Human Development Report Slovenia 2002/2003

Human Development and Health

Editors:

Jana Javornik

Valerija Korošec

IMAD

UNDP

Address:
Institute of Macroeconomic Analysis and Development
Gregorčičeva 27
1000 Ljubljana
Slovenia
Editors: + 386 1 478 10 50, +386 1 478 10 38
Fax: +386 1 478 10 70
E-mail: hdr.umar@gov.si
Home page: http://www.gov.si/umar/
Distribution: +386 1 478 10 43
E-mail: simona.zrim@gov.si

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Team for the preparation of Human Development Report - Slovenia 2002/2003

Project Manager: Alenka Kajzer

Editors:

Jana Javornik

Valerija Korošec

Editorial Board:

Janez Šušteršič

Dušan Kidrič

Maja Kersnik

Advisory Board:

Matjaž Hanžek

Irena Križman

Brina Malnar

Marjan Premik

Tanja Rener

Tine Stanovnik

Authors:

Jana Javornik, Alenka Kajzer, Maja Kersnik, Dušan Kidrič, Valerija Korošec, Saša Kovačič, Brina Malnar, Janja Pečar, Barbara Artnik, Marjan Premik, Valentina Prevolnik Rupel, Matejka Rebolj, Mateja Rok Simon, Tine Stanovnik, Nada Stropnik, Milivoja Šircelj, Janez Šušteršič, Ana Tršelič Selan, Mirjana Ule, Gaj Vidmar

Consultation:

Maja Bednaš, Pavle Gmeiner, Rotija Kmet, Jasna Kondža, Ivo Lavrač, Sonja Lokar, Ana Murn, Boštjan Vasle, Eva Zver

Support:

Alenka Bitenc, Nadja Brezavšček, Janez Jereb, Slavica Mencin, Marija Polanc, Ana Marija Pucelj, Irena Rink, Dragica Šuc, Aco Trampuž, Simona Zrim, Igor Žafran, Marjeta Žigman

Reviews:

Anton Kramberger

Marko Kranjec

Institute of Public Health of RS

Translation::

Nina Barlič, Marko Germovšek, Nataša Zajec Herceg

Language editing:

Murray Bales

Matija Vodopivec

Cover page design:

Sandi Radovan, Studio DVA

Cover page:

Stane Jagodič

Layout:

Saša Dolenc

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Content

BOXES

HIGHLIGHTS

ABBREVIATIONS

CIS - Commonwealth of Independent States

GDI - Gender-related Development Index

GDP - Gross Domestic Product

GEM - Gender Empowerment Measure

HBS - Household Budget Survey

HDI - Human Development Index

HDR - Human Development Report

HII - Health Insurance Institute of the Republic of Slovenia

ICD - International Classification of Diseases

IER - Institute for Economic Research

IMAD - Institute of Macroeconomic Analysis and Development

IPH - Institute of Public Health of RS

MESPE - Ministry of the Environment, Spatial Planning and Energy

OECD - Organisation for Economic Co-operation and Development

p.c. - per capita

PPP - Purchasing Power Parity

PPS - Purchasing Power Standards

SEDS - Strategy for the Economic Development of Slovenia

SORS - Statistical Office of the Republic of Slovenia

SPOS - Slovenian Public Opinion Survey / SJM /

UN - United Nations

UNDP - United Nations Development Programme

WHO - World Health Organisation

COUNTRY ABBREVIATIONS

A - Austria, AL - Albania, B - Belgium, BG - Bulgaria, BY - Belarus, CH - Switzerland, HR - Croatia, CZ - Czech R., CY - Cyprus, DK - Denmark, D - Germany, E - Spain, EE - Estonia, EL - Greece, F - France, FIN - Finland, HU - Hungary, I - Italy, IRL - Ireland, JP - Japan, L - Luxembourg, LT - Lithuania, LV - Latvia, NL - Netherlands, MT - Malta, NO - Norway, PL - Poland, P - Portugal, RO - Romania, RU - Russian Federation, S - Sweden, SA - Saudi Arabia, SI - Slovenia, SK - Slovakia, TR - Turkey, UA - Ukraine, UK - United Kingdom

