain populations (mainly young men with some education and experience) tend to migrate from rural to urban areas, women, children and older people usually stay

in the countryside, where subsistence agriculture is often the only possibility for generating income and perhaps even surviving.

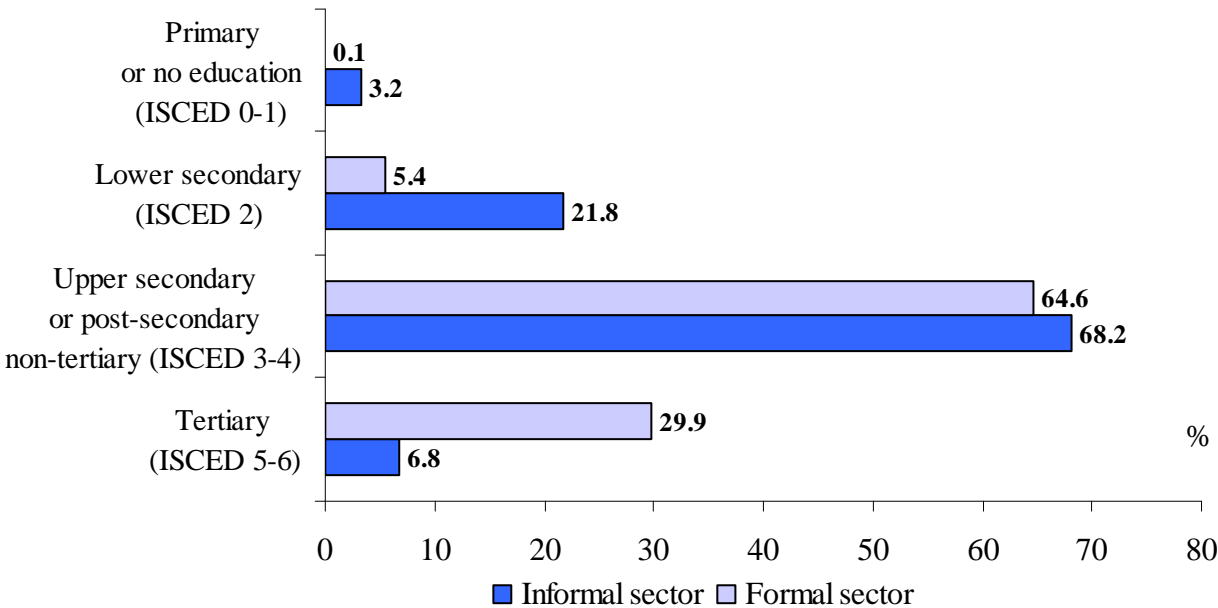
Figure 3.23 Informality rate by age group (% of total employment by age) 2007



Source(s): Ukraine State Statistics Committee (LFS).

Education in Ukraine is an important factor in determining selection into formal or informal employment. Individuals with little or no education are disproportionately represented among informally employed workers, whereas highly educated people are predominantly employed in the formal sector (Figure 3.24).

Figure 3.24 Formal and informal employment by education (% of total) 2007

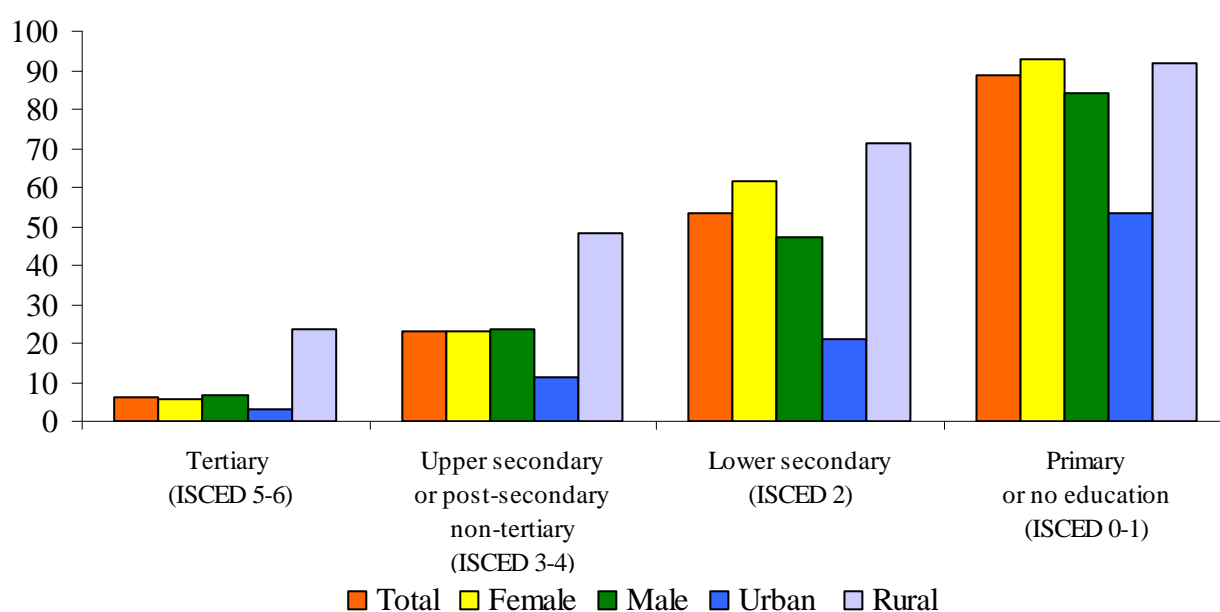


Source(s): Author calculations based on Ukraine State Statistics Committee data.

Note(s): Tertiary education includes complete higher and basic higher education; upper secondary or post-secondary non-tertiary education includes incomplete higher and complete secondary general education; and lower secondary education denotes basic secondary education.

As Figure 3.25 shows, the incidence of informal employment decreases with education. As many as 88.7% of people with primary or no education and 53.6% of people with lower secondary education find employment in the informal sector, whereas only about 6.1% of people with higher education are employed in the informal sector. This tendency is observed for both sexes and for urban and rural areas, although the informality rates for all education groups in rural areas tend to be higher than in urban areas. Thus, informal employment remains the most important form of employment for unskilled and disadvantaged individuals with low educational attainment. They tend to stay in the informal sector until they accumulate the necessary human capital to move to the formal sector, although inadequate education and skills often makes it difficult for them to do it.

Figure 3.25 Informality rate by education (% of total employment by education) 2007



Source(s): Author calculations based on Ukraine State Statistics Committee data.

Note(s): Tertiary education includes complete higher and basic higher education; upper secondary or post secondary non-tertiary education includes incomplete higher and complete secondary general education; and lower secondary education denotes basic secondary education.

Most informal wage employees and rural self-employed are involuntarily employed, whereas self-employed people in urban areas seem to voluntarily choose informal activity. Analysing the nature of informal employment in Ukraine and testing the validity of the three most prominent schools of thought on the role of informality in the development process, Lehmann and Pignatti (2007) have found that wage employment in Ukraine is best characterised in terms of three-fold segmentation: formal jobs making up the predominant employment relationship, upper-tier informal jobs that are well remunerated but to which access is restricted, and a majority of informal, free-entry jobs that can be had by anyone and which people mainly take up involuntarily.

Study of transitions between seven labour market statuses demonstrate that at all ages Ukrainian workers have a preference for formal employment relationships and that most of them take up informal wage employment or remain unemployed while waiting to enter a formal relationship as soon as possible (Lehmann and Pignatti, 2007). However, informal self-employment in urban areas is likely to be mainly voluntary, given that it is associated with substantial gains in earnings. Informal self-employment in rural areas is mainly linked to subsistence agriculture and extremely low returns. The authors find little evidence for the hypothesis of a life-cycle pattern for various employment statuses

(Maloney, 1999; World Bank, 2007b) according to which workers start their working life choosing informal wage employment for training purposes, then enter formal employment to acquire human and physical capital, with some tending then to flow into informal self-employment and eventually into formal self-employment. Instead, there is evidence for the theory that no matter at what stage a worker is to be found, most seek formal wage employment, which is the most favoured destination status.

As far as the link between informality and poverty and social exclusion in Ukraine is concerned, there are indications that higher rates of poverty and vulnerability occur among those in the informal sector and among the unemployed (World Bank, 2003). However, we adhere to the position of Maloney (2004) that poverty among informal workers is likely to be a function of low levels of human capital and other individual characteristics that ultimately result in low productivity, and whether a poor person works in the informal or formal sector is largely incidental.

Conclusions

Economic growth resumed in Ukraine only in 2000 due to successful macroeconomic stabilisation efforts and growing productivity in industry driven by the privatisation and restructuring of enterprises, management changes and improved capacity utilisation. However, the main engine behind Ukraine's economic recovery was strong merchandise export performance, explained mainly by external favourable conditions such as increased world demand and rising prices for metals, cheap gas supplies and real depreciation of the national currency. In more recent years, growth has been driven mainly by strong private consumption and accelerated investment demand as a consequence of ongoing industrial modernisation and a boom in construction.

Despite a growing share of services in GDP — reflecting the country's progress towards post-industrial development — industry is the only sector which contributes to the economy's gross value added more than to employment. The construction sector's shares are roughly the same, whereas agriculture and service sectors contribute to gross value added much less than to employment. This reflects low labour productivity and an extensive shadow economy in both the services sector and agriculture.

However, economic recovery has not been followed by significant improvements in the employment situation. The Ukrainian economy is experiencing virtually jobless growth, explained by defensive restructuring of enterprises in the old sector, the switch to new labour-saving technologies and the relatively small size of the new private sector (attributable to a number of factors that constrain firm entry and further growth). Fast growing GDP and rising real wages accompanied with virtually no growth in employment suggest that enterprise restructuring and economic growth have mostly benefited workers employed in the formal sector (insiders) at the cost of unemployed individuals, marginalised workers and those engaged in various forms of quasi-employment (outsiders).

Negligible employment growth in Ukraine since 2002 has largely resulted from the expansion of the informal sector and self-employment. According to official statistics on job flows, net employment growth is particularly strong in growing sectors such as trade and repair, financial intermediation, municipal and individual services and construction. However, a notable increase in market services employment coincides with a high demand for skilled and unskilled manual workers and a relatively weak demand for non-manual workers.

4. Labour migration

4.1 Internal mobility and immigration

Population redistribution patterns have changed in response to the abolishment of the requirement to acquire residence permits. The Ukrainian constitution protects the right to free movement. The freedom of labour force migration is enshrined in the Ukraine Labour Code, which now contains no requirements on registered housing for employees. Thus, the administrative restrictions that used to bind the labour force to local markets have been abolished.

Nevertheless, new market forces have replaced the administrative restrictions. A lack of housing, low incomes, poverty and other economic barriers prevent people from moving between regions. This might be one of the explanations why the transition to a market economy and the removal of barriers and constraints have not been reflected in any significant growth in internal migration. The rate of internal migration grew from 29.1/1,000 people in 2002 to just 30.6/1,000 people in 2007.

Another explanation is purely statistical. The main statistical source on migration is information based on the in-out registration procedure, whereby people complete a registration form at the local passport office on arrival and departure to a new permanent place of residence). Thus, data on migration provided by the Ukraine State Statistics Committee reflect only movements between places of permanent residence and so masks the true picture of migration flows.

Table 4.1 shows that most regions are a source of migration. The Vinnitsa, Zhytomir, Zakarpacie, Kirovograd and Sumy oblasts experienced steady net losses. Kiev (city) and Sevastopol are the only administrative areas with net migration gains.

Table 4.1. Net internal migration by oblast (per 1,000 people) 2002-2007

	2002	2003	2004	2005	2006	2007
Crimea	3.0	0.1	0.5	-0.3	0.5	0.5
Vinnitsya	-0.6	-1.2	-1.3	-1.7	-1.5	-1.2
Volyn	-0.8	-1.4	-0.7	-0.6	-0.1	0.2
Dnipropetrovsk	0.9	0.6	0.7	0.6	0.4	0.2
Donetsk	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2
Zhytomyr	-1.2	-1.2	-2.1	-2.2	-1.7	-1.3
Zakarpattya	-1.0	-1.2	-1.2	-1.2	-1.2	-0.9
Zaporizhzhya	-0.1	0.0	-0.3	-0.6	-0.6	-0.6
Ivano-Frankivsk	-0.4	-0.7	-0.6	-0.5	-0.6	-0.1
Kiev	-0.4	0.9	0.2	0.3	0.5	-0.7
Kirovohrad	-3.3	-3.7	-4.7	-5.0	-4.4	-4.0
Luhansk	-1.5	-1.6	-1.8	-1.5	-1.5	-1.4
Lviv	-0.8	-0.7	-0.7	-0.5	-0.4	-0.4
Mykolayiv	-0.7	-0.7	-1.4	-0.5	-0.6	-0.7
Odessa	-0.2	-0.5	-0.0	0.2	-0.2	0.1
Poltava	0.2	-0.1	-0.3	0.0	0.0	-0.4
Rivne	-0.4	-0.7	-1.3	-1.3	-1.0	-1.2

Sumy	-2.2	-2.4	-2.4	-2.1	-2.2	-1.8
Ternopil	-0.7	-0.8	-1.5	-1.3	-1.6	-1.4
Kharkiv	1.9	2.1	2.2	1.5	1.4	0.9
Kherson	-2.1	-2.8	-3.4	-3.0	-2.7	-2.7
Khmelnyskiy	-1.9	-1.5	-1.8	-2.2	-1.5	-1.4
Cherkasy	0.1	-0.2	-0.8	-0.9	-0.9	-0.4
Chernivtsi	0.4	0.2	-0.3	-0.1	0.4	0.6
Chernihiv	-0.9	-1.2	-2.3	-2.1	-1.2	-0.9
Kiev City	6.9	8.3	11.1	10.7	8.9	8.3
Sevastopol City	4.4	5.0	5.0	5.6	4.2	4.1

Source(s): Ukraine State Statistics Committee.

The main factors driving internal migration are economic rather than political. One of the factors driving local population movements in Ukraine is the economic attractiveness of an area. Like many other transition economies, Ukraine has inherited highly segmented local labour markets from the past (Friebelyand and Guriev, 1999) that are dominated by one or a few large companies. Thus, poor regional economic activity reflect depressed areas, and this is one of the strong driving forces behind interregional migration.

Table 4.2. shows net migration flows by regions and gross regional product (GRP) per capita. We assume that high GRP is evidence of economic activity in the region. A permanent negative balance of migration can be seen in the oblasts in which economic activity is relatively poor (marked in grey in Table 4.2), with a level of GRP that is substantially lower (50%-66%) than the average for Ukraine, in contrast with the steady high positive inflow of migrants for the most developed economic regions, namely, Kiev and Dnepropetrovsk. Industrial assets (heavy industry and machinery) are concentrated primarily in the eastern and central parts of Ukraine (Lvov excepted), and the western regions, which are less industrially developed and more agricultural, have migration outflows that reflect lower economic activity and rural underdevelopment.

The direct correlation between high regional economic activity and a positive migration balance is not true for three oblasts. First of all, the Donetsk oblast has a high GRP per capita (135% of the average for Ukraine in 2006) and a negative interregional migration balance (-0.2 per 1,000 in 2006). The reason for the outflows cannot be attributed to economic development; rather, the Donetsk oblast is ranked 12 out of 27 regions in terms of an integrated regional standard-of-living index (IDSS, 2006b); in other words, it has a relatively poor social environment (in terms of social security, social-psychological climate and risk of disease) and poor living standards (living conditions, transport, housing, etc). Secondly, although the Sevastopol and Kharkiv oblasts are ranked high on the integrated regional standard-of-living index (2 and 4 out of 27, respectively), they do not manifest high economic activity levels; their respective GRPs per capita are only 86.7% and 97.6% of the national average. Thus, factors such as attractive living conditions, developed infrastructures and social security prevail in terms of interregional migration.

