DFID Department for International Development

FRSSU

Сприяння реформі соціальних послуг в Україні
Facilitating Reform of Social Services in Ukraine

FACILITATING REFORM OF SOCIAL SERVICES IN UKRAINE (FRSSU)

Contract Number: CNTR 03 5289

Demography, Social Statistics and Financial Trends A Suite of Resource Papers on the Background to the Future Demand and Need for Social Services

Resource Paper 3

An analysis of residential care in Ukraine, potential users of residential care facilities to 2050 and projections of the financial implications to 2015

Saturday, 13 January 2007

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Acknowledgements

This analytical study was designed to support the development of the concept of the reform of social services and to support the implementation of the Law on Social Services as a reference work to support the Ukrainian social services planners, and policy makers, and to begin policy discussions. The study was designed and prepared by a team led by Laurie Joshua, as an integral part of the DFID Project *Facilitating Reform of Social Services in Ukraine* (FRSSU). Technical contributions, advice, support and inputs for the analysis were provided by a multi-disciplinary team comprised of E. M. Libanova, N.S. Vlasenko, M.V. Golubchikov, L.M. Stelmakh, I.V. Kalachova, I.I. Samchenko, V.O. Pavlyuchenko, O.V. Makarova, G.V. Gersymenko, L.M. Cherenko, O.V. Poznyak, P.E. Shevchuk, S.V. Nychyporenko, S.A. Ponyakina, L.O. Grygorieva, and E.V. Kozhemyakina.

The DFID FRSSU Project is grateful for the individual and collective contributions from this multi-disciplinary team, and for the collaborative efforts on data collection by representatives of the Ukrainian Statistical Committee, the Ministry of Finance, the Ministry of Labour and Social Policy, the Ministry of Education and Science, and the Ministry of Health.

Responsibility for the contents of the report rests with Stace Birks, the Project Director of the DFID FRSSU project, and the authors.

LIST OF ABBREVIATIONS

CIS	Commonwealth of Independent States
CoE	Council of Europe
CoM	Cabinet of Ministers
CPI	Consumer Price Index
DFID	Department for International Development
EU	European Union
EUUAP	European Union-Ukraine Action Plan
FRSSU	Facilitating Reform of Social Services in Ukraine
GDP	Gross Domestic Product
GDR	German Democratic Republic
GoU	Government of Ukraine
GPO	General Prosecutors Office
IER	Institute of Economic Research
LSS	Law on Socialo Services
MAFB	Mean Age At First Birth
MAFM	Mean Age At First Marriage
MIA	Ministry of Internal Affairs
MoES	Ministry of Edication and Science
MoF	Ministry of Finance
MoFYS	Ministry of Family Youth and Sport
MoJ	Ministry of Justice
MoLSP	Ministry of Labour and Social Policy
MoH	Ministry of Health
NGO	Non-Government Organisation
PDDT	Policy Dialogue and Development Team
SMEC	Socio-Medical Expert Commission
TDR	Total Divorce Rate
TFMR	Total First Marriage Rate
TFR	Total Fertility Rate
USA	United States of America
US$	United States Dollar
USSR	Union of Soviet Socialist Republics

Resource Paper 3: An analysis of residential care in Ukraine, potential users of residential care facilities to 2050 and projections of the financial implications to 2015

This is Resource Paper 3 in a suite of papers, which consists of

Summary Report

Resource Paper 1: Demography, social statistics and social policy and social service planning

Section 1: Demography, Social Statistics and Social Services Planning: Developing a Framework for the 21st Century

Section 2: Facilitating and Accelerating Policy Development in Ukaine in Transition – the Policy Development and Dialogue Team

Resource Paper 2: The demographic transition of the 1990s, analysis of Ukraine's demographic trends and key demographic projections to 2050

Section 1: Social, Political and Economic Transformation under Conditions of Transition: The Demographic and Social Dimensions

Section 2: Demographic Trends in Ukraine

Section 3: Demographic Projections to 2050

Resource Paper 3: An analysis of residential care in Ukraine, potential users of residential care facilities to 2050 and projections of the financial implications to 2015

Section 1: Trends in the Structure and composition of the Population in Residential Social Services

Section 2: Analysis of Social Statistice and Trends in Physical and Mental Health Related Disabilities

Section 3: Analysis of the Public and Private Funding Assigned to Residential Social Services: 2004-2015

Resource Paper 4: the Supporting Annexes and References

1. Projection of the share of registered marriages among males aged 18-19 years
2. Projection of the share of registered marriages among males aged 20-24 years
3. Projection of the share of registered marriages among males aged 25-29 years
4. Projection of the share of registered marriages among males aged 30-34 years
5. Projection of the share of registered marriages among males aged 35-39 years
6. Projection of the share of registered marriages among females aged under 18 years
7. Projection of the share of registered marriages among females aged 18-19 years
8. Projection of the share of registered marriages among females aged 20-24 years
9. Projection of the share of registered marriages among females aged 25-29 years
10. Projection of the share of registered marriages among females aged 30-34 years
11. Projection of the share of marriages and divorces in Ukraine
12. Projection of the share of marriages and divorces in Kharkiv Oblast
13. Projection of the share of marriages and divorces in Khmelnytsky Oblast
14. Macroeconomic Forecasting: Methods for Projecting Variants

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Part I – An Overview of Demography, Social Statistics and Financial Trends – Overview of a Suite of Resource Papers on the Background to the Future Demand and Need for Social Services

Introduction

Ukraine faces unprecedented demographic and social change which has major implications for the reform of social services, the implementation of recent legislation on social services, and for ways in which services aimed at: families and children; people with physical and mental health disabilities; and elderly people; are designed and delivered in the future.

Policy makers in Ukraine need to face these changes and their impact squarely and in a relatively immediate way.

It is in the context of these changes and challenges – set out in a series of Resource Papers - and the growing need to develop appropriate policy responses, that this comprehensive analysis of demography, social statistics and financial trends has been prepared.

The purpose of this study and the resulting suite of Resource Papers is to ensure that:

- decision-makers have a body of demographic and social statistical evidence, related in a first rough way to finance of social services, on which informed discussions, leading to social policy reforms can be based, and

- there is a publicly accessible body of knowledge – real evidence - that will inform a growing policy dialogue between the government and citizens on the future delivery of social services.

The suite of Resource Papers has been prepared by local and international consultants under the the DFID project, Facilitating Reform of Social Services in Ukraine (FRSSU), and sets out the basis for:

- Policy objectives and priorities, and the development of strategies for social services reform which support the Government of Ukraine's (GoU) overall aims of poverty reduction and decentralisation; and the identification of

- Financial systems and processes that need to be in place to support the delivery of community-based social services, with new approaches to financial planning, management and auditing

The analysis of population and social statistics, is a critical first step in formulating recommendations for changes in social policy. To ensure a firm basis for recommendations for change in social services, it is necessary to:

- develop an understanding of past trends,
- assess the present,
- examine comparative experiences under similiar social, political and economic conditions, and
- develop projections on which to make judgements about future policy options.

The next step, which is being facilitated by the FRSSU project in 2007, is to develop from this evidence base, specific recommendations.

This policy development process is facilitated by the FRSSU project through the Policy Dialogue and Development Team (PDDT). Details of this adaptation of EU best practice of policy development in parternship with GoU, by broad discussion amongst stakeholders, are set out in Resource Paper 1, section 2.

The particular aim of the PDDT is to promote and foster policy dialogue among national and local tiers of government and other stakeholders, to produce policy recommendations that are practical, realistic, and evidence and consensus based.

FRSSU (and other) policy recommendations related to demography and social statistics, are not only contained within this report, though. Nor are they only developed in forums related specifically to

demographic analysis through the PDDT or other policy development processes. Rather the demographically based conclusions are also absorbed into and influence the full range of policy focussed outputs from FRSSU, and other policy development processes in Ukraine. For this material, together with the reality of finances, is the very bedrock, the foundations of all considerations about social services in Ukraine

The Structure, Content and Focus of the Analysis and Resource Papers

The analysis consists of an evidence base in three Resource Papers, in turn supported by statistical annexes, contained in Resource Paper 4.

Resource Paper 1. Demography, social statistics and social policy and social service planning

Section 1 focuses on the relationship between demography, social statistics and social service planning in a framework for the 21st Century. It shows: the importance of population and social statistics as essential attributes in policy making, and in elaborating Ukraine's Demographic Development Strategy and Law on Social Services. It develops a matrix on the categories of use and key requirements of population and social statistics for social services; the technical framework and evidence-base for policy reform, and the more generlal interface between demography and social services reform.

Section 2 sets out the basis of the Policy Development and Dialogue Team – the key policy development process of FRSSU

Resource Paper 2. The demographic transition of the 1990s, analysis of Ukraine's demographic trends and key demographic projections to 2050

Section 1 examines some demographic and social consequences of economic transition in central and eastern Europe between 1990 and 2000.

Section 2 analyses demographic trends in Ukraine, in particular of older people (aged 50-64)and elderly people (65 and over). The section examines the age structure of the population and the determinants of natural population growth – fertility and mortality. It illustrates trends between 1989 and 2005, and the specific features of Kharkiv and Khmelnytsky Oblasts[1].

Section 3 focuses on key demographic projections until 2050, including trends in fertility, mortality, migration and marriage and divorce rates. The projections show implications for residential social services, which still dominate public expenditure. Projections are also given for Kharkiv and Khmelnytsky, the FRSSU pilot oblasts.

This paper, Resource Paper 3: An analysis of residential care in Ukraine, potential users of residential care facilities to 2050 and projections of the financial implications to 2015

Section 1 analyses structures of the population in residential institutions in Ukraine and in the Oblasts of Kharkiv and Khmelnytsky. The section highlights changes in the number of and structure of particular populations that are admitted to and in residential institutions, and shows likely changes in the number of people in residential institutions by 2050.

The projections assume no fundamental changes in current policy, and so highlight trends in the future demand for social services.

Section 2 focuses on physical and mental health disabilities including general illness, child disability, occupational disability or disability caused by work related injuries. The section includes projections on national disability trends, trends in Kharkiv and Khmelnytsky Oblasts to 2050, and presents an analysis of

[1] The rationale for focusing on demographic trends in the Oblasts of **Kharkiv** and **Khmelnytsky** in this report is: (i) the Oblasts are integral to the DFID FRSSU Project in terms of piloting local developments for the reform of social services; and (ii) demonstration of the strategic and operational need for distinct demographic and social statistical frameworks for social services at local levels.

the social statistics on mental health morbidity and the prevalence of such disorders and the dynamic and structural shifts in the prevalence of mental health and behavioural disorders in Ukraine between 1989 and 2004.

Section 3 addresses financial trends and financial projections – using two variants - to 2015 for residential social services that fall under the legislative and administrative mandates of the Ministry of Labour and Social Policy (MoLSP), Ministry of Education and Science (MoES), and the Ministry of Health (MoH)[2].

Resource Paper 4 The Supporting Annexes.

This Paper presents, in tabular form, the supporting projections, and sets out the assumptions that guided the macro economic projections presented in Resource Paper 1-3.

Methodology

The resource papers consist of quantitative and qualitative analysis of: Methods of demographic and economic forecasting applied in Ukraine[3]; Monographs; Publications; Analytical Social Service Policy reports produced by the DFID FRSSU Project; and Analytical reports from the Stage III of the DFID Project on "Support to the State Statistics Committee of Ukraine".

The information base includes date from: the State Statistics Committee of Ukraine; the Ministry of Labour and Social Policy (MoLSP) especially on the disabled population, and the system of residential institutions subordinated to the Ministry; the Ministry of Health (MoH); the Ministry of Education and Science (MoES) on the system of residential institutions subordinated to the Ministry; Statistical reports on residential institutions in Kharkiv and Khmelnytsky; the State Treasury and the Ministry of Finance on funding residential institutions.

Next Steps: Familiarisation of stakeholders with the contents of these reports

The analysis supports the Ukraine's Demographic Development Strategy 2006-2015[4] which shows "*The need to develop a scientifically based demographic strategy, relevant actions and mechanisms of implementation is explained by the necessity to mitigate the effects of demographic crises and prevent threast to the National Security of Ukraine in the social and economic spheres*. And this is widely discussed.

The suite of papers also confirms that the Demographic Strategy is correct in aiming to: "*Enhance the welfare of all population groups through…implementing a comprehensive system of social protection, and providing social care services through direct targeting*".

The content of the papers amount to the avialable 'tools' and data that are avialable in Ukraine to support an improved policy dialogue for:

- Resource allocation and targeting resources;
- Understanding the long-term context and demographic consequences of social policy;
- Assessing the implications for public programmes of demographic and social change, including the impact on wealth creation;
- Undertanding the demand and supply of social services;
- Supporting effective planning of Oblasts and local-tiers of government; and

[2] The financial assessment is of residential services. A future task is assessment of unit costs of both residential and community-based social services for different population groups. See Terms of Reference for Technical Assistance: *Economic Assessment of Unit Costs in Social Services* (2006e), A FRSSU Technical Paper Prepared for the World Bank, DFID/BSAL, Kyiv.

[3] The economic forecasting model deployed in this report draws on key elements of the World Bank base and optimistic macroeconomic projections, and key elements of the public expenditure forecast in the *Medium Term Propospects of Social Sector Development* prepared by the Institute of Economic Research (IER).

[4] Demographic and Development Strategy for 2006-2015, Ministry of Family, Youth and Sport 2005.

- supporting the EU-Ukraine Action Plan (EUUAP)[5].

As population in Ukraine becomes more mobile, more aged, and household structures and lifestyles changed, so policy development linked to the Law on Social Services (LSS) with its emphasis on diversifying the modes of social service provision, demands more detailed analysis[6].

Administrative responsibilities for social services are fragmented and essential data on social services reflects this administrative fragmentation and means that resources are not effectively targeted. This suite of papers starts to bring these materials together.

It is not expected that the general reader ploughs through these resource papers, and they are indeed focussed upon different audiences. They serve as a valuable reference work and – given the nature of demographic projections - notwithstanding the pace of change in Ukraine that are of value for a decade.

The Next Steps: Policy Development

The demographic trends in Ukraine share, with degrees of variation, many features in common with other CoE member states, but they are ofter more acute and, as a whole, these demographic trends could have significant consequences for the Ukrainian economy. For example:

- As the working population decreases Ukraine will experience declines in human capital which potentially reduces productivity;
- Pension, social insurance and social service systems can become heavily burdened;
- The ability to care for the elderly population, and other population groups that require social support, declines as household sizes decrease;
- The elderly and disabled could face sharp increases in health and social care needs and associated rises in service costs.

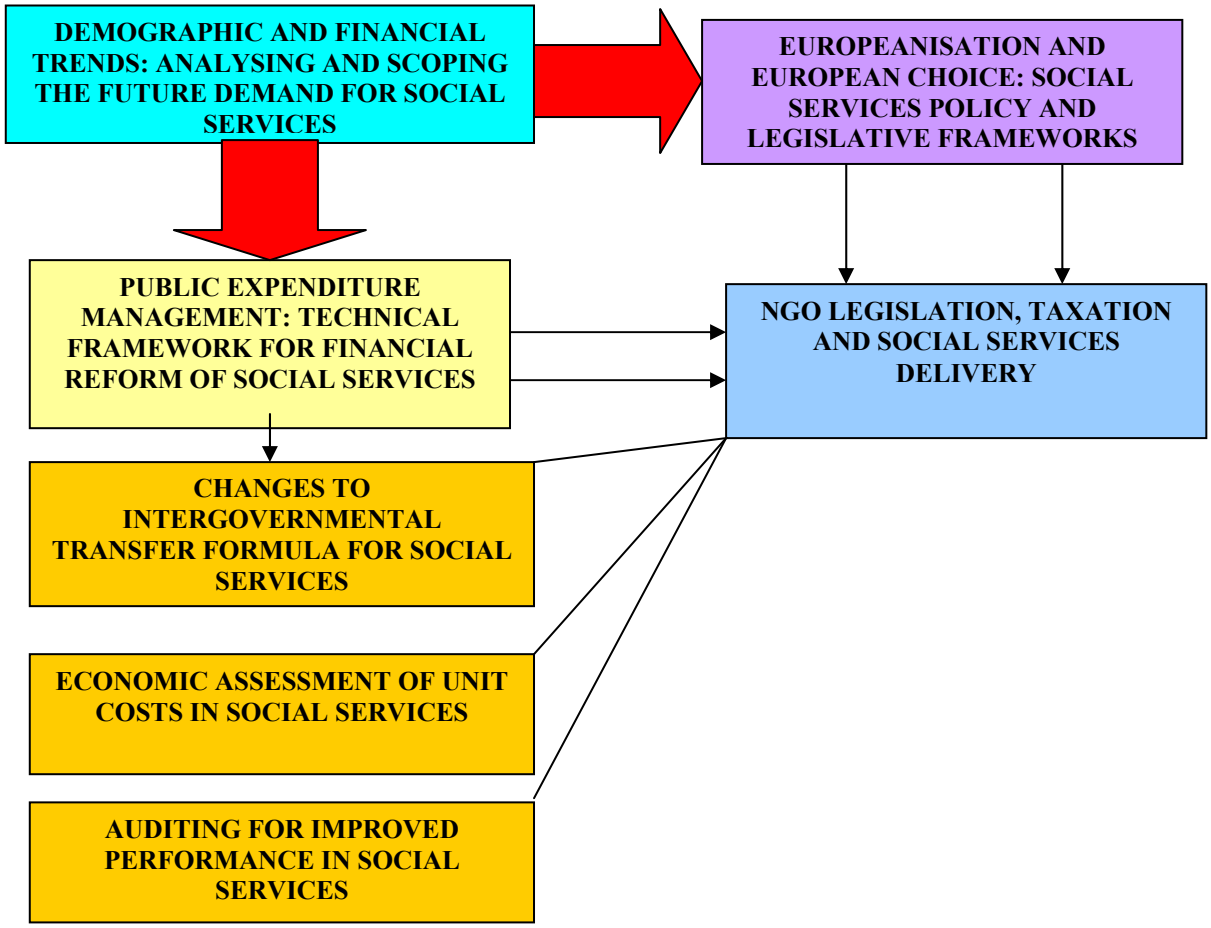
These developments challenge the achievement of GoU goals such as:

*to solve the problems of poverty (and) to increase the quality of **social services** in order to approach the European level, and to enlarge the circle of those who render such services. **Priority** will be given to socially un-protected elederly people, not sufficiently provided families, invalids and families with children.*

This policy development, starting from demography, has to maintain a broad focus. The way that this is structured within FRSSU – which is to some degree a model approach - is in the figure below.

[5] European Commission, (2005) *EU/Ukraine Action Plan*, DG Enlargement, UE-UA 105/05, European Commission, Brussels. Also **see** DFID FRSSU Project Report (2006b) for an elaboration of the content and focus of the EUUAP.
[6] Aside from plans for the demosocial survey in 2007 a number of plans being developed by the State Statistics Committee of Ukraine which are designed to address the need for more detailed analysis. Among the plans include: *The introduction of a New System of Organisation for Household Surveys* (Osypova, I.I., 2006); *Improvement in Labour Market Statistics* (Grygorovych, N.V. (2006) and (Rublova, N.V 2006); *Implementation of GIS at Statistical Offices* (Karpinsky, Y., and Lyaschenko, A., 2006). These plans were designed and developed by the State Statistics Committee of Ukraine under the auspices of the DFID Project entitled "*Support to the State Statistics Committee of Ukraine, Stage 111*"

The Interface between Demography and Social Services Reform:



These technical inputs lead naturally to thinking about policy strategies instead of single policies.

The practical point of departure for policy development

The practical point of departure for the PDDT, given the:

- agreed need to implement a wider blend of social service provision, guided by the balance of services model;
- concens of MoF to guide service provision within a sustainable financial and budgetary level;
- establishment of the Financial Issues Working Group of MoLSP's WGILSS; and the
- aims and objectives of FRSSU, jointly agree with GoU, and especially MoLSP and MoYFS;

will be this paper, Resource Paper 3, An analysis of residential care in Ukraine, potential users of residential care facilities and projections of the financial implications to 2015.

The PDDT will use the analysis of the

- Potential demand for; and
- Projected use of;

residential institutions (internats) in Ukraine, and in the Oblasts of Kharkiv and Khmelnytsky, using the projections to:

- evaluate the financial implications and the opportunity cost of these;
- look at what alternative practices of admissions and use of residential institutions might mean in financial terms; from these discussions

- policy guidelines regarding the implementation of the LSS will derive.

This will give practical policy suggestions for residential social services that fall under the legislative and administrative mandates of the Ministry of Labour and Social Policy (MoLSP), Ministry of Education and Science (MoES), and the Ministry of Health (MoH).

Part II

Resource Paper 3: An analysis of residential care in Ukraine, potential users of residential care facilities to 2050 and projections of the financial implications to 2015

Section 1: Trends in the Structure and Composition of the Population in Residential Social Services

Overview:

In Ukraine, population projections are used mainly in planning pension policy and public finance at the central government level. Official demographic forecasts are provided by the State Statitistics Committee of Ukraine. They take into account uncertainty in a manner that involves the presentation of three scenarios: optimistic, pessimistic and base line. As regards public finance, demographic projections are used not only in the sense that pension expenditure affects public expenditure in a significant way: the projections are used in planning state budget income and expenses as well, and demographic variables are incorporated into the budget formula[1] that is used to define and allocate resources for education, health and social services at Oblast, City and Rayon levels. There are several other examples where demographic data is used in planning and decision making. However, for the main part the analysis of demographic trends and demographic projections is to plan the future need and demand[2] for public services – such as social services. The focus of this Section of the report therefore applies the analysis and projections (based on stochastic approaches) in the previous resource papers, and applies the findings to specific analysis of trends in the past use of residential social services, and the presentation of three scenarios – based on demographic projections in Resource Paper 2, Section 3 - on the future need for social services among the elderly, children and the disabled. Uncertainty and differences between projections and actual trends are inevitable when it comes to the future need for social services – this is particularly true for children's and disability related services, but less so for social services aimed at the elderly – and because of unforeseen vagaries in policy directions and future political decision. Thus data presented in this section is designed to generate awareness among key decision-makers in the GoU of the probability nature of the forecasts on which decisions will need to be made in the future.

The shift from planning on the basis of 'firm' data towards a system based on probable scenarios of future needs and demand will call for a systemic shift along the lines delineated in Resource Paper 1. In this sense the analysis presented in the three sections of this resource paper are designed to be preliminary in nature. It is assumed that future elaboration of a social statistics system will provide the framework for running more detailed scenarios that take account of: (i) the elaboration of community-based social services (as defined by the LSS), and (ii) incorporate scenarios on the future **balance of service provision**[3] that will need to be struck – via policy dialogue - between different types of social service provision (e.g., residential and community-based, state and non-governemental) for different population groups (e.g., the elderly, children and families, and the disabled).

With these observations at the fore this section primarily focuses on (i) past trends in the use of residential social services (1998-2004)[4] based on user data assembled by the State Statitsics Committee of Ukraine and financial data furnished by the Ministry of Finance; and (ii) the future need for social services based on stochastic demographic projections (as delineated in Resource paper 2, Section 3). The analysis does not incorporate the existing utilisation of community-based social services – such as those types services provided by territorial centres and domiciliary centres (subordinated to the MoLSP), and centres for families

[1] See FRSSU Report (2006a) and the Budget Code of Ukraine (2001)

[2] See Resource Paper 1 for a distinction between "need" and "demand"

[3] op.cit. FRSSU Report (2006a)

[4] December 2004 was chosen as the cut-off point because data (at the time of the analysis) for 2005 was not available. Where 2005 data was available it has, where appropriate, been included in the text and data tables. The collection of data on the use of, and number of residents in residential institutions, residential services prior to 1998 is highly error prone with significant errors of exclusion. Thus data prior to 1998 could not be used for cross-comparative purposes. Data quality in social services is generally remains poor – with high levels of variation between the MoLSP, MoES, and the MoH.

and children (subordinated to the Ministry of Family, Youth and Sports (MoFYS). The rationale for this particular focus is primarily linked to three factors in the policy environment: (i) residential social services have traditionally dominated social service delivery; (ii) the preliminary nature of the analysis – given that the application of demographic projections to social services is a new departure in the approach to social policy in Ukraine; and (iii) the organisational and regulatory framework for the elaboration of community-based social services – as defined in the LSS (2004) - is still evolving. Attempting to focus on community-based social services is difficult to effectively undertake until policy directions – i.e., towards public expenditure management, unit costs, legislative and social service policy, the role of Non-Government Organisations (NGOs) in the delivery of social services, and the directions taken to improve auditing and quality control systems in social services[5] – are more clearly defined by key stakeholders in the GoU. The statistical analysis in this section, and the projections on future need for social services, are therefore undepinned by the assumption that there will be no fundamental change in the dominant role of residential social services in the overall balance of service provision in the short to medium term.

This section therefore focuses on:

- The organisational structures and subordinated management of residential social services;
- Residential Social Services and Changes in the Structure of the Adult Population in Residential Institutions;
- Residential Social Services and Changes in the Structure of the Child Population in Residential Institutions;
- Trends and Dynamics in the Populations of Residential Institutions – Projections to 2050

The Organisational Structures and Subordinated Management of Residential Social Services

The system of residential social service institutions in Ukraine consists of nine basic types (including five types of children's institutions and four types of institutions for adults) which fall under the subordinated responsibilities of three line ministries (see Table 3.1.1 below – which provides an overview of the number of residential institutions, the number of residents, and the the structure of managerial subordination). All residential institutions for adults are subordinated to the Ministry of Labour and Social Policy (MoLSP). Residential institutions for disabled children are also subordinated to the MoLSP. The Ministry of Education and Science (MoES) governs three types of residential institutions for children: children's homes, general residential schools for orphans and children classed as "being without parental care", and special residential schools (designated for children who need care and support with regard to physical and/or mental development). Baby homes (for children aged 0-3) are subordinated to the Ministry of Health (MoH). For an overview of the distribution of subordinated responsibilities see Figure 3.1.1 below for an overview of the distribution and number of residential institutions for children across line ministries.

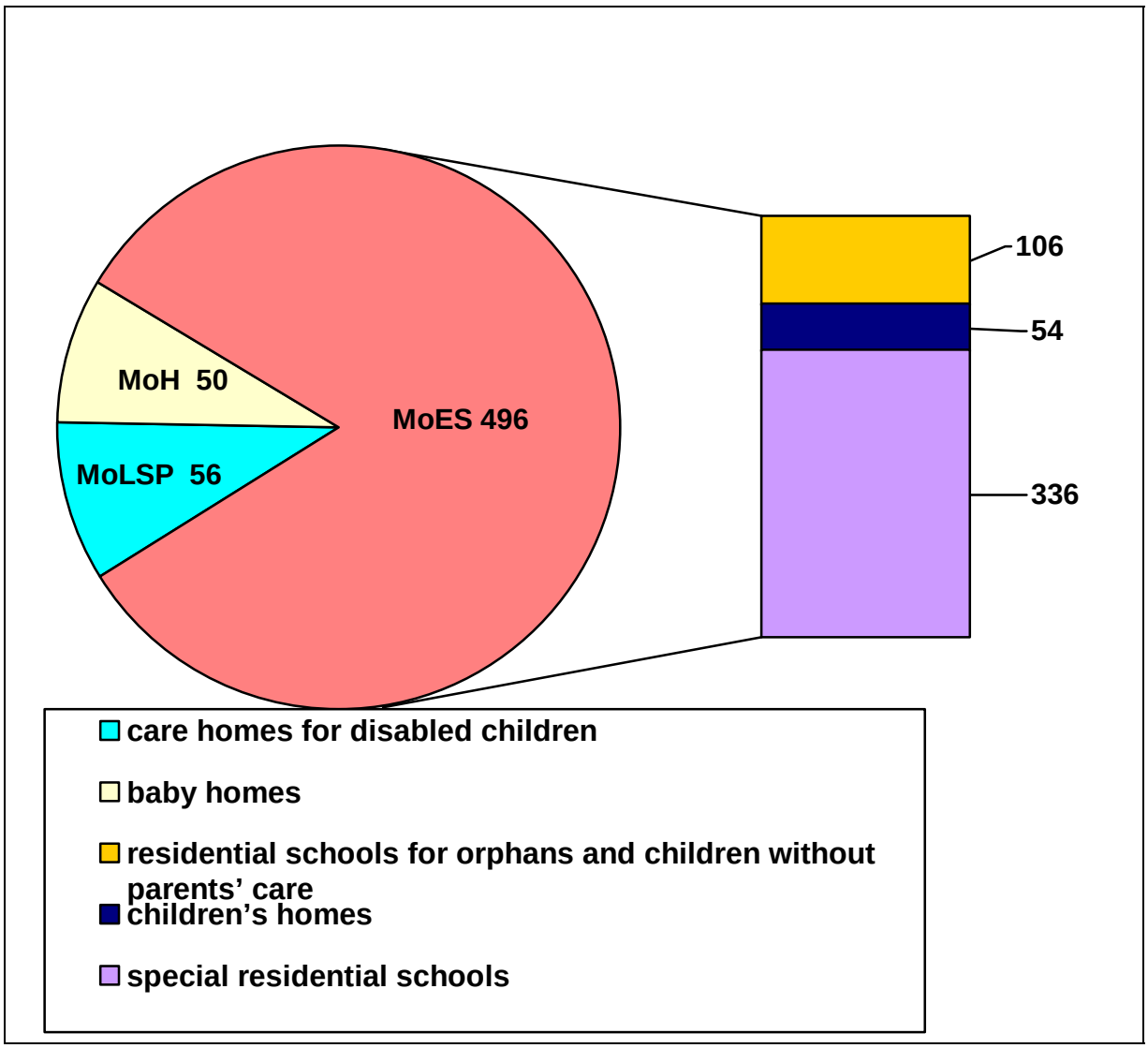
[5] See FRSSU Reports (2006a), (2006b), (2006c), (2006d), and (2006e)

Table 3.1.1: Number of Residenital Institutions*, Number of Clients* and Expenditure (in UAH million) 1998-2004**

			1998	1999	2000	2001	2002	2003	2004
MoES	Special residential schools	Institutions	348	n/a	345	344	345	337	336
		Residents	55,437	n/a	54,998	53,979	53,153	51,388	49,687
		Funding, UAH mln.	n/a	n/a	n/a	n/a	57.4	81.6	104.8
	Residential schools for orphans and children "without parents' care"	Institutions	40	n/a	44	45	52	53	54
		Residents	11,193	n/a	12,254	12,090	13,173	13,110	12,593
		Funding, UAH mln.	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Children's homes	Institutions	57	n/a	83	91	92	101	106
		Residents	4,526	n/a	5,552	5,910	6,116	6,417	6,690
		Funding, UAH mln.	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MoH	Baby homes	Institutions	44	n/a	46	47	48	48	50
		Residents	5,049	n/a	4,969	4,775	5,132	5,205	5,387
		Funding, UAH mln.	n/a	n/a	n/a	n/a	64.4	82.3	103.8
MoLSP	Children's homes	Institutions	57	58	58	57	56	56	56
		Residents	8,024	7,947	7,977	7,865	7,781	7,856	7,716
		Funding, UAH mln.	33.3	35.9	43.1	55.1	65.8	78.5	88.1
	Residential homes for elderly and disabled people	Institutions	221	218	217	231	258	258	260
		Residents	39,781	39,683	39,740	41,619	42,886	44,575	45,626
		Funding, UAH mln.	138.8	155.9	191.4	243.6	306.4	352.9	396.3

Notes: * Source: State Statistics Committee; ** Source: Ministry of Finance (MoF); n/a = no data provided

Figure 3.1.1: Distribution of Residential Institutions for Children by Subordination



Residential Social Services and Changes in the Structure of the Adult Population in Residential Institutions

As of December 2004, there were 260 **residential institutions for adults** in Ukraine, including 88 care homes for elderly and disabled people; 23 for war and labour veterans; 145 psycho-neurological homes and 4 special care homes. There are residential institutions for adults in all Oblasts of Ukraine with the highest level of concentrations being in Khmelnytsky Oblast (with a total of 30 institutions); and the eastern industrial Oblasts (i.e., Lugansk Oblast with 17, Donetsk Oblast with 16, and Kharkiv Oblast with 15). High concentrations of residential establishments are also observed in Central Ukraine (Cherkasy, Poltava, Kyiv, Sumy, and Kirovograd Oblasts). Compared with 1994, the number of residential institutions for adults grew by 43 (almost 20%). A large proportion of this growth is accounted for by considerable growth in the network of residential institutions in Khmelnytsky Oblast (which expanded by 23 institutions, or by more than 4 times between 1994 and 2004). The number of institutions also notably increased in Lugansk and Kherson Oblasts – by a total of 5 institutions; and in 9 other Oblasts by between 1 and 3 institutions. On the other hand the network of residential institutions declined in number in Dnipropetrovsk, Zakarpattia and Volyn Oblasts.