Preface

"Behind the blaring headlines of the world's many conflicts and emergencies lies a silent crisis - a crisis of underdevelopment, of global poverty, of ever-mounting population pressures, of thoughtless environmental degradation. This is not a crisis that will respond to emergency relief. It requires a long, quiet process of sustainable human development." This is how the 1994 Human Development Report begins, a report whose main theme was the new dimensions of human security. With the shrinking of military budgets and the reconciliation of countries after the fall of the Iron Curtain in the late eighties and early nineties, it seemed as if world politics were no longer focused on the arms race but on human development. It seemed that the era of the past forty years, in which the equilibrium was maintained quite delusively by the fear of mass destruction, would be succeeded by the idea of the coming millennium as a millennium of peace. These optimistic expectations called for a different concept of security which, firstly, equated security with people rather than territory and, secondly, set sustainable human development, rather than armament, as the foundation of security.

Such a switch in the concept of security is related to human development. Human development encompasses a secure economy, adequate food, environment, personal security, security within the local community and broader political security. Only such a holistic development perspective allows us to resolve the problems of human existence in the long run. It must take into account the close interconnections between the economic, social, cultural, spatial, educational and health roles of every human being. Emphasising one aspect at the expense of another ultimately takes us farther away from our goal. The world is connected as closely as ever, territorially and functionally. Transposing national problems to other nations and provoking conflicts in other parts of the world benefits nobody. Any policy that causes clashes in the Third World and thereby transfers one's own conflicts to someone else leads to a dead-end. Conflicts - and not just the economy - have become global. For more than a decade, human development studies have warned about the problem of such narrow development criteria. In addition, the main purpose of the human development project is to call on the present and future generations to be aware of their development responsibilities.

This is what the concept of human development should be like. An individual's and community's security should be sought in development which allows people to live a decent life, in an economy whose profits go not to just a few but are distributed equitably, and in a natural environment whose fruits and joys can be shared without fear. Only this will allow a long and healthy life for every one of us. *A long and healthy life, which can be controlled with knowledge*, is one of the key goals of human development.

The main purpose of this project and its reports - both global and national - is to draw the attention of the people who make decisions about development goals (policy-makers, experts) to the urgency of taking into account the close interconnections between the economic, social, cultural, spatial, educational, and health roles of individuals in each and every development planning decision and changes in the desired development path.

The Human Development Project, which attempts to cover as many countries as possible in its analyses, has been developed under the auspices of the United Nations Development Programme (UNDP). Its first public presentation dates back to 1990. Today, more than a hundred countries are involved in this project, with Slovenia having been involved since 1998. The Report before you now is the fourth Human Development Report for Slovenia.

The first three reports attracted a lot of attention and publicity from the professional community as well as the general public. What these reports lacked were a more holistic approach to human development, one that would encompass a broader range of issues pertinent to human existence. The concept of simultaneous economic, social and spatial planning, which before Slovenia's transition was quite strongly incorporated in social development planning, was in the early nineties quite unjustly proclaimed a negative remnant of the past system. The development lacked a concrete concept or plan, and this may have had many side effects in the times of rapid changes which were detrimental to long-term development. Reconsidering the strategy of social planning is thus an urgent matter and, at this moment, the concept of human development seems to be the most appropriate solution.

Its importance, however, has to be recognised by those for whom it is intended in the first place - policy-makers. They have to realise that, although (macro)economic planning is indeed necessary, it alone is insufficient. Their view of development strategies must be expanded and economic development should be given its rightful importance, i.e. not as an end in itself but as a means to an end. It is human development that has to be an end, whereas the economy is only an important part of it. Therefore, the human development project has to become the central social project and should not merely be a result of the efforts and enthusiasm of a few individuals. I strongly believe that it should become a national project and also be recognised as such by the National Assembly, which should provide the necessary conditions for its preparation: expert independence, people willing to co-operate, as well as institutional and financial support. In addition, the Human Development Reports should be given their proper weight. The past three reports fully justify these expectations. And I am convinced that, so too, will the fourth one. Unlike the former ones, this Report focuses predominantly on one component of human development - health.