Table 4.2. Net internal migration (% change) and gross regional product per capita (% of GDP per capita) 2004-2006

	2004		2005		2006	
	Migration	GRP	Migration	GRP	Migration	GRP
Kirovohrad	-4.7	70.4	-5.0	68.2	-4.4	66.4
Kherson	-3.4	62.5	-3.0	60.9	-2.7	58
Ternopil	-1.5	48.3	-1.3	49.1	-1.6	50

Khmelnyskiy	-1.8	62.5	-2.2	61.5	-1.5	60.3
Vinnytsya	-1.3	64.6	-1.7	63.6	-1.5	63
Zhytomyr	-2.1	60.4	-2.2	59.2	-1.7	57
Zakarpattia	-1.2	58.2	-1.2	57.3	-1.2	56.5
Kiev City	11.1	318	10.7	307	8.9	302.7
Sevastopol City	5.0	80.3	5.6	79.5	4.2	86.7
Kharkiv	2.2	98.7	1.5	96.3	1.4	97.6
Dnepropetrovsk	0.7	119.4	0.6	127	0.4	131

Source(s): Author calculations based on Ukraine State Statistics Committee data.

A persistent income disparity across regions is another factor driving interregional migration. Table 4.3 shows the balance of migration in comparison and regional average wages in 2007. With the exception of Volyn and Chernivtsi oblasts (with positive migratory balances), regions with migration outflows had lower than average wages. Regional differences have been enhanced since the beginning of economic transformation.

Table 4.3 Migration and average wage by oblast 2007

	Net migration (per 1,000 people)	Average wage, (% of national average wage)
Ternopil	-1.4	69.8
Ivano-Frankivsk	-0.1	74.9
Chernihiv	-0.9	75.2
Kherson	-2.7	75.3
Volyn	0.2	76.1
Donetsk	-0.2	76.5
Khmelnyskiy	-1.4	77.3
Chernivtsi	0.6	77.8
Mykolayiv	-0.7	78.0
Cherkasy	-0.4	80.3
Lviv	-0.4	80.7
Sumy	-1.8	81.3
Rivne	-1.2	83.8
Zaporizhzhya	-0.6	87.3
Vinnytsya	-1.2	87.5
Zhytomyr	-1.3	89.0
Crimea	0.5	90.3
Luhansk	-1.4	90.7
Kirovohrad	-4.0	92.0
Kharkiv	0.9	92.6

Sevastopol	4.1	96.4
Zakarpattya	-0.9	97.9
Kiev	-0.7	100.8
Poltava	-0.4	103.2
Odessa	0.1	107.7
Dnipropetrovsk	0.2	113.6
Kiev City	8.3	170.2

Source(s): Ukraine State Statistics Committee.

The economic development imbalance between rural and urban areas is another significant factor in internal migration in the Ukraine. Poor communication and transport infrastructures, modest public financing, unequal access to healthcare and education, a lack of decent employment opportunities and severe poverty in rural regions have resulted in continuous outflows from rural to urban areas. Table 4.4 reveals a steady growth in urbanisation in Ukraine. The share of the rural population in Ukraine is high—although declining compared to OECD countries. In 2007, the net migration flows per 1,000 people for urban areas was a positive inflow of 0.5 compared to a negative outflow (-1.0) from rural regions.

The scale of rural migration is not as great as would be expected given the poor rural infrastructures and living standards and a lack of jobs. One possible explanation for this conundrum is housing costs, which are very high in economically prosperous cities, and, given their low incomes, people from rural areas are often unable to meet travel and accommodation costs. Another possible explanation is hidden migration in the form of pendulum and seasonal migration that is not reflected in official internal migration statistics.

Table 4.4. Rural and urban population (%)

	1991	1996	2001	2002	2003	2004	2005	2006	2007
Rural	32.5	32.2	32.7	32.8	32.7	32.6	32.3	32.0	31.9
Urban	67.5	67.8	67.3	67.2	67.3	67.4	67.7	68	68.1

Source(s): Ukraine State Statistics Committee.

Certain political issues have influenced internal population flows in Ukraine. The positive migration balance for Crimea in the 1990s and the early years of the new millennium was due to the repatriation of Crimean Tatars hoping to retrieve property confiscated after they were deported in 1944. The results of this repatriation were reflected in the first All-Ukrainian Population Census in 2001, revealing that Crimean Tatar numbers increased fivefold between 1989 and 2001 (Malynovska, 2006); this ethnic group continues to add to the population of Crimea, mainly as families reunify. A more significant ethnic group is Russians, who historically find their homes in Crimea. Modern driving factors for Russians taking up residence in Crimea are political - according to unofficial sources of information, Crimean people can easily obtain Russian citizenship in addition to their Ukrainian citizenship (even though forbidden by Ukrainian legislation).

Thus, economic reasons were the main motivators for moving from one residence to another within the country. One more non-economic factor of regional immigration flows can be considered –student movement. Most of the oblasts have negative net migration for the 15-19age group, except e.g. Kiev (city), Kharkov, Odessa, Lvov, Dnepropetrovsk which are well known educational centres with the vast proportion of universities and colleges⁷⁵. Such migration movements explain the high number of interregional migrants in Ukraine in the 15-24 age group (7,424 per 100,000 people in 2007) comparative to other adult groups (3,028 for 25-34 year olds and 1,450 for 35-44 year olds, 954 for 45-54 year olds). We can also see that the migration activity goes down during working life. More

⁷⁵ For the 15-19 age group in the Kharkov region net migration (per 100, 000 people) in 2007 was 7,574, but for the 20-24 age group it was negative (- 3,394), that means that young people might leave the city when they graduate.

active behaviour can be seen at the beginning of people's careers and more cautious behaviour and unwillingness to relocate comes later on.

It should be mentioned that official statistics do not reflect the real migration process. The current number of interregional migrants may be much more impressive. Official data are based on the registration forms that people fill in when they relocate (registration of permanent residence). It means that the vast majority of labour migrants who come to a region and rent apartments (or even buy them) but without registering their residence are out of the picture.

Nothing can be said about labour migrants who "shuttle". A lot of Ukrainian enterprises attract labour from nearby small villages and neighbouring regions. But there is no data as to how many people in Ukraine work in regions other than where they live. Thus the statistical picture of the labour market and its supply-demand balance is imperfect in terms of interregional migration flows.

4.2 International migration

Recent years have witnessed important debates on international migration in Ukraine. The Ukrainian government has been forced to rethink and align its emigration/immigration policy in view of globalisation. Governmental migration policy is being changed along with growing understanding that women traffic is not the only problem for Ukraine, but also the fact that a reshaped labour market and changing social security system are the consequences of international migration. Nevertheless, little has been done to develop the grounded migration concept for Ukraine.

Too many governmental agencies are involved in migration processes. Migration policy in Ukraine to date has been ineffective, given that, in terms of the institutional framework there are around 7-8 governmental bodies responsible for regulating and monitoring migration processes, as follows: the Cabinet of Ministers, which coordinates the work of ministries; the Ukraine Ministry of Foreign Affairs, which protects Ukrainian citizens abroad and regulates visas; the State Committee for State Border Protection, which controls passports; the Ukraine Ministry of Labour and Social Policy, which regulates labour migration and social protection for Ukrainians abroad and foreigners in Ukraine; the Ukraine Ministry of Internal affairs, which records migration and prevents illegal migration and trafficking; the Public Employment Service, which enters into consultations on employment abroad and cooperate with international organisations; and finally, the State Committee for Nationalities and Migration, which develops migration policy.

No single body embraces all the activities and issues associated with migration within a unified conceptual framework. There is also a lack of migration methodology, relevant data collection and monitoring of migratory movements.

Information on international migration is incomplete and unreliable. The main obstacles to obtaining information on international migration are a poor methodical background and uncertain definitions of the main categories of migrants and their characteristics. There is no clear understanding in the literature and in official documents regarding permanent residents, temporary workers, students/ professionals abroad, family members and the like. As with internal migration data, official statistics on international migration are not full and reliable as they reflect only movements from/to Ukraine accompanied by registration of a permanent residence.

Data other than that of the Ukraine State Statistics Committee varies considerably; according to different sources and estimates the number of Ukrainians working abroad ranges from 2 million to 4.5 million and even 7 million people. Table 4.5 illustrates divergences between official and expert estimates.

Table 4.5 Ukraine labour emigration to selected countries

Country	Official statistics	Expert estimates
Russia	169,000	2,000,000
Italy	195,400	500,000

Poland	20,000	450,000
Spain	52,800	250,000
Portugal	44,600	75,000
Czech Republic	51,000	150,000
Greece	20,000	75,000
Netherlands	-	40,000
Great Britain	10,000	70,000
Total EU (Eurostat)	508,400	4,500,000

Source(s): Public Employment Service and Eurostat.

Ukraine is becoming a country of destination. In 1991-1992, Ukraine experienced high immigration flows, with the vast majority of migrants coming from former Soviet republics (Malynovska, 2006). After repatriation processes slowed down, the trend became a negative one, with the unfavourable economic situation provoking migratory outflows (mainly to Russia) and very small inflows to Ukraine. A positive migration balance was achieved only in 2005 (Figure 4.1). In 2007 the World Bank estimated Ukraine to be the fourth largest migrant-receiving country in the world (behind the USA, Russia and Germany)⁷⁶. As the World Bank report reveals, Ukraine (as well as Poland) serve as transit points for migrants on their way to Western Europe.

Figure 4.1 International migration (per 1,000 people) 2000-2007



Source(s): Ukraine State Statistics Committee.

The top ten source countries for migrants to Ukraine are Russia, Belarus, Kazakhstan, Uzbekistan, Moldova, Azerbaijan, Georgia, Armenia, Tajikistan and Kyrgyzstan. Arrivals from CIS countries accounted for 87% of immigrants in 2007. Table 4.6 shows that the main inflow was from Russia (42.3 per 100,000), Moldova (11 per 100,000) and Uzbekistan (6.6 per 100,000) (Table 4.6)..

Among the determinants of immigration are repatriation processes (mainly inflows from Russia and Moldova), with the proximity to Ukraine helping immigrants from Moldova to avoid economic tensions. Poorer Central Asian workers migrate to resource-rich Ukraine attracted by the high level of economic activity, rising standards of living and the development of democracy. Ukraine also serves as a transit point for migrants on their way to Western Europe.

The majority of immigrants (46% in 2007) are of working age; this is crucial for Ukraine as it ensures a better labour demand/supply ratio in the domestic market. Immigrants do not cause the problems of

⁷⁶ <http://web.worldbank.org/html>

unemployment and wage take-outs in Ukraine. As in Europe, discussions on the dual impact of migration on domestic labour markets (Rilly and Weale, 2006) may last for decades in Ukraine.

The top ten destination countries for Ukraine emigrants are Russia, the USA, Poland, Israel, Kazakhstan, Moldova, Germany, Belarus, Canada and Spain. Historically Russia has been the most important destination for Ukrainian migrants. The findings of the ETF recent study on migration (ETF, 2008) clearly placed Russia as the preferred destination and the highest proportion of prospective migrants (18.8%) mentioned Russia as their preferred destination. The survey shows a strong correlation between the place of residence of prospective migrants and their destination country. Those who chose Russia were located in the south (28.9%) and east (22%)—mainly Russian-speaking areas. The same findings in regard to Russia as the preferred destination were obtained in the survey conducted by the Ukraine Research & Branding Group in May 2008⁷⁷

Table 4.6 Officially recorded migration by origin and destination countries 2007

Country	Arrivals per 100,000	Departures per 100,000	Net balance
Total	100	63.8	36.2
Europe	58.8	51.2	7.6
Austria	0	0.1	-0.1
Belorussia	2.2	3.7	-1.5
Estonia	0.1	0	0.1
Spain	0.1	0.6	-0.5
Italy	0.1	0.3	-0.2
Moldova	11.0	1.3	9.7
Poland	0.2	0.5	-0.3
Russian Federation	42.3	37.6	4.7
Germany	1.0	4.4	-3.4
Czech Republic	0.1	1.1	-1.0
America	1.7	6.0	-4.3
Canada	0.2	0.5	-0.3
USA	1.3	5.4	-4.3
Asia	37.7	6.0	31.7
Azerbaijan	3.3	0.1	3.2
Armenia	3.3	0.1	3.2
Georgia	2.8	0.1	2.7
Israel	3.0	2.6	0.4
Kazakhstan	1.6	0.5	1.1
Kyrgyzstan	0.5	0	0.5
Tajikistan	0.6	0	0.6
Turkmenistan	0.8	0.2	0.6

⁷⁷ (<http://zadonbass.org/socioment>).

Uzbekistan	6.6	0.1	6.5
Africa	1.7	0.5	1.2
Oceania/Australia	0.1	0.1	0

Source(s): Ukraine State Statistics Committee.

The forecast of the Ukraine Institute of Demography and Social Studies predicts a positive migration balance (see Table 4.7). The ETF survey of migration in Ukraine (ETF, 2008) revealed that 26.7% of respondents were willing to emigrate, among them 46.2% who were likely (very likely) to migrate within the next six months. Migration pressures are increasing in Ukraine; consequently, migration policies and the challenge of migration management are coming to the forefront of the political agenda of the Ukrainian government. The survey conducted by the Ukraine Research & Branding Group in May 2008 indicates that 25% of respondents declared their willingness to emigrate.

Table 4.7 Net migration forecast (per 1,000 people) 2015-2050

	2015	2020	2025	2030	2040	2050
Medium scenario	43.8	60.7	85.3	89.2	79.4	73.5
Best-case scenario	62.0	81.1	107.9	117.7	117.2	121.6
Worst-case scenario	-1.8	0.9	7.4	13.4	-3.2	-5.5

Source(s): Libanova (2006).

Labour migration indicators are based on poor quality data. The only reliable (even if very incomplete) source of current information on labour migration is officially registered labour migration as monitored by the Ukraine Public Employment Service. Official data made available by the Public Employment Service shows that the number of Ukrainians working abroad—mostly males—almost doubled between 2001 and 2007 (from 36,329 to 73,184 people). PES statistics are based on information from the recruiting agencies, and therefore cannot include those hired by foreign companies directly or illegal workers. In 2008 the World Bank approved funding for and initiated a modular population survey on labour migration issues.⁷⁸ This survey is now the only representative dataset describing the socio-economic characteristics of Ukrainian labour migrants. The preliminary results, announced at a workshop (December 16, 2009, Kiev), shows the estimated number of labour migrants to be 1,476,100, or 5.1% of active workers (Libanova, Modular population survey, 2008).

The tendencies in labour migration are changing over time. In contrast to the beginning of the 1990s labour migrants today reside in small villages and rural areas rather than urban areas. They are also getting younger, and the share of the migrants with higher education is decreasing (Malynivska and Libanova, 2008).

Again as in international migration as a whole, Ukrainian labour migrants prefer Russia as a destination (48.5% of labour migrants). Other significant destination countries are Italy (13.4%), Czech Republic (12.8%), Poland (7.4%), Spain (3.9%), Portugal (3.0%) and Hungary (2.,4%) (Libanova, Modular population survey, 2008). Men dominate (995,900 compared to 480,200 women). The high proportion of males compared to females according to the official statistics of PES (Table 4.8.) may be partly explained by high levels of illegal female migration. Many Ukrainian women working abroad are employed in nursery and other low-skilled jobs that do not require a contract, and cannot be included in PES statistics. Some of them went to their destination country as tourists and stayed illegally. According to the modular population survey 2008, 64.9% of Ukrainian labour migrants have no residence permit and 68.3% have no work permit.