As of 31.12.2004 there were 45,626 residents in residential institutions for adults. The occupancy rate of these institutions (the ratio of the number of residents to the number of places available) is 95.8 per cent. The capacities of the institutions in Zaporizhzhia, Mykolayiv and Chernihiv Oblasts correspond to the number of people residing in residential institutions. Cherkasy Oblast is the only Oblast where the number of residents

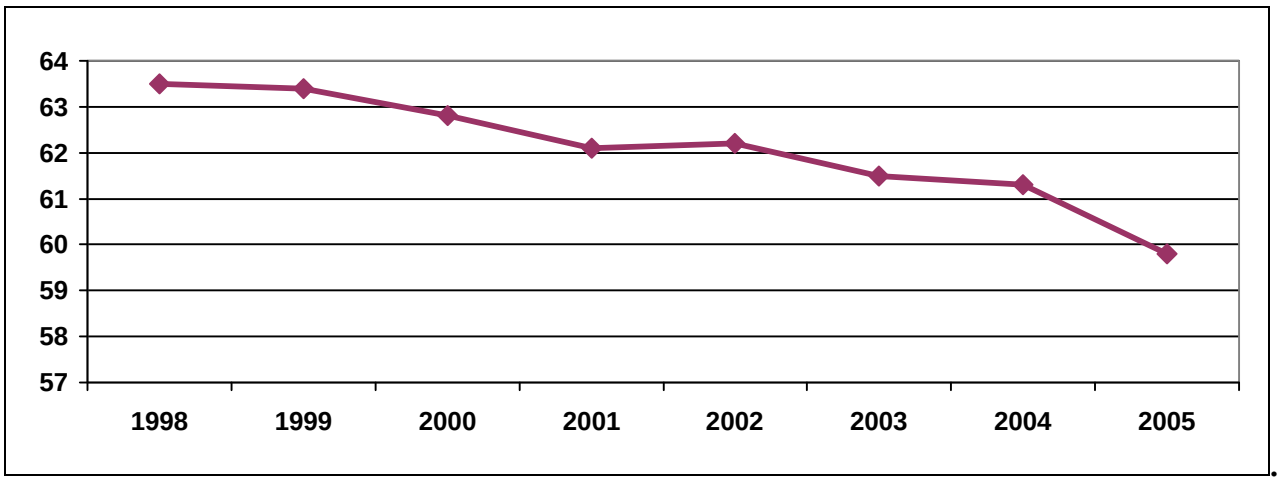
exceeds the physical capacity of institutions by 13 persons (or by 0.6 per cent).

Between 1998 and 2004, the number of adults in residential institutions grew by 14.7 per cent. The most significant growth in the number of residents was registered in Khmelnytsky Oblast (by 88.5 per cent); the numbers declined in only four Oblasts (Ternopil, Ivano-Frankivsk, Zakarpattia and Vinnytsia Oblasts). In 2004 a total of 8,958 people were admitted to residential institutions for adults, while 7,907 people departed. Death and/or transfer to alternative residential institutions account for most of the recorded departures. The number of people placed in a job or sent home to be cared for in the community account for only 9 per cent of the total number of the residents who left or 1.6 per cent of the total number of residents as of the beginning of the year. Higher rates of residents leaving residential institutions because they are either placed in the community or in a job are observed in Zakarpattia and Chernivtsi Oblasts.

On average there are 175 residents in a residential institution for adults. However, the average number of residents in adult residential institutions varies considerably: from 391 in the city of Kyiv to 57 in Khmelnytsky Oblast. Residential institutions for adults in Khmelnytsky Oblast are mostly small. This is characteristic, in spite of the Oblast being the 'leader' in the total number of adult residential institutions, Khmnelytsky ranks only 13th among 27 Oblasts in terms of the number of residents housed. Of the 15 residential institutions for adults in Kharkiv Oblast, one is in the Oblast's central city, 3 in Kharkiv Oblast, 2 each in the rayons of Vovchansk and Bohoduhiv rayons; 1 in each of seven other rayons and two in other towns. The largest institutions for adults are in Kharkiv and in Zmiyiv rayon: there more than 400 residents in each of these institutions, while there are 620 residents in three institutions of Kharkiv rayon.

As of the end of 2004 55.4 per cent of all residents in residential institutions for adults were aged under 60: 33.3 per cent aged between 60 and 79; and 11.3 per cent aged over 80. Considering the structure of the population the ratio between the last two categories is 9:1, it is worthy of note that for people aged over 80 the probability of being residents in a residential institution is three times higher in comparison with people aged between 60 and 79. Over the last the last decade the female share among residents in residential institutions has been steadily decreasing: from 66.3 per cent of the total number at the end of 1994, to 61.3 per cent at the end of 2004, and 59.8 per cent at the end of 2005 (see Figure 3.1.2 below).

Figure 3.1.2: Dynamics of the Female Share Among Residents of Residential Institutions for Adults: 1998-2005



Residential Social Services and Changes in the Structure of the Child Population in Residential Institutions.

Ministry of Labour and Social Policy

Children's residential institutions subordinated to the MoLSP are classified as "socio-medical institutions" for children aged between 4 and 18 with physical or mental disorders who are in need of care and medical

services. At the end of 2004 there were 56 institutions for disabled children in the system of the MoLSP: including 5 in Dnipropetrovsk Oblast, 4 each in Zhytomyr and Odessa Oblasts; and between 1 and 3 institutions in each of all other Oblasts - except in Sevastopol (city council). The overall network of residential institutions of this type is rather stable: their total number declined by 5 over a period of 10 years (from the end of 1994 to the end of 2004), including 1 institution after the end of 1998. There were 7,394 children in residential institutions of the MoLSP at the end of 2005; while at the end of 2004 there were 7,716 children in these institutions: 138 children per institution on average. The lowest number of residents being in Khmelnytsky Oblast – which has one home for disabled children with a total of 57 residents. The average number of residents in children's residential institutions does not vary significantly between Oblasts compared with the corresponding figure for adults: coefficients of variation are 32.2 per cent for children's institutions and 39.2 per cent for institutions for adults. Around 95.9 per cent of the total number of residents in children's institutions are classified as "mentally retarded children" (80.1 per cent are classed as physically healthy; while 15.8 per cent are classed as bed-ridden), the remaining residents are classed as "physically backward". More than two-thirds of the residents are aged between 7 and 17, a further one quarter are aged between 18 and 24 and only 6.8 per cent are aged under 7.

Residents in children's institutions differ notably from the rest of the population by gender: there are 1,565 boys per 1,000 girls, while the corresponding figure among the whole population aged between 4 and 24 is 1,047. From the end of 1998 to the end of 2004 the number of residents in MoLSP subordinated children's homes dropped by 3.8 per cent. The overall occupancy rate of residential children's institutions under the mandate of the MoLSP was 87.2 per cent at the end of 2004; institutions in Zaporizhzhia, Lugansk, Mykolayiv, Kherson and Cherkasy Oblasts were all filled up, while institutions of this type in Ternopil and Volyn Oblasts were only 63 per cent full. The only institution in Khmelnytsky oblast was 72.5 per cent full; one of the three institutions in Kharkiv Oblast (Kharkiv rayon) is 66.7 per cent full, while another (in Shevchenkivsky rayon) was 84.0 per cent full; the third (in Bohoduhiv rayon) was 93.2 per cent full.

Ministry of Health:

Residential Baby Homes are residential institutions subordinated to the Ministry of Health for the medical and social protection of orphaned children, children "without parental care", as well as children with physical and mental disorders from birth till the age of 3 (for some categories of children this extends to children aged 4). At the end of 2004, there were 50 baby homes across all 27 Oblasts of Ukraine (with Donetsk, Odessa and Dnipropetrovsk Oblasts having 5 each; Kharkiv Oblast with 4, Kyiv Oblast with 3, and the all other Oblasts having between 1 and 2 each). In 2004 there were 5,387 children in baby homes; compared with 1998, their number grew by 6.7 per cent, the network of homes having been increased by 6 (i.e. by more than 13 per cent).

At the end of December 2004 there were 437 children in 4 baby homes in Kharkiv Oblast: 36.9 per cent of children were aged under 1; 47.8 per cent aged between 1 and 2; and 15.3 per cent aged over 3. In considering the specific of functions of baby homes it is notable that the intensity of transference (i.e., flow) of residents is much higher compared with other children's institutions. In Kharkiv Oblast new admission accounted for three-quarters of the total number of children in 2004. The number of staff working in baby homes is almost twice as large as the number of residents. On average there is one doctor for 9 residents, 10 paramedical staff to 13 children; and 1 pedagogical staff member to 3 children.

Ministry of Education and Science:

At the end of 2004, there were 106 children's homes and 54 residential schools for orphans and children without parental care in Ukraine. These institutions are subordinated to the Ministry of Education and Science (MOES) and provide residential social services to children from the age of 3 until they complete basic or secondary education. In some instances children remain in these types of residential institutions until they become adults. Around half of the children's homes are concentrated in two oblasts: Kyiv (which has 31 institutions) and Dnipropetrovsk (which has 15 institutions). The reminder are scattered across other Oblasts. Compared with 1998, the number of these institutions almost doubled, more than half of the total growth being provided by the expansion of the network in Kyiv Oblast. Residential schools for orphans and children without parents' care are spread more evenly across the Oblasts, but there are more of them in larger towns with densely populated Oblasts (e.g., 5 institutions each in Dnipropetrovsk and Donetsk Oblasts, and 4 institutions each in Kharkiv and Odessa Oblasts). Compared with 1998, the number of institutions grew by 14 (or by 35 per cent). There are residential schools for orphans and children without

parental care in 26 Oblasts of the country (except Sevastopol city); children's homes in 25 Oblasts (except Zaporizhzhia and Sumy Oblasts). Around 73.6 per cent of all children's homes and 85.2 per cent of all residential schools for orphans and children without parental care are in urban settlements.

At the end of 2004, there were 6,690 residents in children's homes, and 12,593 in residential schools for orphans and children without parental care (on average there are 63 and 233 children per institution respectively). In 1999-2004, the number of residents in children's home's grew by almost 1.5 times (45.8 per cent) while residential schools for orphans an children without parental care grew by 12.5 per cent.

Residents of children's homes are much younger than residents of residential schools for orphans and children without parental care: in the former 39.2 per cent of children are aged under 6, and 5.3 per cent are aged over 16; while in the latter the comparative figures are 5.0 per cent and 15.3 per cent respectively. There are 1,241 boys per 1,000 girls in children's homes, while in residential schools for orphans and children without parental there are1,314 boys per 1000 girls. Both figures are much higher than among the whole population of the corresponding age, but they are much lower than in children's homes for disabled children that fall under the administrative remit of the MOLSP. This suggests there is a lower disability rate among girls than boys.

In 2004 33.4 per cent of the total number of residents (as of the beginning of the year) left children's homes, and 25.0 per cent left residential schools for orphans and children without parental care. Almost half of the children who left children's homes were either placed under guardianship, were adopted or returned to their parents; while only 1 in 5 children left residential schools for orphans and children without parental care for similar reasons. The largest rate of adoption, guardianship and return to parents in 2004 was registered in Khmelnytsky Oblast with 19.2 per cent of the total number of residents, as of the beginning of the year, being placed in alternative living arrangements; Rates of 10 per cent or more were also observed in Kherson, Rivne, Cherkasy, Chernivtsi, Donetsk, Kyiv and Vinnytsia Oblasts.

The number of residents and staff members is similar across children's homes: the ratio is 11 residents to 10 staff. In residential schools for orphans and children without parental care there are 18 residents to 10 staff members.

In addition to children's homes of the MoES there were, as of 31 January 2004, 127 "family homes" for children (these types of establishments are often smaller in size than longer established residential institutions and are designed to provide more intimate care and improve socialisation of children) accommodating 1,517 children. A significant proportion of these types of institutions are located in Kyiv Oblast (17); there are 11 similar institutions in of Crimea and Dnipropetrovsk oblast, 10 in Zakarpattia Oblast, and 9 in Odessa Oblast.

In addition to children's homes and residential schools for orphans and children without parental care there are **Special Residential Schools** ('special' in that they are designated to provide specialised services for children requiring inputs to correct or ameliorate physical and / or mental development). In 2004 there were 336 such institutions in Ukraine that accommodate 49,687 residents. Around 60 per cent resided in schools for mentally retarded children; between 6 and 7 per cent in schools for children with weak eyesight, diminished hearing, deaf children and in centres for intensive pedagogical correction; 4.0-5.5 per cent in schools for children with badly impaired speech and children with impaired motor functions; and only 1.7 per cent in schools for blind children.

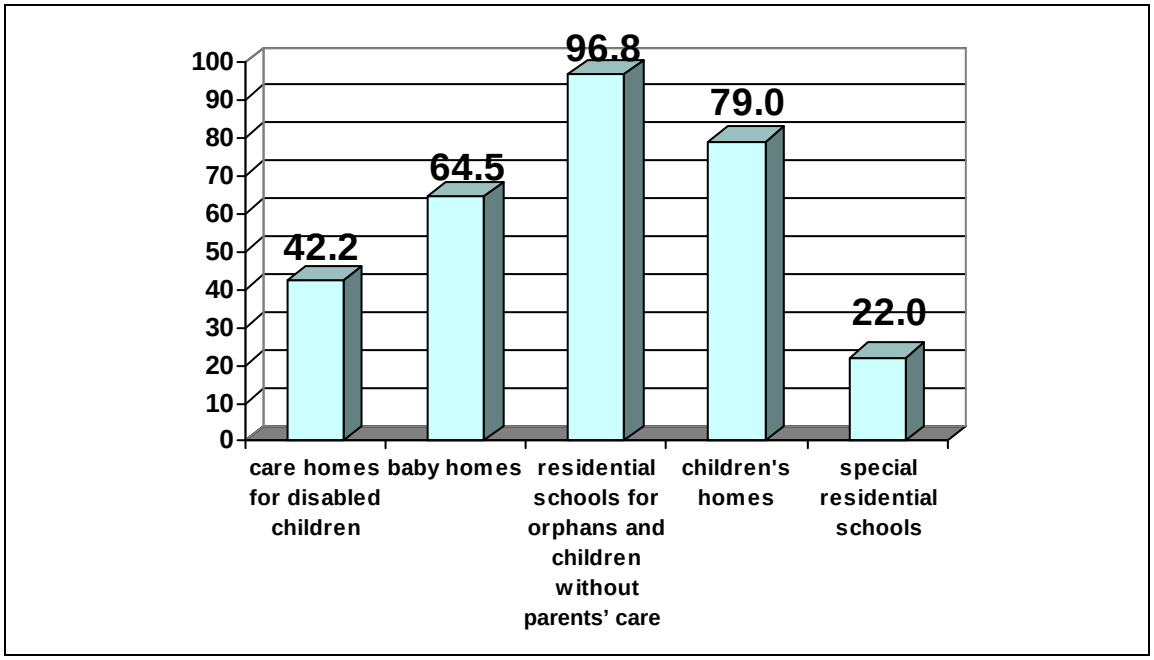
Trends and Dynamics in the Populations of Residential Institutions: **Projections to 2050**

Children:

The number of children in special residential schools decreased by 10 per cent between 1999 and 2004. The number of residents of schools for deaf children decreased most significantly, while the number of residents of schools for children with weak eyesight grew by almost 7 per cent. Among residents of children's residential institutions, the share of orphans and children without parental care varies from 96.8 per cent in residential schools meant for this category to 22.0 per cent in special residential schools (see Figure. 3.1.3). The share of this category (orphans and children without parental care) of children is rather stable in children's homes and residential schools for orphans and children without parents' care, while it is steadily growing in residential institutions for disabled children and in special residential schools, and decreasing in

baby homes. Thus, 56.2 per cent of the total growth in residents of the latter institutions in 1999-2004 was generated by an increase in the number of orphans and children without parents' care and 43.8 per cent resulted from an increase in the number of children having lost one or both parents.

Figure 3.1.3: Percentage of Orphans and Children Without Parental Care in Residential Institutions.



Estimating the dynamics and territorial differentiation of the population housed in residential institutions requires calculation of relative rates. The **rate of coverage** is calculated for residential institutions as the ratio of the number of residents in residential institutions of a certain type to the size of the age group that is most likely to supply of residents for corresponding residential institutions. The results are given in percentage (%). Thus determining the coverage rate for children has to be set against four types of institutions: (i) residential schools for orphans and children without parental care, (ii) residential institutions for disabled children, (iii) children's homes, and (iv) special residential schools, and evaluated in relation to the population aged between 4 and 17; and the rates of coverage by baby homes – in relation to the population aged under 3. The total coverage rate for children by residential institutions is evaluated as the ratio of the total number of children in residential institutions of all types to the total number of the population aged under 17. The total coverage rate for children by residential institutions *is not equal* to the sum of partial rates. In addition to the total rate, it is reasonable to evaluate **the group** coverage rate for children by residential institutions: i.e., the ratio of the total number of children in residential schools for orphans and children without parental care, in children's homes, residential institutions for disabled children and in baby homes (i.e. in all types of residential institutions except special residential schools) to the number of the population aged under 17. Calculating the latter rate is important because the recording procedures that guide the production of the data on the number of children in residential institutions lack information on the distribution of residents in special residential schools by region.

Adults:

Calculating the coverage rate **for adults** presents special problems. The total number of adults cannot be used as the denominator because the residents of residential institutions for adults are characterised by a high concentration in older population groups. The use of the ratio between the age groups of residents does not produce robust results because national social statistics that provide information on the age structure is structured into only three age groups: 18-59, 60-79 and over 80, while the ratios of different age groups among the population aged 18-59 and among residents of residential institutions notably differ. The probability of people aged over 80 being residents in a residential institution is three times higher than for people aged between 60-79 (see above), and yet the most numerous residents in residential institutions for adults are people aged under 60. Considering this feature it is therefore reasonable to correlate the number

of residents and the total number of the population aged over 80 and half of the population aged 60-79. This approach means that the population aged 60-79 make up for the probability of people under 60 becoming residents of a residential institution for adults.

The results of calculating the percentage of the population housed in residential institutions are presented in Table 3.1.2 below. Based on the evidence from the approach delineated above all relative rates grew between 1999 and 2004, even for those types of institutions where the absolute number of residents dropped. The rates of coverage by children's residential institutions, over the same period, soared at a faster rate than would be expected..

Table 3.1.2: Percentage of the Population of Ukraine Housed in Residential Institutions in 1998-2004 (at the end of each year) in percentage.

	1998	2000	2001	2002	2003	2004
Children						
residential schools for orphans and children without parents' care	0.12	0.13	0.14	0.16	0.16	0.17
children's homes	0.05	0.06	0.07	0.07	0.08	0.09
baby homes	0.28	0.31	0.31	0.34	0.34	0.34
care homes for disabled children	0.08	0.09	0.09	0.09	0.10	0.10
special residential schools	0.57	0.60	0.62	0.64	0.65	0.66
Group coverage rate for children	0.25	0.29	0.30	0.33	0.34	0.35
total coverage rate for children	0.73	0.80	0.82	0.87	0.88	0.90
Adults	0.71	0.70	0.73	0.76	0.80	0.83

The highest coverage rates for children at the end of 2004 were observed in Kyiv, Kharkiv, Dnipropetrovsk and Odessa Oblasts (see Table 3.1.3 below). Compared with 1998, this rate grew in all Oblasts except Ivano-Frankivsk Oblast, while the absolute number of residents of children's residential institutions of four types decreased in eight Oblasts.

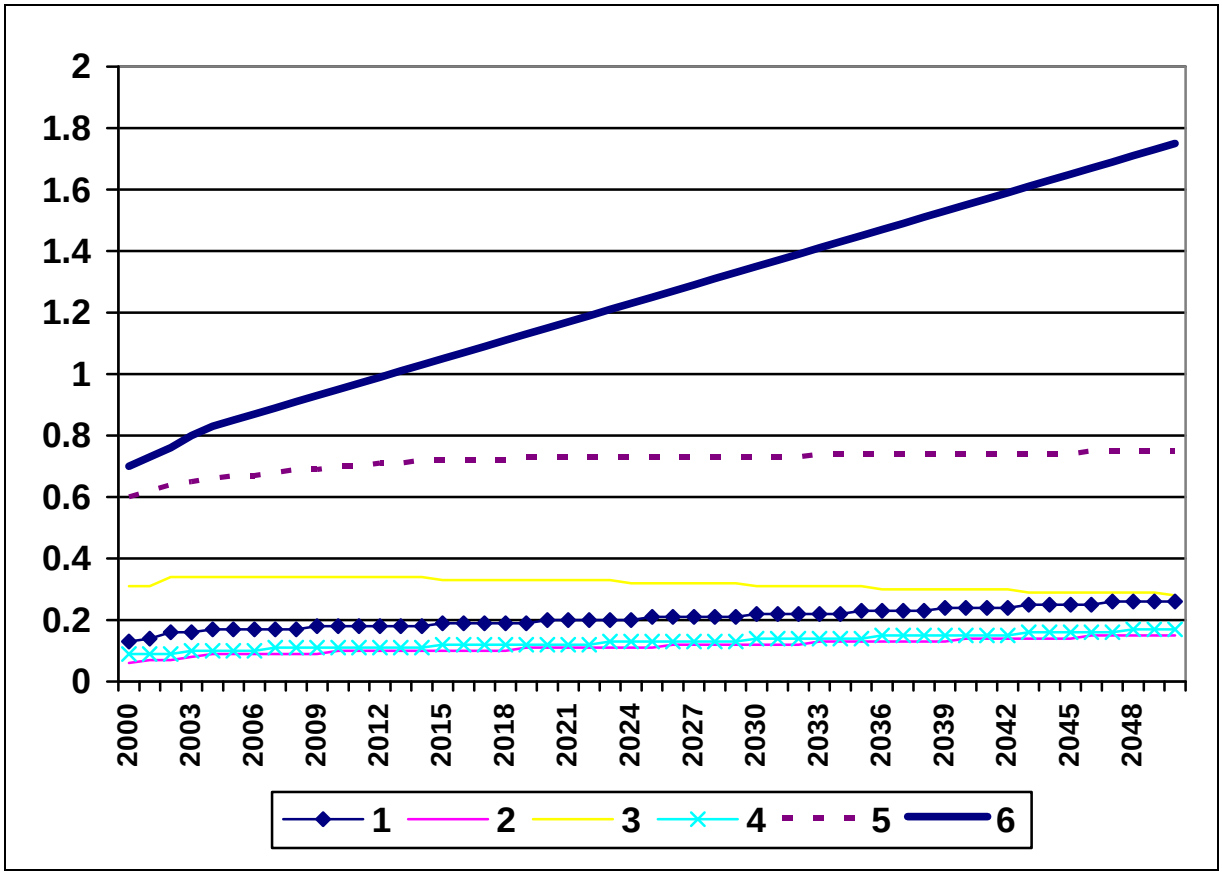
Further rapid growth in the adult population housed in residential institutions is expected between 2006-2050; the rates will double (assuming no fundamental change in policy) by the end of the projection period in comparison with the present rate (see Figure 3.1.4 below). The coverage rates for children with regard to residential schools for orphans and children without parental care, children's homes, and care homes for disabled children will also grow (albeit at slower rates). The coverage rates for children with regard to special residential schools (i.e., for children needing correction of physical and/or mental development) will grow slightly in the near term, but will stabilise after 2011. The coverage rates for children with regard to baby homes will slowly decrease.

Table 3.1.3: Percentage of the Population Housed in Residential Institutions in the Oblasts of Ukraine in 2004 (at the end of each year)

Oblast	Percentage of children in residential institutions					Percentage of adults in residential institutions
	Residential schools for orphans and children without parental care.	Children's homes	Baby homes	Care homes for disabled children	Group rate	
Ukraine (National)	**0.17**	**0.09**	**0.34**	**0.10**	**0.35**	**0.83**
AR of Crimea	0.19	0.12	0.31	0.05	0.35	0.81
Cherkasy oblast	0.21	0.02	0.25	0.14	0.36	0.64
Chernihiv oblast	0.30	0.02	0.10	0.03	0.30	0.66
Chernivtsi oblast	0.15	0.24	0.48	0.12	0.51	0.73
Dnipropetrovsk oblast	0.16	0.09	0.49	0.10	0.37	0.88
Donetsk oblast	0.26	0.04	0.35	0.16	0.44	1.21
Ivano-Frankivsk oblast	0.10	0.12	0.27	0.16	0.36	0.77
Kharkiv oblast	0.21	0.00	0.46	0.15	0.38	0.86
Kherson oblast	0.08	0.03	0.12	0.12	0.21	0.52
Khmelnytsky oblast	0.14	0.38	0.52	0.06	0.57	0.80
Kirovohrad oblast	0.20	0.14	0.32	0.15	0.47	1.07
Kyiv oblast	0.13	0.03	0.29	0.09	0.26	0.94
Lugansk oblast	0.05	0.10	0.17	0.03	0.17	0.54
Lviv oblast	0.26	0.04	0.38	0.05	0.35	1.07
Mykolayiv oblast	0.26	0.06	0.64	0.15	0.50	0.54
Odessa oblast	0.25	0.03	0.33	0.10	0.38	1.04
Poltava oblast	0.07	0.06	0.21	0.03	0.17	0.83
Rivne oblast	0.25	0.00	0.36	0.11	0.36	1.00
Sumy oblast	0.11	0.01	0.13	0.11	0.22	0.45
Ternopil oblast	0.26	0.11	0.52	0.14	0.51	0.86
Vinnytsia oblast	0.14	0.04	0.24	0.20	0.36	1.04
Volyn oblast	0.16	0.06	0.20	0.02	0.24	0.96
Zakarpattia oblast	0.10	0.10	0.35	0.09	0.31	1.10
Zaporizhzhia oblast	0.11	0.04	0.23	0.04	0.19	0.77
Zhytomyr oblast	0.28	0.05	0.44	0.15	0.48	0.99
Kyiv city	0.07	0.05	0.13	0.12	0.22	0.83
Sevastopol city	0.00	0.30	0.73	0.00	0.38	0.41

Considering demographic trends (see Resource Paper 2, Section 3) the number of residents in baby homes and special residential schools will steadily decrease, the number of residents of children's residential institutions of the other three types will fluctuate with the general trend towards a decrease, the number of residents of residential institutions for adults will rise considerably (Table 3.1.4 below for an overview of the dynamics).

Figure 3.1.4: Projections of the Population in Residential Institutions by Categories (see: key below) 2000-2050



Key: **1** - residential schools for orphans and children without parental care; **2** – children's homes; **3** – baby homes; **4** – care homes for disabled children; **5** – special residential schools; **6** – residential institutions for adults

Table 3.1.4: Dynamics of the number of residents of residential institutions of Ukraine 2004-2050 (at the end of each year)

Type of Residential Institution	2004	2010	2020	2030	2040	2050
Residential schools for orphans and children without parental care	12,593	10,688	11,581	10,847	10,482	11,189
Children's homes	6,690	5,746	6,350	6,066	5,979	6,510
Baby homes	5,387	5,985	4,800	3,879	3,662	3,077
Care homes for disabled children	7,716	6,588	7,209	6,819	6,655	7,175
Special residential schools	49,687	42,170	42,963	36,794	32,512	31,734
Care homes for elderly and disabled adults	45,626	51,319	62,763	69,089	78,575	88,615

Note: 2004=actual data; 2010-2050=projection.

Section 2: Analysis of Social Statistics and Trends in Physical and Mental Health Related Disabilities

Overview:

Disability is a complex characteristic of the population's health influenced by numerous medical, social, demographic, psychological, and economic factors, and requires special attention in the context of reframing and reforming policies and delivery systems for social services in the context of implementing the LSS (2004). Physically disabled people, people with chronic conditions, and older people with restricted opportunities in the labour force work and with restrictions on their ability to lead 'normal' modes of life form a steadily growing population group. The growing size of this group is the result of a number of developments and factors: (i) natural and man-caused catastrophes including the Chernobyl catastrophe whose consequences will have a long-term negative influence on future generations; (ii) the Afghan war, where citizens of Ukraine were involved (under the auspices of the USSR) in the armed conflict; (iii) unfavourable ecological conditions and environmental pollution; (iv) the socio-technological interface which is leading to an increase in the number of severe traffic accidents and industrial injuries (accompanied by a lag in health and safety measures to reduce the incidence); (v) an increase in the number of congenital anomalies and chronic diseases; and (vi) ageing of the population.

Rates of disability are also influenced by various subjective organisational factors which do not have a direct impact on the population's state of health. For example, data on disability has faults that result from weak organisational and record keeping procedures[1]. Information on primary disability, integrated by health protection authorities on the basis of the data of Socio-Medical Expert Commissions (SMEC), is not collected and classified in a manner that is user friendly to the purpose of analysing the characteristics of disability dynamics in population groups with differing socio-demographic features. At the same time, possibilities for analysing the demo-economic aspects of general disability (through the use of statistics from social security institutions) are restricted given that this data does not contain information on a number of very important features necessary for the classifying particular characteristics of the disabled people (for example, sex, age, education, profession, etc).

Against the background of these general observations, this section focuses on:

- Trends and Dynamics in Disability: Primary Factors and their Influence;
- Adults and Disability;
- The Causes and Structure of Disability;
- Disability Among Children;
- Disability Resulting from Occupational Disease and Injury;
- Projection of the Number of the Disabled at the National level, and in Kharkiv and Khmelnytsky Oblasts;
- Analysis of Social Statistics of Registered Cases of Mental Health Development Problems Among the Population of Ukraine: 1989-2004;
- Systemic and Organisational Features of Mental Health and Disability in Ukraine;
- Analysis of the Statistical of Registered Mental Health Problems in Kharkiv and Khmelnytsky Oblasts: 1989-2004

[1] **See**: Kalachova, I., (2002) *Children and Disability in Ukraine: MONEE Country Analytical Report*, UNICEF Innocenti Research Centre, Florence, Italy for a detailed overview of the classification of disability categories in Ukraine. Group **1** = severe disability with high level limitation and high dependency requirements, Group **2** = medium disability with moderate limitation and some dependency requirements, Group **3** = low level disability with lower level of limitations and limited dependency requirements

Trends and Dynamics in Disability: Primary Factors and their Influence

According to the State Statistics Committee at the beginning of 2005 the total number of the disabled in Ukraine was 2,462,000 people, or 52 people per 1,000 population (see Table 3.2.1 below). Almost half of this number were people in disability group 2: 1,154,000; a smaller proportion (34.5 per cent) were people in disability group 3: 848,500; and around 13.6 per cent of the total number of the disabled (about 334,000) were people in disability group 1. There were almost 125,500 disabled children aged under 18 (around 5 per cent of the total number of the disabled). During 1990's the total number of the disabled in Ukraine grew considerably (see Table 3.2.1 below).

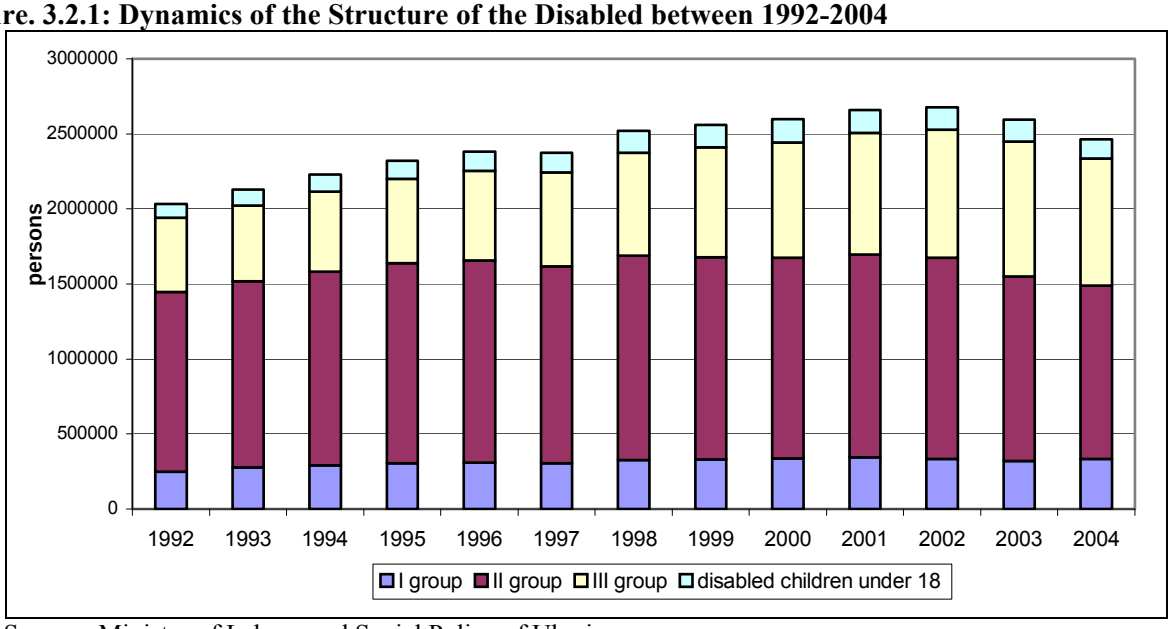
Table 3.2.1: The Number of the Disabled People in Ukraine by Disability Group (as of the beginning of 2005)

	Total	Including				Per 1,000 population
		I group	II group	III group	Disabled children aged under 18	
Total Persons	2,462,244	333,972	1,154,372	848,475	125,425	
%	100.0	13.6	46.9	34.5	5.1	52

Source: the State Statistics Committee

In analysing the numerical dynamics it should be noted that the steady growth in the total number of the disabled which rose to 2,676,000 before 2002 has subsequently been followed by a decrease. People in disability group 3 contributed most to the growth in the total number of disabled - with their number almost doubling from 495,000 in 1992 to 900,000 in 2003). The number of people in disability group 2 changed little, while the number of people in disability group 1 grew by almost 100,000 people (from 248,000 in 1992 to 333,000 in 2004). The number of disabled children also increased from 93,000 to 125,000 over the same period (see Figure 3.2.1 below).