Matjaž Hanžek,
Ombudsman of the Republic of Slovenia and
the first editor of Human Development Report for Slovenia

HUMAN DEVELOPMENT

1. Human Development Paradigm

"Wealth is evidently not the good we are seeking, for it is merely useful and for the sake of something else"

/Aristotle: The Nicomachean Ethics/

The exhaustion of the established development objectives and the new understanding of development factors have long called for a qualitative shift in development concepts. The human development concept defined by the United Nations over a decade ago became well established across the world in the 1990s. Human development is conceived in a way that brings together various aspects of human life, various features of welfare, and freedom in its broad and narrow meanings. It transcends the modernist view of development defined in terms of economic concepts and the traditional criteria for economic development: domestic output growth and macroeconomic stability in a market economy with free competition. The human development concept provides the basis for a paradigmatic shift in development. In this new perspective, economic growth is no longer understood as an objective, it is a *means* of improving human life. Human development is a dynamic concept that transcends the economic concept by incorporating new fields of study such as demography, sociology, and social psychology. It is the result of the pluralism of ideas generated in times when concentrating on one particular aspect of development is no longer sustainable.

Human development is evaluated at three levels: (i) a long and healthy life; (ii) access to resources that enable people to live a decent life; and (iii) knowledge and opportunities that help people reach their potential within the given social framework. The human development paradigm also

incorporates other important factors of development such as human rights, equal opportunities, social welfare, environmental protection etc. It focuses on the realisation of basic social, economic, cultural, civil and political rights. It also stresses the importance of socially responsible forms of development, which should be endorsed through a broad social consensus. Ultimately, human development is development that is shaped by all of us.

Human development as a basis for a shift in development pattern

The idea of human development is not new. It can be found in texts that preceded the existence of economics, as well as in texts of the early founders of quantitative economics (W. Petty, F. Quesnay, G. King, A. Lavoisier, J. Lagrange) and of the pioneers in the field of political economy (A. Smith, D. Ricardo, R. Malthus, K. Marx, J.S. Mill). This conceptual diversity allows contemporary literature on human development to combine both economic analysis and the humanistic vision. Naturally, the humanistic approach to human development has competed with other approaches. The economic idea of general accumulation prevailed at a certain point of time: the community as a whole should get as rich as possible regardless of the wealth distribution and the impact of this wealth on people. However, if we focus only on maximising total wealth and neglect how equitably it is distributed, we ignore the plight of the individual for the sake of aggregate results.

As a result, the human development paradigm has changed both its focus and priorities. People are more an end in themselves than a means of production and economic activity. The (content) human being is thus in the forefront instead of economic growth. The human development approach is founded more on integrating and transcending the existing development concepts than on inventing new ones. Human development is therefore nothing more and nothing less than one of the cornerstones of the post-modern development paradigm that competes with various other development concepts.

1.1 The complex nature of development

People's lives are defined by different factors. The narrow economic variables should be complemented by ones that are not based on market criteria and outcomes. Focusing only on the former causes 'information errors', which in turn leads to misguided policy measures. This is why the need for policy change should be backed by more information on development issues. We should also point out those variables that directly affect people's lives but differ from variables whose importance only stems from their instrumental value. Some of these instruments are undoubtedly very important and deserve more attention. It is nevertheless necessary to separate qualities that have inherent worth from variables that merely have instrumental value, as Aristotle put it. In this context, the underlying issue is what the objective of this type of development is.

Every individual has their own ideas about life's ideals – they each individually interpret *eudaimonia*[1]. This is why no technocratic solution can replace a social evaluation of human development.