Table 4.8 Ukrainian labour emigrants by gender (% of total)

	2001	202	2003	2004	2005	2006	2007
Men	90.4	92.7	92.1	93.7	94	94.9	93.6

⁷⁸ The State Statistics Committee with the support of IBRD, IOM and the "Open Ukraine " Foundation has conducted the research based on an economic activity survey of a sample of 22,000 households. 48, 000 people of active working age were surveyed (women 15-54, men 15-59). The survey period was January 2005-July 2008.

Women	9.6	7.3	7.9	6.3	6	5.1	6.4
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Source(s): Ukraine Public Employment Service.

The statistics provided by PES show that Ukrainian migrant under labour contracts are high-skilled: 47.2% of them possess higher education and 36.1% have vocational secondary education, only 14.7% have general secondary education. The modular population survey states that the share of migrants with higher education of the overall number of labour migrants is not more than 13.5%. Most (59.5%) have general secondary education. Along with the improvement of economic climate in Ukraine and wage growth, highly educated people are more motivated to stay in Ukraine.

Nevertheless, the disparity in wages still remains one of the main motivators for migration. Thus, 6 out of 10 labour migrants mentioned this as the reason for their immigration. Unemployment is not overly-high and is even going down. According to an ETF survey, 67% of respondents give higher wages as the reason for their migration and 46% give unemployment, which has gone down compared to 2006 when it was 55% (ETF, 2008).

The term of employment for Ukrainians is around one year. 37% of migrants stay from one to three years in their country of destination, 23.7% from six to 12 months. 15% of labour migrants have been working abroad for more than one year. The distribution of labour emigrants shows that they are almost entirely and equally concentrated in two age groups: 20-34 years (41.6%), 35-49 years (44.5%).

The labour market impact of migration is not still very significant. Economic theory indicates that immigration should lower wages for competing workers and increase wages for complementary workers (Borjas, 2006). However, immigrants in Ukraine are not as yet a threat to local employment. There is no correlation between the level of wages and the net rate of immigration. The labour effect of immigration is rather more positive than negative. Highly qualified workers, in fact, contribute to the Ukrainian economy with their competence: 57% of labour immigrants to Ukraine were affiliated as managers in 2007, compared to 3.9% low skilled workers and 39% blue-collar workers. The positive effect of immigration on Ukrainian economy is that the high salaries of expatriate managers have raised salary levels for local managers. Local highly qualified specialists get more attractive salaries and social benefits as a result.

However in terms of low-skilled labour, a significant inflow of foreign workers forces out labour in domestic markets, e.g. the construction industry. Hidden and illegal immigration in the construction and retail sectors, in particular, is frequent. Even official statistics shows the great demand for construction workers: 3,300 of 5,000 work permits recorded with the Kiev Public Employment Service in May 2008 were issued to construction workers, with the remaining permits distributed mainly between retail trade (730) and industry (141) workers. Work permits were mainly issued to Turkish, Russian and Chinese labour migrants (2,800, 500 and 370 permits, respectively). But the positive outcome is that foreign workers are forcing local workers to raise their productivity and quality of labour.

Labour outflows have been more discussed in Ukraine. The Ukraine Ministry of Labour and Social Policy has declared labour migration to be a major priority. A crucial tool to encourage migrants to return is to raise wage levels and improve working conditions. A programme aimed at offering one million new jobs has been targeted at Ukrainians working abroad, given that the domestic labour market is losing a significant number of highly qualified workers, which has an impact on taxation and on the pension system. That said, the outflow of migrants has also helped Ukraine to avoid unemployment problems and reduce the rate of unemployment.

The findings of the modular population survey 2008 indicate a strong possibility that many migrants will return. Three out of four labour migrants admitted their willingness to come back to Ukraine. Thus the Ukrainian labour market should be ready for the growth of labour supply.

Besides the supply side – two more factors influence the labour market in terms of return migration. The first one is the experience that migrants can apply to their home country economy. According to an ETF survey, 50% of respondents noticed that their experience of working abroad had helped them to find better working conditions.

Secondly, migrants add to their home economies with their remittances. Though, remittances in Ukraine - 0.8% of GDP in 2006 according to the World Bank⁷⁹ — do not have much impact on labour market activity as they are used primarily to meet immediate family needs (consumption) or are saved. An ETF migration survey (ETF, 2008) revealed that 73% of remittances were used for living expenses and nearly 26% for furniture and consumer goods. The importance of remittances in alleviating poverty is more obvious than in increasing labour activity. Only 3.3% remittances were used by returning migrants to set up a business—a statistic corroborated by the fact that only 11.8% of returning migrants have set up their own businesses upon returning home (ETF, 2008).

Conclusions

Migratory patterns in Ukraine have changed substantially in recent years, although local migration processes are not very evident. A lack of housing, scarce financial resources, low human capital and other economic barriers prevent people from easily moving between regions. Weak economic development and the lack of employment opportunities in rural areas combine with economic barriers that impede the mobility of rural workers to urban areas to make subsistence agriculture the most important and often the only source of employment and income for the rural population in Ukraine. This explains persistently high informal rural employment and poverty.

Ukraine is changing slowly from a country of origin to a country of destination for migrants, and the forecast for the future is a positive migration balance. This will require the Ukrainian government to match migration policies with a renewed policy agenda. The approach to migration is changing and there is a growing understanding that not only is traffic in women a problem for Ukraine, but also a reshaped labour market and changed social security system—all the consequences of international migration. Although economic theory would indicate that immigration lower wages, immigrants to Ukraine are as yet no threat to the local labour market. The outflow of migrants has helped Ukraine to avoid unemployment problems and reduce poverty. The most significant problem facing Ukraine is return migration.

⁷⁹ See <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/Ukraine.pdf>. There are also some local experts who suggest a much higher remittances figure: 4 to 6 billion USD.

5. Employment policy framework

5.1 Employment policy

Employment strategy is formalised in a national employment programme and related documents. The latest national employment programme was approved in 2005 but only covered that year. Since then no new employment programme has been adopted at the national level. The main directions of the government's employment policy up to 2009 are stated in a regulation (No. 922, of 5 July 2006), used as a substitute for a national employment programme.⁸⁰ The main goal of the regulation is, while relying on available legal, administrative and economic mechanisms, to create favourable conditions for the following:

- Ensuring employment growth by maintaining effective jobs and creating new jobs in enterprises and establishments under all types of ownership;
- Developing self-employment and entrepreneurship;
- Educating and training the labour force according to the needs of economy and the labour market;
- Improving the quality of the labour force and developing on-the-job and life-long learning systems according to the needs of the labour market;
- Strengthening motivation for the creation and maintenance of formal and productive employment;
- Providing employment and special assistance to vulnerable social groups;
- Training and employing people with disabilities or with health problems;
- Activating and re-employing registered unemployed people;
- Formalising the informal economy and reducing informal employment;
- Legalising Ukrainian labour migrants abroad and strengthening their social protection.

The overall employment strategy in Ukraine has significant drawbacks. Although consistent with the ILO global employment agenda and local employment issues, employment strategy has a number of failings, such as the fact that it focuses on setting numerical targets that are not always justified and fails to highlight the most important of the many urgent issues to be addressed. Furthermore, official statements in the strategy tend to be declarations of intentions, as they are often not supported by practical tools, clear steps, and adequate financing.

A national action plan for employment for 2007-2008 has been adopted by the government. Implementation of the plan envisages the following main tasks and measures:

- To promote decent job creation, support re-employment of displaced coal mining workers, promote wage employment in rural areas, analyse investment activity and monitor job creation activity in accordance with a national programme for developing small towns and regional programmes for developing small enterprises and to take more control over enforcement of privatisation conditions as regards keeping workers (jobs) at privatised enterprises affected by privatisation plans and contracts;
- To enhance education and training and improve the quality of the labour force by adapting the education system to the needs of employers, improving legislation for state order in education, revising the list of professions obtained as a consequence of studies, developing legislation to involve employers in education, introducing a modern career guidance system, increasing the

attractiveness of blue-collar occupations, developing legislation to facilitate on-the-job training and developing and introducing a system of personnel certification, among other measures;

- To increase employment of vulnerable social groups by creating 2,700 jobs annually for people with disabilities or with health problems, developing legislation aimed at encouraging employers to hire worker from vulnerable social groups, promoting employment of people discharged from the armed forces and promoting self-employment and entrepreneurial activity among young people;
- To regulate international labour migration and improve protection for Ukrainian labour migrants abroad by preparing and ratifying bilateral agreements on protection of the rights of Ukrainian labour migrants with authorities in Spain, Italy, Poland and Greece, creating favourable conditions for economic activities by CIS citizens in frontier territories, improving legislation and taking more control over the use of foreign labour in Ukraine, etc;
- To provide special assistance to registered unemployed people (see Chapter 5.D).

A special government action programme includes a number of tasks in employment and social protection areas. This programme, approved by the Cabinet of Ministers (headed by Prime Minister Timoshenko) but not by the Parliament, does not specifically cover employment policy, although it does contain a number of tasks to be performed in this area and in general is consistent with the national employment strategy. These tasks include:

- To develop and implement a national employment programme that will ensure the creation of 1 million jobs annually, facilitate labour market forecasting, promote the creation of new jobs in developing industries, improve state order in education, provide for professional retraining and stimulate decentralised financing of skill enhancement for workers;
- To develop mechanisms for stimulating employers to create more jobs and provide first jobs to young people (including subsidised employment programmes for labour market entrants⁸¹);
- To develop a legislative framework that supports flexible employment;
- To promote labour mobility by disseminating relevant labour market information, creating additional stimuli in underdeveloped regions, developing seasonal employment systems and renovating worker accommodation;
- To create more public works and promote self-employment;
- To increase wages in the public sector and implement a 20% bonus for civil servants in rural areas;
- To increase minimum wages to the minimum subsistence level, develop legislation for the transition to an hourly minimum wage and implement differentiated minimum wages in different sectors;
- To prepare fully overhauled drafts of the Ukraine Labour Code and Law on Population Employment and to draft a Law on Social Dialogue;
- To improve social protection for Ukrainian labour migrants abroad;
- To promote employment in rural areas by increasing state order in education for agricultural specialists and by providing them with housing.

As can be seen from all the tasks and measures envisaged by existing regulations in the employment field, the Ukrainian government is attempting to address virtually all the employment challenges

⁸⁰ The Ministry of Labour is supposed to prepare a National Employment Programme for 2009-2011, but it is still an internal document.

⁸¹ This measure, launched in 2008, is aimed at young people who have professions specified by the government and currently limited to the eight professions in greatest demand on the labour market.

described in the previous chapter. However, it has not managed to formulate and implement a broader national employment policy that takes into account the full range of economic, social, demographic and other factors affecting employment. The main reason for this is that development and implementation of employment policy in Ukraine is largely the responsibility of the Ukraine Ministry of Labour and Social Policy. Due to a lack of cooperation and coordination between different line ministries, measures taken in adjacent areas are not usually consistent and are therefore not mutually reinforcing. The guidelines developed for promoting employment growth are not clearly linked to the agenda of relevant sectors and do not stipulate complementary measures such as reforms of pensions, healthcare and education systems, institutional and tax system reforms, development of adequate regional policies and many other policy measures in employment-related areas.

There are, in addition, other problems in the government's approach to employment and related issues:

- **Lack of governmental responsibility.** For political reasons, in recent years the Ukrainian government has failed to approve yearly and medium-term overall action programmes. Currently, the activity of the government headed by Prime Minister Timoshenko is regulated by a government action programme approved by the Cabinet of Ministers but not by Parliament (both approvals are required by the constitution). Thus, the government is not held to account for the results of its activity: it focuses on short-term objectives yielding political dividends but does not commit to any medium- and long-term goals.
- **Concentration on administrative measures.** Most programme measures are concentrated on active government intervention instruments such as increases in the minimum wage, price and exports control, obligation to create a specified number of jobs (addressed primarily to regional authorities), various employer penalties and sanctions for non-compliance with certain provisions, etc. However, the government makes little efforts to create an enabling regulatory, economic, financial, political and institutional environment that promotes business and creates good quality jobs.
- **Lack of coordination with budgetary policy.** Although the measures prescribed by the employment programme need significant financing, mainly out of local budgets, the overall resources needed for implementation are not stated. Local budgets lack financial autonomy, whereas the state budget does not cover all the governmental obligations and programmes to be financed from it. Thus, the probability of ad hoc yearly adjustments to the government action plan without policy goal revision is high.

5.2 Business environment and investment climate

Ukraine ranks far behind other European countries with regard to the number of active taxpaying businesses in operation. Small and medium-sized enterprises (SMEs) are widely recognised to play a key role in promoting growth and creating jobs. In a transition context like in Ukraine, the role of small businesses in the economy should be even more pronounced, since firms created de novo provide competition and limit the monopoly exercised by enterprises from the old (state) sector, open up possibilities for initiative and innovation, provide employment opportunities for displaced workers, act as a vehicle for developing new types of inter-firm cooperation and offer products and services demanded by consumers. Furthermore, the new private sector forms the basis for a middle class, which is a pillar of economic stability and further improvements in living standards (IFC, 2007).

Like in many other transition countries, Ukrainian policy makers have developed specific laws, policies and institutions to facilitate the creation and growth of new enterprises. However, as revealed by a survey (IFC, 2007, p.22), Ukraine is lagging far behind other European countries in this regard: there were 12 sole proprietors/19 SMEs per 1,000 population in Ukraine, compared to the 91/109 in the Czech Republic, 71/118 in Hungary, 72/79 in Poland and 27/76 in Estonia. The International Finance Corporation (IFC) survey also revealed a high number of unregistered entrepreneurs (about 25% of all sole proprietors). Furthermore (as has been discussed in Chapters 1.B and 3.C), the new private sector in Ukraine seems to be of much less importance in the generation of employment than in more

advanced transition economies. All these facts would indicate that there are still significant barriers to formalised business operation and growth in Ukraine.

Ukrainian business leaders have indicated political and government instability to be the main obstacles to doing business. An Executive Opinion Survey (WEF, 2008) has revealed great dissatisfaction of business leaders about policy instability, corruption, government instability, tax regulations and tax rates, rated among the top five most problematic factors for doing business in Ukraine (Table 5.1). Strikingly, the business sector and labour market have continued to grow at fairly high rates, despite the political and government instability that has deepened in Ukraine since the Orange Revolution in 2004. Nonetheless, the percentage of business leaders who perceive the instability of the political situation and government policy to be a major obstacle to business operations significantly increased in comparison with the 2004-2005 survey results.

High corruption is perceived to be the second major barrier to investment and business. According to the Transparency International Corruption Perception Index 2007, with a rank of 118 out of 180 countries, Ukraine lags significantly behind the new EU member states and also underperforms when compared to CIS countries such as Armenia, Georgia and Moldova.⁸² The high level of corruption combined with inefficient government bureaucracy (Table 5.1) suggests that issues related to governance and administrative capacity constitute one of the most important constraints to business operation and growth in Ukraine.

Table 5.1 Problematic factors for doing business in Ukraine 2007-2008

Factor	Share of responses 2007	Change compared to 2004-2005 survey
Policy instability	16.3%	moderate increase
Corruption	15.8%	slight reduction
Government instability/coups	13.3%	significant increase
Tax regulations	11.9%	moderate reduction
Tax rates	10.1%	moderate reduction
Inefficient government bureaucracy	9.3%	slight increase
Inflation	4.9%	moderate increase
Inadequate supply of infrastructure	4.3%	moderate increase
Inadequately educated workforce	3.5%	slight increase
Access to financing	3.1%	significant reduction
Poor work ethic in national labour force	2.6%	significant increase
Restrictive labour regulations	1.8%	moderate increase
Foreign currency regulations	1.4%	moderate increase
Crime and theft	1.1%	significant reduction

Source(s): World Economic Forum.