Figure. 3.2.1: Dynamics of the Structure of the Disabled between 1992-2004



Source: Ministry of Labour and Social Policy of Ukraine

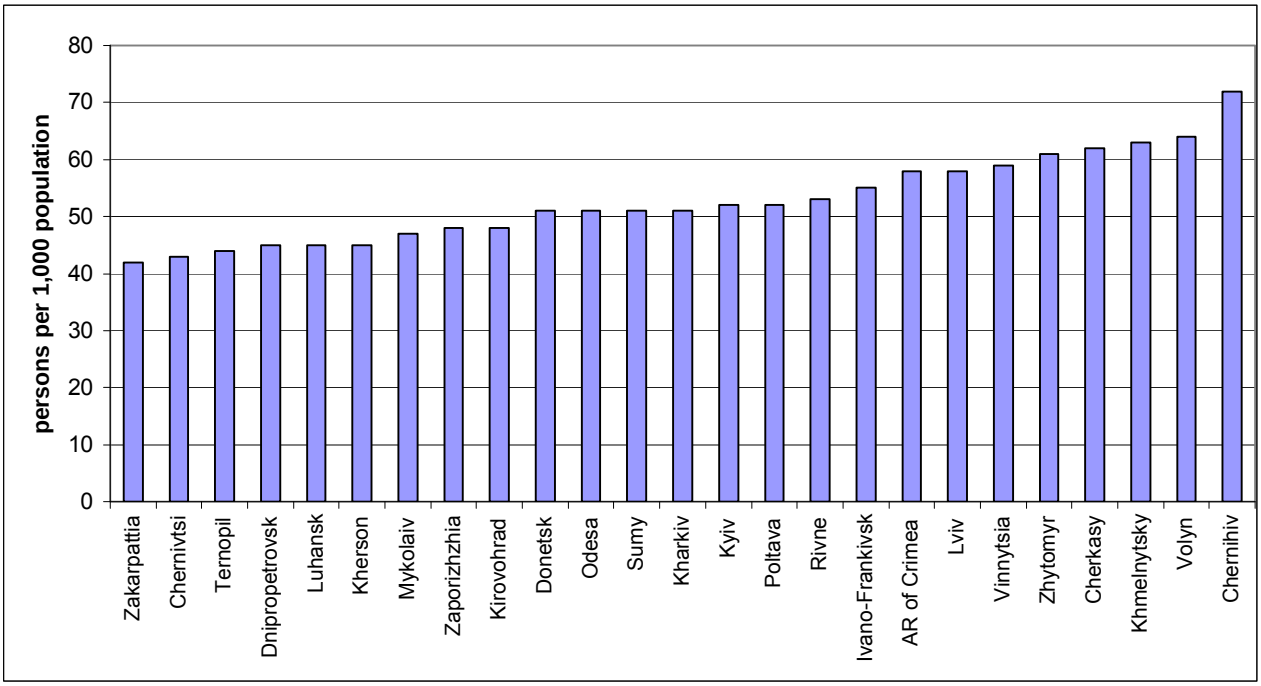
The dynamics of disability in Ukraine demonstrate that there is a relationship between the rate of disability and socio-economic factors. However, the increase in disability is not only dependent on objective factors, but also from amendments to legislation in 1991-1992 which introduced new social privileges for miners and metallurgists injured at work due to unhealthy or hazardous working conditions and who did not previously receive compensation for loss of capabilities[2].

[2] **See**: State report "*On the position of the disabled in Ukraine and the fundamentals of the state policy related to solving the problems of disabled people*", Kyiv, 2002.

Another factor promoting the increase of the rate of disability were changes in the labour market. In the 1980's the reason for not being registered as a disabled person was linked to the fact that there were a number of employment opportunities for people in disability categories 1 and 2. Once these limited opportunities were restricted – within the context of social policy being in transition - an increase in the number of registered disabled people resulted. On the other hand, the limited finance allocated to social programmes for disabled people (despite legislative provisions on particular entitlements) coupled with the restructuring of social privileges (with higher priority being allocated to certain occupational categories[3]) also brought about a decrease in the number of people that applied to SMECs during this period.

There are considerable regional differences in the rates of disability (Fig. 3.2.2) in Ukraine. In some western Oblasts (Zakarpattia, Chernivtsi, Rivne) there are between 42 and 44 disabled people per 1,000 population, while in Zhytomyr, Cherkasy, Volyn, and Khmelnytsky Oblasts there are more than 60 per 1000, and in Chernihiv Oblast as many as 72 per 1000. Kharkiv Oblast falls within the middle of the range: as of the beginning of 2005, the number of the disabled in the Oblast was 51 persons per 1,000 population; while Khmelnytsky Oblast was in towards the upper limits of the range with 60 persons per 1000.

Figure 3.2.2: Regional Diversity in the Number of Disabled per 1,000 Population (as of the beginning of 2005)



Source: State Statistics Committee

The accelerated growth of primary disability between the late 1980's and early 1990's was probably the most evident indication of a deterioration of the population's social conditions and health status (which coincided with the beginning of the transition period). The general rate of primary disability in Ukraine during the period of its accelerated growth, which extended over seven years (1987-1993) increased by almost 1.8 times (see Figure 3.2.3 below). Moreover, between 1989 to 1993 alone, the disability rate grew by 1.5 times and reached 58.5 primarily disabled people per 10,000[4] population. In 1994 the disability rate remained close to the peak (56 people per 1000), but then it started to decrease. As a result, the rate of 1996 (49 people per 1,000 population) was already close to the level of 1992. Between 1997 and 1998 primary disability was about 48 people per 10,000 population, although in 1999 it started to fall and continued to fall until 2003 when the minimum rate of primary disability was registered: 40.9 people per 10,000 population.

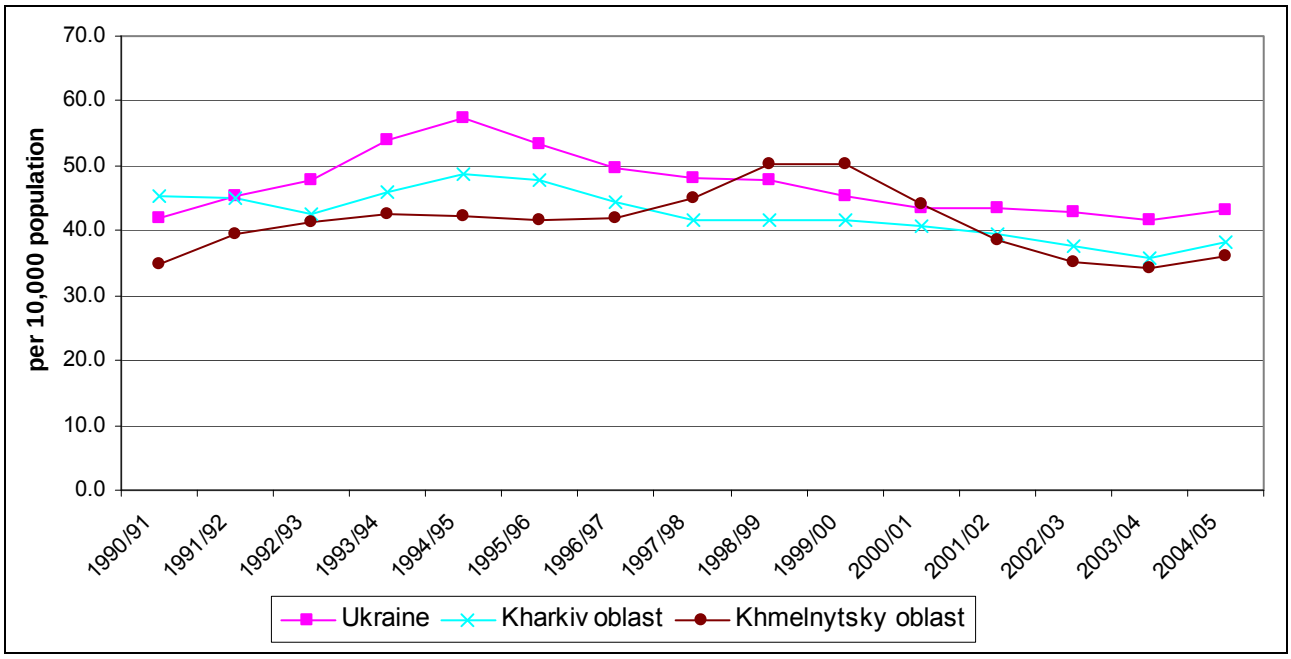
[3] **See:** DFID FRSSU Project Report (2006c) for a detailed analytical review of these trends and their policy implications for social services.

[4] The rate per 10,000 population refers to primary disability; while per 1,000 refers to disability in general.

However, in 2004, there was a sharp increase in the number of primarily disabled people again: up to 45.6 people per 1,000 population.

The trends in primary disability in Khmelnytsky and Kharkiv Oblasts are generally similar to national Ukrainian trends. Starting from 1994, the number of primarily disabled people steadily decreased. However, the peak of disability in Khmelnytsky Oblast was registered in 1998: 53.3 people per 10,000 population. In Kharkiv Oblast, the highest rates were registered in 1990 and 1994 (48.9 per 10,000 and 49.4 per 10,000 respectively). The lowest rates of primary disability in these regions were recorded in 2002-2003; but in 2004 the rate of primary cases of disability began to grow again.

Figure 3.2.3: The Number of Primarily Disabled People of All Categories (except disabled children) in Ukraine and in the Oblasts of Kharkiv and Khmelnytsky: 1989-2000



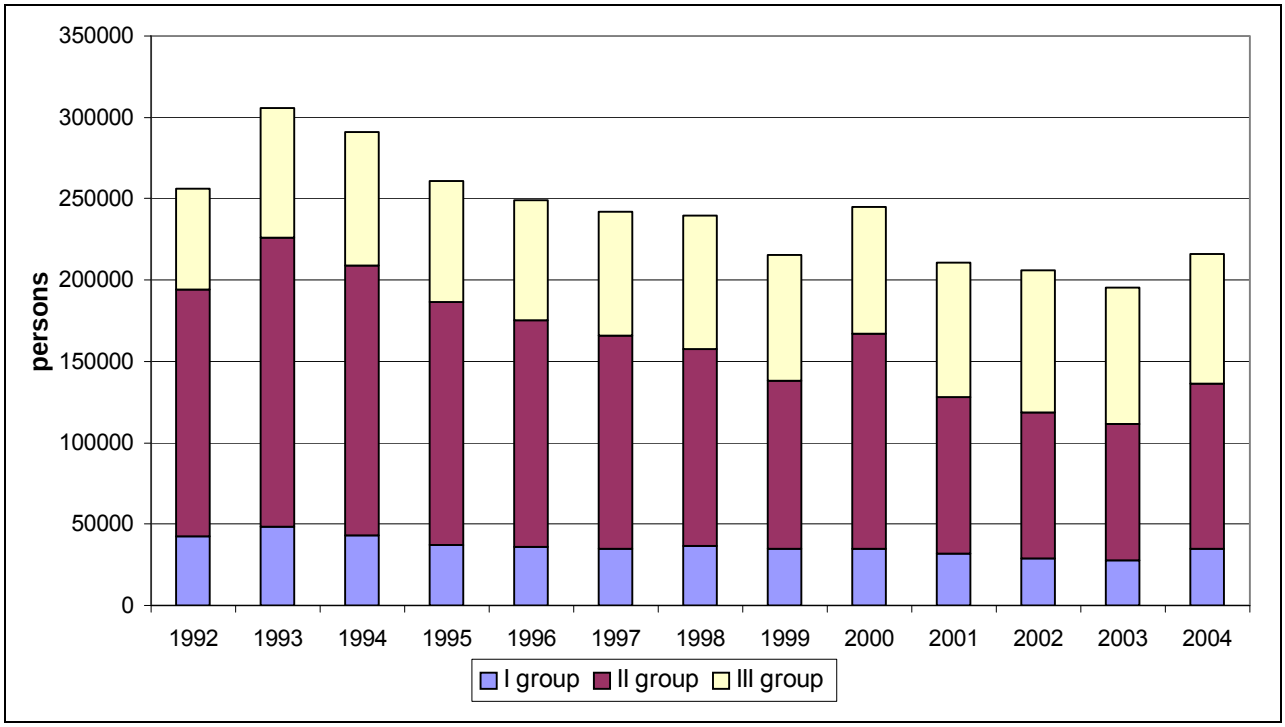
Source: Ministry of Health

The trends of primary disability in Ukraine are diverse in character. Thus, extremely high rates of growth in 1992-1993 were, in part, due to an increase in the number of people applying to SMEC for disability status in order to gain access to certain social privileges and benefits, i.e., to secure official legitimation of concealed disabilities. At the same time, in the late 1990's, the population were motivated, in part, by perverse incentives to register as disabled due to constraints in the labour market even though levels of social benefit and social privileges were inadequate for life maintenance purposes. Available statistics indirectly confirm that in recent years disability among people above the working age have acquired concealed characteristics in Ukraine: i.e., relatively low primary disability rates in older age groups prove that not all older people with serious illnesses and manifestly limited abilities apply for a disability group. This feature can partially be accounted for by the fact that disability pensions do not exceed old-age pensions.

Adults and Disability:

The primary disability rates among adults and the working age population are similar to the dynamics of the general rate for the period under review: accelerated growth in early 1990's with the highest disability rate recorded in 1993 giving way to a decrease in the mid- and, especially, late 1990's, followed by further stabilisation. Among the disabled as a whole and among primarily disabled people in particular the share of Group 3 disability is growing because on one hand, disabled people of working age try not to lose their jobs by registering as disabled; and on the other, conditions and opportunities of the appropriate treatment and rehabilitation of disabled people are limited (see Figure 3.2.4). At the same time, between 1992 and 2004 the number (and the share) of primarily disabled people in disability group 2 has decreased (compared with 1992 by almost 1.5 times). The number of primarily disabled people in Group 1 is also decreasing.

Figure 3.2.4: Dynamics of the Structure of Primarily Disabled People in Ukraine: 1992-2004



Regional characteristics of primary disability among the population are generally similar to the variations in the total number of the disabled (Table 3.2.2). Chernihiv, Odessa, and Mykolayiv Oblasts stand out for their high rates, while in Zakarpattia and Sumy Oblasts the situation is less extreme. However, the comparison of primary disability trends in different regions reveals diverse tendencies. In some Oblasts, there was a sharp decrease in primary disability rates between 1995 and 2004. In particular, in Donetsk Oblast the number of primarily disabled people declined from 32,700 to 23,700 people, in Lviv Oblast from 15,600 to 10,200, and in the Crimea from 14,800 to 10,200 people. A similar decrease was registered in Dnipropetrovsk, Zaporizhzhia, Kyiv, Volyn, Chernivtsi, Cherkasy, Khmelnytsky, and Kharkiv Oblasts. In other regions there was a slight increase in primary disability rates. Among such Oblasts increases were recorded in Vinnytsia, Ivano-Frankivsk, Zakarpattia, Mykolayiv, Odessa, Chernivtsi, and Ternopil where the number of primarily disabled people in 2004 was higher than in 1995. It is noteworthy that in all the regions a greater proportion (almost 70 per cent) of primarily disabled people among adults are urban residents. Naturally, there is an especially big gap between urban and rural settlements characteristic of the regions with large industrial cities: i.e., Donetsk, Dnipropetrovsk, Odessa, and Kharkiv Oblasts. Compared with 1995, the number of primarily disabled people in rural areas declined in practically all regions (with the exception of western Oblasts) which is similar to national Ukrainian trends.

Table 3.2.2: The Number of Primarily Disabled People by Region (population aged 16 and over)

	'000								Per 10,000 population			
	Total				In the rural area							
	1995	2000	2003	2004	1995	2000	2003	2004	1995	2000	2003	2004
Ukraine	**261.2**	**215.2**	**195.6**	**216.1**	**71.4**	**62.6**	**57.1**	**63.8**	**65**	**54**	**50**	**55**
AR of Crimea	14.8	13.1	10.2	10.2	4.2	4.0	3.6	3.4	87	77	61	61
Vinnytsia oblast	8.1	7.6	6.9	8.4	4.0	3.5	3.1	3.9	55	53	48	59
Volyn oblast	6.0	4.7	3.8	3.9	2.5	1.9	1.6	1.7	74	58	46	47
Dnipropetrovsk oblast	19.7	15.7	14.5	16.6	2.5	2.0	1.9	2.3	64	52	49	56
Donetsk oblast	32.7	21.5	22.2	23.7	3.6	2.8	2.7	2.9	78	53	55	59
Zhytomyr oblast	7.6	7.4	6.0	6.5	3.2	3.0	2.4	2.6	65	65	53	59
Zakarpattia oblast	3.5	3.4	3.7	4.4	2.1	2.1	2.5	2.8	37	35	38	45
Zaporizhzhia oblast	11.1	8.1	7.2	8.3	1.9	1.6	1.3	1.6	68	50	45	52
Ivano-Frankivsk oblast	4.7	5.7	5.5	5.5	2.3	2.8	2.9	2.9	43	51	50	49
Kyiv oblast	10.8	7.4	7.1	7.8	4.2	2.8	2.7	2.9	72	50	48	53
Kirovohrad oblast	6.3	4.7	4.4	4.9	2.4	1.7	1.6	1.7	66	51	48	54
Lugansk oblast	11.5	9.8	8.5	9.9	2.3	2.0	1.7	2.1	51	45	40	47
Lviv oblast	15.6	13.1	11.7	10.2	4.2	4.6	4.2	3.7	74	61	56	49
Mykolayiv oblast	5.0	5.3	5.3	7.0	1.4	1.6	1.4	2.2	48	52	52	69
Odessa oblast	12.6	11.8	10.7	13.0	3.7	4.3	3.8	4.6	62	59	53	65
Poltava oblast	8.9	7.7	6.3	7.5	3.5	3.1	2.5	3.1	64	57	47	57
Rivne oblast	6.3	5.5	5.1	4.9	3.3	2.7	2.5	2.4	71	61	56	54
Sumy oblast	7.8	5.6	4.0	4.1	2.6	1.6	1.0	1.2	70	52	38	39
Ternopil oblast	4.0	3.5	3.8	4.5	2.0	1.7	2.1	2.4	44	38	42	50
Kharkiv oblast	14.5	12.0	10.0	11.9	2.9	2.2	1.6	2.1	58	49	41	49
Kherson oblast	6.0	4.6	4.5	4.9	1.8	1.5	1.6	1.8	62	48	48	52
Khmelnytsky oblast	6.3	6.0	4.9	5.2	2.5	2.5	2.1	2.1	53	51	42	46
Cherkasy oblast	7.7	7.0	6.1	6.2	3.0	2.5	2.3	2.3	64	60	53	55
Chernivtsi oblast	3.0	3.3	3.1	3.5	1.5	1.6	1.7	1.9	42	45	43	48
Chernihiv oblast	8.9	6.4	6.0	7.5	3.7	2.4	2.2	3.1	81	61	58	75
Kyiv city	16.1	12.5	12.1	13.3	—	—	—	—	78	58	55	59
Sevastopol city	1.7	1.8	2.0	2.3	0.05	0.1	0.1	0.1	53	57	63	70

Source: the State Statistics Committee

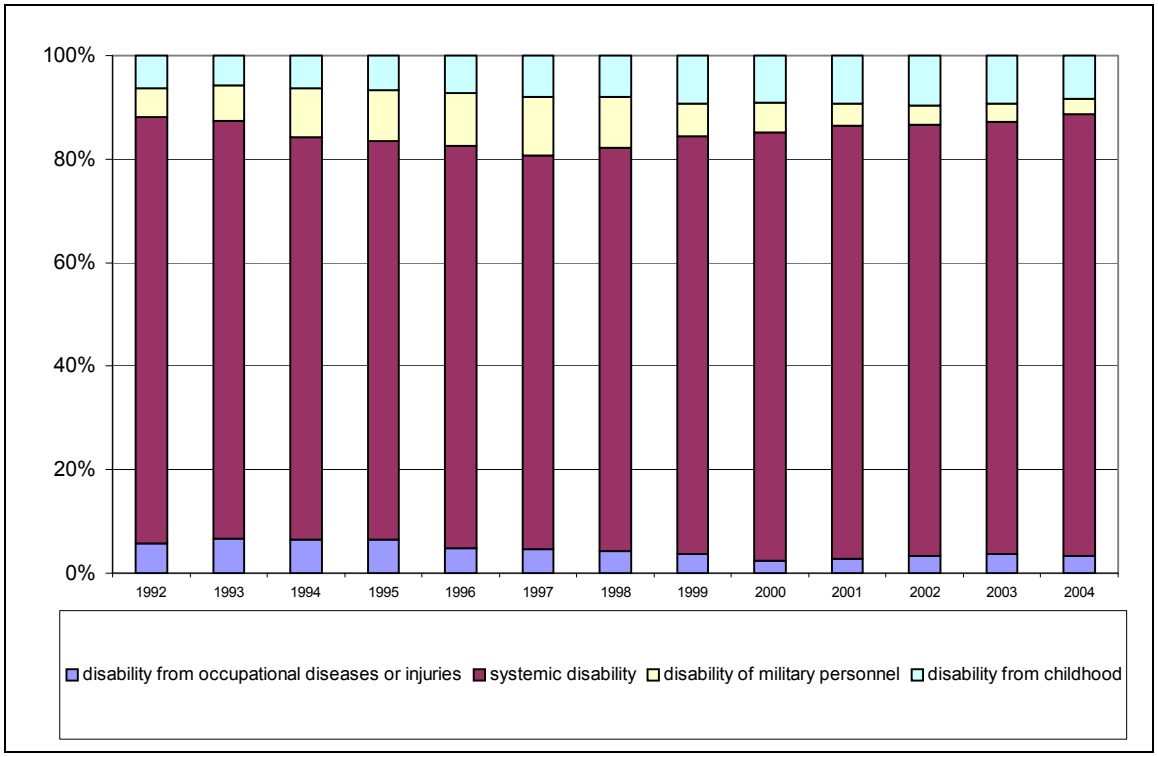
The Causes and Structure of Disability:

The analysis of the cause-specific structure of primary disability shows that a significant number of people who are primarily disabled have systemic disabilities (see Figure 3.2.5). The total number of such primarily disabled people decreased from 211,000 to 184,500 between 1992 and 2004; their share among all disabled people was stable at around 80 per cent, but is now growing. There was a slight decrease of their share between 1994 and 1997, which mostly resulted from a sharp increase in the number (and share) of primarily disabled people among military personnel. In recent years, however, the number of primarily disabled people among military personnel has considerably decreased. During this latter period, the number of primarily disabled people with occupational disability has also considerably decreased from 14,700 to 7,300. However, a certain contribution to the decrease in the number of the disabled with occupational disability

was made by the general setback in industrial production in 1990's. Therefore, the observed reductions cannot be put down entirely to improvements in working conditions and technological progress.

The growth of the number and share of disabled people from childhood looks especially negative against the background of the general decrease in the primary disability rate. Although the maximum number of primarily registered cases of this type of disability declined (it rose to 19,700 people in 1999-2002), the corresponding rates remain high.

Figure 3.2.5: Dynamics of the Cause-Specific Primary Disability Structure 1992-2004



Source: Ministry of Labour and Social Policy

The increase in disability of the population in late 1980's and early 1990's was associated with an accelerated growth in disability resulting from: blood circulation diseases, neoplasms, diseases of the musculoskeletal system and connective tissue, injuries and poisonings, as well as (especially in the 1990's) nervous system diseases and organs of sense, and chronic non-specific diseases of respiratory organs. Among adults disability is mostly caused by blood circulation diseases (more than a third of all cases) and neoplasms (16.5 per cent of cases). Traditionally, among major causes of primary disability are also injuries and poisonings, diseases of the musculoskeletal system, mental and behavioural disorders, nervous system diseases (see Table 3.2.3 below).

The socio-economic instability in Ukraine, and growth of poverty accompanied by the lack of financial and other social resources, the unavailability of certain services, and an increase in the number of presenting needs and fewer opportunities to satisfy them all created conditions that predisposed the population to socially determined diseases that resulted in the growth of disability among the population. Tuberculosis morbidity and disability caused by this disease are a case in point (see below).

Table 3.2.3: The Number of Primarily Disabled People by Class of Disease in 2004

	'000		Per cent		Per 10,000 population	
	total*[1]	including working age	total*[1]	Including working age	total*[1]	including working age*[2]
Total	**216.1**	**147.0**	**100.0**	**100.0**	**55**	**52**
including class of disease**:**						
Infectious and parasitic	9.3	9.1	4.3	6.2	2	3
Neoplasms	35.6	24.8	16.5	16.9	9	9
Endocrine system diseases, dyspepsia and metabolic disease	8.3	6.0	3.8	4.1	2	2
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	0.6	0.5	0.3	0.4	0.1	0.2
Mental health and behavioural disorders	12.0	11.1	5.6	7.5	3	4
Nervous system diseases	12.3	10.5	5.7	7.1	3	4
Eye diseases	7.8	4.7	3.6	3.2	2	2
Diseases of the ear and mastoid	1.5	1.4	0.7	0.9	0.4	0.5
Blood circulation diseases	68.2	29.0	31.5	19.8	17	10
Respiratory diseases	7.4	5.2	3.4	3.5	2	2
Digestive system diseases	5.3	4.7	2.4	3.2	1	2
Urogenital system	2.5	2.3	1.2	1.5	1	1
The musculoskeletal system and connective tissue	19.1	14.4	8.8	9.8	5	6
Injuries, poisonings and some other exogenous causes	26.2	23.3	12.2	15.9	7	8

Notes: *[1] Population under 16 and over; *[2] Per working age population.

Tuberculosis morbidity and disabilities generated by this disease are flagrantly high in Ukraine. The evidence of this is robust in that there striking differences between the rates in Ukraine and in western European countries. In 1980 the tuberculosis morbidity rate in Ukraine was 1.7 times higher than in EU countries, but by 2003 it was 6 times higher. Even more striking is the gap in death rates: in 1980, deaths from tuberculosis in Ukraine were three times more frequent than in western European countries, but in 2004 the gap had increased to between 20 and 21 times. At present, between 10,000 and 11,000 Ukrainian people die from tuberculosis every year: which is between 21 and 23 deaths per 100,000 population on average. At the same time, in EU countries the corresponding death rate is between 1.0 and 1.1 deaths per 100,000 people.

There is a considerable increase in tuberculosis morbidity both among adults and among children and teenagers. Every year, around 40,000 cases of active tuberculosis is diagnosed. The morbidity rate of active tuberculosis increased among all populations from 34.5 in 1989 to 81.2 in 2004, and among children from 4.6 to 9.5 respectively (per 100,000 people). This trend is especially alarming, since, as is well known, a growing rate of morbidity among children suggests there is a high risk of the disease becoming an epidemic. According to SMEC 8,811 primarily disabled people with tuberculosis were registered in Ukraine as of 2004 (2.2 cases per 10,000 population), including 8,195 cases (2.1 per 10,000 people) caused by pulmonary tuberculosis. A significant number (8,581) of the people with disabilities from tuberculosis were of working age. The tubercular epidemic situation is regionally uneven. The highest rates of mortality and disability from tuberculosis are in south-eastern and southern regions of Ukraine. Donetsk and Kherson oblasts have

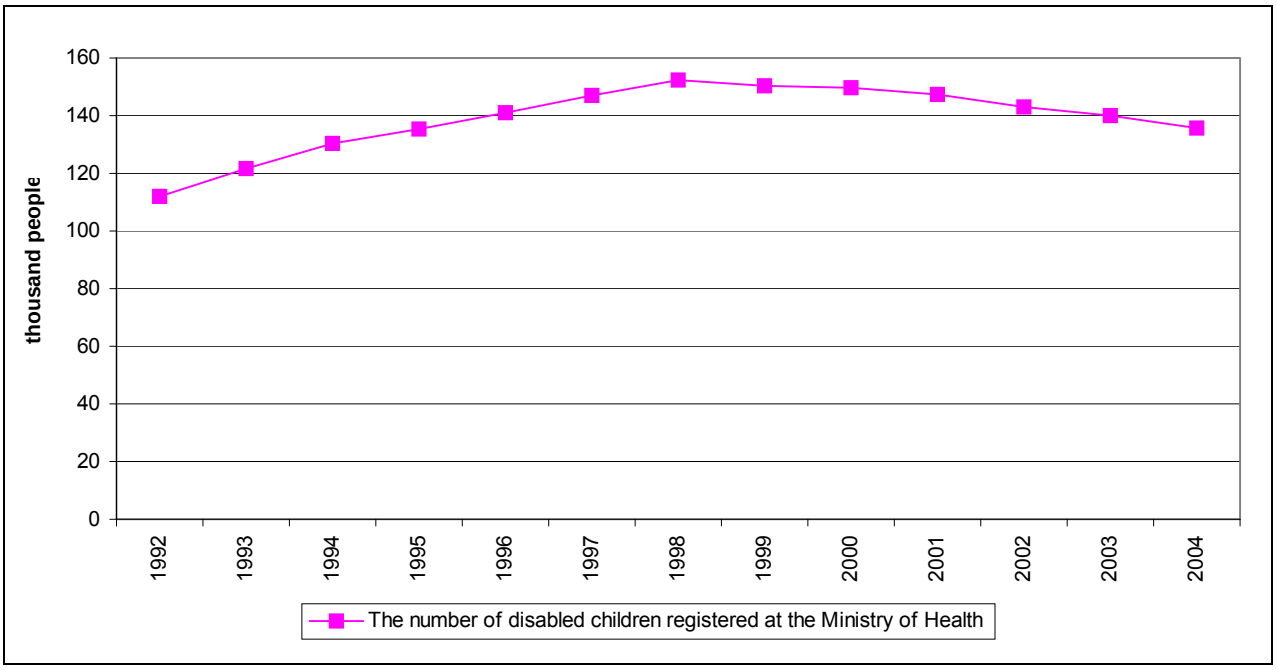
had the largest number of recorded cases for a number of years: the rate of disability from tuberculosis is twice higher there than the average Ukrainian rate (4.5 and 4.4 cases respectively per 10,000 population against 2.2 across Ukraine). The lowest rate of disability from tuberculosis is in Sumy and Cherkasy Oblasts (0.8 cases per 10,000 population in both Oblasts). In Kharkiv Oblast the rate of disability from tuberculosis is lower than the rate across Ukraine (1.5 cases per 10,000 people), and in Khmelnytsky Oblast it is practically equal to the average Ukrainian rate (2.1 per 10,000 population). The above rates both indicate that the situation in health protection is deteriorating, and mirror general conditions of population' development. Morbidity and disability from these causes can be avoided and prevented. Demographic losses from the above causes can be minimised if the environment is friendly (i.e., created and maintained) to the population's health, security, and welfare – including social services .

Disability Among Children

Disability among children, despite the decreasing birth rate, has shown a steady tendency to grow (see Figure 3.2.6 below). More than 5 per cent of all disabled people are children aged under 18 (125,500 people as of the beginning of 2005). Deterioration of children's health is an outcome from a number of systemic socio-economic factors, the most important being: imperfections in the current medical care of children and teenagers; deterioration in the quality of nourishment; an over emphasis on technological interventions; a reduction of preventive programmes in out-patient clinics; the growing number of social economic situations that induce stress; imperfections in the system of social services that offer psychological and educational support to children from socially troubled families; and inefficiencies in public health educational programmes. Individually and collectively these factors contribute to a high disability rate. In terms of impact these systemic factors have led to increases in disability caused by a deterioration of children's health; a growth in the number of chronic diseases; and the impact of genetic factors. During the transition period, there has been an accelerated growth in accumulated child disability from congenital anomalies, tuberculosis, diseases of the musculoskeletal system and connective tissue, urogenital system, as well as from diseases of blood and blood-forming organs, respiratory pathologies and neoplasms.

Between 1995 and 2004, the total number of disabled children increased from 112,000 to 135,000. The peak of child disability cases was registered in 1998, and later, there was a decrease in their number. The total number of disabled children has fallen a little in recent times. There is also a slight decrease in primary child disability: though the rate of accumulated child disability has not decreased (indeed the rate in 2002 was 5 per cent higher than in 2000).