Highlight 1: Key areas of sustainable human development seen in the global perspective

1. Strengthen policies and actions for human development and adapt them to the new realities of the global economy
2. Develop new approaches to reduce poverty
3. Reverse the marginalisation of poor and small countries
4. Remedy the imbalances in the structures of global governance
5. Build a more coherent and democratic architecture for global governance

Taken from the HDR - Slovenia 2000-2001: 20

[1] A contented state of being; happy, healthy and prosperous.

Box I: Human development indices

Experts from the United Nations Development Programme have set a wide and practical framework for evaluating human development. In order to evaluate development comprehensively and globally, they have developed a single and unique system composed of a number of indices. The Human Development Index has become the most effective and recognised alternative to traditional measures of development.

Indicators that make up the Human Development Index (HDI) generally change little in one year. Unless there are major social and economic changes or negative social effects caused by inadequate policies, no significant change is even noticed in the course of several years. A look at Slovenia's HDI shows that its value and rank have improved slowly but steadily since 1992 (when it was first calculated for Slovenia) despite methodological changes[i]. In the course of one decade, Slovenia revealed an accumulated change of +0.034 of a point in its HDI. The relatively fast HDI growth was largely fuelled by gross domestic product growth and a rise in the education index. The life expectancy index improved steadily throughout the period, but contributed less to growth in the HDI.

The latest calculations of the HDI for 2000 (the latest data available from the UNDP) have brought about a minor change in its value compared to the year before, while its rank underwent a greater change. Slovenia was once again put in 29th place out of a group of 173 countries. So Slovenia remained in the group of countries enjoying a high level of human development. Slovenia's highest ranking was in the education index, reaching 23rd place. It remained in 30th place in the GDP index, between Portugal and Malta (the Czech Republic drew closest out of all countries in transition, reaching 38th place). Slovenia was placed lowest in the life expectancy index, in 34th place, between Portugal and Chile. All other EU candidate-countries were behind Slovenia.

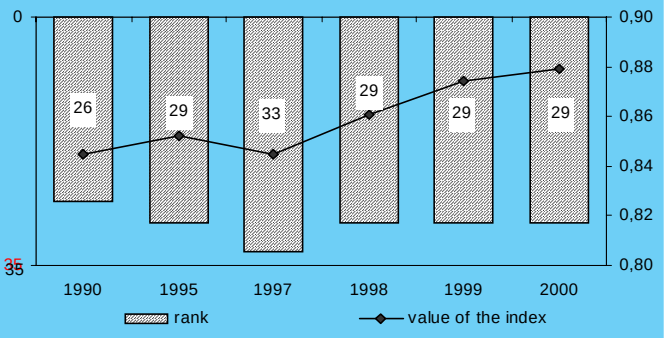
In addition to the Human Development Index, a number of other indices and measures have been developed by the UNDP in order to complement the procedure of ranking countries in an international context. A precondition for the

Table 1: Values of the Human Development Index (HDI) and its components for Slovenia, 1995-2000

	1995[1]	1997[1]	1998[1]	1999[2]	2000[2]
Life expectancy	74.52	74.90	75.00	75.30	75.50
Index	0.83	0.83	0.83	0.84	0.84
Gross enrolment ratio	79.1	82.0	82.0	83.0	83.0
Education index	0.924	0.93	0.93	0.94	0.94
GDP per capita (ppp)	12,600	14,000	14,800	15,977	17,367
Index	0.81	0.825	0.83	0.85	0.86
HDI	0.852	0.864	0.864	0.874	0.879
Rank in the world (number of countries covered)	**28**	**28 (174)**	**28 (174)**	**29 (162)**	**29 (173)**