Tax administration, both in terms of tax rates and tax regulations, is another area that is viewed as problematic in Ukraine. With one of the most burdensome taxation systems in the world, Ukraine has a world ranking of 177 in this regard in the World Bank/IFC Doing Business Indicators. According to this survey, Ukrainian businesses have to pay 99 different taxes and spend 2,085 hours a year on tax payment procedures (World Bank/ IFC, 2007). Comparative data for other countries are: Switzerland, 63 hours; Singapore, 49 hours; and United Arab Emirates, 12 hours. Ukrainian

⁸² See the full list at http://www.transparency.org/policy_research/surveys_indices/cpi/2007.

enterprises are required to pay nearly 60% of their profits in taxes, while the global average is about 40%.

The high marginal burden on payroll taxes (also called social insurance contributions) and a rather complex system of four separate social insurance programmes for collecting payroll taxes encourage employers to find ways for lowering their tax burden and decreasing labour costs. Each social insurance programme has its own tax rate (Table 5.2), its own administration and operation systems through the corresponding insurance fund, and its own regulation. As Table 5.2 shows, total payroll taxes on average reach 40.5-41%, and most of the rate – around 37.5 % – is the employer’s share.⁸³

Table 5.2. Social insurance programme taxes (% of gross wages) 2008*

Contributions	Pension insurance	Unemployment insurance	Temporary disability insurance	Industrial accident and occupational disease insurance	Total
Employer	33.2 ⁽¹⁾	1.3 ⁽³⁾	1.5 ⁽⁵⁾	1.5 ⁽⁷⁾	37.5
Employee	2.0 ⁽²⁾	0.5 ⁽⁴⁾	0.5 – 1 ⁽⁶⁾	----	3-3.5
Total	35.2	1.8	2 – 2.5	1.5	40.5- 41

Source(s): “All about accounting” (Ukrainian weekly newspaper for accountants), No. 21 (1418), 3 March 2008.

Note(s): *Structure of the table is taken from World Bank (2006b, Table 2.5). Contributions do not cover health insurance as coverage is universal with free medical care for all citizens.

⁽¹⁾ 4% for workers with disabilities, 19.92% for payers of agricultural fixed tax.

⁽²⁾ Varies from 1%-5 % for some special categories of workers depending on their income.

⁽³⁾ 0% in special enterprises for the blind and deaf.

⁽⁴⁾ 0% for working retirees (including on preferential terms) and people of retirement age.

⁽⁵⁾ Varies from 0.5%-0.7% for workers with disabilities.

⁽⁶⁾ 0.5% if income does not exceed the statutory subsistence minimum for working-age people, 1% otherwise. 0.25% for workers with disabilities in special enterprises for the blind and deaf.

⁽⁷⁾ An average weighted rate. The rate varies from 0.66%-13.6% depending on the risk of industrial accidents. Public organisations are taxed at the rate of 0.2%.

Due to the existence, within a single insurance programme, of multiple rates applying to different types of employees working for the same employer and, furthermore, given the duplicative nature of the system for withholding and paying taxes to four different agencies, the social insurance system is rated as very complicated, cumbersome and ineffective (World Bank, 2006b). Since the system is very costly for employers, many try to avoid regular payroll taxes taking advantage of the existing simplified tax system (designed for entrepreneurs-physical people): they employ people who agree to provide services to a firm as if they were independent consultants (entrepreneurs within the simplified tax system), although in practice they have the same functions as other employees.⁸⁴

Alternatively, employers collude with employees to pay payroll taxes on only a proportion of wages (usually at a level just a little higher than the statutory minimum wage), paying the remainder of wages unofficially (in the envelope). Another frequent practice is to employ workers but not officially register them on the payroll. Consequently, a burdensome system of payroll taxes has given rise to lower tax revenues and an expanding informal employment sector.

⁸³ Total payroll taxes vary between 39.2% and 53.1% depending on the risk of industrial accidents. Payroll taxes do not include personal income tax (PIT), which is currently at 15%.

⁸⁴ The maximum tax burden under the simplified tax system is UAH 200 per month. For comparison, only PIT from the average wage of UAH 1917 (October 2008) amounts to UAH 287.55.

However, payroll taxes in Ukraine are estimated to be lower in Ukraine than in other CEE countries (World Bank, 2006a). This suggests that although payroll taxes increase labour costs in Ukraine, the increase is no larger than in more advanced transition economies. The problem is thus not tax rates per se, but rather the overall complexity of the tax system and the low cost-effectiveness of the social expenditure system.

Although some tax rates have been lowered, opaque and overly complicated tax regulations allow loopholes to persist. Old problems have not been resolved and this is hampering the country's competitiveness. Tax reforms that have been postponed include:

- The adoption of a tax code that includes a significant decrease in the number and complexity of procedures (postponed at least until 2010);
- The resolution of serious VAT refund arrears;
- An approach to tax legislation that is more stable (so as to avoid, for example, as happened in 2008, a voluntary change in tax administration procedures in the form of a ban on using promissory notes for imports or government appeals that ignore court decisions in favour of tax payers).

International surveys on the business and investment climate have not revealed tangible improvements in recent years. According to the Doing Business survey (World Bank/IFC, 2007), Ukraine has a ranking of 139 out of 178 countries and this overall position is not improving. In 2006 no positive reforms in this sphere were made, and Ukraine only entered the first 100 in two of ten areas (Table 5.3.). Ukraine's highest rankings were in *enforcing contracts* (rank 46, unchanged) and *getting credit* (rank 68, down six places from the previous year). The banking sector has grown rapidly over the last decade improving access to credit by businesses; nonetheless, Ukraine could get an even better ranking in this area if a fully operational credit bureau system was set up.

Table 5.3 Ukraine Doing Business rankings

Indices	2007	2006	Change
Ease of doing business rank	139	139 (128)*	
Starting a business	109	105	-4
Dealing with licences	174	174	0
Employing workers	102	103	1
Registering property	138	134	-4
Getting credit	68	62	-6
Protecting investors	141	141	0
Paying taxes	177	177	0
Trading across borders	120	116	-4
Enforcing contracts	46	46	0
Closing a business	140	139	-1

Source(s): World Bank/IFC (2007).

Note(s): *Rankings for 2006 on ease of doing business were recalculated using the new methodology and additional information on three new countries.

Ukraine has received very low ratings on a number of indicators, notably on *paying taxes* and on *dealing with licenses*, ranking as it does among the bottom five economies in the world. Neighbouring

countries that had previously been ranked below Ukraine have improved their positions by implementing necessary reforms.⁸⁵

Ukraine's ranking on *dealing with licenses* (174) is only marginally better. This indicator analyses the procedures, time and cost implied by building a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections and obtaining utility connections. In Ukraine, this process involves 29 procedures and takes 429 days, compared to 34 days in Korea, 38 days in Finland and 40 days in the USA. Overall, administrative barriers to doing business remain very high and therefore hinder economic growth (Box 5.1).

Complicated procedures for *starting up a new business* are another factor that negatively affect the business environment, requiring 10 procedures and 27 days in Ukraine compared to 2 procedures and 2 days in top-ranked Australia. No reforms have been made since 2005, when one-window registration offices were introduced that reduced the number of obligatory registration procedures from 15 to 10.

Box 5.1. Administrative barriers to doing business

- Ukraine's business regulation system, which is based on approvals and inspections, is one of the most stringent in the post-Soviet countries. For example, the number of businesses obtaining various approvals in a single year in Ukraine, at 54%, exceeds that for Belarus (45%), Uzbekistan (33%) and Georgia (6%), while the proportion of businesses examined by controlling authorities in a single year, at 95%, is as large as that for Tajikistan (96%).
- In 2006, the number of permits obtained by enterprises increased. While over the previous few years enterprises on average obtained from 3 to 4 permits a year, in 2006 enterprises applied for 4 to 5 permits. At the same time, the proportion of enterprises which obtained permits increased from 43% in 2004 to 54% in 2006. Furthermore, the total number of permits and other enabling documents (around 200) to be obtained remains excessively great; in 2006, enterprises allocated some UAH 67 million (USD 13 million) to employee working time spent on obtaining permits;
- Inspections remain as comprehensive and all-embracing as before: each year controlling bodies examine some 95% of enterprises. As in the past, the state bodies most actively involved in the process are the State Tax Administration, State Fire Safety Department and the State Sanitary and Epidemiological Service. In 2006 alone, each of them examined more than 50% of domestic enterprises.

Source(s): Based on the results of a survey of enterprises by the European Business Association, entitled *Barriers to Investment in Ukraine 2007*. Available from: <http://www.eba.com.ua/analytical/barriers.html>.

Other problems faced by Ukrainian businessmen are the extremely difficult procedures for closing and restructuring businesses and insufficient protection of property rights, with ranks of 140 and 141, respectively (World Bank/ IFC, 2007).

5.3 Labour legislation

The Ukraine Labour Code of 1971, as amended, is the principal legislation governing employment relationships. Other legislation affecting labour relations includes the Constitution (1996) and laws as follows: on Employment of Population (1991), on Labour Protection (Safety) (1992), on Labour Remuneration (1995), on Vacation and Leaves (1996), on Collective Agreements and Contracts (1993), on Trade Unions, Trade Union Rights and Guarantees of Their Activity (1999), on Collective Labour Dispute Resolution (1998), on State Social Industrial Accident and Occupational Disease Insurance (1999), on State Social Unemployment Insurance (2000), on State Social Temporary Disability Insurance (2001), and on Employers' Organisations (2001). Their provisions set

⁸⁵ According to the Ukraine Ministry of Finance, because of a problem of methodological inaccuracies (number of tax payments, etc), Ukraine should be ranked 167 rather than 177.

out virtually all the procedures that must be followed by employers (owners or their authorised representatives) and employees, including procedures before entering into and terminating an employment contract, the forms and content of labour agreements, working conditions for all employees and for specific groups of workers (for example, women and young people), wage and non-wage benefits, disciplinary procedures, employment protection, activity of trade unions and employers' organisations, collective bargaining and social dialogue. The Laws on Employment of Population and on State Social Unemployment Insurance and related legislative documents specify the legal framework for dealing with unemployed and displaced workers, including passive and active labour market policies (see Section D below).

The most typical employment contract is indefinite. The Ukraine Labour Code distinguishes between an employment agreement and an employment contract. The most common instrument is a standard employment agreement for which all legal provisions should be fulfilled. Unlike the employment agreement — governed by the rigid requirements of the Ukraine Labour Code — parties of an employment contract have discretionary powers to determine the terms and conditions of the employment relationship, such as contract duration, rights, obligations and responsibility of the parties, remuneration and working conditions and the grounds for termination of the contract, including early termination. However, an employment contract may only be entered into if expressly authorised by law. As a rule, employment contracts can be used for senior managers of companies but not for other employees. This is particularly important in the case of industrial enterprises and public sector organisations with a large share of workers covered by general, industrial and collective bargaining agreements.

Generally, employment agreements must be concluded in written form and for an unlimited period. However, in a few specified circumstances (namely, if the character of work, conditions of its performance or employee's interests make it impossible to establish an employment relationship for an unlimited period of time), the Ukraine Labour Code allows for an employment agreement to be concluded for a limited period agreed upon by the parties or for the period required to complete a given task.

In addition to employment agreements and contracts concluded and regulated in accordance with the Ukraine Labour Code, employers may contract either the services of individuals as physical people under civil law contracts or the services of individuals registered as entrepreneurs (within the simplified tax system) using contracts in accordance with the Ukraine Civil Code.⁸⁶ Employers benefit from such contracts in smaller payroll tax payments and greater flexibility in hiring and firing workers. Individuals who provide such services may benefit in higher net income and more flexibility but now lose in terms of non-wage benefits and employment guarantees, envisaged by the Ukraine Labour Code, and in terms of pension payments in the future.

Hiring regulations seem to be not very restrictive. The Ukraine Labour Code guarantees equal employment opportunities to all Ukrainian citizens. Consequently, in negotiating an employment labour agreement with a prospective employee, employers are not permitted to obtain information on political party membership, nationality, background, residence status (*propiska*⁸⁷) or data regarding private or family life, etc. For every employee working for more than 5 days in an enterprise a labour book should be kept (with the corresponding record on current employment). It represents an employee's employment history and so is vital in establishing rights to state-provided social benefits and pensions.

Employers have the right to establish a three-month probationary period (six months in some cases, on agreement with the corresponding trade union) for a newly hired employee, with some exceptions. For blue-collar workers the probationary period may not exceed one month. No probationary period is permitted for people from certain groups (people younger than 18, graduates from vocational schools, colleges or universities, people discharged from military or alternative service and people with disabilities directed to work according to medical recommendations). Probationary period is not

⁸⁶ As has been already mentioned in the previous section, many of such contracted individuals have the same regular functions as other staff employees. The difference is in the overall tax burden (all social insurance contributions and PIT) and formal regulations of labour relations.

⁸⁷ This provision on prohibition of requesting information about residence status (*propiska*) was added only in 1997, in accordance with an amendment to Article 25 dated 19/06/1997 of the Ukraine Labour Code. Before 1997, the residence permit system (*propiska*) was the major barrier to geographical labour mobility in Ukraine.

permitted also in the case of a direct transfer to another enterprise or organisation and in certain other cases specified in the legislation.

Dismissal is strictly regulated by the Ukraine Labour Code. The procedure for terminating an employment agreement between an employee and an employer is governed by different articles depending on the reasons and conditions of termination. An employment agreement may be terminated in the following cases: a) mutual agreement between employer and employee, b) expiry of the contract (except when both sides wish the employment relationship to continue), c) draft to military or alternative (non-military) service, imprisonment, d) termination of the contract on the initiative of an employee, employer or his authorised representative, or trade union, and e) other grounds as specified in the employment contract, etc.

However, an employer may only terminate an employment agreement for a limited number of reasons, such as:

- changes in production and work organisation (including liquidation, bankruptcy, reorganisation or staff redundancy),
- employee unsuitability because of insufficient skills or deteriorating health,
- systematic and unjustified failure by an employee to fulfil duties,
- unjustified absence from the workplace for more than 3 hours during a working day or for more than 4 consecutive months because of temporary disability (excluding parental leave),
- reinstatement of the employee who had previously held the post,
- narcotic, toxic or alcoholic intoxication in the workplace,
- theft in the workplace, etc.

The law prohibits the dismissal of temporarily absent employees (on sick leave or on vacation), pregnant women, women who have children under the age of 3 years (in some case 6 years) and single mothers who have children with disabilities or children below the age of 14.

Other provisions of the Ukraine Labour Code cover the dismissal of union members, which must be agreed with the corresponding trade union, the fact that at least two months notice must be given of dismissal and alternative employment should, if possible, be offered in the same enterprise or organisation. Simultaneously, employers must notify the dismissal to the local public employment office providing information on the employee's profession, occupation, skills and wage.

If an employment agreement is terminated for economic reasons (due to liquidation, bankruptcy, reorganisation of an enterprise or staff redundancy), the employer is obliged to pay severance payment amounting to at least one month's wage, in general. However, in the cases of draft to military or alternative non-military service at least two months' wages must be paid, and three months' wages if labour legislation or a collective or employment agreement has been violated.

The working week is strictly regulated by the Ukraine Labour Code. The working week in Ukraine is 40 hours. Any time worked in excess of 40 hours per week is classified as overtime and must be paid at double the rate of the regular hourly wage. Total overtime should not exceed 4 hours in two consecutive days and 120 hours in one year. Pregnant women, women with children under the age of 3 years, minors, secondary and vocational school students during term-time are not allowed to work overtime or to work at night.

Non-wage benefits are generous. According to the Ukraine Labour Code and other related legislation, adult employees in Ukraine are entitled to annual paid vacation of a minimum of 24 calendar days and minors are entitled to 31 days of paid vacation. Working students are also entitled to additional paid vacation for examinations, writing up and defending theses or dissertations, etc.