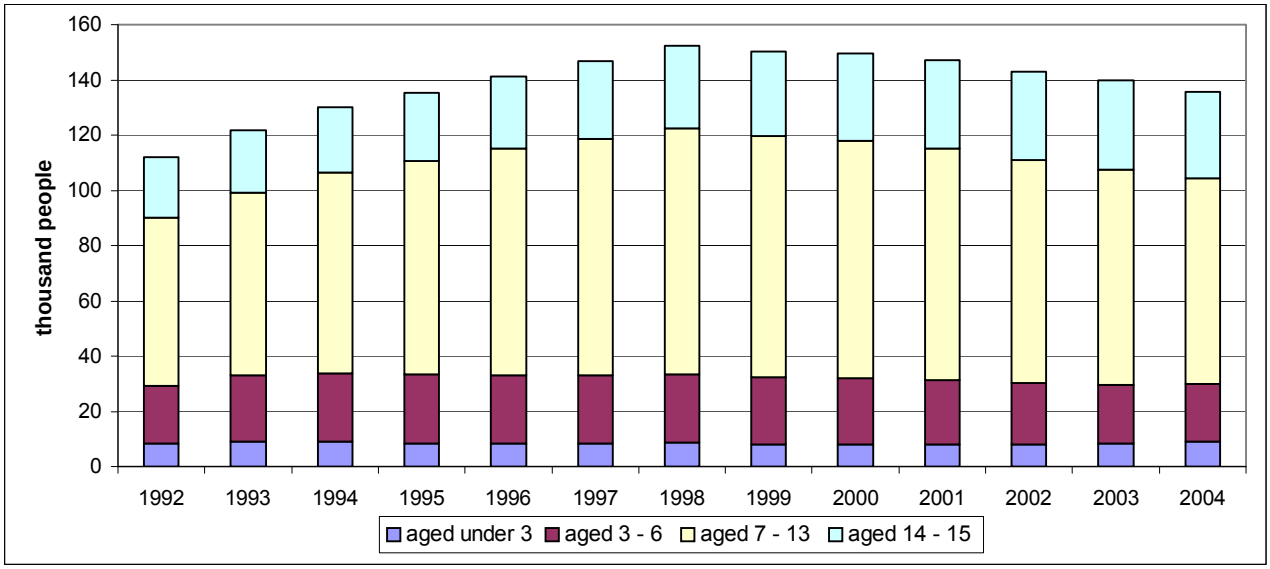
Figure 3.2.6: Dynamics of the Total Number of Disabled Children (aged under 16) in Ukraine: 1992-2004



In 2004, there were 135,773 disabled children aged under 16: 87,487 of them resided in urban settlements, and 48,286 in rural areas. The number of children who became disabled in 2004 was almost 15,923, the number of disabled children under 3: 9,105; those aged between 3 and 6: 20,909; those aged between 7 and 13:74,492; and those aged between 14 and 15: 31,267 children.

Generally, and in terms of the age structure of child disability, the largest number of children with disabilities are aged 7-15. Children in this age group prevail most significantly across all classes of diseases in the cause-specific structure of disability. Past trends suggest that more than half of the disabled children are aged between 7 and 13; about 20 per cent aged between 14 and15. The smallest share of disabled children are from the youngest age group i.e., aged under 3: according to 2004 data they constitute 6.7 per cent of all disabled children (see Figure 3.2.7 below).

Figure 3.2.7: Age Structure of Disabled Children Between: 1992-2004



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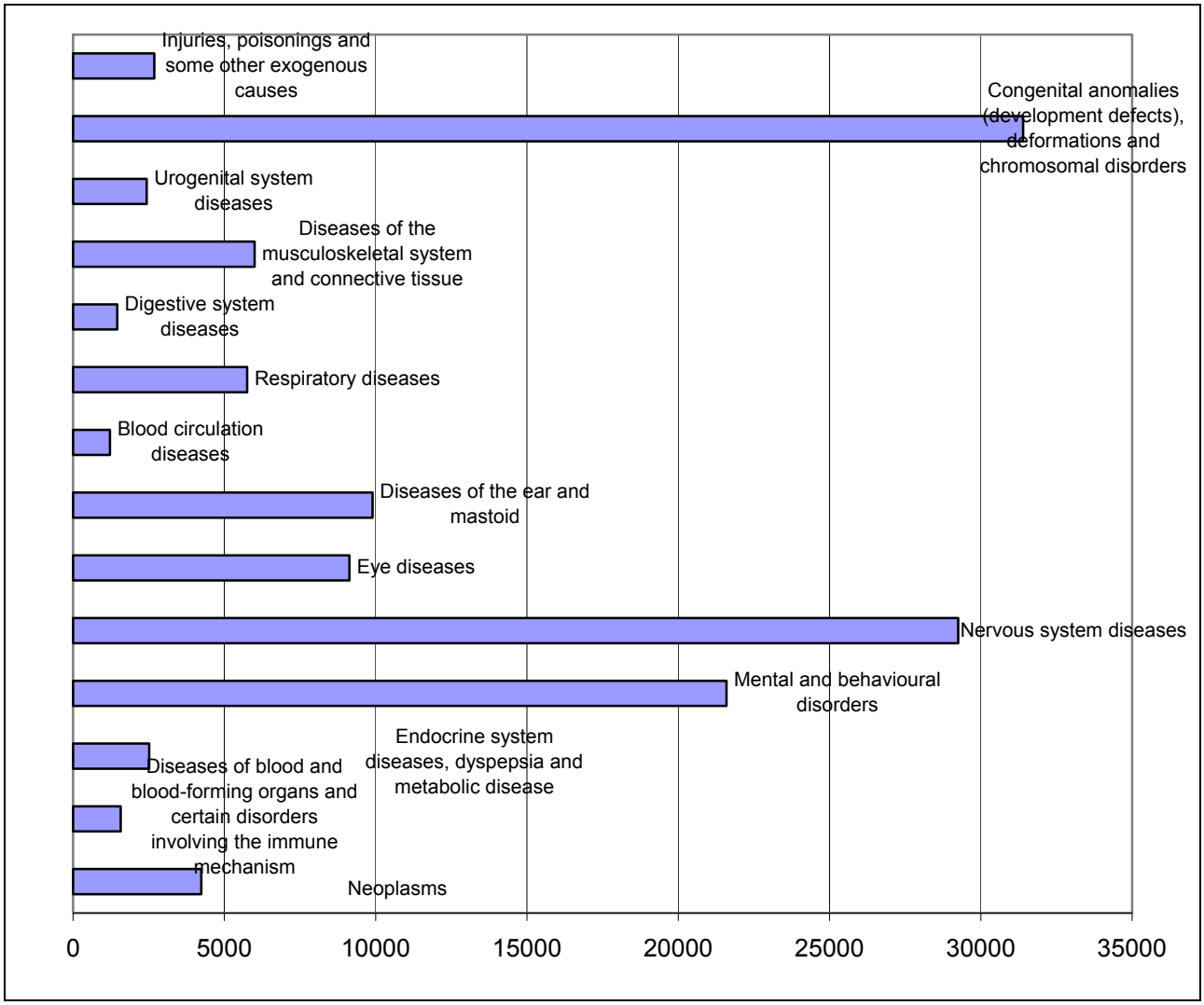
At present, the main causes of disability among children in Ukraine are nervous system diseases (primarily, infantile cerebral paralysis) which account for about 1 in 4 of the total number of disabled children, and almost 1 in 5 of primarily disabled children. Next in rank are congenital anomalies (which at 21 per cent contributes to both general and primary disability in children), and mental health and behavioural disorders(16 per cent). Among other common causes of child disability are eye diseases, diseases of the ear and mastoid, respiratory diseases, diseases of the musculoskeletal system and connective tissue, endocrine system diseases, dyspepsia, metabolic and immune disorders[5] – See Figure 3.2.8 below

In **Kharkiv** Oblast 8,132 cases of child disability were registered, including 6,034 cases in urban settlements, and 2,098 in rural areas. The share of disability associated with the nervous system diseases was 25 per cent of the total number of disabled children in 2004 (i.e., 2033 out of 8,132 cases). Next in rank was congenital anomalies (i.e., development defects), deformations and chromosomal disorders: which accounted for 19 per cent of all cases. However, among primarily registered disabled children in 2004, the most numerous causes were congenital anomalies, deformations and chromosomal disorders (175 cases); and nervous system diseases and mental and behavioural disorders:129 and 104 cases respectively (see Figure 3.2.8 below).

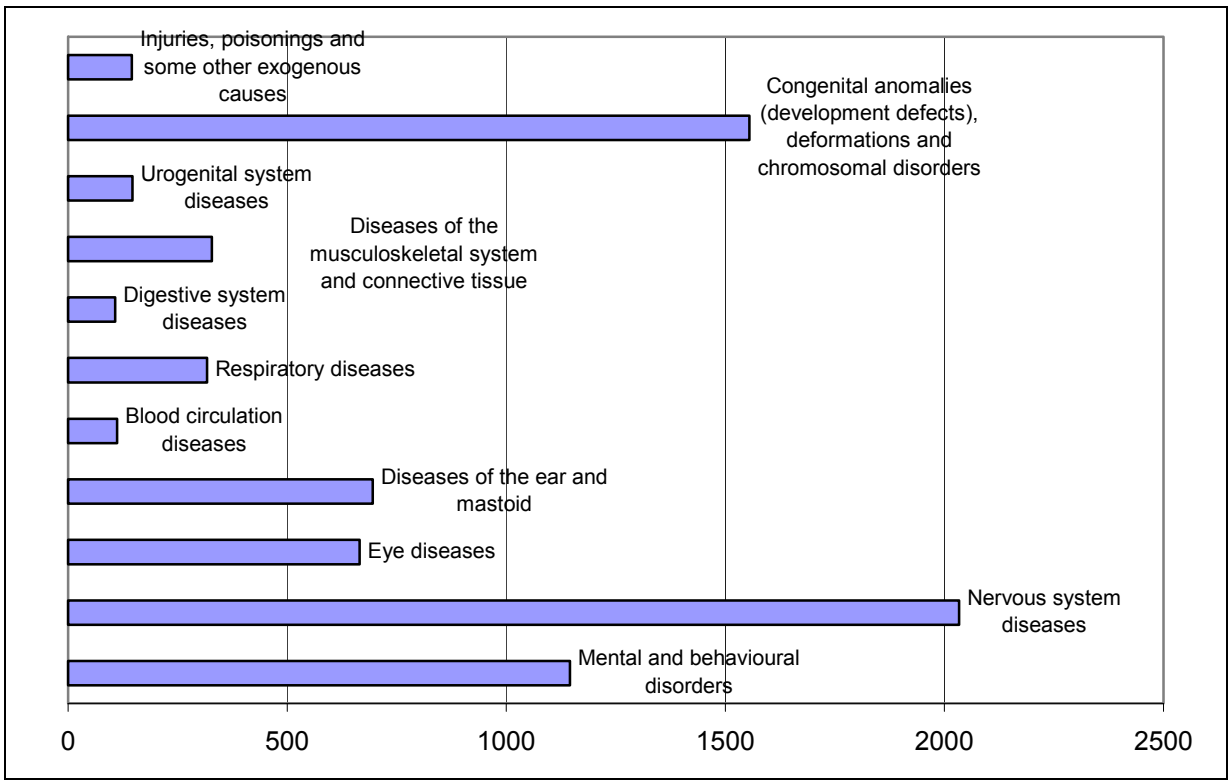
[5] In the age-specific context, the most numerous among registered disabled children were cases of child disability from congenital anomalies and nervous system diseases. According to the Ministry of Health (MoH), about 3,000 children with congenital anomalies of the heart and major vessels are born in Ukraine every year. In addition a large propotion of disability is caused by diseases of the endocrine system, dyspepsia, and metabolic diseases

Figure 3.2.8: Child Disability by Class of Disease in Ukraine in 2004.



In **Khmelnytsky** Oblast 4,891 disabled children were registered in 2004: 2,606 of them resided in urban settlements, and 2,285 in rural areas. In 2004 447 disabled children were primarily registered which accounted for 9 per cent of the total number of disabled children in the Oblast. The largest number of the disabled children had nervous system diseases (22 per cent of the total number of diseases), almost 21 per cent of registered child disability was caused by congenital anomalies, deformations and chromosomal disorders. The share of mental and behavioural disorders was also quite large: 15 per cent (see Figure 3.2.9 below)

Figure 3.2.8: Child Disability by Class of Disease in Kharkiv Oblast: 2004



Across the whole Ukraine, and in individual Oblasts, most of registered child disability cases relate to nervous system diseases, mental health and behavioural disorders and congenital anomalies (i.e., development delay and disorders), deformations and chromosomal disorders. The only difference is that nervous system diseases tend to prevail more strongly in the Oblasts, and congenital anomalies across the whole of Ukraine. The number of primarily registered cases of child disability in the Oblasts was about 9 per cent of the total number of disabled children; across Ukraine this rate was a little higher: 12 per cent. In the age-specific context, the number of disabled children was almost the same in the Oblasts and across the whole of Ukraine. The highest rate of disability was among children aged between 7 and13, next in rank were children aged between 14 and 15, followed by children aged between 3 and 6, and then children aged under 3.

Disability Resulting from Occupational Disease and Injury

Rates of disability from occupational disease and injury to a great extent is dependent on working conditions and changes in the number of people employed in the production. The analysis of the data (see Figure 3.2.10 below) on the number of primarily disabled people with an occupational disease or injury between 1992 and 2004 shows that there was a considerable reduction between 1991 and 2000 (from 20,000 cases to 5,000) which can be accounted for by economic decline, and a reduction in production volume and consequently a reduction in the overall level of employment in production. Since 2000, with the revival of the economy and industrial process, there has been a clear growth in the tendency of disability. In 2004, for example, the number of primarily disabled people with an occupational disease or injury was about 7,000 people.

Figure 3.2.9: Child Disability by Class of Disease in Khmelnytsky Oblast 2004

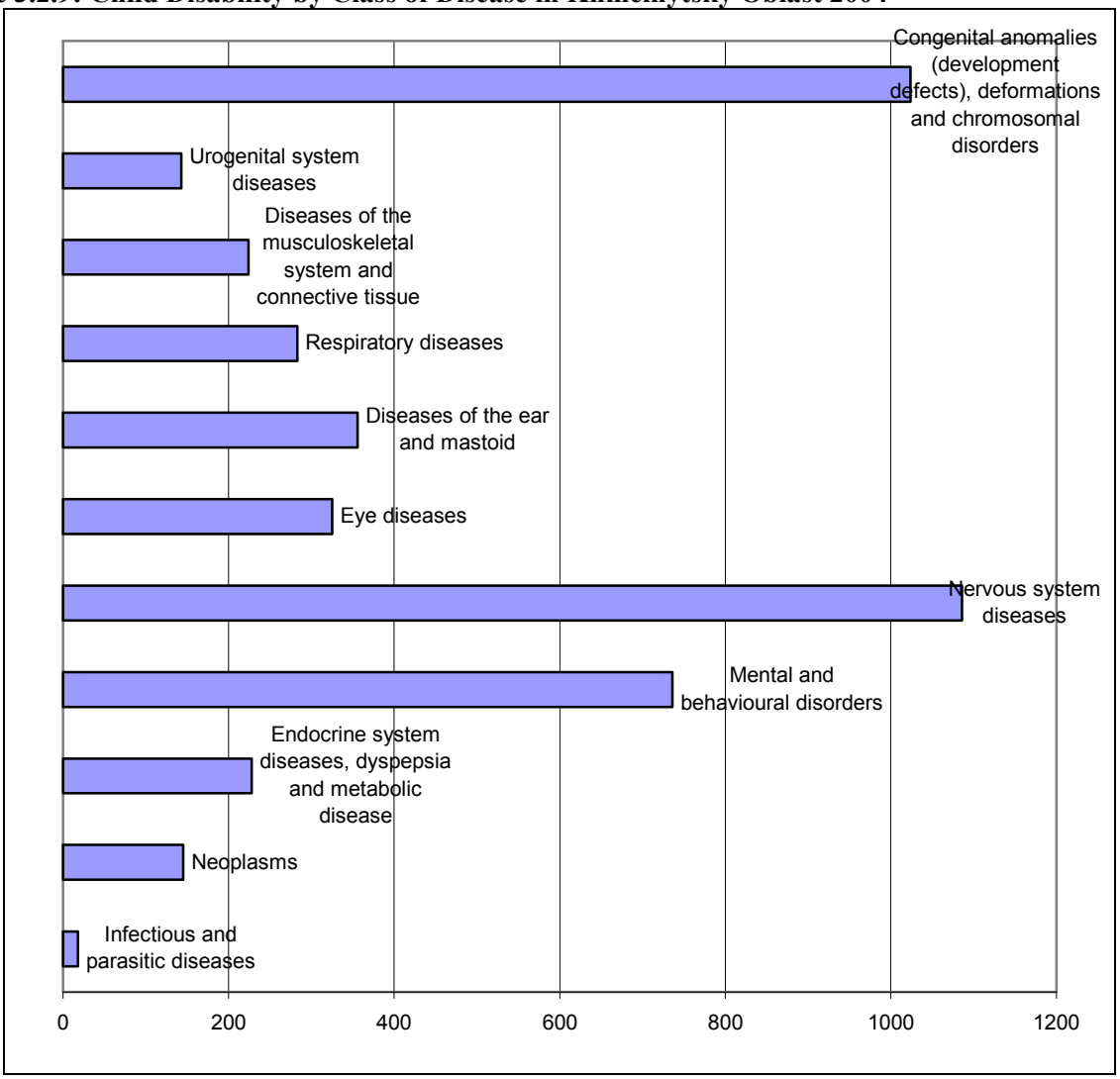
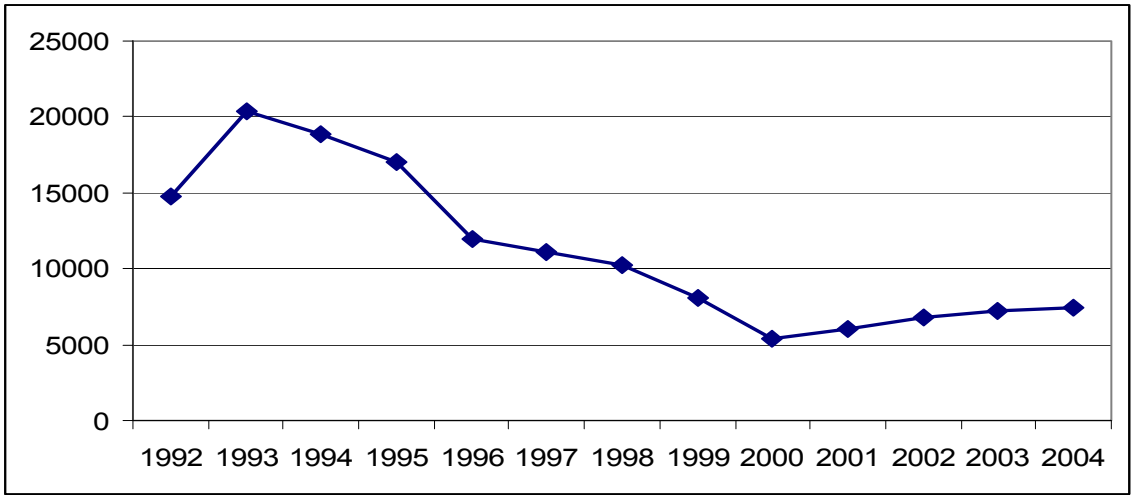


Figure 3.2.10: The Number of Primarily Disabled People with Disability from an Occupational Disease or Injury in Ukraine (1992-2004)



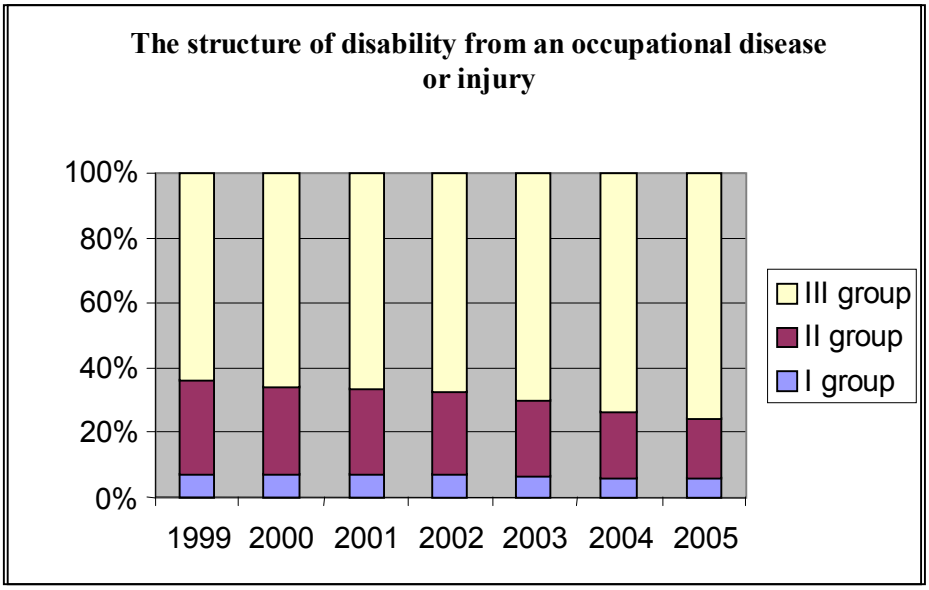
Also, the total number of the disabled people with a disability from an occupational disease or injury is decreasing (Table 3.2.4) which can be accounted for by a considerable reduction in the registration of the disabled in the preceding period (see above re: comments on disincentives to register).

Table 3.2.4: The Amount and Structure of Disability from Occupational Disease or Injury (1999-2005)

	Number of People						
	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Total	113,096	109,783	104,818	101,837	90,920	70,054	57,896
Disability group 1	8,518	8,172	7,853	7,507	6,282	4,416	3,512
Disability group 2	32,424	29,864	27,428	25,497	21,056	14,256	10,872
Disability group 3	72,154	71,747	69,537	68,833	63,528	51,382	43,512

There is also a decrease in the share of disabled people with higher degrees of disability (i.e., Groups 1 and 2) – see Figure 3.2.11 below.

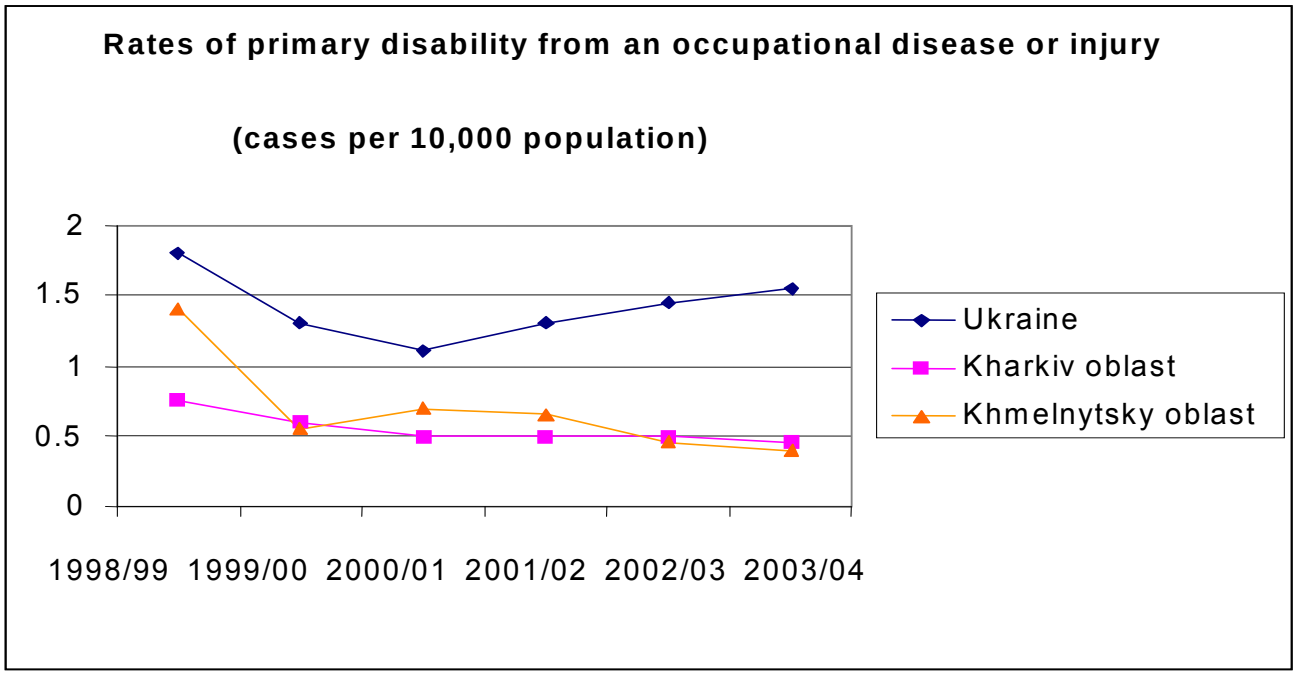
Figure 3.2.11: Dynamics of the Structure of Disability from Occupational Disease or Injury.



In the present stage of the transition there are still a large number of people working in the conditions that do not comply with the hygiene and sanitary requirements in Ukraine. The largest number work in the mining sector (the share of miners among all people with industrial injuries was 52.8 per cent in 2004), next in rank were in industries such as ferrous metallurgy, machine-building, construction, and the production of building materials. Occupational pathologies of people working in Ukraine are associated with about 140 harmful factors. These include various kinds of industrial dust, noise, local and general vibration, various kinds of chemicals, low and high temperatures, electromagnetic, and non-ionising and ionising radiation. The largest share in the structure of occupational morbidity is comprised of dust-related lung diseases - including black-lung disease and chronic bronchitis - which are common in people that work in coal mines, the production of building materials, and ferrous metallurgy. The second largest group are pathologies related to vibration and noise. Chronic occupational diseases of the support and locomotion system also tend to grow in the context of these pathologies. The rate of morbidity of chemical genesis (poisonings, dermatitis, cataract) fluctuates between 2 per cent and 5 per cent from year to year. The problem of occupational cancer is becoming topical in Ukraine because of the use of ionising radiation and uranium mining. Among occupational diseases associated with chemical aetiology - heavy metal poisonings is especially a threat.

In **Kharkiv** and **Khmelnytsky** Oblasts the rate of primary disability from an occupational disease or injury is notably lower than across Ukraine and does not tend to increase. Moreover, the share of people working in the conditions that do not comply with hygiene and sanitary requirements in these two regions is lower than in Ukraine as a whole (in Kharkiv Oblast this rate is 21 per cent, in Khmelnytsky 16 per cent, compared with the national level across Ukraine which is 27 per cent) – see Figure 3.2.12 for a comparison between the national level and the Oblasts of Kharkiv and Khmelnytsky.

Figure 3.2.12: Dynamics Primary Disability from Occupational Disease or Injury in Ukraine: 1998-2004 (National and the Oblasts of Kharkiv and Khmelnytsky)



In Kharkiv Oblast there were rather stable disability rates during the whole period reviewed within this assessment. In Khmelnytsky Oblast the dynamics were less stable. Thus, in 1999, there was a decrease in the rate from 1.3 to 0.5 cases per 10,000 population followed by growth of up to 0.8 cases per 10,000 population in 2001. Thereafter, there was a decrease which stabilised at 0.4 cases per 10,000 population in 2003/2004. Currently, the rates in these two Oblasts are almost equal. It would be reasonable to expect a further decrease in disability rates given the likelihood of renewed policy emphasis on promoting improvement in working conditions, and a decrease in the number of people working in unhealthy conditions.

Projections on the Number of Disabled People in Ukraine, Kharkiv and Khmelnytsky Oblasts

Demographic projections are usually developed without taking into account unpredictable disastrous events, which can greatly influence the rates of natural and migration movement of a population during the projection period. This assumption is particularly pertinent in relation to projections on the numbers of disabled. Obviously, the number of disabled people can dramatically change under particular circumstances such as a major industrial or municipal accident, military actions in a country or participation in military conflicts abroad, and the advent of epidemics and pandemics such HIV/AIDS. A detailed breakdown of the disabled by age is not currently available, but it is obvious that there must be a relationship between the distribution disability and the characteristics of a population's age structure. Predictive hypotheses are therefore required to cope with this data gap (i.e., the absence of age related variables), but inevitably lead to oversimplified assumptions. With this caveat in mind, there has – in recent years - been a general decrease in the share of the disabled among children (aged under 18) and among adults (aged 18 and over). Thus, the share of disabled children among all children of the same age has decreased from 1.44 per cent in 2001 to 1.37 per cent in 2004. The share of the adults in disability groups 1, 2 and 3 among adults changed from 6.44 per cent to 6.15 per cent during the same period.

The prospective number of the disabled was calculated on the assumption of a hypothesis that there would be a gradual decrease in their share in the population. The share of disabled children among among all children aged under 18 will fall to 1.8 per cent, and the share among adults in disability groups 1, 2 and 3 will decrease by 5.20 per cent. The decrease in the rate of disability of the national population of Ukraine and among Oblasts populations is associated with several hypotheses which will promote, jointly and gradually, a decrease in this rate:

(i) A certain share of people presently classed as disabled achieved this status illegally in order to avoid military service, to gain access to certain social privileges. Transition to a professional army and closer control over the procedures for granting disability status will help reduce the number of some categories of the disabled in future;

(ii) Progress in medicine and technology related to the detection of genetic and other diseases at the stage of fetation will promote a decrease in the number of children with congenital development defects that can result in disability;

(iii) There are a number of state level national programmes that provide measures directed at decreasing disability of the population. These include: "Child oncology" (for 2006-2010), the State Target Programme on "Reproductive Health of the Nation" (for 2006-2015), and the Programme for Prevention of Cardiovascular and Cerebrovascular Diseases for 2005-2010 aimed at achieving a decrease in early mortality and disability in Ukraine. A number of related policies and programmes are being developed and implemented.

The total number of disabled will be change under the influence of shifts in the age structure of the population. Thus, the projections outlined in Figure 3.2.13 below, and comparative data in Table 3.2.5 and Figures 3.2.14 and 3.2.15 for Kharkiv and Khmelnytsky, show a decrease in the number of the disabled resulting both from their natural deaths, and a reduction in the number of primarily disabled people due to general improvements in the population's health.

Figure 3.2.13: Predictive Estimation of the Number of the Disabled in Ukraine till 2051

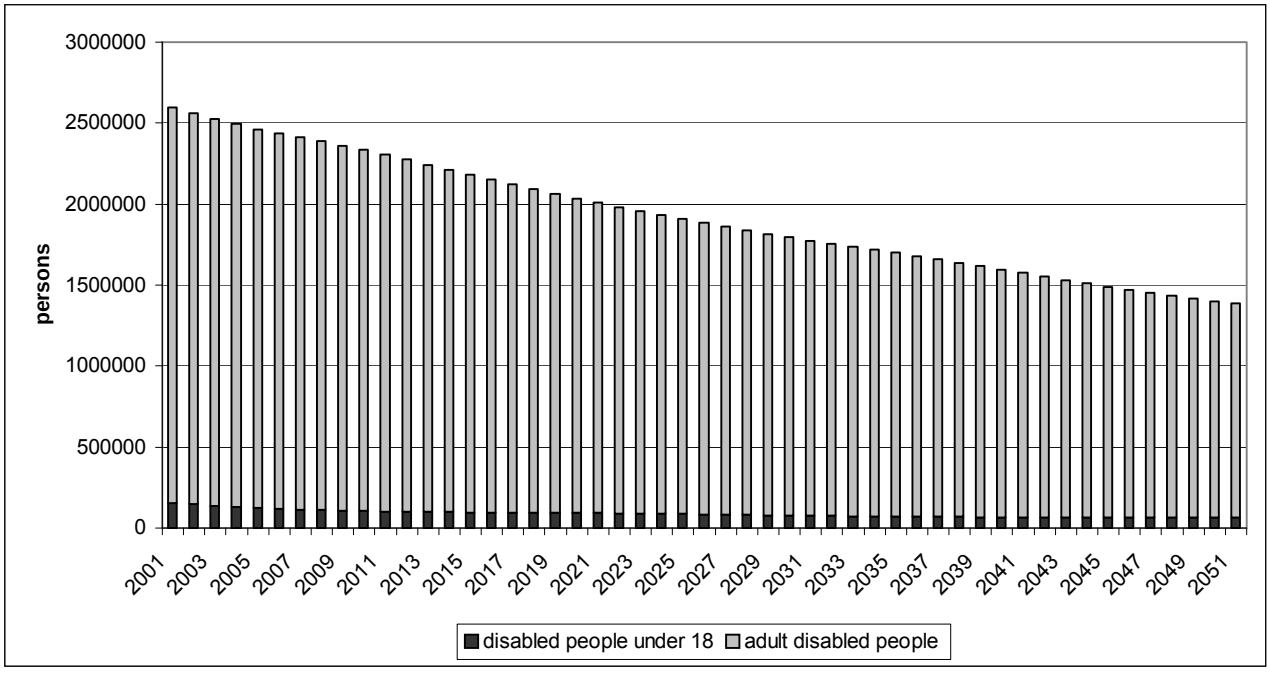


Table 3.2.5: Predictive Estimation of the Number of the Disabled in Ukraine, Khmelnytsky and Kharkiv Oblasts till 2050

thousand people

	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050
Ukraine	**2462.2**	**2335.2**	**2183.3**	**2036.4**	**1907.1**	**1793.9**	**1699.5**	**1597.0**	**1489.9**	**1401.3**
Disabled people under 18	125.4	105.5	96.9	93.6	86.4	77.6	71.0	67.4	65.5	63.4
Adult disabled people	2336.8	2229.7	2086.4	1942.9	1820.7	1716.3	1628.4	1529.6	1424.5	1337.9
Khmelnytskya oblast	**87.6**	**81.3**	**74.5**	**67.4**	**61.0**	**55.2**	**50.9**	**46.6**	**42.4**	**39.6**
Disabled people under 18	4.6	3.8	3.3	3.1	2.8	2.4	2.1	1.9	1.9	1.8
Adult disabled people	83.0	77.6	71.2	64.3	58.2	52.8	48.7	44.6	40.5	37.8
Kharkiv oblast	**145.6**	**141.8**	**136.6**	**129.0**	**122.6**	**117.7**	**113.9**	**109.5**	**104.7**	**101.2**
Disabled people under 18	6.9	5.7	5.6	5.6	5.4	4.8	4.5	4.4	4.4	4.4
Adult disabled people	138.7	136.1	131.1	123.3	117.2	112.9	109.5	105.1	100.3	96.9

Similar trends will be characteristic of the pilot in Khmelnytsky and Kharkiv oblasts.