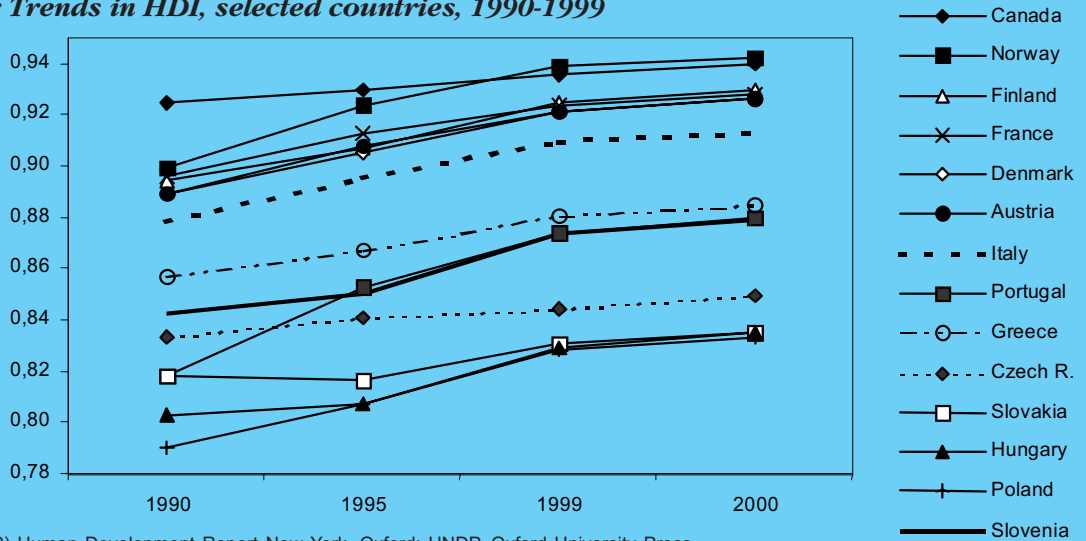
Source: (1999) Human Development Report - Slovenia 1999. Hanžek, M. (ed.). Ljubljana: UNDP, IMAD, p. 17. (2001) Human Development Report - Slovenia 2000-2001. Hanžek, M. (ed.). Ljubljana: UNDP, IMAD, p. 24. (1999-2002) Human Development Report. UNDP, Oxford University Press: New York, Oxford.
Notes: [1]calculated by the IMAD, [2]calculated by the UNDP.

Figure 1: Trends in the value and rank of HDI for Slovenia, 1990-2000



Source: See Table 1.

Figure 2: Trends in HDI, selected countries, 1990-1999



Source: (2002) Human Development Report New York, Oxford: UNDP, Oxford University Press.

[i] Most changes were seen in the method of calculating the GDP index. The latest formula is based on the logarithm of values so that the asymptote starts relatively late. As a result, countries with medium-high income are not disadvantaged.

empirical assessment of similarities and differences between countries is access to comparable international data. No other index has received such media attention as the HDI, which was primarily the result of the low availability of disaggregated data for these other indices. The number of countries covered in all other indices is lower. Unfortunately, this undermines the interdisciplinary quality of the indices, which should serve as a basis for co-ordinating development strategies between different departments.

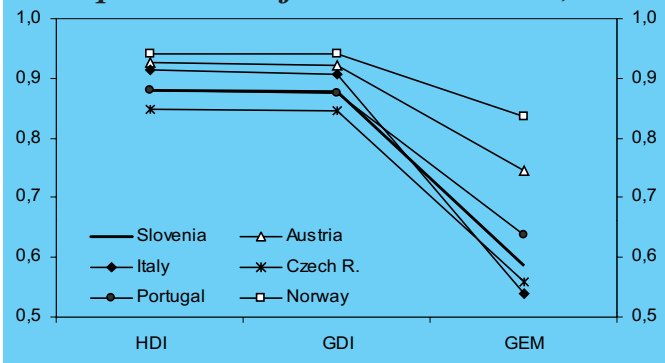
One of the relatively well-developed indices is the *Gender-related Development Index* (GDI). According to this complex index, Slovenia was ranked 27th out of 146 countries, its value, however, was slightly lower (0.877) than that of the HDI. This information is important because the GDI breaks down the basic quality of life indicators by gender. The biggest difference between the genders is revealed in the level of income and life expectancy. The results for Slovenia show that the value of its GDI almost equals the value of the HDI components, which is usually not the case in other countries. Other countries in transition were ranked below Slovenia, and Slovenia was accompanied by Greece (25th place), Cyprus (26th place), Portugal (28th place) and Korea (29th place).