Paid maternity leave is available for 70 days before and 56 days after birth (70 days in the case of multiple births or complicated delivery). Women (or other relatives looking after a child) may take

additional unpaid leave until the child reaches 3 years of age (in some cases 6 years) and monthly children's benefit is funded by the government. During the entire period of parental leave, employees retain the right to reinstatement in their job and the period of leave is fully counted in the total length of service.

According to the Law on State Social Temporary Disability Insurance, insured people (whose employers pay contributions to the corresponding State Social Security Fund) are entitled to paid sick leave whose duration and amount depend on the total length of insurance payments. The first five days of sick leave are paid by the employer. Funeral benefits are paid from the State Social Security Fund in the event of the death of an insured worker or a dependent family member. In the case of disabilities connected with workplace accident or occupational disease, insured people are entitled to disability benefits and a pension from the corresponding fund.

Other non-wage benefits such as medical insurance, paid training, housing subsidies, transport subsidies, meal vouchers, etc. are regulated mainly via collective bargaining agreements or under individual employment contracts.

Labour market regulations are cumbersome and inconsistent. Labour legislation is represented by the detailed Ukraine Labour Code, supplemented by laws on related issues, presidential decrees and regulations issued by the Cabinet of Ministers — contributing to fragmented, unsystematic and often contradictory provisions and regulations. This situation has meant poor governance, uncertainty and legal irregularity in the field of employment and labour relations, which, in turn, discourages formal job creation while encouraging the development of various forms of quasi-employment (for example, employment on the basis of civil law contracts and contracts with people registered as entrepreneurs) and informal employment. Existing loopholes in the legislation allow employers to disregard many important worker rights and to discriminate against women with children, young people and other vulnerable groups.

It is widely acknowledged that the Ukraine Labour Code and related laws inherited from Soviet times are outdated and conceptually unsuited for a market economy. Despite numerous amendments, the body of laws has inherited the legacy of socialist labour relations, marked by fairly strong employee protection and detailed regulations governing every possible aspect of labour relations. This places a high procedural costs on employers and limits them in adapting the employment structure and wages to business needs.

Employment relations are over-regulated and non-wage labour costs are extremely high.

According to the Global Competitiveness Report (WEF, 2008), Ukraine's labour market is considered to be fairly rigid in international term, as indicated by a labour market flexibility ranking of 94 out of 131 countries — a ranking that is much worse than in most of the CIS and CEE countries. Ukraine ranks 86 in terms of the relationship between employers and employees (which is quite confrontational and worsening over time), 103 in terms of rigidity of employment, 120 in terms of non-wage labour costs, and 123 in terms of extent and effect of taxation. All this data points to an unfavourable environment for job creation and business growth in the formal sector. The same conclusion can be drawn on the basis of the Doing Business Indicators (World Bank/ IFC, 2007).

According to a cross-country study of employment legislation by Botero et al (2004, pp.1362-1363), in which 1 represents maximum protection, Ukraine has an employment legislation index of 0.66. This represents strict employment protection legislation compared to the UK (0.28), the USA (0.21) and other countries with legal systems that are Anglo-Saxon in origin but less strict legislation compared to most European countries with legal systems originating in France or Scandinavia (for example, Portugal, Spain, Germany, France and Norway have values of 0.81, 0.74, 0.70, 0.72 and 0.69, respectively). Ukraine's employment protection legislation is also less strict than in other countries that have inherited a socialist legal tradition, such as Russia (0.83), Kazakhstan (0.78), Kyrgyzstan (0.75), Georgia (0.77) and Latvia (0.72), although it is more strict than in Poland (0.64), Lithuania (0.63), Armenia (0.6), the Czech Republic (0.52) and Hungary (0.38).

Noteworthy is the fact that firing and hiring is not very costly for Ukrainian employers, as demonstrated by ranks of 17 and 16 in terms of firing costs and hiring and firing practices, respectively (WEF, 2008). Overall, labour legislation in Ukraine is not viewed by entrepreneurs as a significant constraint to

company operation and growth (World Bank, 2006a; WEF, 2008). This suggests that although labour legislation is extremely rigid on paper, it is not enforced and is widely evaded.⁸⁸

Achieving more labour market flexibility through the non-enforcement of legislation undermines the rule of law, exposes firms to costly uncertainty, impedes decent formal employment growth and leaves workers without adequate protection (World Bank, 2006a). Furthermore, better enforcement and faster economic restructuring are likely to cause labour regulations to enhance enterprise performance in the future, as has happened in more advanced transition economies.

There is thus an urgent need to revise labour legislation in Ukraine so that it strikes an optimal balance between the interests of employers — by deregulating employment relations and relaxing constraints on labour adjustment — and those of workers — by protecting their core rights, especially in the private and services sectors where unions are weaker.⁸⁹ In other words, Ukrainian labour legislation and institutions should apply the solution that is popular in many European countries: the provision of more flexicurity, defined as an integrated strategy to simultaneously enhance labour market flexibility and employee security.⁹⁰

High union and collective bargaining coverage reflect prevalence of old-type trade unions and slow development of the new private sector rather than a high level of workers' confidence in trade unions as civil society organisations. Most trade unions are part of the Federation of Trade Unions of Ukraine (FTUU), the legal successor of the Central Council of the Trade Unions of the USSR. However, a number of new independent unions have appeared recently whose membership seems to be growing. According to estimates based on data provided by the FTUU, the percentage of wage employees who are members of any trade union is 75%, while the percentage of wage employees who are members of the FTUU is about 68%.⁹¹

In 2006, 82.7% of employees were covered by collective bargaining agreements. Obviously, collective bargaining coverage is greater in sectors predominated by state- and municipal-owned enterprises (the maximum, 98.9%, occurs in forestry) and in industrial sectors (the average rate for industry as a whole is 93.1%), and relatively less in modern market services sectors (for example, 51.6% in financial intermediation and 52.4% in trade). These rates are relatively high compared to CEE transition economies, but lower than in some highly-unionised Western European countries such as France, Italy, Denmark and Sweden (see Lawrence and Ishikawa (2005) for data on these and other countries).

Firm-level trade unions do not properly defend the interests of workers.⁹² Most trade unions in Ukraine simply continue a tradition inherited from Soviet times, providing social services, recreational and cultural programmes and similar benefits to workers in return for union dues. Firm-level trade unions are very often under strong management influence and so are unable to push employers to increase wages or at least pay them on time, avoid lay-offs and improve working conditions.⁹³ Thus,

⁸⁸ Widespread evasion of employment protection legislation does not only mean informality, but violation of the rights and requirements of the Ukraine Labour Code for officially registered employees. One example (of many) of a widely accepted practice to ensure flexibility and avoidance of severance payments is that simultaneously on signing an employment agreement, new employees also sign an undated written request for voluntary termination of the employment agreement.

⁸⁹ The new draft Labour Code is presently under preparation for a second reading in the Ukrainian Parliament. Although it relaxes some of the constraints on labour adjustment it still over-regulates employment relations and provides fairly strong employee protection. In the opinion of employers' representatives, the draft Labour Code discriminates against employers and is not sufficiently market-oriented (<http://job.ukr.net/news/2008/06/10/26087>).

⁹⁰ See EU Commission Communication on flexicurity at http://ec.europa.eu/employment_social/news/2007/jun/flexicurity_en.pdf.

⁹¹ These unionisation rates are based on recent data provided by the ILO National Coordinator in Ukraine, Mr. V. Kostytsa, and leaders of the largest unions, indicating that FTUU membership is around 9.5 million including students, state sector employees, and employees of other sectors, whereas membership of all independent unions is about 1 million (of which 268,000 members of the Confederation of Free Trade Unions and about 135,000 members of VOST standing for the All-Ukrainian Union of Workers' Solidarity). The total number of waged employees in 2007 was around 14 million people.

⁹² A sociological survey of Ukrainian worker attitudes to trade unions conducted in 2001 revealed that more than half of respondents held a poor opinion of trade unions' main activities, such as efforts at increasing wages, mitigating the wage arrears problem, preventing open and hidden unemployment, ensuring compliance with the occupational safety rules, etc. More information on the survey results as well as on the role, problems and prospects of trade unions in Ukraine is available at <http://www.razumkov.org.ua/eng/journal.php?y=2001&cat=90> (in English).

⁹³ Moreover, following the old soviet tradition, top enterprise managers are often members of the old-style trade union (a part of FTUU). Independent trade unions exclude such possibilities from the outset of their activities.

to the dissatisfaction of many workers, firm-level trade unions fail to perform their proper role as representatives of worker interests and as reliable partners in social dialogue.

National and sectoral trade unions play an important role in wage determination while the role of employers tends to be limited. Existing employers' organisations in Ukraine mainly represent the interests of large, state-owned or privatised firms and not those of de novo private firms. The collective bargaining process at the national and industrial level is often dominated by trade unions and line ministries representing the government as the main employer, and the interests of private employers are often sidelined, leading to inefficiencies and a centralised approach to wage determination in Ukraine. This contributes to labour market imbalances in certain sectors and to significant wage pressures on small private businesses (World Bank, 2006a). Furthermore, it impedes the development of a genuine social dialogue that would balance the interests of employers with those of workers.

5.4 Labour market policy

The main principles underlying the unemployment insurance system and active labour market policies addressed at the unemployed are set forth in the Law on Employment of Population (1991), the Law on State Social Unemployment Insurance (2000) and auxiliary legislative documents. All these services are provided by the Ukraine Public Employment Service (PES) established in December 1990. The PES system includes 664 regional and base employment centres of different levels (starting from the district level in cities, following city, rayon and oblast levels, and ending with the State Employment Centre of the Ministry of Labour and Social Policy) which cover the whole territory of Ukraine. There are about 15,740 people working in the PES, 85.5% of whom are women, and over 90% of whom work at the base employment centres.

An unemployment benefits systems has existed since the early 1990s but was transformed into an unemployment insurance system in 2001. According to the above mentioned laws, individuals who are officially registered as unemployed with the Public Employment Service are entitled to unemployment benefits and unemployment assistance. Unemployment benefit is paid from the eighth day after the date of registration in the PES until re-employment but the overall duration of unemployment benefit payment is limited to 360 days over two years for the majority of the unemployed, to 720 days for people of pre-retirement age (men of 58 or older and women of 53 or older), and to 180 days for uninsured individuals with unemployment status looking for their first job and for some categories of dismissed military employees. If a person is registered as unemployed for a second time in two years, the duration of unemployment benefit in the second unemployment spell is calculated as the remains of the maximum specified duration over two years and actual duration of unemployment benefit during the first unemployment spell. A description of the calculation of the unemployment benefit is provided in Box 5.2.

Despite some tough regulations aimed at stopping income support during unemployment for people supposedly not inclined to work, the benefit coverage rate in Ukraine is fairly high by international standard, at 73% at the end of 2007. However, the unemployment insurance system seems to be less generous in terms of the benefit replacement rate: at the end of 2007 average unemployment benefit accounted for 20% of the average wage in the economy and for 64% of the statutory subsistence minimum. Analysis of the distribution of unemployment benefit recipients by monthly unemployment benefit amount reveals that, at the national level at the end of 2007, more than 80% of recipients were paid benefits amounting to less than the subsistence minimum and more than a third received benefits of 160 UAH (equal to 30% of the subsistence minimum).

Benefits are insufficient to keep unemployed people from abject poverty. The income support system for the unemployed does not comply with its aim of equity. Although benefit payments contribute to income, the unemployed still need other support in order to survive, such as the assistance of household members or other relatives or income from informal activities, casual work or subsistence agriculture (Kupets, 2006). As far as efficiency issues are concerned, it is highly unlikely that such low unemployment benefits are in any way instrumental in enhancing search efforts by the unemployed. However, there is empirical evidence that unemployment benefits often generate a discernible disincentive effect as far as leaving unemployment to jobs is concerned (Stetsenko, 2003; Kupets, 2006).

According to the Law on State Social Unemployment Insurance, the size of unemployment benefit depends on the reason for unemployment, the length of unemployment insurance payments (equal to the sum of work experience before 2001 and the length of unemployment insurance payments since 2001), average wage in the previous job and duration of unemployment. Those who did not pay contributions during a certain period before unemployment are not entitled to benefit.

1) If an insured person worked (including various forms of employment) and paid unemployment insurance contributions for at least 26 weeks in the 12 months before unemployment, was laid off for reasons outside his/her control, is registered on general conditions and is entitled to unemployment benefits, the size of his/her benefit is calculated as a percentage of his last average wage depending on the length of unemployment insurance payments according to the following schedule:

Length of unemployment insurance payment (years) < 2 2-6 6-10 > 10

Unemployment benefit as a % of average wage 50% 55% 60% 70%.

Depending on the duration of unemployment the final benefit paid is defined as a percentage of the unemployment benefit: 100% in first 90 days, 80% in the following 90 days, and 70% thereafter.⁹⁴ As a result, the amount of unemployment benefit is calculated as shown in the table below:

Length of unemployment insurance payment	Unemployment period	Unemployment benefit as % of average wage
< 2 years	first 90 days	50%
	next 90 days	40%
	remainder	35%
2-6 years	first 90 days	55%
	next 90 days	44%
	remainder	38.5%
6-10 years	first 90 days	60%
	next 90 days	48%
	remainder	42%
> 10 years	first 90 days	70%
	next 90 days	56%
	remainder	49%

Unemployment benefit cannot exceed the regional average wage in the previous month and cannot be lower than the subsistence minimum.

2) If an insured person worked (including various forms of employment) and paid unemployment insurance contributions for at least 26 weeks in the last 12 months before unemployment, left a job without strong reasons, is registered on general conditions and is entitled to unemployment benefit, the size of his/her benefit is calculated in the same way as for 1), except that payment of unemployment benefit starts from the 91st day at 80% of the specified amount.

3) The size of benefits paid for all other categories does not depend on the length of unemployment insurance payment and is set at the level of the subsistence minimum established by law. These categories covered both insured and uninsured people, including people dismissed for disciplinary reasons, people who worked or paid unemployment insurance contributions for less than 26 weeks in the last 12 months before unemployment; people willing to re-enter employment after a break of more than six months; people who worked or were engaging in entrepreneurial activity at least 26 weeks in the last 12 months before unemployment, did not pay unemployment insurance contributions but had work experience (equated to insurance experience) or insurance experience acquired before; people seeking a job for the first time and with no insurance experience, certain categories of dismissed military employees, etc.

⁹⁴ Before the Law on State Social Unemployment Insurance came into effect in 2001, the replacement rate for people who were laid off for economic reasons was 100% in the first 60 days, 75% in 90 days and 50% in 210 days. People who worked less than 26 weeks were eligible to unemployment benefits of no less than 50% of their wage and all other people were eligible for the established minimum unemployment benefit.

4) People who worked or who were engaged in entrepreneurial activity for at least 26 weeks in the last 12 months before becoming unemployed, who did not pay unemployment insurance contributions and do not have work experience (equated to insurance experience) or insurance experience acquired beforehand are not eligible for unemployment benefits.

Unemployed people who attend training or retraining courses are eligible for a stipend at the level of unemployment benefit calculated according to the above rules, except that the amount of their stipend cannot be changed during the training course depending on the duration of unemployment but remains equal to the amount defined at the beginning of the training programme. The duration of payment is scored up to the general duration of the benefit payment and cannot exceed it.

Unemployed workers with less than one and a half years to go to legal retirement age may be provided with a regular pension instead of unemployment benefit, paid for from the Unemployment Insurance Fund.

People registered as unemployed who have exhausted their unemployment insurance benefits are entitled to unemployment assistance given that the average per capita income in their families does not exceed the level of the statutory subsistence minimum. Unemployment assistance to the unemployed is paid at the monthly level of 75% of the subsistence minimum wage for 180 days.