Figure 3.2.14 Predictive Estimation of the Number of the Disabled in Khmelnytsky Oblast till 2051.

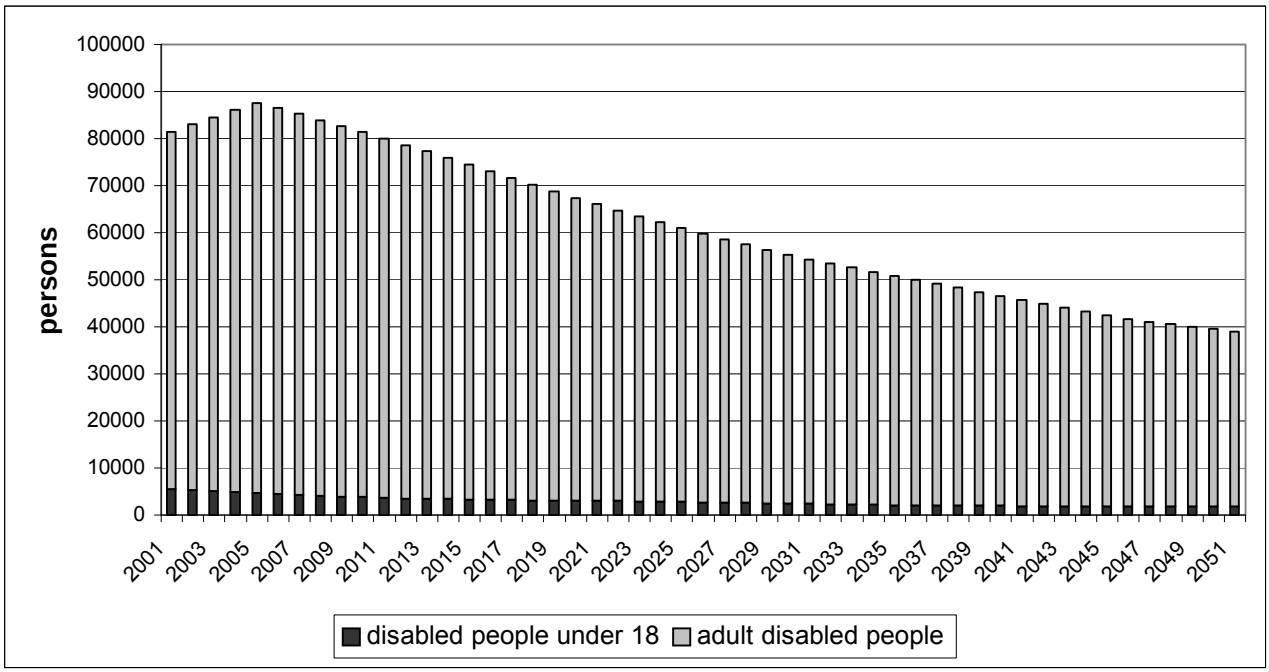
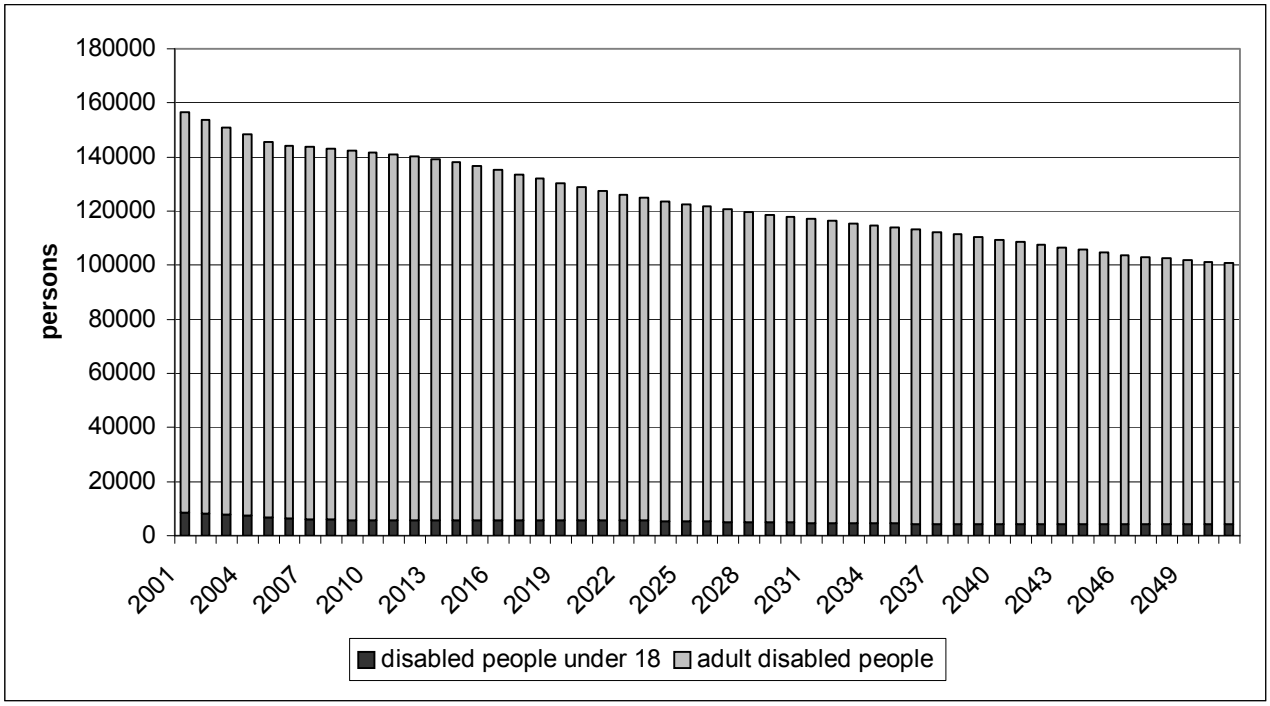


Figure 3.2.15: Predictive Estimation of the Number of Disabled in Kharkiv Oblast to 2051



Analysis of Social Statistics of Registered Cases of Mental Health Problems Among the Population of Ukraine: 1989-2004

The state of mental health of the population plays a very important role in the formation of demographic potential. There is presently a tendency towards a deterioration in the mental health of the population in Ukraine. A negative impact on mental health is exerted by the deterioration of ecological situation, the increase in the number of socially determined stress factors, as well as by growth in the number and scope of man-made accidents and natural catastrophes with serious long-term medical and social effects. An analysis of morbidity show a recent increase in the number of psychogenic, somatised and psychosomatic disorders taking a chronic course, and practically stable rate of morbidity for psychoses. At the same time there is also an acute form of pathomorphism in the clinical structure of psychogenies. The mass neurotisation of the population shows in different variations: the development of neurosis associated with stress, and somatoform disorders; the appearance of mass mental and behavioural disorders which take on religious, mystic and occult characteristics in passive, defensive and aggressive destructive forms; and the prevalence of debutant forms of endogenous psychoses.

Analysing the structure of mental health development problems among the population requires, first of all, breaking the population up into three main constituents: the number of people with mental disorders that are classified as psychotic; the number of people classed as nonpsychotic; and people with mental and learning deficiencies. Such groupings help explain the configuration of the population with mental disorders, as well as transformations i.e., its structure and the structural changes. Table 3.2.6 and Figure 3.2.16 below show that the share of the groups with mental disorders between 1989-1993, 1994-1998 and 1999-2004, and changes during these periods.

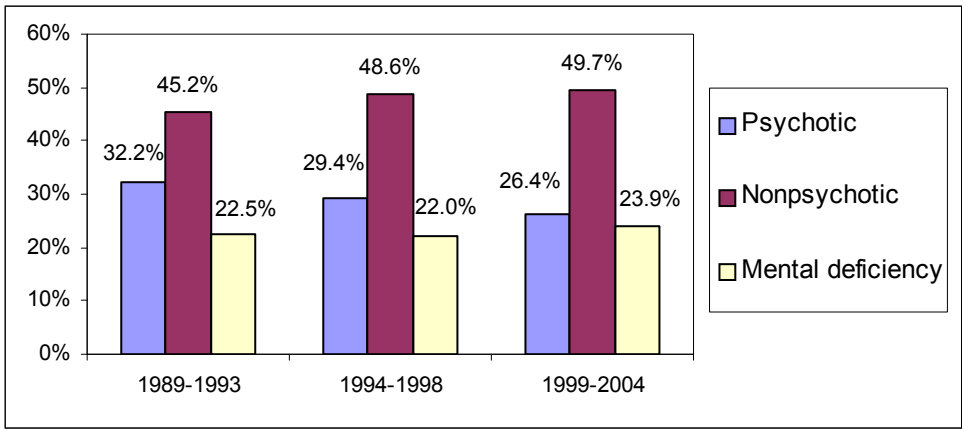
Table 3.2.6: The Structure and Structural Changes of Mental and Behavioural Disorders by Type of Disorder across Ukraine: 1989-2004

Mental Disorders	The number of patients, people per 100,000 population (average per year)			Share of patients (average per year)			Rates of structural change			
	1989-1993	1994-1998	1999-2004	1989-1993	1994-1998	1999-2004	absolute, percentage points		relative, %	
	y_1	y_2	y_3	d_1	d_2	d_3	(d_3-d_1)	(d_3-d_2)	d_3/d_1	d_3/d_2
Psychotic	667.7	680.0	645.0	0.322	0.294	0.264	-0.058	-0.030	0.819	0.899
Nonpsychotic	936.9	1 124.2	1 222.4	0.452	0.486	0.497	0.044	0.011	1.098	1.022
Mental and learning deficiencies	466.3	509.1	588.6	0.225	0.220	0.239	0.014	0.019	1.062	1.087

*Calculated by DFID FRSSU Project team in accordance with data of the Ministry of Health

Figure 3.2.16 below shows that at present nonpsychotic (i.e socially determined) disorders form the main group of mental disorders in Ukraine. The analysis of the data demonstrates that the share of the nonpsychotic group has grown steadily. Between 1989 and 1993 the average share of was 45.2 per cent, and between 1999-2004 the average share of nonpsychotic disorders increased to 49.7 per cent or by 9.8 per cent.

Figure 3.2.16: Structure of Mental and Behavioural Morbidity in Ukraine: 1989-2004



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A similar trend is observed among people with mental health and learning disabilities. Between 1999 and 2004, in comparison with previous periods, there was a growth in the share of this group: to 23.9 per cent on average, or by 6.2 per cent in comparison with average values between 1989 and 1993. The share of psychotic disorders, on the other hand, decreased from 32.2 per cent to 26 per cent between 1999-2004 in comparison with the period between1989 and1993 (or by 18.1 per cent). In the category-specific context for the period between 1989 and 1991 only data on out-patients (i.e., attending dispensary care) are available which means that the real number of diseases may have been higher than officially recorded. Hence, the growth in the share of nonpsychotic disorders and mental and learning deficiencies may have been less considerable, while the decrease in the psychotic group more intensive. For a general description of the intensity of changes in the shares of all groups of mental disorders, compound absolute and relative quadratic coefficients of structural changes need to be calculated.

The quadratic coefficient of absolute structural changes between 1999 and 2004 compared to the period between 1989-1993 $\sigma_a = \sqrt{\frac{\sum_1^m (d_{j3} - d_{j1})^2}{n}} = \sqrt{\frac{1489.78}{3}}$ =0.0447 percentage points, which means that the shares of different categories of mental disorders deviate on average by 0.0447 percentage points.

The quadratic coefficient of absolute structural changes between 1999 and 2004 compared to the period between 1994 and 1998 is $\sigma_a = \sqrt{\frac{\sum_1^m (d_{j3} - d_{j2})^2}{n}} = \sqrt{\frac{0.001}{3}}$ =0.0183 percentage points, which means that the shares of different categories of mental disorders deviate on average by 0.0183 percentage points.

Thus, in the period between 1999 and 2004 in comparison with the period between 1989 and 1993, the structural changes were more rapid than in 1999 and 2004 in comparison with 1994 and 1998.

Having analysed the rate of changes, let us analyse their intensity.

The quadratic coefficient of relative structural changes between 1999 and 2004 compared to the period between 1989 and 1993 is $\sigma_b = \sqrt{\sum \frac{(d_{j3} - d_{j1})^2}{d_{j1}}} = \sqrt{0.0158}$ =0.1255%, which denotes a low intensity in the category-specific changes in the structure of mental and behavioural disorders.

The quadratic coefficient of relative structural changes in the period 1999 and 2004 compared to the period between 1994 and 1998 is $\sigma_b = \sqrt{\sum \frac{(d_{j3} - d_{j2})^2}{d_{j2}}} = \sqrt{0.0049}$ =0.0701%.

The analysis of the calculated values of relative quadratic coefficients of the structural changes shows (see Table 3.2.7 that there is a decrease in the intensity of change in the structure of mental disorders in Ukraine. The rate of accumulation of mental and behavioural disorders among the population of Ukraine mirrors the dynamics of morbidity. In order to comprehend the structure and dynamics of mental health morbidity in Ukraine, there is a need to supplement the analysis of the morbidity structure with a description of morbidity intensity: i.e., that takes into consideration time series of the number of people with primarily diagnosed mental disorders who are under dispensary (out-patient) and consultative care (in-patient) of psychoneurologic establishments. Between 1990 and 2000, the morbidity of psychotic disorders increased by 5 per cent and was 260.7 cases per 100,000 population in 2000 (in 1990 it was 248.0 cases per 100,000). The peak of morbidity growth was in 1997–1998 (281.0 and 289.0 per 100,000 population respectively). The years' 2001 and 2002 were characterised by a reduction in morbidity which fell to values recorded in the early 1990's (252.9 and 248.7 per 100,000 population respectively). This fall was the result of a decrease in morbidity of nonpsychotic disorders (in 1990:182.0 cases; in 1995:189.0 cases; in 1998:204.0; in 2001:178.2; and in 2004:173.8).

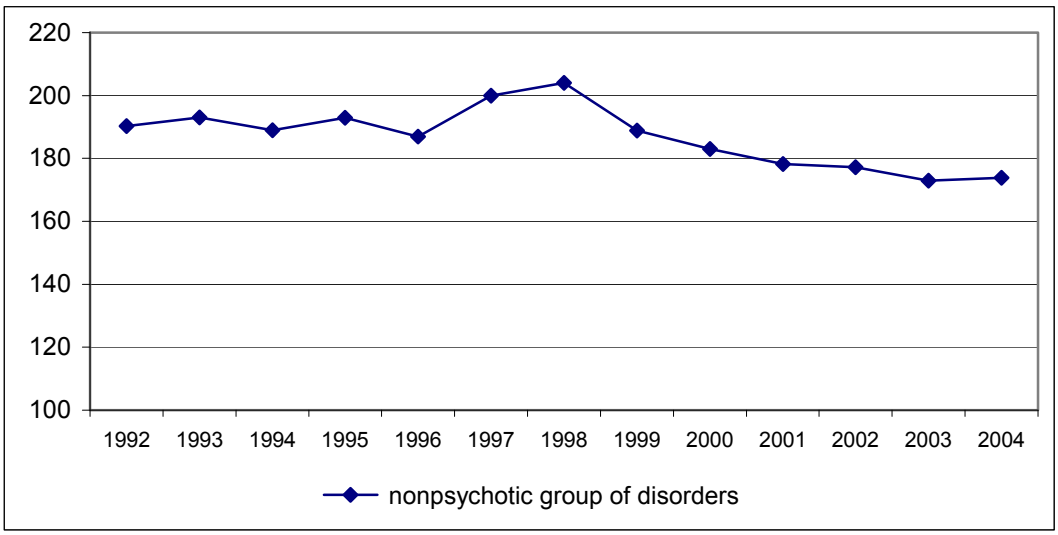
Table 3.2.7: Structure of Mental and Behavioural Morbidity by Type of Disorder in Ukraine: 1989-2004

Mental disorders	The number of primarily registered cases, per 100,000 population (average per year)			Share (average per year)		
	1989-1993	1994-1998	1999-2004	1989-1993	1994-1998	1999-2004
	Y_1	y_2	y_3	d_1	d_2	D_3
psychotic	35.2	44.6	41.7	0.167	0.166	0.165
nonpsychotic	149.3	194.6	179.0	0.710	0.722	0.709
Mental and learning deficiencies	25.8	30.2	31.6	0.123	0.112	0.125

*Calculated by DFID FRSSU Project team in accordance with the data of the Ministry of Health of Ukraine

About 70 per cent of the nonpsychotic group in the structure of morbidity accounts for a large share of such problems in the structure of prevalence (about 50 per cent). The difference between these values can be substantiated by the fact that nonpsychotic mental disorders can be medically treated and are not chronic. However, the growth of their share in the total population demonstrates (see Figure 3.2.17) that this problem is extremely important for Ukraine. Nonpsychotic disorders among the population are caused by a group of factors, namely: socio-political instability, economic changes and weaknesses within the health protection system. See Figure 3.2.17 below.

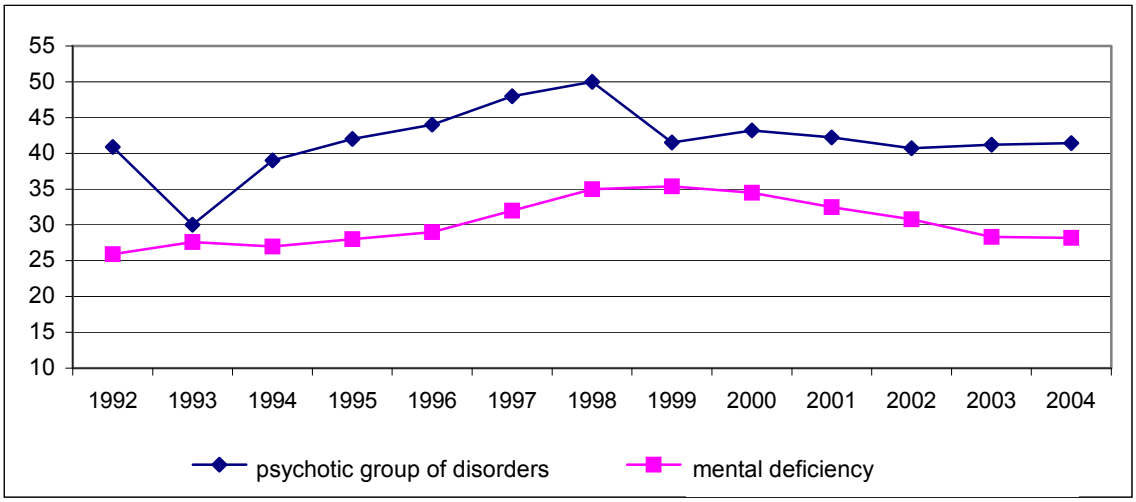
Figure 3.2.17: Dynamics of Nonpsychotic Mental Disorders Across Ukraine: 1992-2004



In analysing the dynamics of psychotic disorders and mental and learning deficiencies it possible to distinguish three distinctions that characterise the data: the period of fluctuations (1989-1994), the period of a sharp growth (1994-1998), and the period of a gradual decrease (1999-2004) - see Figure 3.2.18 below. These data trends are not accidental and can be associated with particular features in the policy environments: the lower rates in earliest period can (with a lag) have resulted from the anti-alcoholic campaign of 1985-1986. The sharp growth starting from 1994 was determined by the character of psychotic disorders that emerged under the influence of socio-psychological atmosphere in the society and dramatic events associated with transition. Psychogenic harmful factors are often combined with physical injuries, the influence of chemicals, and radiation all of which result in serious mental, behavioural, and psychosomatic

disorders. From 1999 onwards there was a decrease, though the number of registered cases in 2004 was still higher than in 1994 – see Figure 3.2.18 below

Figure 3.2.18: Dynamics of Psychotic Mental Disorders and Mental and Learning Deficiencies, Across Ukraine: 1992-2004



To summarise changes in the rates of the above time series calculation of the chain and relative growth enables generalisation of the rate of dynamics (see Table 3.2.8). The values between 1992 and 2004 have been used in these calculations, since there are no respective statistics for earlier years.

Table 3.2.8: Dynamics of Mental and Behavioural Morbidity Across Ukraine: 1992-2004 (number of cases per 100,000 population)

Year	psychotic group	non-psychotic group	mental and learning deficiency	psychotic group	nonpsychotic group	mental and learning deficiency	psychotic group	Non-psychotic group	mental and learning deficiency
1992	40.9	190.3	25.9	Absolute growth			Rate of growth		
1993	30.0	193.1	27.6	**-10.9**	2.8	1,7	**0,733**	1,015	1,066
1994	39.0	189.0	27.0	9.0	-4.1	-0,6	1,300	0,979	0,978
1995	42.0	193.0	28.0	3.0	4.0	1.0	1.077	1.021	1.037
1996	44.0	187.0	29.0	2.0	-6.0	1.0	1.048	0.969	1.036
1997	48.0	200.0	32.0	**4.0**	**13.0**	**3.0**	**1.091**	**1.070**	**1.103**
1998	50.0	204.0	35.0	2.0	4.0	3.0	1.042	1.020	1.094
1999	41.5	188.9	35.4	**-8.5**	**-15.1**	0.4	**0.830**	**0.926**	1.011
2000	43.2	183.0	34.5	1.7	-5.9	-0.9	1.041	0.969	0.975
2001	42.2	178.2	32.5	-1.0	-4.8	-2.0	0.977	0.974	0.942
2002	40.7	177.2	30.8	-1.5	-1.0	-1.7	0.964	0.994	0.948
2003	41.2	172.9	28.3	0.5	-4.3	-2.5	1.012	0.976	0.919
2004	41.4	173.8	28.2	0.2	0.9	-0.1	1.005	1.005	0.996

Source: Calculated by the DFID FRSSU Project in accordance with the data from the Ministry of Health.

It is obvious from Table 3.2.8 that the greatest parallel growth in all categories was in 1997 (by 9.1 per cent, 7per cent, and 10.3 per cent in psychotic and nonpsychotic groups and mental and learning deficiencies respectively). From 1999 onwards the tendency was towards a decrease. There was a considerable decrease in psychotic and nonpsychotic groups by 17 per cent and 7.4 per cent respectively. At the same time, the number of cases of mental and learning deficiencies per 100,000 population grew by 1.1 per cent. In 2001 and 2002 a gradual decrease in all groups of mental disorders began.

Generalising characteristics of dynamics intensity is the average absolute growth $\bar{\Delta}$ and the average rate of growth $\bar{K}$. The average absolute growth is calculated by the following formula: $\bar{\Delta} = \sum_{1}^{n} \Delta_t / n = \frac{1}{n} \Sigma (y_t - y_{t-1})$, where n is the number of chain absolute growth. The average rate of growth is calculated by the formula of geometric middling: $K = \sqrt[n]{K_1 \cdot K_2 ... K_n} = \sqrt[n]{\frac{Yn}{Yo}}$, where n is the number of chain rates of growth. The calculated values are given in Table 3.2.9 below.

Table 3.2.9: Generalising Average Rates of Changes in Mental Morbidity Across Ukraine: 1992-2004

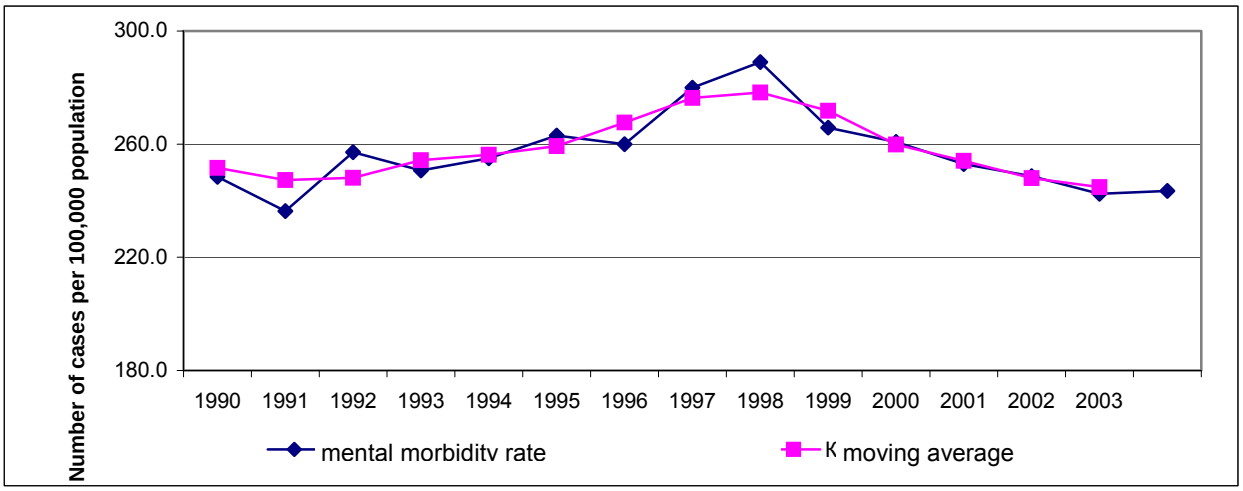
Mental Disorders	Average Absolute Growth: Cases per 100,000 Population	Average Rate of Growth
psychotic group	0.04	1.001
nonpsychotic group	-1.38	0.992
mental deficiency	0.19	1.007

Calculated by DFID FRSSU Project Team in accordance with data of the Ministry of Health

Data in Table 3.2.9 reveals that on average, and during the period under review, the number of cases in the nonpsychotic group decreased by 1.38 cases per 100,000 population or by 0.8 per cent. However, the morbidity in other groups of mental health disorder increased. The situation of patients from nonpsychotic group is rather disturbing: such problems are the most wide-spread and form the majority of all mental health diseases. Analysis of the data demonstrates that when the number of primarily registered cases decreased (on average) the share of this group in the total number of mental health diseases grew. This is likely to mean that diseases had become chronic and had a considerably impact on population – particularly young people.

In order to forecast probable rates of morbidity in the future the rates in the time series of registered cases of mental health disorders for the period between 1989 and 2004 have to be smoothed, so that the probable rates of morbidity can be described through the rates of regression more adequately. The method of moving averages was used for smoothing (see Figure 3.2.19 below).

Figure 3.2.19 Smoothing of the Time Series on Mental Health Morbidity Across Ukraine: 1990-2004



The next stage in undertaking this analysis was to smooth the above data using a 3-year interval. The results are presented in Table 3.2.10 below

Table 3.2.10: Calculation of Moving Averages of the Time Series on the Mental Health Morbidity Rate Across Ukraine: 1990-2004

Year	Morbidity rate, *per 100,000 population*	The moving average, people *per 100,000 population*	Calculation of the moving average
1990	248.4	251.6	(270.0+248.4+236.3):3=251.6
1991	236.3	247.3	251.6+(257.1-270.0):3=247.3
1992	257.1	248.0	247.3+(250.7-248.4):3=248.0
1993	250.7	254.3	248.0+(255.0-236.3):3=254.3
1994	255.0	256.2	254.3+(263.0-257.1):3=256.2
1995	263.0	259.3	256.2+(260.1-250.7):3=259.3
1996	260.0	267.7	259.3+(280.0-255.0):3=267.7
1997	280.0	276.3	267.7+(289.0-263.0):3=276.3
1998	289.0	278.3	276.3+(265.8-260.0):3=278.3
1999	265.8	271.8	278.3+(260.7-280.0):3=271.8
2000	260.7	259.8	271.8+(260.7-280.0):3=259.8
2001	252.9	254.1	259.8+(252.9-289.0):3=254.1
2002	248.7	248.0	254.1+(248.7-265.8):3=248.0
2003	242.4	244.8	248.0+(242.4-260.7):3=244.8
2004	243.4		

Calculated by the DFID FRSSU Project Team in accordance with data of the Ministry of Health

On the basis of existing smoothed rates of the time series forecasts on the development trends for the future till 2050 can be calculated. In order to describe the fluctuations of the given series in the most accurate manner, a parabolic regression equation is used. However, the parabola cannot provide an exact projection for a long period. For this particular purpose, it is more appropriate to use the regression equations that have asymptotes (i.e., that place limitations on large growth, because rates of mental health morbidity in Ukraine are undulating, and have a maximum limit). Thus, a logarithmic regression equation has been used: y = 4.3092Ln(x) + 250.6, where ***y*** is the number of primarily registered cases of mental development problems, and ***x*** – a temporary variable. Then, in 2050 y=4.3092Ln(60)+250.6=267.231 cases per 100,000 population. Table 3.2.11 below provides a projection on the rate of mental health disorders to 2050.

Table 3.2.11: Expected Rates of Mental Health Disorders Across Ukraine (per 100,000 of population)

Year	**X**	**y**
2010	20	263.549
2015	25	264.511
2020	30	265.296
2025	35	265.961
2030	40	266.536
2035	45	267.044
2040	50	267.498
2045	55	267.908
2050	60	268.283

On average, the number of cases of primarily registered mental health problems will grow in the future if the current average growth rates will persist. At the same time, in absolute figures, the number of cases may fall

- though in terms of mid-year population rates of morbidity will be high. However, there are many other factors influencing mental health morbidity (such as housing)which considerably limit the use mathematical methods. Thus it is helpful to analyse the prevalence of mental health disorders in the population of Ukraine (see Table 3.2.12 below).

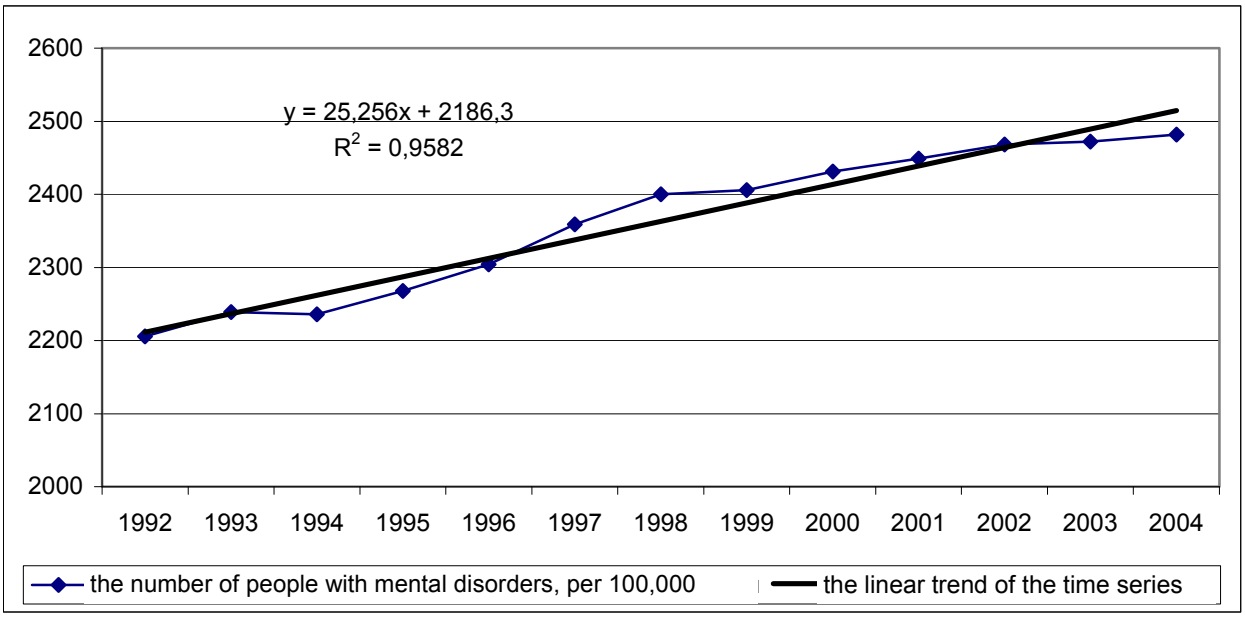
Table 3.2.12 Structure of Mental Health and Behavioural Disorders and Prevalence in Ukraine (per 100,000 population)

Mental health disorders	1995		2000		2004	
	absolute value	rate	absolute value	Rate	absolute value	rate
Total	**1168846**	**2268,0**	**1202227**	**2430,0**	**1177487**	**2481,9**
Psychotic	348940	677.0	320135	647.3	311154	655.9
Nonpsychotic	564607	1096.0	603861	1221.0	581770	1226.3
Mental and learning deficiencies (all grades)	255299	495.0	278253	562.6	284563	599.8

Calculated by the DFID FRSSU Project Team in accordance with data of the Ministry of Health

The total prevalence of mental and behavioural disorders grew most rapidly between 1992 and 1998; between 1999 and 2000 absolute values remained practically unchanged (1,194,614.0 — 1,206,114.0 — 1,199,344.0 — 1,202,227.0 respectively), and in 2001-2003 they stabilised. The prevalence increased mostly at the expense of nonpsychotic disorders, while the number of serious psychotic disorders remained almost unchanged for a considerable period (see Figure 3.2.20 below)

Figure 3.2.20. The Number of People with Mental Health Disorders Among Dispensary (Out-patients) and Consultative Care (in-patients) of Psychoneurologic Establishments Across Ukraine: 1992-2004 (cases as end of year per 100,000 population)



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The dynamics of prevalence can be described in a manner similar to the dynamics of morbidity by using a regression equation. Table 3.2.13 below provides theoretical point prediction values for the prevalence of mental health disorders to 2050. The current trend of growth in the number of cases in relation to the population can be described by a linear trend with a rather high determination coefficient: 95.82 per cent.