Table 2: Participation of women in the public sphere, selected indicators, selected countries, 2000

	Slovenia	Czech Republic	Slovakia	Hungary	Sweden	Norway	Austria	Portugal	Greece
Senior officials and managers	31	26	31	34	29	25	28	32	25
Members of Parliament	12.2	14.2	14	8.3	45	36.4	25.1	19.1	8.7
Professionals and technicians	51	53	62	61	49	49	49	50	47
Share of Income	62	58	65	58	68	64	50	53	44

Source: (2002) Human Development Report. UNDP, Oxford University Press: New York, Oxford.
http://www.ipu.org/wmn-e/classif.htm

Figure 3: Relationships between individual development indices for selected countries, 2000



Source: See Table 2.

Slovenia's rank in 2000 was somewhat surprising in the index called the *Gender Empowerment Measure* (GEM). According to the GEM, Slovenia dropped from 22nd place in 1999 to 25th place in 2000 out of 66 countries. The value of this indicator, which measures women's active participation in the public sphere, was just 0.585. Compared to 1999, the value rose slightly, mainly due to the share of income earned by women relative to men, going up by +0.01 of a point. However, Slovenia fell behind Poland, Singapore and Israel in its ranking for this index. This was particularly evident in the share of women who have broken through the glass ceiling.[ii] One component where Slovenia has exceeded a number of other countries for several years running is the high ratio of men's to women's income (the GEM).

[ii] The glass ceiling arises because of the attitudes and traditions in a society that prevent women from rising to the top jobs. Women's professional engagement is limited to specific tasks and generally does not involve more abstract managerial activities that are associated to higher levels of hierarchy and prestige.

1.2 Strategy for the Economic Development of Slovenia (SEDS) and human development

Slovenia is still without a clear vision of development.[2] Unlike the preceding strategic documents,[3] the Strategy for the Economic Development of Slovenia adopted in 2001 integrated some of the findings of the first three national human development reports for Slovenia. What the Strategy incorporated was primarily the need for sustainable and balanced development that encompassed economic, social and environmental aspects. Adopted in 1995, the first Strategy already conceded

[2] The latest development scenario that tried to integrate and harmonise various aspects of Slovenia's development was the scenario that emerged from the Slovenia 2000 project, which served as a basis for Slovenia's Long-term Plan adopted by the parliament in 1986. Two more projects emerged in the 1990s: the Strategy for the Economic Development of Slovenia (IMAD, 1995) and Slovenia after 2000 (Centre for Evaluation and Strategic Studies). We should also add the Strategy of the Republic of Slovenia for Accession to the European Union. The findings of these projects can serve as important starting points for setting the direction of Slovenia's future development, while considering, understanding, developing and complementing the main development problems.

[3] Because Slovenia has no law to uniformly regulate the system of development planning, the role of development planning documents was partly defined in the Public Finance Act and its implementing regulations. The law stipulates that the SEDS provides a strategic framework for drawing up the national budget and defining national priorities.

that it was impossible to cover development by only focusing on the economic aspect. While the spatial-environmental, social and national-cultural aspects were noted, they were not brought together into a single concept. The priority remained economic development, while other aspects were largely treated as constraints to economic development. The Strategy of 2001 tried to resolve the balance between economic development and other features of human development by introducing the concept of sustainable development. Even though the guidelines of this Strategy still focused on economic development, with social and environmental development only being given two chapters at the end, its first part, ambitiously called the new development paradigm, tried to integrate the different aspects of development into a new whole, thereby providing the basis for preparing special social and environmental development strategies.