In addition to passive income-support programmes, Ukraine — like most European countries — implements labour market programmes aimed at reducing unemployment by improving labour market functioning, known as active labour market policies (ALMP). In Ukraine the following types of ALMPs are usually provided:

- Public employment services targeting the unemployed, such as job placements (brokerage) and professional orientation (career guidance), which includes the collection and distribution of relevant information and the provision of consultative and advisory services, psychological assistance and job-search training, the organisation of seminars and job fairs, etc;
- Public employment services targeting employers, such as the dissemination of information on vacancies and on registered job seekers, training programmes to tailor unemployed workers to the specific needs of employers, assistance in filling vacancies, counselling on labour legislation issues, etc;
- Direct job creation for certain groups of unemployed people, such as displaced workers from the coal-mining sector or the armed forces;
- Labour market training programmes aimed not only at standard vocational training/retraining/ skills upgrading of people currently unable to obtain a suitable job but also at the provision of business administration, management and marketing training for registered unemployed people wanting to start their own business;
- Public works organised by regional or local authorities in cooperation with the Ukraine Public Employment Service aimed at providing temporary employment (up to two months), particularly to registered unemployed people;
- Special support in the form of reserved job placements (based on a 5% quota for organisations with 20 or more employees) to people from disadvantaged groups as described in the Law on Employment of Population (women with children under six years of age, single mothers with children under the age of 14 or children with disabilities, orphans, school graduates who have not been placed in jobs, other young people under the age of 21, workers within two years of retirement, ex-prisoners, ex-military personnel and people with disabilities);
- Wage subsidies to employers to encourage them to recruit registered unemployed people;
- A self-employment scheme in the form of a lump-sum payment of accumulated unemployment benefits for registered unemployed people wanting to start their own business.

Total expenditure on labour market policies have been relatively modest but not negligible by international standards. Apart from Mexico, which spends virtually nothing on labour market policies, most Western OECD countries have spent considerable more of GDP on ALMPs (OECD, 2007b) than Ukraine (Table 5.4).

Given the specific labour market problems and severe budgetary problems arising from transition, comparisons with other transition economies are particularly relevant. The Czech Republic (unemployment 7.2% in 2006) spends a moderate amount — around 0.5% of GDP — on labour market policies. Hungary (unemployment 7.5% in 2006) spent 0.68% of GDP on labour market policies. Poland and Slovakia (with higher unemployment rates in 2006, at 14% and 13.3%, respectively) spent just over 1% of GDP on labour market policies. Given fairly low unemployment rate in Ukraine (which peaked at 4.5% in 2000 and now is about 2%),⁹⁵ the Ukrainian government seems to have spent substantial amounts on labour market policies in comparative terms.

Table 5.4 State Unemployment Insurance Fund expenditure (% of GDP) 1996-2007

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total expenditure	0.14	0.21	0.32	0.40	0.37	0.51	0.65	0.72	0.70	0.57	0.55	0.51
Including:												
Unemployment benefits	0.05	0.14	0.20	0.26	0.24	0.27	0.32	0.32	0.28	0.27	0.27	0.24
ALMP	0.03	0.02	0.03	0.04	0.04	0.04	0.10	0.13	0.15	0.13	0.11	0.10
Public Employment Service operational costs	0.04	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.08	0.08	0.09	0.08

Source(s): 1996-2000 “Rynek praci v Ukraini u 2006 rotsi”, Table XI.4. 2001-2007 “Rynek praci v Ukraini u 2007 rotsi”, Table XI.4.

Note(s): Data for 2007 are preliminary. Prior to 2001, this fund was called the State Employment Fund.

As in most European countries, the bulk of all expenditure by the State Unemployment Insurance Fund is allocated to passive labour market policies, mainly unemployment benefits. Expenditure on ALMPs has been very low in Ukraine by regional standards, reaching a maximum of 0.15% of GDP in 2004.

Positive trends are evident in labour market policy developments in recent years. Comparing the detailed data on expenditure on passive and active labour market policies in 2003 and 2007 (Table 5.5), analysing the data on the number of participants in various ALPMs over the period 1998-2007 (Table 5.6) and examining other activities of the PES, the following positive trends in labour market policy developments can be observed in Ukraine:

- There has been a marked shift in the balance between passive and active labour market policies, with a growing share of expenditure devoted to the latter.
- Within the ALMPs, there has been a change in the share of expenditure devoted to demand-side versus supply-side measures, with increasing emphasis on the former. In terms of participation levels, however, supply-side measures are more popular than demand-side schemes.
- Within the demand-side approach, there has been a shift from mass direct job creation schemes towards indirect job creation measures such as employment subsidies for employers and self-employment schemes for the unemployed. At the same, public works continue to be one of the most important ALMP measure applied in Ukraine in terms of participation level. Participation levels in subsidised jobs and start-up business schemes are still very small compared to public works.

⁹⁵ Since labour market policies are aimed primarily at the registered unemployed, it is preferable to take into account the registered unemployment rate, which is much lower than the unemployment rate according to the ILO methodology (see Chapter 1.C.II).

- Within the supply-side approach, the balance has begun to shift towards schemes delivered through the PES that focus on job information provision, counselling, job-search support, career guidance, etc — often less costly, per capita, in monetary and time terms but with significantly higher coverage. It is necessary to note, that in addition to traditional methods of informing job seekers and employers about vacancies, job seeker profiles and services provided by the PES in local employment offices and via employment fairs, the PES has recently introduced and now actively uses more up-to-date methods such as all-Ukrainian Internet job portals,⁹⁶ an interactive multi-channel telephone information system, mobile communication (for example, sending text messages about vacancies), public transport information displays (mainly in Kiev), etc.

Table 5.5. State Unemployment Insurance Fund expenditure on labour market programmes 2003 and 2007

Programme	2003*	2007*
Public employment services (information and counselling services connected with job placement and career guidance)	3.99	2.80
Vocational training	5.21	3.39
Employment subsidies	5.11	8.21
Job creation programmes for displaced workers from the coal mining sector	5.41	3.63
Public works	1.82	2.32
Unemployment benefits, including lump-sum unemployment benefit to start up own business, stipend during training, unemployment assistance and funeral benefit	60.21	52.12
Early retirement for labour market reasons (reimbursement to the Pension Fund)	4.83	4.19

Source(s): Reports on Budget Execution of the State Unemployment Insurance Fund of Ukraine in 2003 and 2007.

Note(s): Expressed as a percentage of total Fund expenditures.

- There has been a trend towards activation of the unemployed and other categories of the population, by strengthening their motivation in the following aspects: a) active positioning on the labour market in Ukraine by making unemployment benefit conditional on strict job-search and acceptance criteria and helping all job seekers to find a suitable job in the domestic labour market; b) independent job search by providing training in effective job-search techniques and in how to present oneself to an employer; and c) choosing the right profession in accordance with current and future labour market needs and individual personal characteristics by providing career guidance services not only to current job seekers but more importantly to school children and students.
- There has also been a move towards an individualisation of measures and development of so-called tailored approaches, aimed at addressing the specific needs and characteristics of individual job seekers and providing an optimal package of measures to improve their employability and shorten the period of job search.
- The national system of career guidance has been improved. The Concept of a State Career Guidance System in Ukraine was adopted in September 2008. The PES was the main initiator. The Concept aims at developing the career guidance process and raising working force competitiveness in the local labour market. It should be based on (a) employer and community representative participation in the management of a career guidance system, (b) broad implementation of IT technologies, (c) the development of up-to-date standards in career guidance, (d) appropriate financing provision, (e) differentiation of career guidance and redirection tools. The Ministry of Labour along with the Ministry of Education have introduced the Internet Career Connection system. One thousand computer terminals have been placed in Ukrainian schools and another 10 500 are to be deployed in 2009. The terminals give access to information

⁹⁶ See portals at www.dcz.gov.ua and www.trud.gov.ua.

that helps pupils to discover the career directions that best match them, as well as information for teachers and parents.

- There is an increasing emphasis on market orientation in programme design and fuller involvement of employers in collaboration with the PES. Market-oriented initiatives attempt to influence not only the attitudes and motivation of job seekers, but also the attitudes and perceptions of employers towards the registered unemployed, most of which are disadvantaged groups. Effective collaboration between employers and local employment offices is found to promote stronger focus on demand-side needs, to enhance the prospects of job placements and to match workers with available vacancies more effectively. In 2007, more than 20 types of activities and services for employers were provided by the PES, including various types of information and counselling services, staff recruitment and specific training if necessary, assistance of employers in job advertisement and promotion of their companies among unemployed, etc. The number of unemployed who participated in training customised to the specific needs of employers (134,000 people) doubled in 2007 compared to the previous year. In addition, 28,400 registered unemployed people participated in training classes on the fundamentals of entrepreneurial organisation, 36,000 took part in training oriented on developing useful skills for running a business, and nearly 37,000 upgraded their skills via on-the-job training.

Unlike other government institutions, the Public Employment Service has built on economic growth and favourable labour market conditions to become more effective. This is demonstrated by indicators such as the following:

- The job placement ratio (people employed with the help of the PES as a proportion of all registered job seekers) increased from about 20% in 2000 to 45.4% in 2007 (see Table 5.4).
- The staffing rate (vacancies matched with the help of the PES as a proportion of the total number of vacancies) increased from 36.1% in 2005 to 45.1% in 2007.⁹⁷
- The average duration of registered unemployment (average duration of registration for all unemployed on the PES register) declined from 12 months to 7 months and the share of registered long-term unemployed was reduced from 36.8% to 19.8% between 2001 and 2007.
- The job placement ratio after training (with the help of the PES) increased from less than 60% in 2000 to 72.6% in 2007 (95% in some regions) and another 3.1% (13.4% in some regions) of unemployed trainees found work without the assistance of the PES.

Economic growth has favoured Public Employment Service activities in two ways. The rapid growth in the total wage bill has meant that total revenues for the State Unemployment Insurance Fund have significantly increased and, at the same time, the number of registered unemployed has declined, resulting in less expenditure from the Fund on passive labour market measures (PLMPs). As a consequence of both these developments, substantial funds have been released. Pursuing several effective management strategies aimed at improving the cost-effectiveness of Public Employment Service expenditures and better targeting of provided services, senior managers of the PES have achieved considerable success in comparison with many other government institutions in Ukraine.

⁹⁷ Relatively low staffing and job placement rates can be attributed to significant skill mismatches (connected mainly with low or obsolete skills among the registered unemployed) and to the low remuneration offered for vacant jobs. Of more than 2.2 million vacancies notified to the PES during 2007, 43.7% offered wages lower than the statutory subsistence minimum, and only 8.1% of vacancies offered remuneration that exceeded the average wage in the corresponding region.

Table 5.6. Participation in ALMPs 1998-2007

ALMP	Indicator	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total number of people registered with the Public Employment Service (NR)	Number of people	2,036,708	2,475,900	2,744,097	2,760,239	2,799,215	2,835,197	2,900,579	2,887,736	2,700,381	2,419,657
Participated in career guidance schemes (job information, counselling and occupational selection)	Number of people	874,959	1,198,768	1,479,922	1,757,043	2,026,755	2,202,767	2,192,193	2,305,168	2,256,632	2,120,024
	% to NR	43.0	48.4	53.9	63.7	72.4	77.7	75.6	79.8	83.6	87.6
Employed with the help of the Public Employment Service	Number of people	390,593	467,548	597,049	772,726	831,810	877,268	984,177	1,049,759	1,070,782	1,098,571
	% to NR	19.2	18.9	21.8	28	29.7	30.9	33.9	36.4	39.7	45.4
Participated in training programmes	Number of people	105,238	126,518	137,164	147,199	163,447	175,495	184,392	193,317	203,365	229,381
	% to NR	5.2	5.1	5	5.3	5.8	6.2	6.4	6.7	7.5	9.5
Participated in public works	Number of people	95,908	151,815	250,711	301,977	345,211	378,584	414,240	419,180	437,416	422,130
	% to NR	4.7	6.1	9.1	10.9	12.3	13.4	14.3	14.5	16.2	17.4
Employed in subsidised jobs	Number of people	n/a	n/a	n/a	13,099	27,739	36,947	42,873	43,066	37,965	36,777
	% to NR				0.5	1	1.3	1.5	1.5	1.4	1.5
Received lump-sum unemployment benefit to start up own business	Number of people	n/a	n/a	n/a	20,061	39,210	48,539	52,738	50,545	28,218	25,546
	% to NR				0.7	1.4	1.7	1.8	1.8	1.0	1.1

Source(s): 1998-2003 "Rynek pracici v Ukraini u 2003 rotsi", 2004-2006 "Rynek pracici v Ukraini u 2006 rotsi", 2007 "Rynek pracici v Ukraini u 2007 rotsi"

However, the outdated Law on Employment of Population hinders effective regulation while encouraging informal employment and discrimination against certain worker categories. Despite positive trends in labour market policy developments and the functioning of the PES some obstacles remain to further economic growth and mitigation of social exclusion. One such obstacle is the outdated and inadequate Law on Employment of Population and other related legislation.

The Law on Employment of Population (1991) is conceptually based on a traditionally socialist understanding of employment and, despite many amendments over time, most of its articles are inapplicable to a modern market environment. Some examples follow:

- Its provisions do not correspond and often conflict with provisions of existing legislation, in particular the Law on Pension Insurance and the Law on State Social Unemployment Insurance.
- Non-working students secondary general schools and higher educational institutions are included among employed categories, whereas no account is taken of activities specific to the contemporary labour market such as subsidiary agriculture for sale or barter.
- Its definition of the unemployed differs markedly from the ILO definitions. For example, before amendment in 2006, people with disabilities looking for a job could not register as unemployed. Furthermore, people of statutory retirement age and those entitled to a retirement pension (including on preferential terms 5 to 15 years earlier than in general) who wish to continue working cannot be classified as registered unemployed. As a consequence, there is a huge gap between unemployment indicators (number, rate, duration, composition by gender, age, education and other characteristics) according to these two definitions (see Chapter 1.B).
- A major complication is the concept of a suitable job (employment) as used in the definition of unemployment and consequently important in establishing the right of non-employed people to unemployment benefits and participation in ALMPs. According to the law, suitable job is defined as employment at the worker's place of residence that accords with an individual's educational attainment, profession/occupation and skills level; in addition, the wage should correspond to the level in the previous job, with the average wage in the corresponding sector and region in the previous month taken into account. When a suitable job is offered, however, the following additional information about a job seeker should also be taken into account: work experience and tenure, work history and previous activity, age, duration of unemployment and labour market status. The definition of a suitable job needs to be more flexible in order to be more applicable to a competitive labour market with high structural unemployment.
- Local authorities are requested to reserve, for certain categories of workers, up to 5% percent of all jobs in enterprises and organisations of all types of ownership with 20 or more employees. Employers who refuse to hire workers from these categories must pay a fine. Measures like this not only depress job creation and productivity growth in the formal sector, but also contribute to further discrimination and social exclusion of disadvantaged categories of people. It is well known that, in a market economy with a significant private sector, employers respond more positively to tax incentives than to obligations or penalties.
- According to the law, the Public Employment Service is recognised as virtually the only statutory agency that provides services on posting information about job seekers and vacancies, matching unemployed to vacant jobs, assisting people in employment abroad, etc. This provision conflicts with the current situation of the rapid development of private employment and recruiting agencies, Internet job portals and press advertisements. Strikingly, the activity of private employment agencies in Ukraine is not regulated by any special legislation (only by laws governing their entrepreneurial activity) and the only related provision in the law — governing the operation of private employment agencies in Ukraine in accordance with a system of licensing — was removed in 2006. Aware of the importance of correcting this regulatory deficiency and protecting Ukrainian job seekers against abuses, trafficking and involuntary servitude, a Presidential Decree on Improvement of the State Regulation of Employment and the Labour Market in Ukraine (No. 1073/2005) placed an obligation on the government to introduce a bill on ratification of the ILO Private Employment Agencies Convention (No.181) to Parliament before 1 December 2005. However, this has not yet been done.