Table 3.2.13: The Projected Number of People with Mental Health Disorders Among Dispensary (Out-patient) and Consultative Care (In-patient) of Psychoneurologic Establishments Across Ukraine: 2010-2050, (cases as end of year per 100,000 population)

Year	X	У (theoretical)
2010	19	2666.2
2015	24	2792.4
2020	29	2918.7
2025	34	3045.0
2030	39	3171.3
2035	44	3297.6
2040	49	3423.8
2045	54	3550.1
2050	59	3676.4

Note: Calculated by DFID FRSSU Project in accordance with the data of the Ministry of Health

The projection demonstrates that, providing the influence of all current factors hold true, the share of cases in the total number of the population will grow smoothly.

Systemic and Organisation Features of Mental Health and Disability in Ukraine:

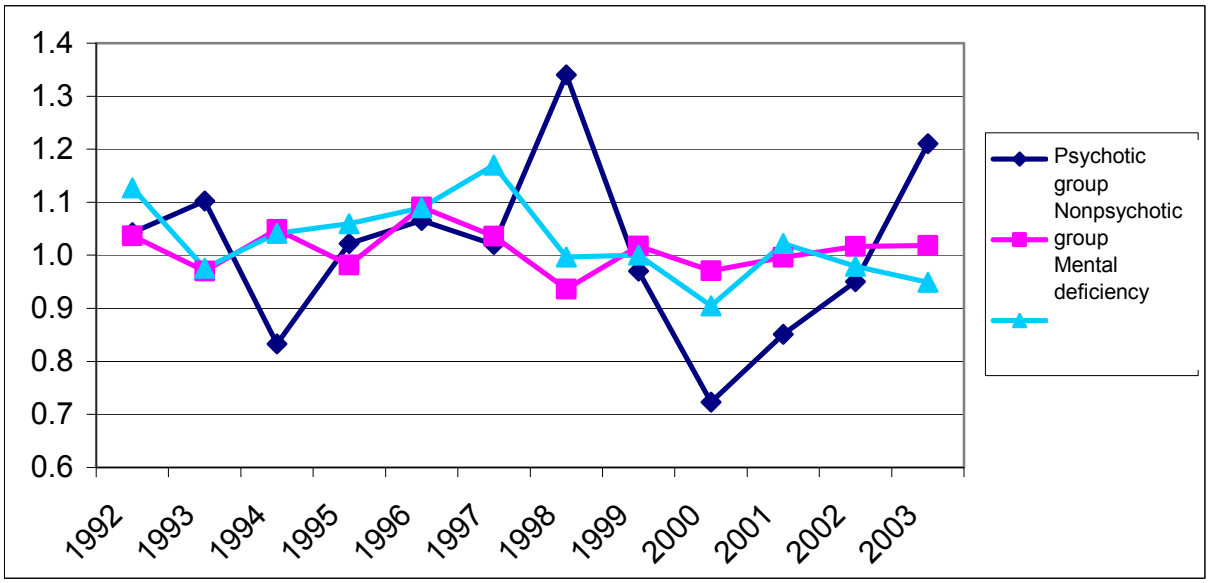
The interface between age and mental health is extremely important. The prevalence of mental and behavioural disorders over the last 10 years has increased more notably among children and teenagers than among adults during the last 10 years. According to the Ministry of Health (MoH) between 1989 and 2004 was, on average, about 74.5% of the total number of children seen by mental health agencies had mental nonpsychotic disorders, while the share of children with mental and learning deficiencies was about 24 per cent and only 1.5 per cent were children with psychotic disorders. At the same time, the structure of patients with a primarily diagnosed mental disorder between 1989 and 2002 was, on average, about the same. Of this number, 82.5 per cent were children with mental nonpsychotic disorders, 16.2 per cent with mental and learning deficiencies and 1.3 per cent children with psychotic disorders. The changes in the dynamics of mental disorders among children are traced in Table 3.2.14 below. The chain absolute growth (Figure 3.2.21) shows that between 1992 and 2004 there were 7 periods of growth and 5 periods of decrease in comparison with the previous year in each category. In other words, morbidity had an undulating character; with nonpsychotic mental health disorders outstripping psychotic disorders by between 1 and 2 years. The worst situation was between 1997 and 1999 when the most considerable growth in all groups occurred. The number of cases of nonpsychotic disorders grew by 9.1 per cent in 1997, mental and learning deficiencies by 17 per cent in 1998, and psychotic disorders by 34 per cent in 1999 in comparison with the previous year. In years subsequent years there was a respective decrease.

Table 3.2.14: Dynamics of Mental Health and Behavioural Disorders Among Children in Ukraine: 1992-2004 (number of cases per 100,000 population)

Year	psychotic group	Non-psychotic group	mental and learning deficiency	psychotic group	Non-psychotic group	Mental and learning deficiency	psychotic group	Non-psychotic group	mental and learning deficiency
1992	4.7	374.7	61.4	Absolute growth			Rate of growth		
1993	4.9	388.3	69.2	0.2	13.6	7,8	1,043	1,036	1,127
1994	5.4	376.6	67.5	0.5	-11.7	-1,7	1,102	0,970	0,975
1995	4.5	395.0	70.3	-0.9	18.4	2.8	0.833	1.049	1.041
1996	4.6	387.7	74.5	0.1	-7.3	4.2	1.022	0.982	1.060
1997	4.9	422.9	81.2	0.3	35.2	6.7	1.065	**1.091**	1.090
1998	5.0	438.0	95.0	0.1	15.1	13.8	1.020	1.036	1.170
1999	6.7	410.1	94.7	1.7	-27.9	-0.3	**1.340**	**0.936**	0.997
2000	6.5	417.2	94.7	-0.2	7.1	0.0	0.970	1.017	1.000
2001	4.7	404.9	85.7	-1.8	-12.3	-9.0	**0.723**	0.971	0.905
2002	4.0	403.4	87.6	-0.7	-1.5	1.9	0.851	0.996	1.022
2003	3.8	410.0	85.8	-0.2	6.6	-1.8	0.950	1.016	0.979
2004	4.6	417.5	81.4	0.8	7.5	-4.4	1.211	1.018	0.949

Calculated by DFID FRSSU Project Team in accordance with data of the Ministry of Health

Figure 3.2.21: Chain Growth Rates of the Number of Cases of Mental Disorders Among Children by Category Across Ukraine: 1992-2004



Data in Table 3.2.15 below demonstrates that, in spite of considerable fluctuations, on average the number of cases in the psychotic group decreased by 0.2 per cent between 1992 and 2004; the number of primarily registered cases (per 100,000 children) of nonpsychotic disorders and mental deficiency increased by 0.9 per cent and 2.4 per cent respectively.

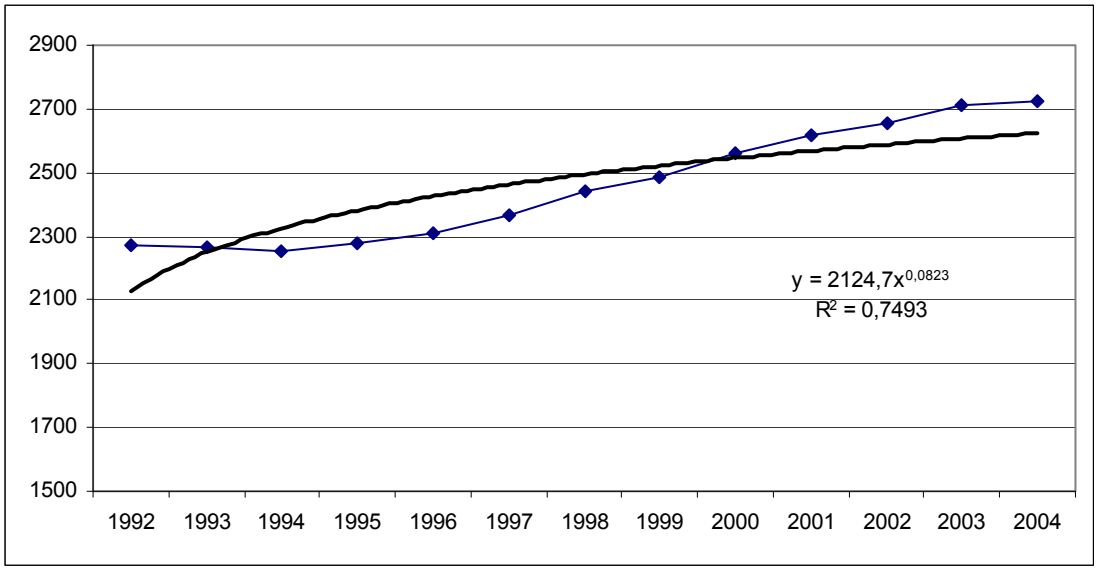
Table 3.2.15: Generalising Average Rates of Change in Mental Health Morbidity Among Children Across Ukraine: 1992-2004

Mental Health Disorders	Average Absolute Growth: (cases per 100,000 population)	Average rate of growth
psychotic group	-0.01	0.998
nonpsychotic group	3.57	1.009
mental and learning deficiencies	1.67	1.024

Calculated by DFID FRSSU Project team in accordance with data of the Ministry of Health

In order to forecast the prevalence of mental disorders among children in Ukraine extrapolation methods have been used. This has been undertaken by using a power function which enables the calculation of theoretical values of the number of children being ill per 100,000 children in the future: the determination coefficient being 74.93 per cent – see Figure 3.2.22 below

Figure 3.2.22 The Number of Children with Mental Health Disorders under Dispensary (Out -patient) and Consultative Care (In-patient) in Psychoneurologic Establishments as of the end of each year Across Ukraine: 1992-2004 (per 100,000 population)



On the basis of the trend equation – see Figure 3.2.22 above - it can be concluded that, like in the whole population of Ukraine, the prevalence of mental health disorders among children will continue to grow between now and 2050 - providing current rates of growth are maintained – see Table 3.2.16 below.

Table 3.2.16: The Number of Children with Mental Health Disorders under Dispensary (Out-patient) and Consultative Care (In-patient) of Psychoneurologic Establishments as of the end of each year Across Ukraine: 1992-2050 (cases per 100,000 population)

Year	x	У (theoretical)	**Year**	X	y (theoretical)
1992	1	2124.7	**2008**	17	2682.6
1993	2	2249.4	**2009**	18	2695.3
1994	3	2325.8	**2010**	19	2707.3
1995	4	2381.5	**2011**	20	2718.8
1996	5	2425.6	**2012**	21	2729.7
1997	6	2462.3	**2013**	22	2740.2
1998	7	2493.7	**2014**	23	2750.2
1999	8	2521.3	**2015**	24	2759.9
2000	9	2545.8	**2020**	29	2803.2
2001	10	2568.0	**2025**	34	2840.1
2002	11	2588.2	**2030**	39	2872.4
2003	12	2606.8	**2035**	44	2901.0
2004	13	2624.1	**2040**	49	2926.9
2005	14	2640.1	**2045**	54	2950.4
2006	15	2655.2	**2050**	59	2971.9
2007	16	2669.3			

Calculated by DFID FRSSU Project Team in accordance with data of the Ministry of Health

The growth tendencies in the prevalence of mental health disorders are characteristic of both the whole population and younger generations. This situation has prevailed for most of the 1990s and the early part of the 20th Century and could have a deleterious effect if the current trends extend into the future. In terms of the prevalence of disability and mental illnesses, the absolute number of mentally disabled people as of the end of 2000 was 247, 454 (in 1990: 208, 425 people) - including 13, 486 primarily disabled people in 2000. As of the end of 2000, among all mental health patients the share of disabled people was 20.6 per cent (see Table 3.2.17).

Table 3.2.17: Prevalence of Mental Health Disability in Ukraine

	1990	**1995**	**2000**
Total:			
absolute value	**208425.00**	**232269.00**	**247454.00**
per 100,000 population	**402.00**	**450.70**	**500.35**
including children:			
absolute value	**23511.00**	**23644.00**	**21816.00**
per 100,000 population	**213.00**	**224.50**	**247.20**

Source: *data of the Ministry of Health*

The dynamics of the above parameters in Ukraine generally correspond with trends in other European countries. For example, between 1990 and 2000 the number of beds in mental health institutions declined by 31 per cent - including beds for children by 32 per cent. However, more troubling was the reduction in beds for psychosomatic patients and places in day care institutions (see Table 3.2.18).

Table 3.2.18: Mental Health Institutions and Bed Numbers in Ukraine: 1990-2000

Institutions / Beds	1990	1995	2000
The number of mental hospitals	90.0	89.0	88.0
• number of beds	65650.0	59025.0	46144.0
The number of day care institutions	—	104.0	104.0
• number of beds	6096.0	6031.0	5545.0
The number of dispensaries:	35.0	35.0	34.0
•with residential services	25.0	23.0	22.0
• number of beds	3655.0	3530	2923

Source: *data of the Ministry of Health*

Between 1990 and 2000, there was a reduction in the number of filled positions of psychiatrists. At present (2005) there are 4028 (8.3 per 100,000 population) employed psychiatrists and about 500 psychotherapists in Ukraine. An acute shortage of medical psychologists and social workers, and weaknesses in legal basis for their work has contributed to the lack of socio-psychological and socio-rehabilitation services in the sphere of mental health care services. Over the last three years, a considerable amount of work has been undertaken in terms of overcoming the shortage of medical psychologists, but the problem of training specialists in social psychiatry in still unsolved – see Table 3.2.19 below for an overview of key mental health personnel between 1990 and 2000.

Table 3.2.19: Number of Psychiatrists in Ukraine:

Positions	**1990**	**1995**	**2000**
Established positions			
absolute value	**Data not available**	**5177.50**	**4317.75**
per 100,000 population		**10.00**	**8.70**
Filled positions			
absolute value	**4803.00**	**4779.00**	**4141.30**
per 100,000 population	**9.30**	**9.00**	**8.30**

Source: *data of the Ministry of Health*

Along with the reduction in the number of beds, the number of patients per bed in residential mental health establishments increased respectively: on average each bed was occupied for 339 days in 1999. Bed occupancy turnover increased during this period by 42.5 per cent, and in 1999 reached the value 5.7. The average duration of each patient's occupancy of a bed in mental establishments decreased by 10.1 per cent. Another important medical and social problem that has re-emerged in recent times concerns alcohol and drug addiction. Narcological trends are unfavourable. For example, more than 700,000 people with alcohol and about 70,000 people with drug addiction are registered in Ukraine: every second man and every fifth woman is addicted to nicotine. In 2000 morbidity from the use of narcotics was 21.6 per 100,000 population (in 1990 it was 6.2 per 100,000), and toxicomania grew by 57 per cent in 10 years. The use of "heavy" narcotics has spread and new kinds of drug addiction are emerging – all of which contribute to early disability and death (see Table 3.2.20)

Table 3.2.20: Narcological Disorders in Ukraine: 1990–2000 (per 100,000 population)

	1990	**1995**	**1999**	**2000**
Chronic alcoholism	118.9	101.2	84.4	82.6
Alcoholic psychoses	8.5	22.2	18.8	19.1
Drug addiction	6.2	23.6	20.8	21.6

Source: *data of the Ministry of Health*

According to the National Coordinating Committee for Drug Addiction Control in the Cabinet of Ministers (CoM) around 90 per cent of drug addicts are teenagers and young people aged between 12 and 27 years, and their share is especially high in industrialised Oblasts of Ukraine: which is 3 times higher than in rural areas. Therefore, studying the misuse of psychoactive substances, rehabilitation and socio-psychological adaptation of such people are top-priority issues.

Analysis of the Statistics of Registered Mental Health Development Problems in Kharkiv and Khmelnytsky Oblasts: 1989-2004

Mental health problems depend considerably on living conditions of the population, the social-pyschological situation, and the quality of health and safety enforcement to protect life and limb. The structure of morbidity between Oblasts therefore varies. and therefore the structure of morbidity between Oblasts varies. Figure 3.2.23 demonstrates that the number of reported cases of mental health disorder in the populations of Kharkiv and Khmelnytsky Oblasts reflect similar trends with the population of the whole Ukraine. However, the prevalence of mental health disorders in Kharkiv Oblast is a little higher than in Khmelnytsky Oblast - which can be accounted for by the industrial character of Kharkiv, the poor state of industrial machinery, unsafe working conditions, pollution, and unhealthy ways of life Considerable differences were registered between 1997 and 1999, but in 2004 the prevalence rates were almost similar - which reflects a decrease in Kharkiv Oblast and parallel growth in Khmelnytsky Oblast. The structure of prevalence of mental health disorders mirrors the dynamics of morbidity (see Figure 3.2.24 below). Starting from 1999, there was a sharp decrease in the number of people with primarily diagnosed mental health disorders in Kharkiv Oblast, which was considerably lower than the average rates of morbidity across Ukraine. In Khmelnytsky Oblast the rates of morbidity decreased in 1998 for the first time after a considerable growth - but further decreases were very slow.

Figure 3.2.23: Prevalence of Mental Health and Behavioural Disorders in Kharkiv and Khmelnytsky Oblasts :1989-2004 (per 100,000 population)

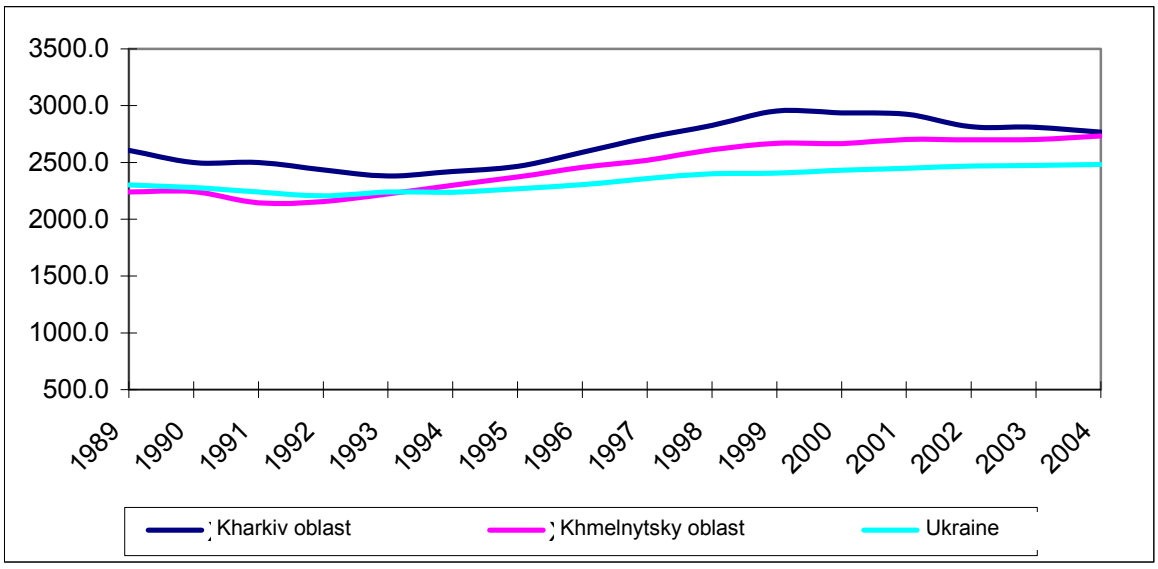
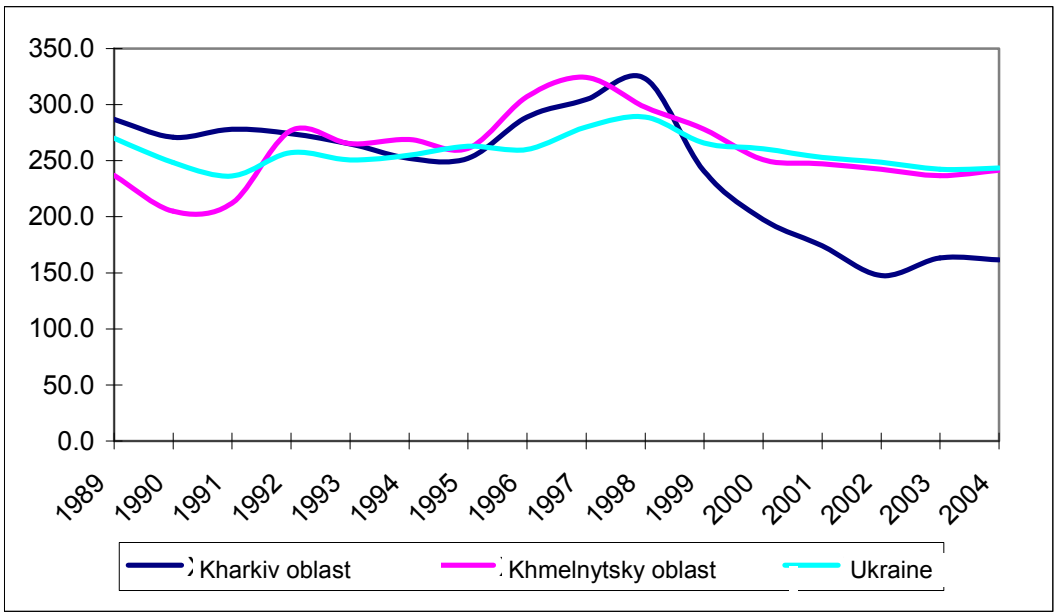
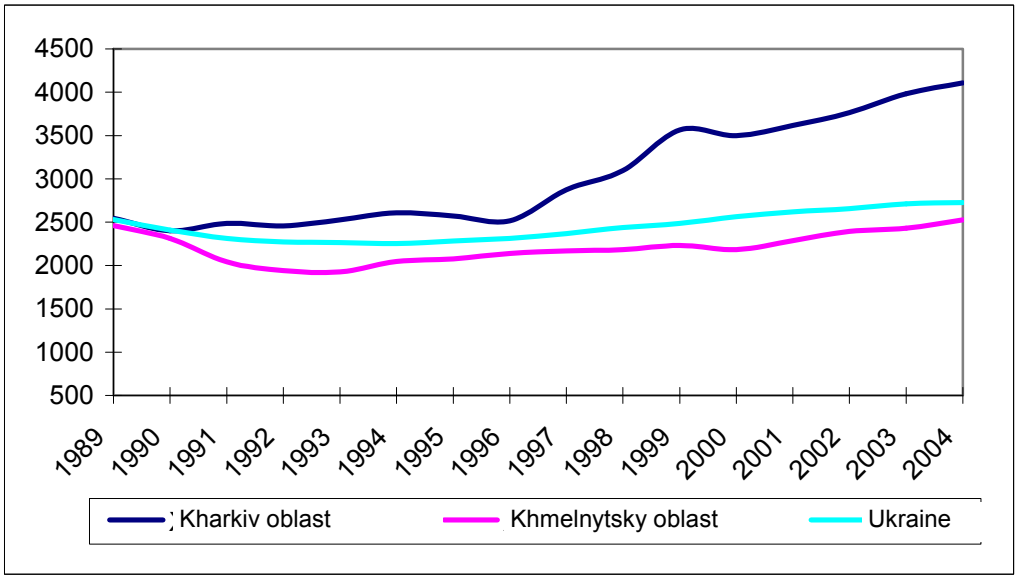


Figure 3.2.24: Morbidity of Mental Health and Behavioural Disorders in Kharkiv and Khmelnytsky Oblasts: 1989-2004 (per 100,000 population)



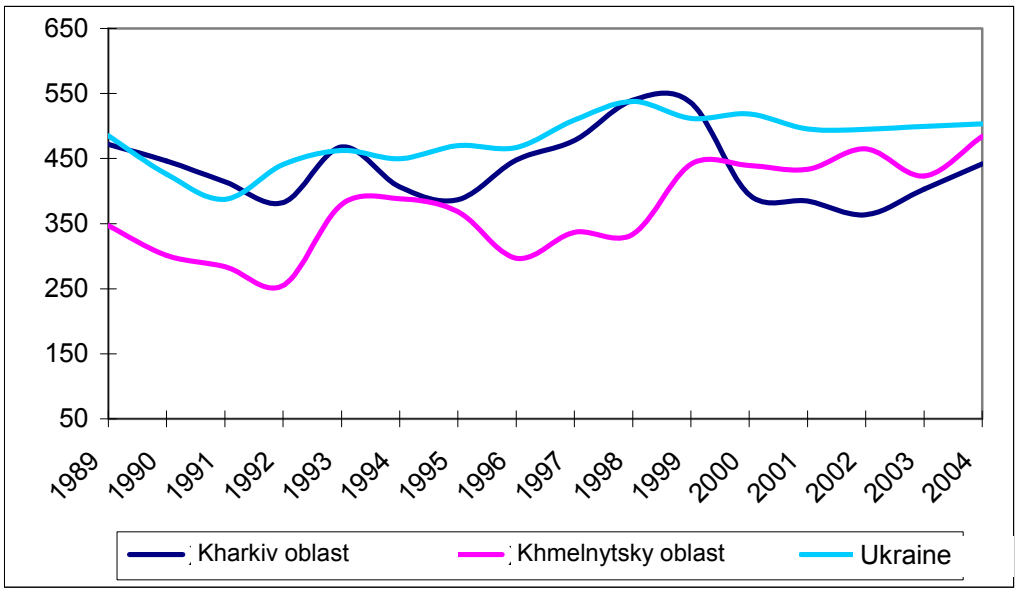
The situation for children in Kharkiv and Khmelnytsky Oblasts was inverse to the situation of adults (see Figure 3.2.25 below). The share of cases among children grew dramatically in Kharkiv Oblast, while in Khmelnytsky Oblast the rate of mental health disorders prevalence was lower than across Ukraine during the period under review. The trends mean that a greater proportion of patients in Khmelnytsky Oblast are adults – most of whom are over working age since life expectancy of the population is relatively high in this Oblast.

Figure 3.2.25: Prevalence of Mental Health and Behavioural Disorders Among Children in Kharkiv and Khmelnytsky Oblasts, 1989-2004 (per 100,000 children).



At the same time, the number of primarily registered cases of mental health disorders among children was lower in the two Oblasts than the average across Ukraine and was relatively stable during 1999-2004 in comparison with previous years (see Figure 3.2.26 below).

Figure 3.2.26: Morbidity of Mental Health and Behavioural Disorders Among Children in Kharkiv and Khmelnytsky Oblasts: 1989-2004 (per 100,000 children)



Section 3: Analysis of the Level of Public and Private[1] Funding Assigned to Residential Social Services: 2004-2015

Overview:

The financing of social services raises a great many questions. How many older people, disabled people, and families and children are likely to require services in the coming decades? How much are these services likely to cost? Will the cost to public funds prove affordable? Should some types of social services be paid for users? How should costs be divided between public expenditure and private sources of finance? How should a commissioning and service provider relationship be structured? What should be the balance of service provision between residential and community-based services for different types of social services? In order to address these issues long term projections are needed of future demand, and need, for social services and future expenditure. These questions are new to social services planning in Ukraine, though the *Law and Social Services* (LSS) (2004), the *Law on Social Support to Disabled People* (2004), the *Law on Providing Organisations and Legal Conditions for the Social Protection of Orphans and Children Without Parental Care* (2005), the *Law on Social Work with Children and Young People* (2005), and the *Law on Rehabilitiation of Disabled People in Ukraine* (2005) indicate that the questions outlined above are deemed by policy-makers to be of critical importance to immediate concerns about the dominant position of residential provision of social services, and the medium and longer-term evolution of social services policy and service delivery.

Debates about the funding of social services necessarily need to include both the mechanisms by which revenues are raised and the mechanisms by which these are allocated. Methods of allocating resources – particularly the micro-allocation processes associated with individual needs assessments and the incentives attached to more less costly types of social services (including residential, community-based and informal) – directly impact on the equity, efficiency and ultimately the sustainability of any particular system. It is with these features to the fore that this section focuses on:

- Organisational and funding structures for residential social services;
- Financing systems of residential institutions subordinated to the Ministry of Labour and Social Policy (MoLSP);
- Financing systems of residential institutions subordinated to the Ministry of Health (MoH);
- Financing systems of residential institutions subordinated to the Ministry of Education and Science (MoES);
- Predictive estimation (demographic and economic) of future financing needs of residential institutions;
- Macroeconomic projections to 2015;
- Potential need for social services to 2015 based on population projections;
- Predictive estimation of total 'private' costs from the Pension Fund directed to residential institutions for older people**;**
- Predictive estimation of the number of people in residential institutions and public expenditure implications – variant 1 and variant 2.
- The Economic Structure of Expenditures on Social Services.

Organisational and Funding Structures for Residential Social Services:

According to the Budget Code of Ukraine (2001)[2] public expenditure is distributed across the budgets of levels of government[3]. Social services directly consumed by the population are mostly financed at the expense of local budgets. According to State Treasury reports on execution of budgets across different levels of governance local budgets concentrate about 70 per cent of expenditures on education, 80 per cent of expenditures on health care, about 50 per cent of expenditures on social services. According to Chapter 14

[1] 'Private' funding refers, under current arrangements, to deductions made from state pensions of the elderly to cover the costs of their care and protection in residential institutions - see below.
[2] Government of Ukraine (2001) *Budget Code of Ukraine*, No 2542-III, June 21 2001, Verkhovna Rada, Kyiv.
[3] **See**: DFID FRSSU Project Report (2006a) for a detailed description of devolved budgetary structures for subordinated responsibilities towards social services.

of the Budget Code, expenditures on residential institutions for adults and children are assigned to local budgets – the Budget of the AR of Crimea and Oblast budgets, and budgets of cities of rayons of Oblast significance – with the exception of residential institutions which are national in character and scope. These specific types of institutions are directly financed from expenditures of the State Budget[4]. The financing mechanism of social services from local budgets is based on the system of equalisation through transfers from the central government which are expected to guarantee that every local budget has sufficient resources to execute normative levels of expenditures[5].

Residential social service institutions are – as delineated in Section 1 – subordinated to three ministries: the Ministry of Labour and Social Policy (MoLSP), the Ministry of Education and Science (MoES), and the Ministry of Health (MoH) – see Figure 3.3.1 for an overview of the designation and number residential institutions that fall under the administrative and legislative mandate of each ministry. As a consequence of this organisational arrangement, expenditures on different types of residential institutions are fragmented across different budget managers (i.e., across different tiers of the central public administration). Analysing and forecasting the level of public expenditure assigned to residential social service institutions, as well as the predictive estimation of the need for corresponding funds, has therefore to be carried out for each separate ministry that performs the role of budget manager towards a particular range of residential institutions. The statistics on the expenditures for financing residential institutions by separate budget managers (i.e., from reports of the State Treasury) that have been deployed in this analysis are available only for the period up to 2004[6]. Unfortunately adequate statistics are not available for separate Oblasts, and it is for this reason that the analysis is based on extrapolated data on total expenditures from sub-Oblast level budgets in Ukraine. The analysis focuses exclusively on public expenditures on stationary residential institutions given that this form of service provision dominates social services provision over and above alternatives such territorial centres and centres for domiciliary care, and because the future policy trajectory and financial sustainability of community-based social services is yet to be fully defined..