- Although the self-employment scheme in its present form seems to be fairly effective according to PES officials, its effectiveness in promoting sustainable and profitable business activities among the unemployed is questionable. Given the low level of unemployment benefits in Ukraine, the lump-sum payment is not sufficient for setting up a business. The general success of emerging small-scale business activities depends on access to preferential credits and taxation, a stable regulatory framework, a stable macroeconomic and business environment and few administrative barriers (licenses, permits, inspections, etc). Furthermore, candidates for self-employment among the unemployed need courses on law, accounting, marketing, business management and sales. Besides such training prior to launching a business, effective assistance to new entrepreneurs should include business counselling, support in access to technologies and premises, assistance in marketing and sales, help with finding business partners, contractors and investors, etc.

The Law on Employment of Population and related legislation clearly need an overhaul. This legislation needs to include definitions and measures adequate to the present legal, economic and social environment. As in the case of the Ukraine Labour Code and other labour-related laws, it is necessary to move from declaratory to more practically effective norms and measures. A completely new version of the Law on Employment of Population drafted in March 2008 includes some important improvements but should be further revised substantially to correct existing imperfections and inaccuracies.

Conclusions

Judging from the bare figures, it may seem that there is a contradiction between the strong economic growth performance achieved in Ukraine since 2000 and country's low competitiveness ratings. How is it that the economy and FDI continue to grow and unemployment and poverty continue to decrease if the business environment and investment climate are as bad as perceived, if the design of employment and educational policies fails to conform with economic and social policies and if there are no adequate institutional and policy responses to specific problems?

The explanation is fairly obvious, however. Up to 2004 Ukraine enjoyed the benefits of catch-up growth driven by the loading of spare capacities and the reallocation of resources. Export industries obtained an additional impulse from favourable market conditions developing from the depreciation of the hryvnia, cheap energy imports and increased demand for metals.

Up to 2004, the Ukrainian economy could be defined in institutional terms as an economy of 'insiders'. This kind of economic model is based on limited access to large scale privatisation, state contracts, budget flows, etc, resulting in the emergence of large financial-industrial groups with the power to evade formal institutions through ownership ties, relations with government administrations and direct influence over the courts and other regulatory bodies. The insider economy did not create demand for structural reforms from the political elites, but it hindered competition and encouraged corruption, which was used as an alternative approach to the protection of property rights and to contract enforcement. In other words, there was no need to improve the business climate. FDI, moreover, remained comparatively low up to 2004.

The situation started to change from the end of 2004. Firstly, the Orange Revolution reflected society's aspirations for a more democratic and competitive political and economic environment in Ukraine. Most small business owners openly supported the Orange Revolution as they hoped it would bring more economic freedom. Foreign companies were inspired to invest capital in the potentially large and emerging Ukraine market once the government promised to set up more transparent procedures for privatisation and to liberalise investment, tax and currency regulations. Secondly, a strong demand for reforms was generated by the financial-industrial groups themselves, with export-oriented sectors becoming less competitive on world markets in the face of falling steel prices, the end of an era of cheap gas imports, hryvnia appreciation in 2005 and rising salaries,.

Despite some positive achievements in 2005 (abolishment of some permits, easier new business registration, the transparent sale of Krivorozhstal, etc), the authorities failed to launch systemic structural reforms aimed at increasing economic and business competitiveness by enhancing the quality of institutions and market efficiency. Weak institutions and conflicts of interests in regard to constitutional amendments led to an ongoing political crisis in Ukraine and narrowed the scope of government actions to vote-buying initiatives (for example, raising salaries, pensions and other social transfers). The issues of improving the investment climate and reforming institutions have been

brought to the surface and have been included in the political agenda, but nothing has been done to address these priorities, given the lack of consensus among politicians that has frozen Ukraine's weaknesses on the institutional side.

Even so, both in terms of GDP and FDI per capita, strong growth resumed in 2006 that may be attributed to the following: (a) booming private consumption stimulated through credit expansion and increases in social transfers and public and private sector wages, resulting in rapid development of the financial sector in Ukraine and more FDI; and (b) rising world demand and prices for steel and investment demand from Russia (fuelling growth in the machine building sector).

Thus, the Ukrainian government, apart from pushing up social expenditure, cannot lay any claim to enhancing the growth achieved in recent years. The fact that the economy continued to grow despite a continuing weak business climate has two main explanations. Firstly, the costs and barriers of a poor investment climate were overcome by growing markets. In booming sectors like commerce and construction the cost of a bad investment climate (for example, of bribes to obtain construction permits) were simply shifted onto consumers in the form of exorbitant prices. Secondly, in spite of declining competitiveness, Ukrainian export-oriented sectors have continued to benefit from expanding world markets.

However, it is clear that such a situation cannot last forever, as it will intensify macroeconomic imbalances in the form of rising inflation and the current account deficit. The world financial crisis has aggravated the negative prospects facing Ukraine by depressing consumption and causing a fall in world prices for metals and in capital outflows. Therefore, in order to survive the global crisis and sustain long-term economic growth, reforms to improve the investment climate should become a top priority in Ukraine. Since competitiveness is a challenge not only for enterprises, but also for individuals and society, there is also an urgent need for better strategies in education and training, health care, demography and migration policies.

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Appendix

Table A.1. Economic activity rates 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Total	63.2	62.3	61.9	61.8	62	62.2	62.2	62.6
Female	58.4	57.7	57.7	57.6	57.6	57	56.8	57.1
Male	68.5	67.3	66.7	66.5	66.8	67.9	68.2	68.9
15-24 years	40.1	38.7	38.5	37.9	40.2	40.2	40.8	41.8
25-29 years	84.7	83.6	82.5	83	82.4	81.4	81.4	82.2
30-34 years	87.5	86.6	86.1	85.6	84.2	82.9	84.3	84.4
35-39 years	88.2	88.1	87.1	87.9	86.1	85.6	86	87.3
40-49 years	87.1	86.4	85.9	85	84.7	84.3	84.7	84.5
50-59 years	65.1	65	64.7	65.7	64.5	64.8	63.4	63.3
60-70 years	19.8	18.8	19.7	19.4	19.8	22.9	21.4	21.6
F 15-54 years, M 15-59 years	73.7	72.6	71.7	71.4	71.1	70.9	71.2	71.7
Tertiary (ISCED 5-6)					77.1	77.0	77.7	77.9
Upper secondary/post-secondary non-tertiary (ISCED 3-4)					67.4	66.5	65.8	65.5
Lower secondary (ISCED 2)					37.8	38.5	36.6	37.3
Primary or no education (ISCED 0-1)					17.1	21.0	20.4	21.3
Urban	63.9	63.1	62.6	62.9	62.3	61.3	61.3	61.6
Rural	61.5	60.3	60.4	59.5	61.2	64.1	64.2	65.1

Source(s): Author calculations based on Ukraine State Statistics Committee (LFS) data.

Note(s): Tertiary education includes complete higher and basic higher education; upper secondary or post-secondary non-tertiary education includes incomplete higher and complete secondary general education; and lower secondary education denotes basic secondary education. Education data for period before 2000-03 is excluded as a different classification levels were used before, making data non-comparable.

Table A.2. Employment rates 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Total	55.8	55.4	56	56.2	56.7	57.7	57.9	58.7
Female	51.6	51.5	52.2	52.6	52.9	53.1	53	53.7
Male	60.5	59.9	60.1	60.3	60.9	62.8	63.5	64.3
15-24 years	30.4	30.1	31.1	31.5	33.9	34.2	35.1	36.6
25-29 years	72.7	73.7	73.8	74.6	74.7	75.2	75.4	76.5
30-34 years	76.9	76.8	77.7	77.8	77.3	77.2	78.5	79.1
35-39 years	78.9	78.4	78.7	80.2	78.7	80.1	81.3	82.7
40-49 years	79.1	78.5	78.7	78.1	78	78.8	79.6	79.7
50-59 years	60.3	60.4	60.6	61.5	60.5	61.6	60.4	60.3
60-70 years	19.5	18.6	19.6	19.3	19.7	22.8	21.3	21.6
F 15-54 years, M 15-59 years	64.5	64.1	64.4	64.5	64.6	65.4	65.9	66.7
Tertiary (ISCED 5-6)					73.4	73.6	74.1	74.2
Upper secondary/post secondary non-tertiary (ISCED 3-4)					60.8	59.8	60.7	60.8
Lower secondary (ISCED 2)					33.9	35.7	34.3	35.1
Primary or no education (ISCED 0-1)					16.3	20.5	20.2	21.1
Urban	55.1	55.2	55.7	56.6	56.9	56.5	56.8	57.4
Rural	57.3	56.1	56.6	55.4	56.1	60.5	60.5	61.5

Source(s): Ukraine State Statistics Committee (LFS).

Note(s): Tertiary education includes complete higher and basic higher education; upper secondary or post-secondary non-tertiary education includes incomplete higher and complete secondary general education; and lower secondary education denotes basic secondary education. Education data for period before 2000-03 is excluded as a different classification levels were used before, making data non-comparable.

Table A.3. Employment by sectors 2000-2007

	Employment share of sector (% of total employment)								Growth rate (%)	
	2000	2001	2002	2003	2004	2005	2006	2007	2007 to 2000	2007 to 2006
Agriculture	21.6	20.8	20.6	20.4	19.7	19.4	17.6	16.7	-20.21	-4.60
Manufacturing and mining	22.8	22.0	21.0	20.4	20.1	19.7	19.5	19.0	-13.60	-1.58
Construction	4.5	4.3	4.2	4.1	4.5	4.6	4.8	4.9	14.01	4.37
Trade and repair. Hotels and restaurants	15.5	17.1	18.2	18.6	19.6	20.2	21.2	21.8	46.23	3.64
Transport and communication	6.7	6.6	6.7	6.8	6.8	6.8	6.9	6.9	7.15	1.65
Financial intermediation	0.8	0.9	0.9	0.9	1.1	1.2	1.4	1.6	107.34	20.42
Real estate, renting and business activities	4.0	4.2	4.2	4.5	4.5	4.7	5.0	5.4	39.07	8.91
Public administration	5.9	5.8	5.9	5.8	5.2	5.0	5.0	5.0	-13.53	0.26
Education	8.0	8.1	8.1	8.1	8.1	8.1	8.2	8.1	5.22	0.19
Health and social work	6.8	6.8	6.8	6.8	6.6	6.6	6.5	6.5	-1.49	0.17
Municipal and individual services	3.3	3.3	3.4	3.5	3.9	3.9	3.9	4.0	26.16	2.42
Total %	100	100	100	100	100	100	100	100	3.62	0.84
Total 000s	20175	19972	20091	20163	20296	20680	20730	20905	-	-

Source(s): Ukraine State Statistics Committee (based on LFS and State Statistical Establishment Survey data).

Note(s): Classification of sectors is according to NACE Rev.1.

Table A.4. Unemployment rates 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Total	11.6	10.9	9.6	9.1	8.6	7.2	6.8	6.4
Female	11.6	10.8	9.5	8.7	8.3	6.8	6.6	6
Male	11.6	11	9.8	9.4	8.9	7.5	7	6.7
15-24 years	24.2	22.3	19.1	16.7	15.7	14.9	14.1	12.5
25-29 years	14.2	11.8	10.5	10.2	9.3	7.6	7.3	6.9
30-34 years	12.2	11.3	9.7	9.1	8.2	6.8	6.8	6.3
35-39 years	10.6	10.9	9.6	8.8	8.6	6.5	5.5	5.3
40-49 years	9.2	9.2	8.4	8.2	7.9	6.5	6	5.7
50-59 years	7.4	7.1	6.3	6.4	6.1	4.9	4.7	4.7
60-70 years	1.2	0.9	0.6	0.7	0.6	0.3	0.1	0.0
F 15-54 years, M 15-59 years	12.4	11.7	10.3	9.7	9.2	7.8	7.4	6.9
Tertiary (ISCED 5-6)					4.8	4.5	4.7	4.8
Upper secondary/post secondary non-tertiary (ISCED 3-4)					9.7	8.2	7.7	7.1
Lower secondary (ISCED 2)					10.2	7.1	6.2	5.9
Primary or no education (ISCED 0-1)					5.1	2.2	0.9	0.6
Urban	13.7	12.6	11.1	9.9	8.7	7.8	7.3	6.8
Rural	6.7	7	6.3	7	8.4	5.7	5.8	5.4

Source(s): Ukraine State Statistics Committee (LFS).

Note(s): Tertiary education includes complete higher and basic higher education; upper secondary or post-secondary non-tertiary education includes incomplete higher and complete secondary general educations; and lower secondary education denotes basic secondary education. Education data for period before 2000-2003 is excluded as a different classification of the levels of education was used before, that makes data non-comparable.

Table A.5. Population by age and education 2001

	Total	Education					
		Higher		General Secondary		No primary	Illiterate
		Total	Complete	Total	Complete		
Total population	100	30	12	62	33	7	1
By age group							
6-9	5	...	...	0	...	4	0
10-14	7	...	...	7	0	0	0
15-19	8	0	...	8	4	0	0
20-24	8	2	1	5	4	0	0
25-29	7	3	1	4	3	0	0
30-34	7	3	1	4	3	0	0
35-39	7	3	1	4	3	0	0
40-44	8	4	2	4	4	0	0
45-49	8	3	1	4	3	0	0
50-54	7	3	1	4	3	0	0
55-59	5	2	1	3	2	0	0
60-64	7	2	1	5	2	0	0
65-69	5	1	1	3	1	0	0
>70	10	2	1	7	1	1	0
10 years and over	95	30	12	62	33	2	1
15 years and over	88	30	12	55	33	2	0
17 years and over	85	30	12	52	33	2	0
14 – 27	22	5	2	17	10	0	0
Working age	100	39	16	61	47	0	0

Source(s): All-Ukrainian Population Census 2001.