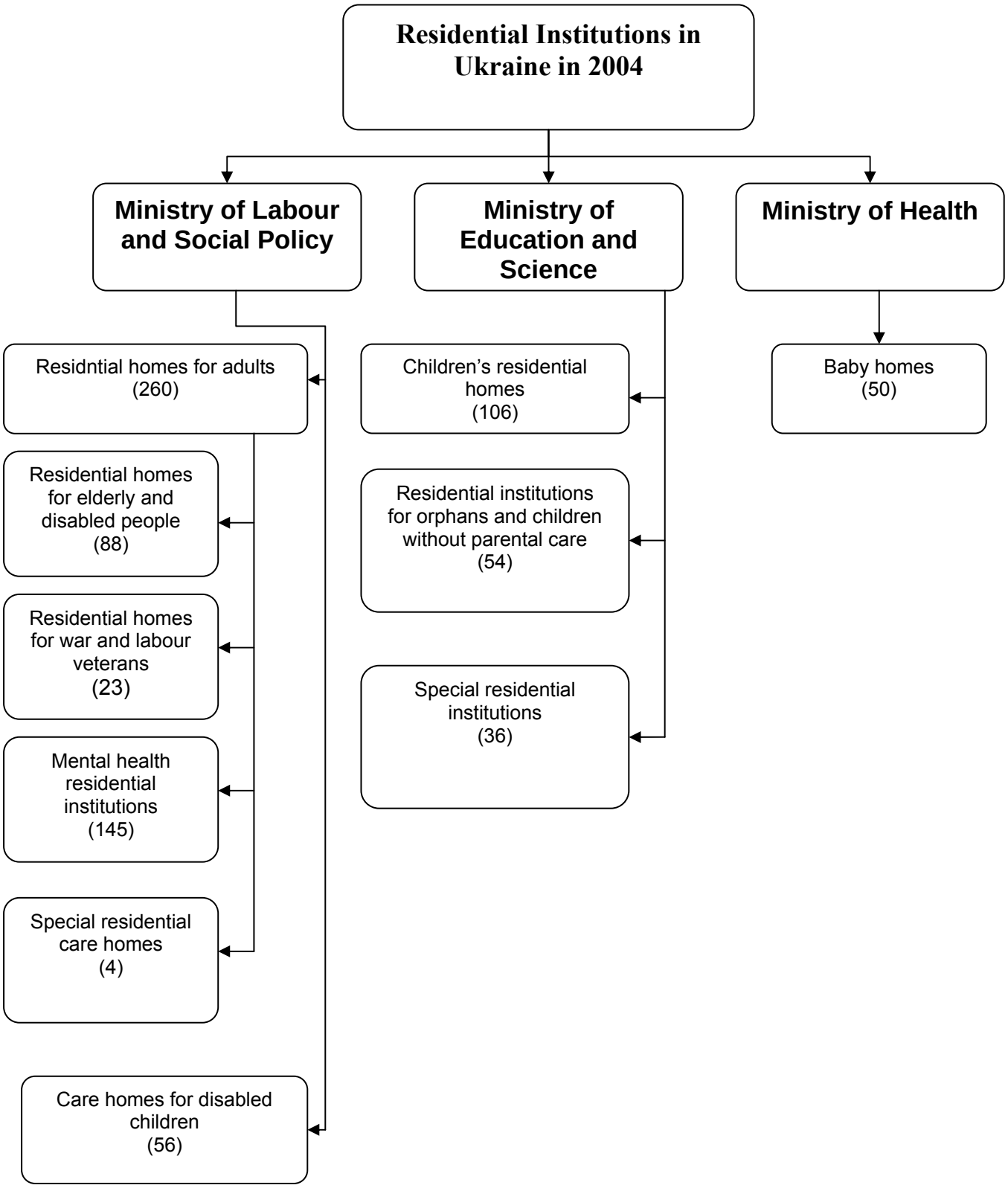
The practice of estimating of different types of public expenditure as a percentage of GDP is widespread (for example, in public expenditure on health, public expenditure on education etc). However, private expenditures (apart from deductions from state pensions for residential care of the elderly) of Ukrainian households on stationary residential services are very insignificant; and there is no official and comparative data on the corresponding spending by charitable foundations and NGOs in this field. In view of these limitations the financial analysis focuses on an estimation of each line Ministry's spending on residential institutions, and an analysis of the approximate amount that can be attributed to costs from the Pension Fund that are deduction – as co-payments from the pensions of older people in residential social service institutions.

[4] According to Chapter 14, Article 87 of the Budget Code, expenditures on education from the State Budget of Ukraine include expenditures on special secondary schools (including residential schools) of the state form of ownership.

[5] op.cit. DFID FRSSU Project Report (2006a)

[6] This is because data on expenditures for 2005 were being processed and generalised at the time the assessment was undertaken by the DFID FRSSU Project.

Figure 3.3.1: The System of Administrative and Legislative Mandates of Line Ministries Towards Residential Institutions in Ukraine



Financing Systems of Residential Institutions Subordinated to the Ministry of Labour and Social Policy (MoLSP):

One of the main types of social protection and social security, as defined in the Constitution[7], for elderly and disabled people is the provision of different kinds of social services. For this purpose, there is a developed network of residential institutions, territorial social service centres for retired and single disabled people, and departments of domiciliary social services. Residential institutions subordinate to the MoLSP include residential homes for adults (i.e., homes for the elderly and disabled people, war and labour veterans, mental health homes and special care homes) and for disabled children. As of the end of 2004, there were 316 care homes of these types in Ukraine, including 260 for adults and 56 for disabled children.

Through the general level of financing of residential institutions of these types it is possible to assess the accounts of the MoLSP (see Table 3.3.1 below). In recent years, the corresponding allocations of funds has grown considerably. Thus, in 2000, UAH 233,900,000 was assigned to such institutions, and in 2005 over UAH 637,000,00. Moreover, the level of execution of planned expenditures was also raised – the actual funding of planned expenditures for 2005 was 98.1 per cent (compared with 92.8 per cent in 2000).

Table 3.3.1 Expenditures on Residential Institutions Subordinated to the Ministry of Labour and Social Policy (in UAH thousand)

Years	Planned funds	Actual financing from the budget and other sources	Percentage of planned financing	Account payable
2000	233,900	217,100	92.8	12.4
2001	271,330	259,520	98.9	13.0
2002	431,459	362,800	98.1	4581.6
2003	369,827	362,901	98.1	4851.6
2004	428,051	420,377	98.2	1888.0
2005*	637,041	540,177	98.1	800.0

Note: Planned*
Source: Ministry of Labour and Social Policy

The growing amount of finance allocated to residential institutions is also confirmed by the following facts. The Law of Ukraine on the State Budget 2004 provided for UAH 389.7 million for the maintenance of residential homes for elderly and disabled people, disabled children, and training of the disabled, and UAH 257.1 million for the maintenance of territorial social service centres and departments of domiciliary social services[8]. According to the Draft State Budget of Ukraine for 2005, expenditures on residential homes for elderly and disabled people increased by UAH 65.3 million to UAH 455 million; expenditures on territorial social service centres and departments of domiciliary social services by comparison increased by UAH 6.1 million: total expenditure amounting to UAH 324.3 million.

The reports of the State Treasury on the execution of local budgets enabled the DFID FRSSU Project to estimate the level of financing attributed to some types of residential institution (See Table 3.3.2 below). Given that residential institutions, subordinated to the MoLSP, are funded exclusively from the local budgets, these figures also characterise the total state expenditure on these types of institutions (i.e. they are equal to corresponding expenditures from the Consolidated Budget)[9]. Since residential institutions for adults are more numerous, naturally, the greater part of public expenditures traditionally fall on them: more than 80 per cent of total expenditure. The growth rates in the amount of funds assigned to residential homes for adults are higher than the growth of expenditures on children's residential homes. Between 1998 and 2004,

[7] see DFID FRSSU Project Report (2006b)
[8] According to the official data from The Ministry of Finance (MoF).
[9] Reports of the State Treasury on expenditures from the local budgets have been used as data sources. This is because they present detailed information on funding different types of institutions. There is no detailed description in the Consolidated Budget (only items "exdenditures on social protection of elderly, disabled, children and so on", including these costs and others – pensions, benefits etc.). So, these local expenditures are equal to consolidated expenditures.

the financial allocations to children's residential institutions increased by almost twice (from UAH 33.3 million to UAH 88.9 million), and the financing of residential institutions for elderly and disabled people by 2.5 times (from 138.8 to UAH 396.3 million).

Table 3.3.2: Expenditures from Local Budgets on Financing MoLSP's Residential Institutions by Types of Institution: 1998-2004 (in UAH)

	Children's homes	Percentage of total expenditures on residential institutions	Care homes for elderly and disabled people	Percentage of total expenditures on residential institutions
2004	88,137,900.0	18.2	396,296,300.0	81.8
2003	78,484,300.0	18.2	352,890,700.0	81.8
2002	65,761,100.0	17.7	306,448,800.0	82.3
2001	55,148,700.0	18.5	243,571,300.0	81.5
2000	43,105,800.0	18.4	191,429,700.0	81.6
1999	35,887,500.0	18.7	155,949,900.0	81.3
1998	33,327,200.0	19.4	138,845,700.0	80.6

Source: State Treasury reports on expenditures from local budgets.

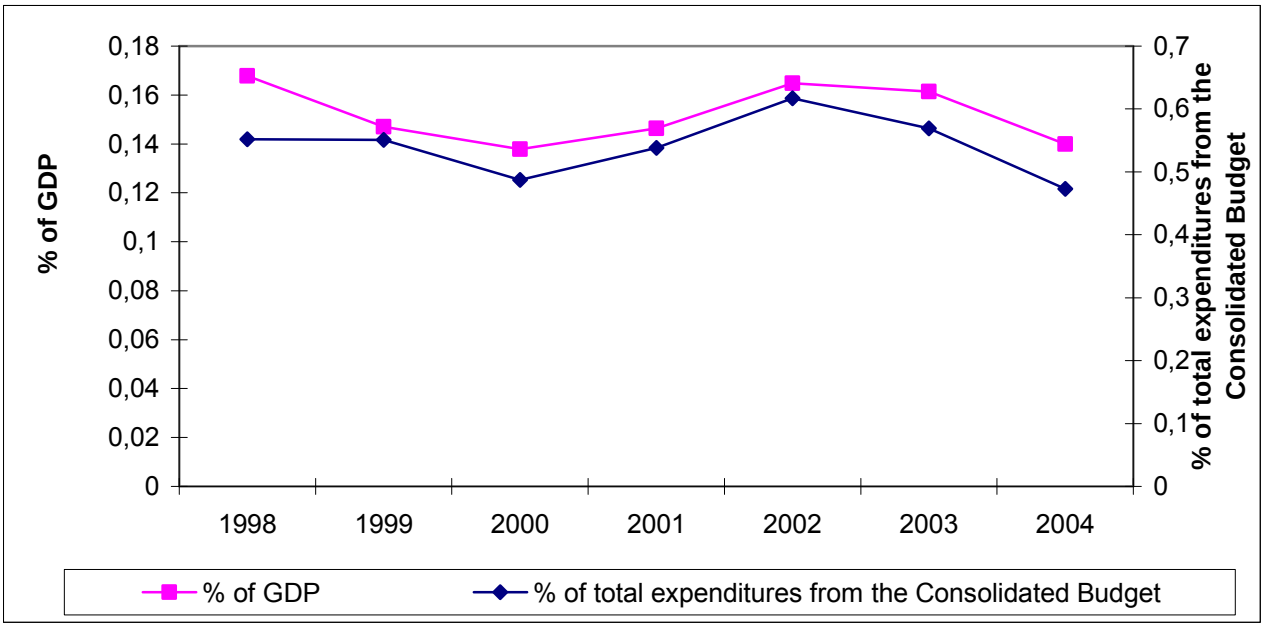
An analysis of relative values of financing for residential institutions administered by the MoLSP shows, however, that their share considerably decreased in relation to both the GDP and total budget expenditures (see Table 3.3.3 and Figure 3.3.2 below). Thus, in the structure of all expenditures directed at social security from the Consolidated Budget, the share of funds for residential institutions administered by the MoLSP decreased more than three times (from 6.7 per cent in 1998 to only 2.5 per cent in 2004), and in the structure of total expenditures from the Consolidated Budget from 0.56 to 0.47 per cent respectively. This trend is set against the wider picture where in 2000 social expenditures from the Consolidated Budget of Ukraine made up only 39.6 per cent of the total expenditures (including expenditures on social security and social services which constituted 12.4 per cent of spending), while in 2004 their share was 51.8 per cent (and 19.1 per cent respectively).

Table 3.3.3: Expenditures on Residential Institutions Subordinated to MoLSP in relation to the GDP; and Total Expenditures from the Consolidated Budget and all Expenditures Assigned for Social Security

Years	Total expenditures on residential institutions of MoLSP, UAH million	Percentage of expenditures on financing social security from the Consolidated Budget	Percentage of expenditures of the GDP	Percentage of total expenditures from the Consolidated Budget
1998	172.2	6.660	0.168	0.552
1999	191.8	4.626	0.147	0.551
2000	234.5	3.919	0.138	0.487
2001	298.7	3.585	0.146	0.538
2002	372.2	2.944	0.165	0.617
2003	431.4	3.330	0.161	0.569
2004	484.4	2.510	0.140	0.473

Source: reports of the State Treasury on expenditures from the Consolidated and local budgets, data of the State Statistics Committee on the GDP.

Figure 3.3.2: Dynamics of Total Expenditures on Residential Institutions Subordinated to MoLSP in Relation to GDP and Total Expenditures from the Consolidated Budget of Ukraine



In addition to expenditures from the budget, the allocations from the Pension Fund of Ukraine (about 75 per cent of a residents' pensions) form a substantial part of funding to residential institutions in providing adequate living conditions for their residents. Thus, according to the State Administration of Kyiv Oblast (which is good comparator for the rest of Ukraine), in 2004, Oblast residential institutions got UAH 2,444,000 from this source (which was an increase of more than 90 per cent compared to 2003): UAH 928.7 thousand was assigned to improvement of residents' nutrition; UAH 298.9 thousand to the purchase of medicines, and UAH 224.2 thousand to purchase clothes, footwear, etc. Planned expenditures from the Oblast budget on residential institutions were UAH 25.2 million in 2004, and the actual expenditure was UAH 20.6 million (81.6 per cent). This means that the share of the allocations from the Pension fund was about 12 per cent of all actual expenditures. A similar situation applies across other regions of Ukraine.

Financing Systems of Residential Institutions Subordinated to the Ministry of Health (MoH):

Aside from mainstream mental health institutions (which are not included in this financial appraisal – see Resource paper 3.2.2) one special type of residential institution that falls under the remit of the Ministry of Health: baby homes. As of the end of 2004 there were 50 such institutions in Ukraine. The reports of the State Treasury are the basis for estimating expenditures from local budgets on financing baby homes between 2002-2004 (which describe the total state expenditure on these types of institutions). In 2002, UAH 64.4 million was assigned to baby homes, and in 2004 UAH 103.8 million. However, although the absolute level of financing to these types institutions grew by 26 per cent, the share of these expenditures in the structure of total expenditures on health care remains practically unchanged (around 0.85-0.86 per cent). Although in the structure of the Consolidated Budget, the share of these expenditures decreased a little (due to the general decrease in the share of expenditures on health care from the Consolidated Budget of 2004: in 2002 health care received 12.5 per cent of budget expenditures, in 200312.8 per cent, and in 2004 only 12 per cent), their share slightly increased in relation to the GDP (see Table 3.3.4 below)

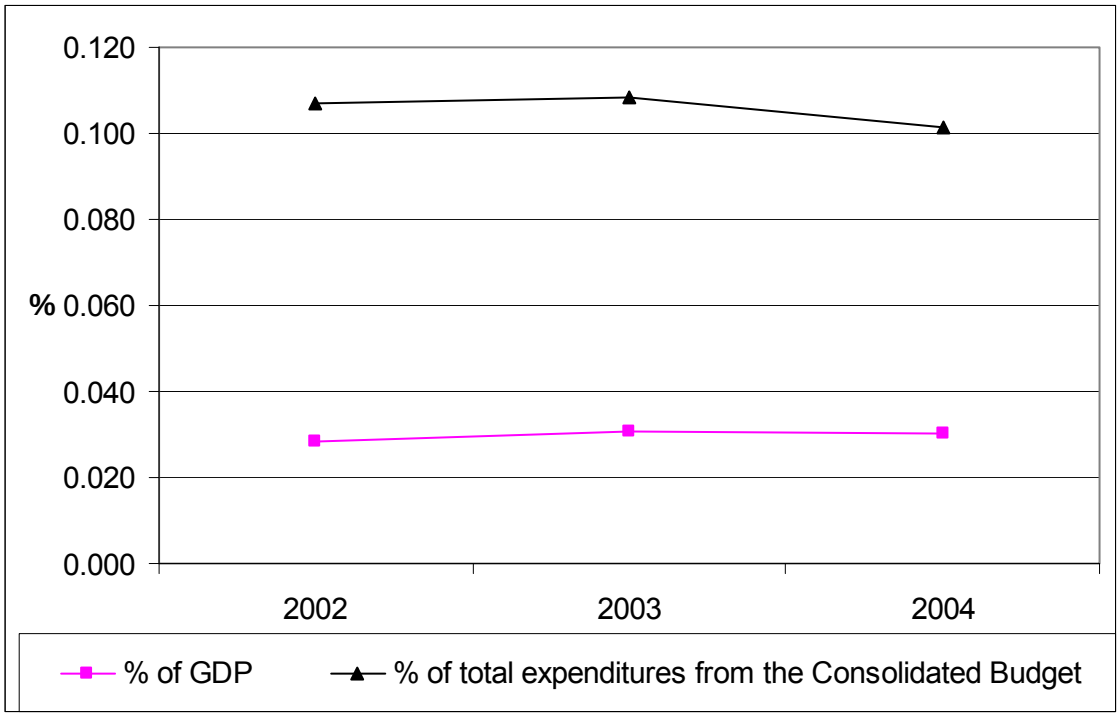
Table 3.3.4: Total Expenditures From Local Budgets on Financing Baby Homes in Ukraine: 2002-2004

Years	Total expenditures, UAH	Percentage of total expenditures on health care from the Consolidated Budget	Percentage of the GDP	Percentage of total expenditures from the Consolidated Budget
2002	64 397 194.0	0.85	0.029	0.107
2003	82 263 070.0	0.85	0.031	0.109
2004	103 751 179.0	0.86	0.030	0.101

Source: reports of the State Treasury on expenditures from the Consolidated and local budgets, data of the State Statistics Committee on the GDP.

The material security, money allowances, and the norms of maintenance for orphans and children without parental care are regulated by resolutions of the Cabinet of Ministers (CoM), and by decrees and letters of ministries and departments. Consequently, services to children in these institutions are not fully protected against changes in inflation rates. According to the MoH the levels of financing baby homes are different in different regions: i.e., they vary between 5,000 and 15,000 thousand per annum. Daily allocations from Oblast budgets for the nutrition of a child are: for a child aged under six months UAH 3.74, from six months to 1 year UAH 4.96, 1-3 years UAH 5.71, and 3 years and over UAH 7.23. According to MoH, in most of baby homes the average level of financial allocation is equivalent to 70 per cent of the required funding level. In the absence of unified social standards for maintenance of children in baby homes and residential institutions, the problem of inadequate funding is problematic (see Figure 3.3.3 below).

Figure 3.3.3: Dynamics of Expenditures on Residential Institutions (Baby Homes) Subordinated to the MoH in relation to the GDP, and Total Expenditures from the Consolidated Budget of Ukraine.



Financing Systems of Residential Institutions Subordinated to the Ministry of Education and Science (MoES)

As of the end of 2004 residential institutions under the remit of the MoES included 196 institutions for orphans and children without parental care aimed at pre-school and school age children. These institutions have the generic status of "orphan's homes" (though they are also referred to as 'schools'.) There are 54 general residential institutions, 36 special residential schools for orphaned children with physical or mental development needs - mostly with learning disabilities; and 106 children's homes for children aged 3 years

and over. In most Oblasts (e.g., Kyiv, Dnipropetrovsk, Donetsk, Lviv, Kirovohrad, and Kharkiv) there is a growing network of children's homes (with up to 100 children, including brothers and sisters of different ages) as an alternative for big residential 'schools'[11].

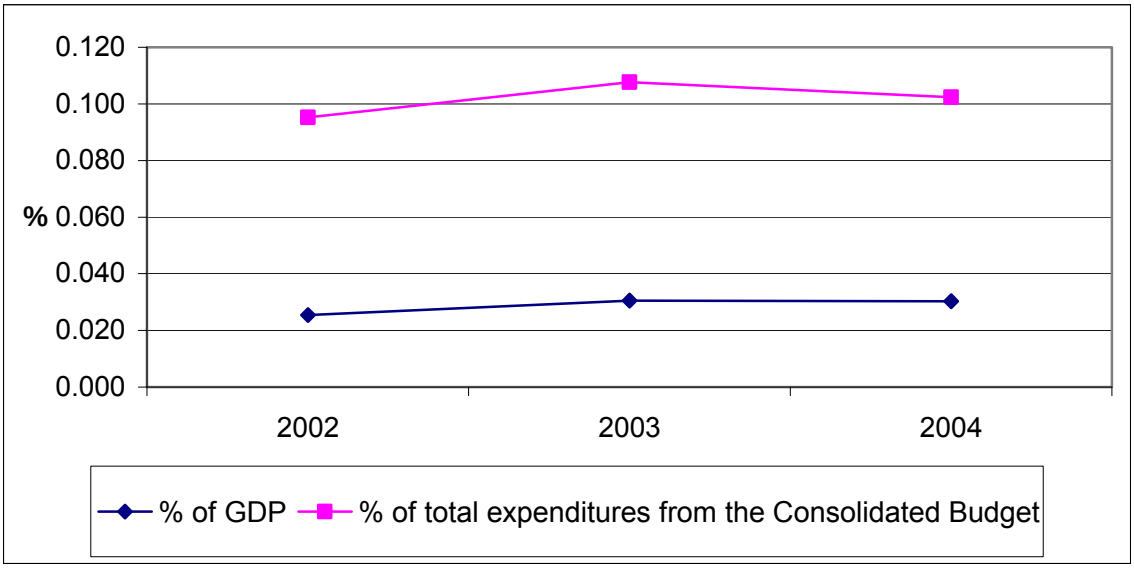
The analysis of expenditures on educational residential institutions refers to the period between 2002 and 2004 only. This is because unlike residential social service institutions of the MoLSP and MoH, expenditures on residential institutions subordinated to the MoES are funded both from the State Budget and the local budgets. So, the total expenditures (from the Consolidated Budget) are based on the combined sum from these two sources (see Table 3.3.5 below). According to reports of the State Treasury of Ukraine expenditures from the State Budget of Ukraine on special residential schools in 2004 were UAH 35.89 million: which is 2.6 times higher than in 2001 (see Table 3.3.5 below). The expenditures from local budgets and the Consolidated Budget of Ukraine also doubled during this period. However, although the level of funding for residential schools in absolute figures grew, the share of these expenditures in the structure of total expenditures on education remained unchanged (around 0.5-0.6 per cent) – See Figure 3.3.4 below.

Table 3.3.5: Financing of Special Residential Institutions ('schools') under the Remit of the MoES:

Years	Expenditures from the Consolidated Budget on residential schools, UAH million	Percentage of total expenditures on funding education from the Consolidated Budget	Percentage of the GDP	Percentage of total expenditures from the Consolidated Budget
2002	57.4	0.47	0.025	0.095
2003	81.6	0.54	0.031	0.108
2004	104.8	0.57	0.030	0.102

Source: reports of the State Treasury on expenditures from the Consolidated and local budgets, data of the State Statistics Committee on the GDP.

Figure 3.3.4: Dynamics of Expenditures on Residential Institutions Subordinated to the MOES (special residential schools) in relation to the GDP, and Total Expenditures from the Consolidated Budget of Ukraine



[11] These smaller units – as highlighted in previous Sections – are designed to considerably improve the living conditions give due regard to the protection of children's rights. Among the advantages of such institutions is minimising the risk of social exclusion and and enhancing social inclusion – for example, children in these smaller units go to ordinary schools in the community rather than receiving their education on-site.

A greater proportion of funding for residential institutions subordinated to the MoES are assigned from local budgets (between 65 and 70 per cent in the period 2002-2004). However, the contribution of the State Budget is gradually growing: in 2002, the share of the expenditures from the State Budget was 31 per cent of the funds assigned by the state to special residential schools of general education, and in 2004 their share was 34.2 per cent see Table 3.3.6 below.

Table 3.3.6: Sources of Finance for Special Residential Schools under the Remit of the MOES (in UAH)

	The State Budget	% of the total expenditures on residential schools	Local budgets	% of the total expenditures on residential schools	The Consolidated Budget	%
2004	35,888,336.0	34.2	68,896,564.0	65.8	104,784,900.0	100
2003	24,105,320.0	29.5	57,505,637.0	70.5	81,610,957.0	100
2002	17,806,879.0	31.0	39,613,703.0	69.0	57,420,582.0	100

Source: reports of the State Treasury on expenditures from the Consolidated and local budgets, data of the State Statistics Committee on the GDP.

Between September 2004 and October 2005 the MoES - in co-operation with the Ministry of Family, Youth and Sport (MoFYS), the Ministry of Justice (MoJ), the Ministry of Internal Affairs (MIA), and the General Prosecutor's Office (GPO) - inspected the work of the above institutions. The inspection focused on the social security of orphans and children without parental care, the level of financial provision, the material and technical conditions, and the organisation of the educational process. Conclusions on the outcomes from the inspections showed that the financing of residential institutions for orphaned children was improving in comparison to previous years. According to the MoES, the maintenance of one child in a residential school for orphaned children cost UAH 9,130 a year in 2004. The expenditures on labour remuneration, public utilities, meals, social payments to orphaned children (minor expenses, one-time benefits, and essential items for children finishing school) were fully funded.

Despite the rising tendency towards financing residential institutions observed in the last three years (1.8-2.0 times compared with 2002), their material and technical conditions have not changed much. The inspection of residential institutions by the aforementioned commission revealed that the funds assigned to material and technical development in these types of residential institutions are insufficient because they cover only between 80 and 90 per cent of minimum needs. The needs of children for clothes and footwear, means of personal hygiene are only 80 per cent met. The needs of orphaned children are mostly met at the expense of funds from commercial enterprises and charitable donations.

According to the Resolution of the Board of the Ministry of Education and Science of Ukraine[12], among the issues that need to be addressed include maintenance, gasification, replacement of technical and medical equipment, water and heating facilities, thorough repairs of buildings and other premises in most of the institutions that were built in the 1960's and 1970's, provision of furniture for classrooms and bedrooms (in Chernihiv, Lugansk, Lviv, Kirovohrad Oblasts and others), replacement of old agricultural machinery in subsidiary farms (Chernihiv Oblast) and building greenhouses for vegetables (Kyiv city, residential school No 21), purchase of motor vehicles (Zaporizhzhia, Dnipropetrovsk, Zakarpattia, Ivano-Frankivsk, Kirovohrad, Poltava, Rivne oblasts, AR of Crimea), reconstruction of residential buildings, gyms and sport grounds (residential school No 3 in Kyiv city, residential school No 9 in Kryvy Rih city, and others), repair of the workshop of Vilniansk residential school in Zaporizhzhia Oblast, renewal of educational facilities for vocational and occupational training, and providing residential institutions with modern technologies for efficient use of computers in educational process and in correction and development work with children.

The capital cost problems are not so acute in the regions where family-type forms of maintenance of orphaned children are being implemented (e.g., Dnipropetrovsk, Lviv, Zakarpattia, Kyiv Oblasts), and where managers have developed structural linkages to secure extra budgetary funds[13]. In general, the system of

[12] On *The education of orphans and children without parental care* issued on December 1 2005.

residential maintenance and education of orphans, for all its social and economic drawbacks, is still the main form of state guardianship and protection of the rights of orphaned children due to the wide network, clearly regulated work and convenience in terms of the procedure of maintaining children over the long-term.

The Cabinet of Ministers of Ukraine (CoM) has set an objective that expenditure from the State Budget on orphans and children without parental care residing in children's residential institutions should be increased. The legislation is being further developed. Thus, under the Decree of the President of Ukraine, the *Concept of Reforming Residential Institutions for Orphaned Children* is being worked out along with a corresponding state programme. The finance mechanisms for the maintenance of orphaned children are, at least in rhetorical terms, expected to be brought in line with the principle "money follows the child". The objective of this policy is aimed at providing guarantees of normative state provision irrespective of the place of the child's residence.

Predictive Estimation (Demographic and Economic) of Future Financing Needs of Residential Institutions:

The predictive estimation of future needs for public funds assigned to the needs of residential institutions is based on a **demographic projection** that allow estimates of the potential groups of social service users, and on a **macroeconomic projection** that is the basis for developing projections of budget expenditures in social policy i.e., education, health care, and social security of the population etc. In calculating the total financing needs, the following data have been used:

- Size of the population in the care of residential institutions, and respective rates of coverage of the main demographic groups by different types of residential institutions;
- Actual data on the total amount of public expenditure on the maintenance of residential institutions as a percentage of Gross Domestic Product (GDP);
- Actual data on public expenditure on residential institutions per person;
- Predictive estimation of inflation rates;
- Predictive estimation of the rate of growth of the actual GDP.

The algorithm of the projection includes:

- Estimation of potential groups of the population that will use the services of residential institutions, taking account of structural changes in the number of corresponding socio-demographic groups. There are two variants of estimation: (i) the present rates of coverage of corresponding groups of the population by residential institutions remain unchanged; (ii) assumptions about changes in rates of coverage of different groups of the population by residential institutions;
- Estimation of public expenditures per person in residential institutions of different types by indexing over the predictive inflation rates;
- Calculation of the total expenditures of each type of residential institution (subordinated to MoLSP, MoH and MoES) by multiplication of the predictive number of residents and the amount of expenditures per person;

[13] For example children's homes in Sevastopol city co-operate with 20 charitable funds, business and state organisations (such as the tax administration, and Sevastopol customs agency) that grant stipends, open charitable personal bank accounts for children, and help with their employment and housing. In Oblasts where institutions receive charitable support and other extra budgetary funds the growth in expenditures on nutrition is between 20 and 25 per cent and allows most children's essential needs to be met.

- Comparison of the predicted total expenditures with the predicted amount of the GDP in order to establish the deficit or surplus of predictive GDP, and the corresponding reserve of increase in expenditures on residential institutions.

In addition, the total amount of costs of the Pension Fund, directed to the residential institutions is provided, based on the projection of the corresponding number of older people and the predictive estimation of the minimal pension.

Macroeconomic Projections to 2015

The long-term economic and political sustainability of funding for social services is important because this contributes to dignity and security for children, the disabled and the elderly. Considerations of sustainability need to take account of the following: (i) future demographic trends, particularly the rapid decline in overall population and the structural features of demographic change; pressures to extend working life and changing patterns of retirement; these factors will affect the extent to which community-based social services – as emphasised by a range of recent legislation, will affect the supply of workers and the ability of families to care for their members in times of hardship or difficulties brought-on by the life-course. In the long term, economic (and indirectly, political) sustainability depends on overall economic performance and competing demands on public expenditure. An active role for central government is key to securing both economic sustainability of social services over the long term. Active central government involvement that takes a long term view of social service provision as a normal life risks extending the scope of risk sharing – between affluent and poorer people, between generations and across the life cycle. One important way in which central government can enhance social services provision is to undertake demographic and economic projections that help decision-makers and citizens make judgements about the best way for securing political legitimacy for collective funding. It is with these issues to the fore that this analysis has undertaken both demographic and economic projections with regard to the future funding of social services[14].

The Macroeconomic projection used as a baseline in the analysis for determining the base and optimistic forecasts is drawn from the model developed by the World Bank (November 2005). The methodology of World Bank macroeconomic projections is based on the standardised model, applied to all countries. Ideally the discount rate is more robust measure for financial projections – but it cannot be applied in this instance because the discount rate is not used as an instrument of monetary policy in Ukraine. Therefore, macroeconomic projections in Ukraine are – drawing on the work of Institute for Economic Research (IER) based on factors such as investment, the foreign trade balance; and present projected rates of GDP and Consumer Price Index (CPI), the minimum wage level, and the living wage level. Two variants (optimistic and pessimistic) of predicted parameters of economic development of Ukraine are given in Table 3.3.7 below. Long-term macroeconomic projections, given the methodology – are highly unreliable. Therefore the horizon of the projection is limited to 2015.

The optimistic variant – that forecasts further economic growth in Ukraine - was used as the basic projection in this analysis. It forecasts that the rates of growth of actual GDP will be around 4-5 per cent a year, and the rate of inflation will be decreasing and will be only 5 per cent in 2015. Another scenario of economic development is based on lower growth rates: under this latter (basic) variant growth rates of the actual GDP will decrease to 2.5 per cent a year in 2015, and the consumer price index will remain around 10-9 per cent a year.

[14] See Resource Paper 4, Annex 14 for an overview of the methodology used for macroeconomic projections.

Table 3.3.7: Predicted Economic Development Parameters to 2015:

Pessimistic Variant	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
GDP growth rate	102.4	107.0	103.0	103.0	103.0	103.0	102.5	102.5	102.5	102.5	102.5
Consumer Price Index (CPI)	112.0	111.4	112.0	111.0	110.0	110.0	109.0	109.0	109.0	109.0	109.0
Amount of GDP in actual prices, UAH billion	419.9	512.5	591.2	675.9	765.8	867.6	969.4	1083.1	1210.0	1351.9	1510.5
The living wage for persons, who have lost their ability to work (i.e., pensioners, disabled people)	332.0	358.5	401.5	445.7	490.3	539.3	587.8	640.7	698.4	761.2	829.8
Basic Variant											
GDP growth rate	102.4	107.0	104.0	105.5	105.0	105.0	105.0	104.5	104.5	104.5	104.5
Consumer Price Index (CPI)	112.0	111.4	110.0	109.0	108.0	107.0	106.0	106.0	105.0	105.0	105.0
Amount of GDP in actual prices, UAH billion	419.9	512.5	586.3	674.2	764.5	858.9	956.0	1059.0	1162.0	1275.0	1399.0
The living wage for persons, who have lost their ability to work (i.e., pensioners, disabled people)	332.0	358.5	394.4	429.8	464.2	496.7	526.5	558.1	586.0	615.3	646.1

Potential Need for Social Services to 2015 Based on Population Projections:

To estimate the potential groups of social service users it is necessary to forecast the dynamics of the number of the following age groups of the population:

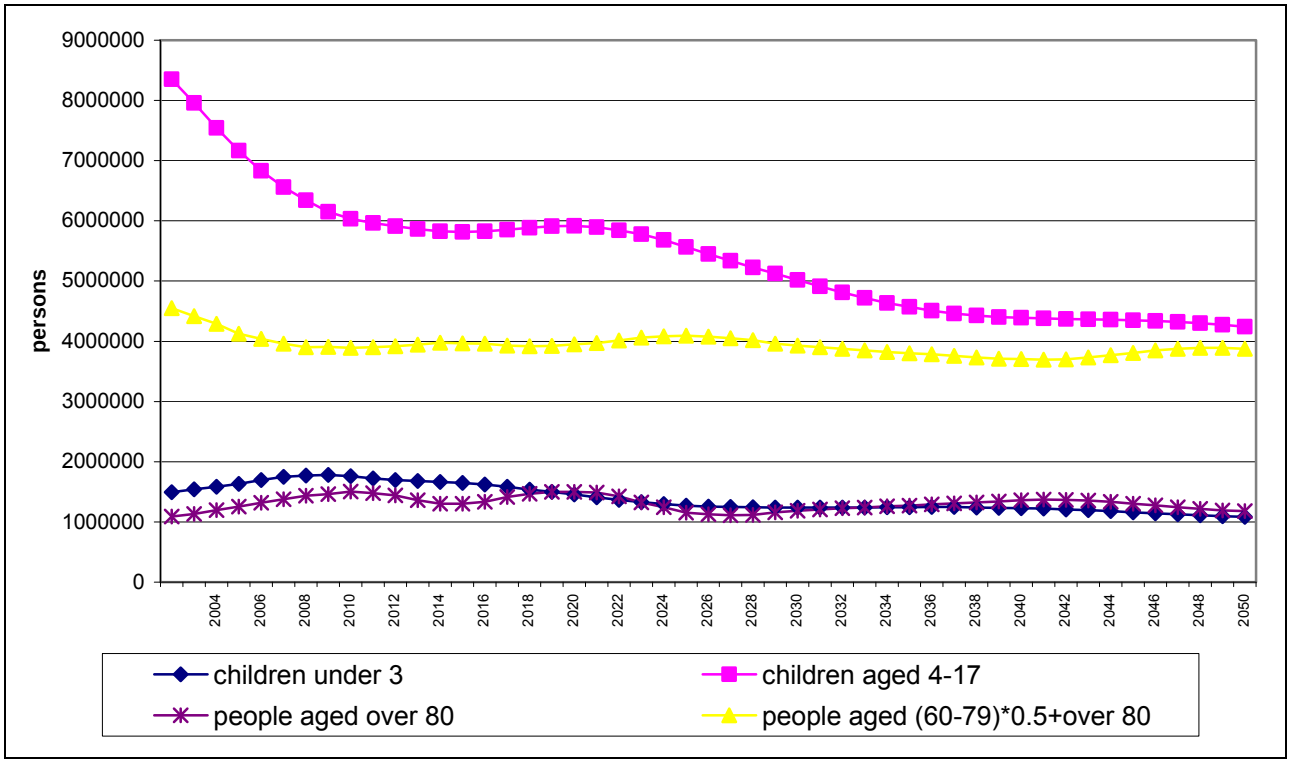
- children aged 0-3 years as a potential group of residents of residential institutions under the remit of MoH[15];
- children aged 4-17 years as potential groups of residents in different types of children's residential institutions under the remit of MoH and MoLSP;
- Elderly people (through the expert judgement method - based on data outlined in Resource Section 2 - a potential age group was calculated by the formula: the size of the population aged 60-79 years*0.5 + the population over 80 years) as a potential group of residents of residential institutions for elderly and disabled people that fall under the remit of MoLSP.

According to predictive estimations to 2050 (see Figure 3.3.5 below) the general decrease in the size of the population will also result in a corresponding reduction of potential groups of social service users in Ukraine. In spite of slight fluctuations in numbers during the projection period, the total number of children aged 0-3 years will decrease from 1.54 million at the beginning of 2004 to 1.08 million at the beginning of 2051, children aged 4-17 years from 7.96 million to 4.24 million respectively, the potential group of disabled

[15] According to regulations of the MoH on baby homes children aged 0-3 years are admitted to baby homes; children with physical and mental health development related disabilities can stay in rehabilitation groups till the age of 4.

adults and elderly people from 5.55 million to 5.06 million. As for the latter (i.e., elderly people), it should be noted that there will be a slight growth among the population aged over 80 years (the oldest old) from 1.13 million to 1.18 million, the rest of this group will decrease (from 4.4 million to 3.88 million people).

Figure 3.3.5: Predictive Estimation of Some Age groups of the Population of Ukraine who are Most Probable Potential Users of Social Services in Ukraine



The comparison of predictive dynamics of the main potential groups of social service users and the growth rates of the actual GDP (see Table 3.3.8 below) shows that even under conditions of the pessimistic macroeconomic projection, the rates of economic development will considerably outstrip the growth of all groups. The number of people over 80 years and children aged under 3 years will growing (at higher rates than the pessimistic projection growth of the GDP) till 2011, after this period there will be a reduction in their numbers. Thus, the predicted level of economic growth in Ukraine, in combination with the general reduction of the absolute number of social service users, will leave a reserve of increase in the level of public expenditures on these services - and if these resources are deployed in a manner that are, at least in part, informed by the analysis and the types of policy recommendations set forth in the analytical work conducted by the DFID FRSSU Project (i.e., on Public Expenditure Management; Legislative Frameworks and Social Services Policy; NGO Legislation and the Delivery of Social Services, Auditing for Improved Performance in Social Services Quality and Outcomes, and the demographic and economic analysis set forth in this report) – that can be invested in establishing a balance of service provision and improving the quality of both community-based and residential social services.

Table 3.3.8: Comparison of Predicted Rates of Economic Development and the Dynamics of Potential Groups of Social Service Users to 2015

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Growth rates of GDP (basic)	**102.4**	**107.0**	**104.0**	**105.5**	**105.0**	**105.0**	**105.0**	**104.5**	**104.5**	**104.5**	**104.5**
Growth rates of GDP (pessimistic)	**102.4**	**107.0**	**103.0**	**103.0**	**103.0**	**103.0**	**102.5**	**102.5**	**102.5**	**102.5**	**102.5**
rates of changes among retired people aged 80+	106.0	104.9	104.9	104.5	104.3	102.0	102.6	98.5	97.5	94.3	95.8
rates of changes among potential clients of MoLSP	99.0	98.1	99.5	99.6	100.1	100.7	100.4	99.8	99.6	98.9	99.5
rates of changes among children aged 0-3 years (clients of MoH)	102.6	103.2	103.7	103.1	101.3	100.6	98.8	97.9	98.4	99.1	99.2
rates of changes among children aged 4-17 years	94.8	95.0	95.3	96.0	96.7	97.0	98.0	98.8	99.1	99.2	99.4
rates of changes in all potential groups	**101.1**	**97.0**	**97.9**	**98.3**	**98.6**	**98.9**	**99.1**	**99.1**	**99.2**	**99.1**	**99.4**

Predictive Estimation of Total 'Private' Costs from the Pension Fund Directed to Residential Institutions for Older People

Given that a 75 per cent deduction is made from the pensions of older people who reside in residential institutions, it is relatively easy to estimate the total costs of the Pension Fund, which would be directed to the residential institutions. The predictive estimate of older persons residing in the residential institutions, is based on the demographic projection and current coverage rate of the corresponding age groups in receipt of residential services. Predictive estimation of the minimum pension is based on the macroeconomic projection of the living wage for persons, who have lost their ability to work (i.e., pensioners, disabled people), which is equal to the minimum pension starting from the end of 2004. Two variants (pessimistic and basic) are presented in Table 3.3.9 below.

Table 3.3.9: Estimate of Costs from the Pension Fund Directed to Residential Institutions for Older People:

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimated number of older people in residential institutions	44674	44465	44282	44305	44593	44777	44690	44518	44021	43812	43732
Pessimistic variant											
Minimum pension, UAH (actual prices)	332.0	358.5	401.5	445.7	490.3	539.3	587.8	640.7	698.4	761.2	829.8
75% deduction	249.0	249.0	268.9	301.1	334.3	367.7	404.5	440.9	480.5	523.8	570.9
Total costs to the Pension Fund for residential institutions (UAH mln)	11.1	11.1	11.9	13.3	14.9	16.5	18.1	19.6	21.2	22.9	25.0
Basic variant											
Minimum pension, UAH (actual prices)	332.0	358.5	394.4	429.8	464.2	496.7	526.5	558.1	586.0	615.3	646.1
75% deduction	249.0	268.9	295.8	322.4	348.2	372.5	394.9	418.6	439.5	461.5	484.6
Total costs to the Pension Fund for residential institutions (UAH mln)	11.1	12.0	13.1	14.3	15.5	16.7	17.6	18.6	19.3	20.2	21.2

Predictive Estimation of the Number of People in Residential Institutions and Public Expenditure Management Implications: **Variant 1 and Variant 2**

Variant 1*(the present rates of coverage of corresponding groups of the population by residential institutions remain unchanged).*

The first variant of estimation is based on the assumption that the present rates of coverage of the population by residential institutions remains unchanged. Calculations were undertaken separately for every line Ministry (i.e., MoLSP, MoH, MoES). As of 2004, the rate of coverage of children aged 0-3 years in baby homes (under the remit of MoH) was 0.34 per cent, the rate of coverage of children aged 4-17 years in residential homes for disabled children (under the remit of MoLSP) was 0.10 per cent, and in residential institutions under the remit of the Ministry of Education and Science 0.91 per cent (including 0.66 per cent in special residential schools for children needing correction and support for their physical and mental development; 0.09 per cent in children's homes, and 0.17 per cent in residential schools for orphans and children without parental care).

The predictive numbers of people in residential institutions of different types were obtained by superposition of the rates of coverage on the demographic projections of corresponding age groups of the population. The results of the calculations are given in Table 3.3.10 below. The level of public expenditures per person was estimated by using the 2004 data and projecting this over the period till 2015 by indexing over the predictive inflation rates.

According to the ***basic variant***, the expenditures per person will have grown by a little more than 2 times by 2015, and the amount of funds necessary for the residential institutions will grow from UAH 693 million in 2004 to UAH 1449.9 million in 2015. The ***pessimistic variant*** is based on higher inflation rates which means that expenditures per person will increase almost 3 times. Hence, the total expenditures residential institutions will also increase by up to UAH 1862 million in 2015.

It should be noted that in recent years the expenditures on residential institutions have been stable as a percentage of GDP (around 0.22-0.23 per cent). Therefore, based on the assumption that their share remains fixed for to 2015, the "minimum necessary" amount of GDP expenditure can be obtained for financing the current network of residential institutions. In the basic variant, there is a slight growth of the fixed percentage: to 0.25 per cent, in the pessimistic variant the figure 0.22 per cent was used.

The calculations showed that, even under the conditions of the pessimistic macroeconomic projection, the GDP would leave some "reserve for an increase" in public expenditures on residential institutions. This means that there will be a possibility of raising the level of financing in relation to the GDP and the State Budget, while the rates of coverage of the population by residential institutions remain unchanged. This will allow some flexibility for diversifying the range of social services, and raise the quality of services provided.

Table 3.3.10: Predictive estimation of public expenditures on residential institutions of different types to 2015 if the present levels of coverage are preserved												
PESSIMISTIC VARIANT	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Consumer Price Index (CPI)	**112.30 %**	**112.0 %**	**111.4 %**	**112.0 %**	**111.0 %**	**110.0 %**	**110.0 %**	**109.0 %**	**109.0 %**	**109.0 %**	**109.0 %**	**109.0 %**
MoLSP												
Number of children in residential institutions	7,716	7,330	6,986	6,709	6,484	6,293	6,169	6,098	6,043	5,994	5,957	5,949
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
the rate of coverage (percentage)	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102
Expenditures per person, UAH thousand (indexed over the inflation rate)	11.4	12.8	14.3	16.0	17.7	19.5	21.4	23.4	25.5	27.8	30.3	33.0
Expenditures of MoLSP on children's residential institutions, UAH thousand	**88,137.9**	**93,773.784**	**99,567.562**	**107,085.11**	**114,889.83**	**122,646.74**	**132,259.72**	**142,488.03**	**153,927.94**	**166,417.62**	**180,272.13**	**196,244.9**
Number of residents in residential homes for adults	45,626	44,674	44,465	44,282	44,305	44,593	44,777	44,690	44,518	44,021	43,812	43,732
The size of population aged (60-79)/2+80^{+}	5,488,651	5,382,370	5,357,197	5,335,210	5,337,910	5,372,704	5,394,766	5,384,382	5,363,640	5,303,732	5,278,533	5,268,941
The rate of coverage, percentage	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Expenditures per person, UAH thousand (indexed over the inflation rate)	8.7	9.7	10.8	12.1	13.5	14.8	16.3	17.8	19.4	21.1	23.0	25.1
Expenditures of MoLSP on residential homes for adults, UAH thousand	**396,296.3**	**434,587.5**	**481,866.3**	**537,475.2**	**596,899.4**	**660,869.1**	**729,941.1**	**794,104.4**	**862,239.5**	**929,343.7**	**1,008,171.7**	**1,096,910.2**
MoH												
Number of children in baby homes	5,387	5,557	5,763	5,943	6,019	6,055	5,985	5,859	5,764	5,712	5,666	5,597
Number of children aged 0-3 years	1,584,426	1,634,444	1,694,893	1,748,024	1,770,271	1,780,847	1,760,275	1,723,207	1,695,215	1,680,100	1,666,361	1,646,192
Rate of coverage, percentage	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Expenditures per person, UAH thousand (indexed over the inflation rate)	19.3	21.3	23.7	26.5	29.5	32.4	35.6	38.8	42.3	46.2	50.3	54.8
Expenditures on residential institutions of MoH, UAH thousand	**103,751.2**	**118,183**	**136,525.0**	**157,701.3**	**177,276.3**	**196,168.9**	**213,293.1**	**227,593.7**	**244,047.3**	**263,639.8**	**285,017.3**	**306,908.8**
MoES												
Number of children in residential schools	12,593	11,963	11,402	10,949	10,583	10,270	10,068	9,952	9,863	9,783	9,722	9,710
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
Rate of coverage, percentage	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Expenditures per person, UAH thousand (indexed over the inflation rate)	8.3	10.5	11.7	13.1	14.5	15.9	17.5	19.1	20.8	22.7	24.8	27.0
Expenditures on residential institutions of MoES, UAH thousand	**104,784.9**	**125,198.0**	**132,933.3**	**142,970.0**	**153,390.2**	**163,746.5**	**176,580.8**	**190,236.7**	**205,510.2**	**222,185.2**	**240,682.5**	**262,007.8**
Total expenditures on residential institutions, UAH million	**693.0**	**771.7**	**850.9**	**945.2**	**1,042.5**	**1,143.4**	**1,252.1**	**1,354.4**	**1,465.7**	**1,581.6**	**1,714.1**	**1,862.1**
Fixed share of expenditures in the GDP	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222
The "necessary" GDP, UAH million	**312,148.7**	**347,631.6**	**383,284.7**	**425,780.0**	**469,574.6**	**515,059.1**	**563,997.6**	**610,100.4**	**660,236.5**	**712,426.3**	**772,136.8**	**838,771.1**
Predicted GDP, UAH million		419,900	512,500	591,220	675,942	765,842	867,699	969,437	1083,103	1210,097	1,351,981	1,510,501
Reserve of increase		*107,751*	*164,868*	*207,935*	*250,162*	*296,267*	*352,640*	*405,439*	*473,003*	*549,861*	*639,555*	*738,364*

BASE VARIANT	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Consumer Price Index (CPI)	**112.30 %**	**112.0 %**	**111.4 %**	**110.0 %**	**109.0 %**	**108.0 %**	**107.0 %**	**106.0 %**	**106.0 %**	**105.0 %**	**105.0 %**	**105.0 %**
MoLSP												
Number of children in residential institutions	7,716	7,330	6,986	6,709	6,484	6,293	6,169	6,098	6,043	5,994	5,957	5,949
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
Rate of coverage, percentage	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102
Expenditures per person, UAH thousand (indexed over the inflation rate)	11.4	12.8	14.3	15.7	17.1	18.5	19.7	20.9	22.2	23.3	24.5	25.7
Expenditures of MoLSP on children's residential institutions, UAH thousand	**88,137.9**	**93,773.8**	**99,567.6**	**105,172.9**	**110,805.1**	**116,135.6**	**121,822.6**	**127,631.6**	**134,083.9**	**139,643.6**	**145,718.0**	**152,807.9**
Number of residents in residential homes for adults	45,626	44,674	44,465	44,282	44,305	44,593	44,777	44,690	44,518	44,021	43,812	43,732
Size of population aged (60-79)/2+80^{+}	5,488,651	5,382,370	5,357,197	5,335,210	5,337,910	5,372,704	5,394,766	5,384,382	5,363,640	5,303,732	5,278,533	5,268,941
Rate of coverage, percentage	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Expenditures per person, UAH thousand (indexed over the inflation rate)	8.7	9.7	10.8	11.9	13.0	14.0	15.0	15.9	16.9	17.7	18.6	19.5
Expenditures of MoLSP on residential homes for adults, UAH thousand	**396,296.3**	**434,587.5**	**481,866.3**	**527,877.4**	**575,677.6**	**625,784.3**	**672,338.8**	**711,307.4**	**751,081.4**	**779,826.9**	**814,927.9**	**854,119.4**
MoH												
Number of children in baby homes	5,387	5,557	5,763	5,943	6,019	6,055	5,985	5,859	5,764	5,712	5,666	5,597
Number of children aged 0-3 years	1,584,426	1,634,444	1,694,893	1,748,024	1,770,271	1,780,847	1,760,275	1,723,207	1,695,215	1,680,100	1,666,361	1,646,192
Rate of coverage, percentage	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Expenditures per person, UAH thousand (indexed over the inflation rate)	19.0	21.3	23.7	26.1	28.4	30.7	32.8	34.8	36.9	38.7	40.7	42.7
Expenditures on residential institutions of MoH, UAH thousand	**103,751.2**	**118,182.9**	**136,525.0**	**154,885.2**	**170,973.5**	**185,754.5**	**196,461.3**	**203,863.7**	**212,585.3**	**221,224.3**	**230,385.9**	**238,977.4**
MoES												
Number of children in residential schools	12,593	11,963	11,402	10,949	10,583	10,270	10,068	9,952	9,863	9,783	9,722	9,710
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
Rate of coverage, percentage	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Expenditures per person, UAH thousand (indexed over the inflation rate)	9.3	10.5	11.7	12.8	14.0	15.1	16.2	17.1	18.2	19.1	20.0	21.0
Expenditures on residential institutions of MoES, UAH thousand	**104,784.9**	**125,198.0**	**132,933.3**	**140,417.0**	**147,936.6**	**155,053.4**	**162,646.2**	**170,401.7**	**179,016.2**	**186,439.1**	**194,549.1**	**204,014.9**
Total expenditures on residential institutions, UAH million	**693.0**	**771.7**	**850.9**	**928.4**	**1,005.4**	**1,082.7**	**1,153.3**	**1,213.2**	**1,276.8**	**1,327.1**	**1,385.6**	**1,449.9**
Fixed share of expenditures in the GDP	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
The "necessary" GDP, UAH million	277,188.1	308,696.9	340,356.8	371,341.0	402,157.1	433,091.1	461,307.6	485,281.7	510,706.7	530,853.6	554,232.4	579,967.8
Predicted GDP, UAH million		419,900	512,500	586,300	674,216	764,561	858,984	956,049	1,059,015	1,162,005	1,275,010	1,399,004
Reserve of increase		*111,203.1*	*172,143.2*	*214,959.0*	*272,058.6*	*331,469.5*	*397,676.2*	*470,767.2*	*548,308.8*	*631,151.1*	*720,777.3*	*819,036.6*

Variant 2 *(there are changes in the rate of coverage of corresponding groups of the population by residential institutions).*

The second variant of the projection assumes changes not only in the size of demographic groups of the population that are potential users of services provided by residential institutions, but also changes in the rates of coverage of corresponding age groups. Thus, there will be a considerable growth of the rate of coverage by care homes for adults (MoLSP), first of all, at the expense of elderly people. Expert judgements forecast that this rate of coverage will grow from the present 0.83 per cent to 1.05 per cent. This projection is based not only on recent trends, but also on the assumption about a rise in the quality of services provided by residential institutions for elderly people, which will lead to an enhanced disposition of the population towards their use.

As for the rate of coverage of children by residential institutions, the projections are ambiguous. On one hand, taking account of recent trends, it is reasonable to expect a slight decrease in the rates of coverage of children aged 4-17 years by residential institutions of MoLSP and MoES; on the other hand – a slight increase of the rate of coverage of children aged under 3 years (by residential institutions of the MoH). The latter tendency could be brought about by the short-term growth of the birth rate in 2006-2007 due to enhanced childbirth benefits (see Section 2) and possible 'misuse' of these benefits by people from marginal groups of the population who may later abandon their children.

Thus, the dynamics of the number of people using the services of residential institutions will have the following characteristics:

- the number of people in residential care homes for adults (MoLSP) will increase from 45.6 thousand to 55.4 thousand;
- the number of children in residential care homes for disabled children (MoLSP) will decrease from 7.7 thousand to 6.7 thousand;
- the number of children, in residential baby homes (MoH) will grow from 5.4 thousand to 5.5 thousand;
- the number of children, in residential schools (MoES) will decrease from 12.6 thousand to 10.8 thousand.

The results of the calculations, which were carried out in the same way as variant 1, are given in Table 3.3.11. According to the **pessimistic variant** total expenditures on residential institutions will be UAH 2205.3 million (an increase almost UAH 340 million compared to the previous variant). According to the ***base variant***, the total expenditures on residential institutions will be UAH 1717.2 million (an increase of almost UAH 270 million than in the previous variant). There will be a corresponding decrease of the "reserve of increase" for public expenditures on residential institutions in relation to predictive GDP.

Table 3.3.11: Predictive estimation of public expenditures on residential institutions of different types to 2015 if coverage levels for respective groups change												
PESSIMISTIC VARIANT	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Consumer Price Index (CPI)	**112.30 %**	**112.0 %**	**111.4 %**	**112.0 %**	**111.0 %**	**110.0 %**	**110.0 %**	**109.0 %**	**109.0 %**	**109.0 %**	**109.0 %**	**109.0 %**
MoLSP												
Number of children in residential institutions	7,716	7,410	7,141	6,933	6,774	6,647	6,588	6,583	6,596	6,614	6,646	6,710
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
Rate of coverage, percentage	0.102	0.103	0.105	0.106	0.107	0.108	0.109	0.110	0.112	0.113	0.114	0.115
Expenditures per person, UAH thousand (indexed over the inflation rate)	11.4	12.8	14.3	16.0	17.7	19.5	21.4	23.4	25.5	27.8	30.3	33.0
Expenditures of MoLSP for children's residential institutions, UAH thousand	**88,137.9**	**94,805.295**	**101,770.1**	**110,657.93**	**120,029.01**	**129,542.35**	**141,232.46**	**153,828.38**	**168,006.74**	**183,636.8**	**201,113**	**221,340.61**
Number of residents in care homes for adults	45,626	45,819	46,676	47,552	48,643	50,035	51,319	52,297	53,169	53,636	54,436	55,391
Size of population aged 60-79/2+80+	5,488,651	5,382,370	5,357,197	5,335,210	5,337,910	5,372,704	5,394,766	5,384,382	5,363,640	5,303,732	5,278,533	5,268,941
Rate of coverage, percentage	0.83	0.85	0.87	0.89	0.91	0.93	0.95	0.97	0.99	1.01	1.03	1.05
Expenditures per person, UAH thousand (indexed over the inflation rate)	8.7	9.7	10.8	12.1	13.5	14.8	16.3	17.8	19.4	21.1	23.0	25.1
Expenditures of MoLSP on care homes for adults, UAH thousand	**396,296.3**	**445,729.2**	**505,831.3**	**577,157.0**	**655,351.6**	**741,510.2**	**836,599.6**	**929273.3**	**1,029,782.9**	**1,132,320.1**	**1,252,658.1**	**1,389,347.7**
MoH												
Number of children in baby homes	5,387	5,557	5,763	5,943	6,019	6,055	5,985	5,841	5,729	5,661	5,598	5,514
Number of children aged 0-3 years	1,584,426	1,634,444	1,694,893	1,748,024	1,770,271	1,780,847	1,760,275	1,723,207	1,695,215	1,680,100	1,666,361	1,646,192
Rate of coverage, percentage	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.33
Expenditures per person, UAH thousand (indexed over the inflation rate)	19.3	21.3	23.7	26.5	29.5	32.4	35.6	38.8	42.3	46.2	50.3	54.8
Expenditures on residential institutions of MoH, UAH thousand	**103,751.2**	**118,183**	**136,525.0**	**157,701.3**	**177,276.3**	**196,168.9**	**213,293.1**	**226,910.9**	**242,585.2**	**261,274.1**	**281,612.5**	**302,332.7**
MoES												
Number of children in residential schools	12,593	12,082	11,631	11,281	11,013	10,794	10,688	10,669	10,680	10,699	10,739	10,833
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
Rate of coverage, percentage	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Expenditures per person, UAH thousand (indexed over the inflation rate)	8.3	10.5	11.7	13.1	14.5	15.9	17.5	19.1	20.8	22.7	24.8	27.0
Expenditures on residential institutions MoES, UAH million	**104,784.9**	**126,450.0**	**135,605.3**	**147,302.2**	**159,618.4**	**172,099.2**	**187,444.1**	**203,959.5**	**222,538.1**	**243,000.7**	**265,863.2**	**292,313.9**
Total expenditures on residential institutions, UAH million	**693.0**	**785.2**	**879.7**	**992.8**	**1,112.3**	**1,239.3**	**1,378.6**	**1,514.0**	**1,662.9**	**1,820.2**	**2,001.2**	**2,205.3**
Fixed share of expenditures in the GDP	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222	0.222
The "necessary" GDP, million	312,148.7	353,679.0	396,275.5	447,215.5	501,024.9	558,252.5	620,977.1	681,969.4	749,059.9	819,924.2	901,462.5	993,394.1
Predicted GDP, UAH million		419,900	512,500	591,220	675,942	765,842	867,699	969,437	1,083,103	1,210,097	1,351,981	1,510,501
Reserve of increase		*107,751*	*158,821*	*194,945*	*228,726*	*264,817*	*309,447*	*348,460*	*401,134*	*461,037*	*532,057*	*609,038*

BASE VARIANT	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Consumer Price Index (CPI)	**112.30 %**	**112.0 %**	**111.4 %**	**110.0 %**	**109.0 %**	**108.0 %**	**107.0 %**	**106.0 %**	**106.0 %**	**105.0 %**	**105.0 %**	**105.0 %**
MoLSP												
Number of children in residential institutions	7,716	7,410	7,141	6,933	6,774	6,647	6,588	6,583	6,596	6,614	6,646	6,710
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
Rate of coverage, percentage	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12
Expenditures per person, UAH thousand (indexed over the inflation rate)	11.4	12.8	14.3	15.7	17.1	18.5	19.7	20.9	22.2	23.3	24.5	25.7
Expenditures of MoLSP on children's residential institutions, UAH thousand	**88,137.9**	**94,805.3**	**101,770.1**	**108,681.9**	**115,761.6**	**122,665.1**	**130,087.3**	**137,789.5**	**146,347.7**	**154,092.5**	**162,564.2**	**172,348.9**
Number of residents in care homes for adults	45,626	45,819	46,676	47,552	48,643	50,035	51,319	52,297	53,169	53,636	54,436	55,391
Size of population aged 60-79/2+80+	5,488,651	5,382,370	5,357,197	5,335,210	5,337,910	5,372,704	5,394,766	5,384,382	5,363,640	5,303,732	5,278,533	5,268,941
Rate of coverage, percentage	0.83	0.85	0.87	0.89	0.91	0.93	0.95	0.97	0.99	1.01	1.03	1.05
Expenditures per person, UAH thousand (indexed over the inflation rate)	8.7	9.7	10.8	11.9	13.0	14.0	15.0	15.9	16.9	17.7	18.6	19.5
Expenditures of MoLSP on care homes for adults, UAH thousand	**396,296.3**	**445,729.2**	**505,831.3**	**566,850.6**	**632,051.6**	**702,144.3**	**770,580.4**	**832,383.0**	**897,025.5**	**950,147.6**	**1,012,551.7**	**1,081,828.6**
MoH												
Number of children in baby homes	5,387	5,557	5,763	5,943	6,019	6,055	5,985	5,841	5,729	5,661	5,598	5,514
Number of children aged 0-3 years	1,584,426	1,634,444	1,694,893	1,748,024	1,770,271	1,780,847	1,760,275	1,723,207	1,695,215	1,680,100	1,666,361	1,646,192
Rate of coverage, percentage	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.33
Expenditures per person, UAH thousand (indexed over the inflation rate)	19.0	21.3	23.7	26.1	28.4	30.7	32.8	34.8	36.9	38.7	40.7	42.7
Expenditures on residential institutions of MoH, UAH thousand	**103,751.2**	**118,182.9**	**136,525.0**	**154,885.2**	**170,973.5**	**185,754.5**	**196,461.3**	**203,252.1**	**211,311.7**	**219,239.2**	**227,633.7**	**235,414.2**
MoES												
Number of children in residential schools	12,593	12,082	11,631	11,281	11,013	10,794	10,688	10,669	10,680	10,699	10,739	10,833
Number of children aged 4-17 years	7,544,752	7,167,139	6,831,201	6,559,795	6,340,446	6,153,207	6,032,265	5,962,175	5,909,045	5,861,013	5,824,725	5,817,264
Rate of coverage, percentage	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Expenditures per person, UAH thousand (indexed over the inflation rate)	9.3	10.5	11.7	12.8	14.0	15.1	16.2	17.1	18.2	19.1	20.0	21.0
Expenditures on residential institutions of MoES, UAH thousand	**104,784.9**	**126,450.0**	**135,605.3**	**144,671.8**	**153,943.4**	**162,962.6**	**172,652.2**	**182,693.7**	**193,848.9**	**203,905.7**	**214,903.2**	**227,612.9**
Total expenditures on residential institutions, UAH million	**693.0**	**785.2**	**879.7**	**975.1**	**1,072.7**	**1,173.5**	**1,269.8**	**1,356.1**	**1,448.5**	**1,527.4**	**1,617.7**	**1,717.2**
Fixed share of expenditures in the GDP	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
The "necessary" GDP, UAH million	277,188.1	314,066.9	351,892.6	390,035.8	429,092.1	469,410.6	507,912.5	542,447.3	579,413.5	610,954.1	647,061.1	686,881.8
Predicted GDP, UAH million		419,900	512,500	586,300	674,216	764,561	858,984	956,049	1,059,015	1,162,005	1,275,010	1,399,004
Reserve of increase		*105,833.1*	*160,607.4*	*196,264.2*	*245,123.6*	*295,150.0*	*351,071.3*	*413,601.7*	*479,602.0*	*551,050.7*	*627,948.5*	*712,122.5*

The Economic Structure of Expenditures on Social Services

Although the public financing residential institutions are rather unfavourable - since public expenditures per person are rather large, it needs to be remembered that these funds include not only direct costs of provided services, but also the wages of personnel in residential institutions, the maintenance of premises, and payment for public utilities. Thus, in the structure of current expenditures on education and health care the greater part is made up by the expenditures on wages and tax charges. Starting from 2000, the share of such expenditures gradually grew (education – 54.4 per cent in 2000, 58.4 per cent in 2001, 59.1 per cent in 2002, and 61.3 per cent in 2003; while in health care the share of such expenditures grew by 50.7; 52.3; 54.4; and 61.3 per cent respectively), which mirrors state policy on the annual rise in the level of the minimum wage. The above data show that minimum wages are raised without taking account of existing financial impact, i.e., at the expense of expenditures on the development and delivery of public services.

The second ranking item in expenditure on residential social services is energy consumption and public utility costs. Their share in the expenditures on both education and health care was 10.2 per cent in 2003. In the structure of current expenditures on social security and social services the greater part of expenditure is made up by subventions and current transfers. The share of subventions and transfers in 2000 was 89.1 per cent, in 2001 – 89.3 per cent, in 2002 – 85.1 per cent, in 2003 83.6 per cent. As for capital expenditures, theses are rather low. In 2003, their share was 9.1 per cent for education and health care, and for social security and social services it was 6.6 per cent.

From the above statistical analysis, one can conclude that although the expenditures on the social services in general, and on residential institutions in particular, are being raised the growth in funding is taken up by increases in wages and tax charges (due to inflation), and by payment for public utilities whose prices are also growing. At the same time, the quality of services (including the purchase of equipment, medicines, food, etc) provided by residential institutions may not be influenced by the growing level of funding. Hence, there is a clear necessity for the GoU to asses the unit costs of both community-based social services and residential social services – with a view to improving efficiency and equity in service provision, and – more broadly for reforms to be effected in way budgets are designed and allocated across social services