Table A.6. Gross enrolment rate in selected countries 1991 and 1999-2006

	1991	1999	2000	2001	2002	2003	2004	2005	2006
Ukraine									
Primary-secondary - female	...	102	102	103	105	98	96	...	95
Primary-secondary - male	...	100	102	104	105	99	97	...	97
Primary-secondary - total	91	101	102	103	105	99	96	96	96
Tertiary - female	48	50	52	57	62	67	71	76	81
Tertiary - male	46	44	46	48	52	55	59	62	65
Tertiary - total	47	47	49	52	57	61	65	69	73
CEE average									
Primary-secondary - female		91	91	93	94	94	89	89	90
Primary-secondary - male		94	94	96	98	98	93	92	92
Primary-secondary - total		93	93	95	96	96	91	91	91
Tertiary - female		41	44	49	53	57	61	64	66
Tertiary - male		35	37	40	43	46	49	51	53
Tertiary - total		38	41	44	48	51	54	57	60

Source: UNESCO statistic database

Table A.7. Net enrolment rate in selected countries 1991 and 1999-2006

	1991	1999	2000	2001	2002	2003	2004	2005	2006
Ukraine									
Secondary - all programmes - female	93	92	87	87	87	...	84
Secondary - all programmes - male	89	90	86	86	86	...	83
Secondary - all programmes - total	91	91	86	87	86	82	84
CEE average									
Secondary - all programmes - female			81	82	82	83	80	79	80
Secondary - all programmes - male			81	84	83	85	83	82	82
Secondary - all programmes - total			81	83	83	84	82	81	81

Source: UNESCO statistics database

Table A.8. Technical/vocational enrolment in selected countries 1999-2006

% of total enrolment in the corresponding ISCED level	1999	2000	2001	2002	2003	2004	2005	2006
Ukraine								
Technical/vocational enrolment in ISCED 2	.	.	.	.	.	.	.	.
Technical/vocational enrolment in ISCED 2-3	7	7	7	7	7	7	8	8
Technical/vocational enrolment in ISCED 3	24	23	22	21	21	23	24	24
CEE average								
Technical/vocational enrolment in ISCED 2	41	39	42	46	43	43	46	47
Technical/vocational enrolment in ISCED 2-3	18	18	18	18	18	19	19	19
Technical/vocational enrolment in ISCED 3	41	41	41	41	39	39	39	39

Source: UNESCO statistic database

Table A.9. Expenditure on education per student in selected countries

Country (year)	State expenditure per student						State expenditure as % of general government budget
	% of GDP			US dollars			
	Primary education	Secondary education	Higher education	Primary education	Secondary education	Higher education	
Austria (2004)	22.7	27.4	48.9	7.316	8.836	15.768	10.8
Belgium (2004)	20.3	34.0	35.7	6.299	10.575	11.088	12.2
Cyprus (2004)	25.3	40.0	37.6	5.770	9.130	8.581	14.4
Denmark (2004)	25.2	35.9	63.4	8.044	11.444	20.245	15.3
Finland (2004)	18.8	32.9	36.6	5.636	9.847	10.977	12.8
France (2004)	17.9	29.2	34.1	5.236	8.545	9.996	10.9
Germany (2004)	16.4	21.8	...	4.631	6.160	...	9.8
Greece (2004)	16.8	23.0	27.6	3.731	5.102	6.124	8.5
Ireland (2004)	14.5	21.5	24.3	5.628	8.335	9.424	14.0
Italy (2004)	25.3	27.7	23.1	7.126	17.808	16.511	9.6
Luxembourg (2004)	21.8	24.1	...	15.237	16.871	...	...
Netherlands (2004)	18.8	25.1	42.6	5.962	7.984	13.533	11.2
Portugal (2004)	24.6	37.0	24.9	4.832	7.255	4.890	11.5
Spain (2003)	18.6	23.8	22.7	4.489	5.727	5.479	11.2
Sweden (2004)	25.9	34.9	44.1	7.664	10.299	13.035	12.9
UK (2004)	18.0	27.1	27.7	5.276	7.927	8.100	12.1
Central and Eastern Europe (average)	20.7	29.1	35.2	6.430	9.490	10.982	11.8
Bulgaria (2003)	19.0	20.9	28.3	1.428	1.571	2.127	...
Czech (2004)	12.9	23.4	30.6	2.508	4.555	5.952	10.0
Estonia (2004)	19.9	26.5	18.8	2.896	3.851	2.741	14.9
Hungary (2004)	23.7	23.8	24.7	3.978	4.007	4.148	11.1
Latvia (2003)	20.6	24.5	14.4	2.175	2.591	1.528	15.4
Lithuania (2003)	14.4	20.1	20.6	1.720	2.403	2.456	15.7
Poland (2004)	22.8	20.9	21.5	3.041	2.788	2.861	12.7
Romania (2003)	12.0	13.5	22.9	919	1.036	1.753	...
Slovakia (2004)	12.2	17.3	32.9	1.781	2.534	4.817	10.8
Slovenia (2004)	26.0	30.7	25.9	5.451	6.443	5.433	12.6
Central Asia and Eastern Europe (average)	18.4	22.2	24.1	2.590	3.178	3.382	12.9
Azerbaijan (2005)	6.3	10.2	10.4	356	570	581	19.6
Belarus (2005)	14.1	25.3	28.3	1.115	1.992	2.228	11.3
Moldova (2005)	16.6	24.1	12.9	317	460	246	21.1
Ukraine (2005)	14.8	23.9	34.1	1.008	1.628	2.318	18.9
Low-income countries (average)*	13.0	20.9	21.4	699	1.163	1.343	17.7
Ukraine (2004)	10.4	15.7	27.1	...	...	...	18.3
Ukraine (2002)	11.9	17.3	39.3	...	...	...	20.3
Ukraine (2001 )	...	...	35.3	...	...	...	15.0

Source(s): UNESCO data cited in Mercer (2008).

Note: * Low income countries are classified as in UNESCO country group classification

Table A.10. Ukraine exports of the top ten commodity groups (% of total exports)

HS Code	Product group	1996	2001	2004	2007
72	Iron and steel	23.7	30.6	33.0	34
73	Iron or steel products	7.0	4.0	4.4	5.9
84	Nuclear reactors, boilers, machinery, etc	6.5	7.7	5.5	5.6
27	Mineral fuels, mineral oils and by-products	4.3	7.3	10.4	5.3
85	Electrical, electronic equipment	3.3	2.9	3.8	4.5
86	Railway, tramway locomotives, rolling stock	1.5	0.9	4.6	3.7
31	Fertilisers	4.0	2.3	2.3	2.7
28	Inorganic chemicals, precious metal compounds, isotope	4.2	3.4	2.4	2.3
26	Ores, slag, ash	3.4	2.6	2.1	2.2
	Other	42.1	38.4	31.6	33.8
	Total exports (USD m)	14400.2	16264.7	32666.1	49248.1

Source(s): Ukraine State Statistics Committee 2001, 2004 and 2007 (1996 HS classification) and United Nations Comtrade 1996 (1992 HS classification).

Table A.11. Ukraine imports of the top ten commodity groups (% of total imports)

HS Code	Product group	1996	2001	2004	2007
27	Mineral fuels, mineral oils	47.8	39.64	35.04	26.3
87	Vehicles other than railway, tramway	2.5	4.04	7.75	12.8
84	Nuclear reactors, boilers, machinery, etc	10.1	10.53	11.09	12.3
85	Electrical, electronic equipment	3.6	4.55	5.26	5.2
39	Plastics and plastic goods	1.6	2.94	3.69	4.4
72	Iron and steel	1.6	1.76	2.81	3.7
30	Pharmaceutical products	1.5	2.17	2.57	3.2
48	Paper and paperboard	1.7	2.84	2.29	2.2
73	Iron and steel products	0.9	1.17	1.18	1.7
90	Optical, photographic, technical, medical, etc devices	1.1	1.61	1.9	1.6
	Other	27.6	28.7	26.4	26.6
	Total imports (USD m)	17,602.9	15,775.1	28,996.8	60, 669.9

Source(s): Ukraine State Statistics Committee 2001, 2004 and 2007 (1996 HS classification) and United Nations Comtrade 1996 (1992 HS classification).

Table A.12. Output (goods, services and works) by type of ownership and activity 2006

Type of economic activity	Ownership type (% of all registered enterprises exc. banks and public institutions)		
	Private	State and state corporate	Municipal and municipal corporate
All industries	88.5	10.4	1.1
Agriculture, hunting and forestry	89.1	9.9	1.0
Mining and quarrying - total	83.1	16.9	0.0
Mining and quarrying of energy producing materials	74.1	25.9	0.0
Other mining and quarrying	97.2	2.8	0.0
Manufacturing - total	95.1	4.8	0.1
Manufacture of food products, beverages and tobacco	97.6	2.4	0.0
Manufacture of textiles and textile products, leather and leather products	98.9	1.0	0.1
Manufacture of wood and wood products	97.4	2.4	0.2
Manufacture of pulp, paper and paper products and publishing and printing	94.0	4.7	1.3
Manufacture of chemicals, chemical products, man-made fibres and petrochemical products	89.2	10.8	0.0
Manufacture of other non-metallic mineral products	98.4	1.6	0.0
Manufacture of basic metals and fabricated metal products	98.9	1.0	0.1
Manufacture of machinery and equipment	88.2	11.7	0.1
Electricity, gas and water supply	37.3	55.5	7.2
Construction	94.3	4.8	0.9
Wholesale and retail trade, repairs of motor vehicles, motorcycles and personal and household goods	96.8	2.9	0.3
Hotels and restaurants	89.0	5.2	5.8
Transport, storage and communication	51.2	46.9	1.9
Financial intermediation	99.2	0.1	0.7
Real estate, renting and business activities	60.1	34.7	5.2
Education	92.8	5.2	2.0
Health and social work	84.9	8.8	6.3
Other community, social and personal services	81.7	2.6	15.7

Source(s): Ukraine State Statistics Committee.

Table A.13. Statutory minimum wage increases 1998-2008

Period of validity (day/month/year)	Minimum wage (UAH)	Period-to-period growth rate (%)
1.01.1998-30.06.1998	45	-
1.07.1998-31.12.1998	55	22.2
1.01.1999-31.03.2000	74	34.5
1.04.2000-30.06.2000	90	21.6
1.07.2000-31.12.2001	118	31.1
1.01.2002-30.06.2002	140	18.6
1.07.2002-31.12.2002	165	17.9
1.01.2003-30.11.2003	185	12.1
1.12.2003-31.08.2004	205	10.8
1.09.2004-31.12.2004	237	15.6
1.01.2005-31.03.2005	262	10.5
1.04.2005-30.06.2005	290	10.7
1.07.2005-31.08.2005	310	6.9
1.09.2005-31.12.2005	332	7.1
1.01.2006-30.06.2006	350	5.4
1.07.2006-30.11.2006	375	7.1
1.12.2006-31.03.2007	400	6.7
1.04.2007-30.06.2007	420	5.0
1.07.2007-30.09.2007	440	4.8
1.10.2007-31.12.2008	460	4.5
1.01.2008-31.03.2008	515	12.0
1.04.2008-30.09.2008	525	1.9
1.10.2008-30.11.2008	545	3.8
1.12.2008-31.12.2008	605	11.0

Source(s): Laws on State Budget in the corresponding year.

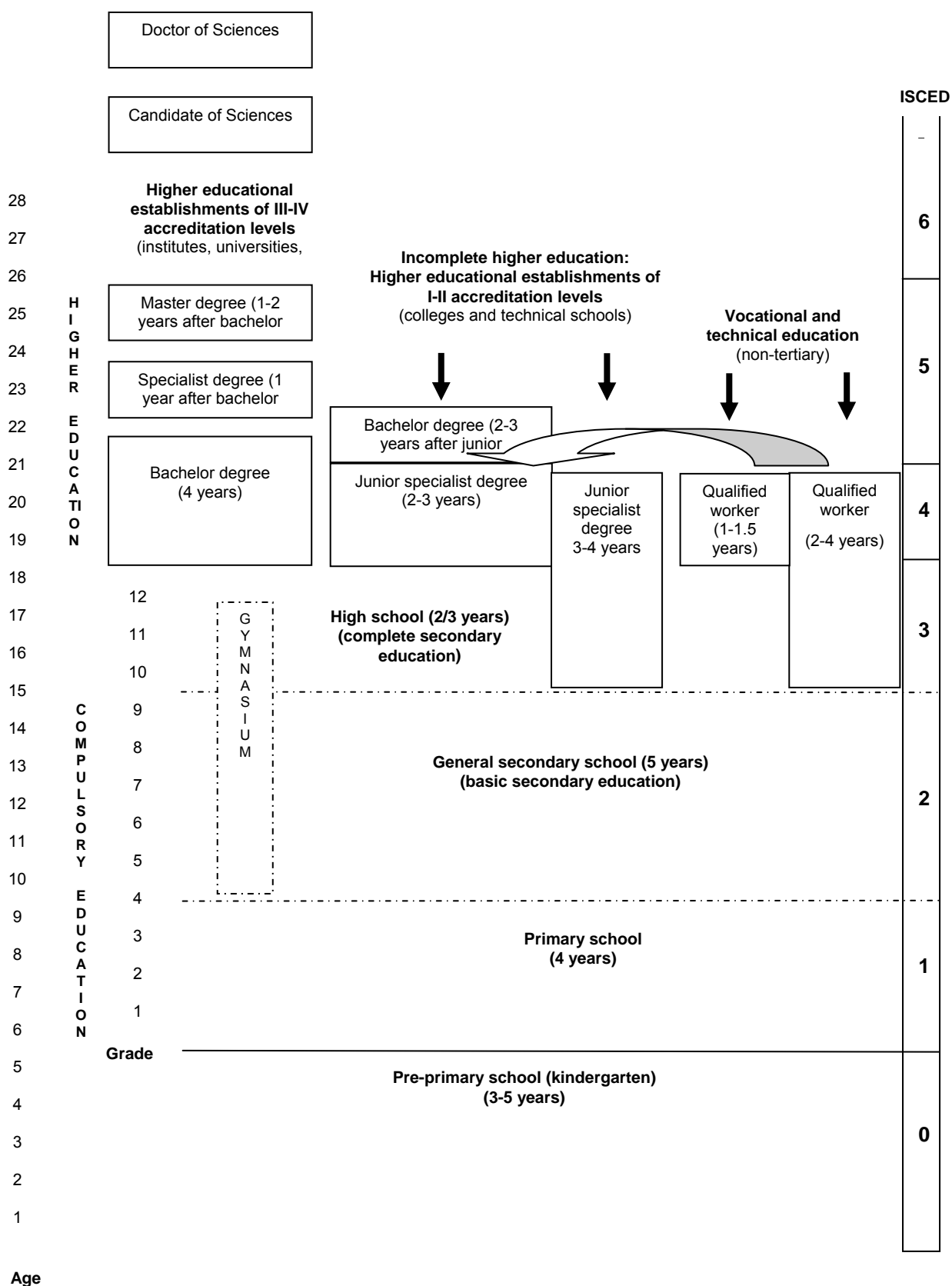
Table A.14. Labour market transition probabilities by sector 2003-2004

	Agriculture	Manufacturing and mining	Construction	Trade and repair, hotels and restaurants	Transport and communications	Financial intermediation/ real estate, renting and business activities	Public administration	Other services	Total Employment	Unemployment	Inactivity
Agriculture	0.688	0.044	0.016	0.007	0.023	0.002	0.007	0.023	0.810	0.074	0.116
Manufacturing and mining	0.033	0.729	0.015	0.029	0.025	0.006	0.007	0.052	0.897	0.039	0.064
Construction	0.014	0.143	0.536	0.029	0.064	0.014	0.014	0.064	0.879	0.043	0.079
Trade and repair, hotels and restaurants	0.025	0.065	0.027	0.636	0.025	-	-	0.065	0.843	0.065	0.092
Transport and communications	0.016	0.072	0.040	0.048	0.680	0.004	0.008	0.060	0.928	0.028	0.044
Financial intermediation/ real estate, renting and business activities	0.018	0.125	0.054	0.036	0.054	0.536	0.071	0.071	0.964	0.018	0.018
Public administration	0.030	0.068	0.008	0.015	0.015	0.023	0.624	0.105	0.887	0.023	0.090
Other services	0.016	0.039	0.013	0.023	0.020	0.009	0.025	0.764	0.909	0.027	0.064
Unemployment	0.039	0.098	0.050	0.088	0.019	0.002	0.013	0.114	0.422	0.319	0.259
Inactivity	0.028	0.020	0.007	0.020	0.007	0.003	0.003	0.024	0.112	0.071	0.817
Turnover rate ⁽¹⁾	0.076	0.091	0.300	0.090	0.096	0.071	0.075	0.016		-0.153	-0.045
Sample distribution ⁽²⁾	0.069	0.117	0.027	0.065	0.041	0.009	0.021	0.156		0.081	0.413

Source(s): Lehmann et al (2005), Table II.14, based on ULMS.

Note(s): Shown are probabilities of transition from status /sector *i* in 2003 to status /sector *j* in 2004 (see footnote 40 for definition). ⁽¹⁾ The turnover rate is the net change from 2003 to 2004 divided by the original stock in 2003. ⁽²⁾ Sample distribution in the reference week in 2003.

Figure A.1. Structure of the education system in Ukraine



Note(s): The chart, revised and augmented by authors, is based on the structure given in OHhttp://www.education.gov.ua/pls/edu/docs/common/schema_eng.html.