The Strategy's main goal is to increase the welfare of people living in Slovenia in a sustainable way, with welfare being defined as a balance between economic, social and environmental components. Given the current levels of advancement in each of the three welfare components, the SEDS gives priority to reducing the economy's development gap, which should be achieved without increasing the relatively narrower gaps in social and environmental development. Hence, the priority given to economic growth and development stems from the fact that gaps in this area were estimated to be the widest and not from the fact that this was primarily an economic strategy.[4] Moreover, the contingency of the economic development priority (depending on the actual circumstances) means that the SEDS did not promote the most rigid definition of sustainability, which would allow one component of welfare to be strengthened to the detriment of others.

The SEDS recognised the growing importance of the human factor in bolstering global competitiveness in line with the role played by knowledge, innovation, the creative use and management of information, organisation, management and other factors.[5] The human factor involves not just individual qualities such as education and health (human capital), but also the growing importance of social relations shaped through the interactions between people (social capital). The SEDS therefore incorporated new indicators for monitoring the development, with the human development index being one of them. Even though the Strategy deals with all three underlying elements of human development (a long and healthy life, access to education and information, and access to the financial means necessary for decent living standards) and stresses the importance of health (both as human capital and as a component and indicator of welfare) and culture (development of creativity, adaptability and co-operation), the Strategy's guidelines primarily focus on the measures to be taken in education.

Slovenia without a clear vision of development

1.3 Human development from the economic perspective

Economic thought is still dominated by the image of a person whose satisfaction of needs is constrained by two factors alone: the relative prices of goods required to satisfy his/her needs, and his/her disposable income. Since relative prices are determined by the market and cannot be influenced by the individual, and the government is only entitled to regulate prices in specific circumstances (e.g. when offsetting external effects or providing public goods and services, whereas in other cases intervention would disturb the operation of market forces), the only way to improve the satisfaction of needs is to increase income, both that of the individual and the nation. In order to maximise

Development gaps in the economy should be reduced without undermining social and environmental development

[4] The findings of the two Development Reports (IMAD, 2002 and 2003) supported this assumption. It was established that development gaps narrowed fastest in the economic field; they also narrowed in the social field, while the advantage previously enjoyed in the environmental area has been lost to a great extent. Further, disparities in regional development continued to increase.

[5] The SEDS put this within the framework of the general statement that the international competitiveness of countries and companies is primarily based on created assets such as research and development, a qualified labour force, information and communication technologies and infrastructure, social capital and culture, a quality environment and spatial structures. The importance of these assets is growing relative to the importance of natural assets in the context of the knowledge-based economy. The importance assigned to the created factors of competitiveness also suggests that the social and environmental components are no longer seen only as constraints on development or criteria to measure its quality. They are seen as equally important factors of development, directly contributing to the positive effects of economic policy by creating social capital and a social consensus on development.

national income, it is necessary for people to do their work efficiently. In this context, inequality between people is productive because differences in the level of reward, which correspond to their contribution to overall income, direct people to carry out those activities where they can use their skills most productively. Such inequality is also legitimate. Since total wealth grows faster in these unequal societies, the poorest members of society increase their wealth faster than people living in stagnant economies. The economy growing as a whole also means that society can offer compensation or transfers to those who suffer relative losses. Consequently, one of the main economic principles of equity that provides a basis for modern welfare economics, serving as the intellectual foundation of the social welfare state, says that just social change improves the welfare of some people while making no one worse off. This view of inequality stems from the traditional model of *homo economicus*.

An equitable social change is a change for the better for some people, while no one should suffer

Despite the importance assigned to economic incentives, it would be hard to find an economist who would claim that wealth is a goal in itself. Quite the opposite: according to its textbook definition, economics is the science about how to best satisfy human needs with scarce resources. The trouble therefore is not that economics ignores a human being's needs as the ultimate purpose of economic activity, but that it neglects people's needs and preferences – what they are, how they are shaped etc – in its *concrete* applications and that it equates the abundance of means with people's happiness. It is important to understand that this reduction is not simply a matter of naivety, blindness or political needs, but is also theoretically founded by the model of *homo economicus* described above.

Co-operation and trust increase the common benefit

A new view of the human being has recently emerged within mainstream economics, one that has been assisted by other social sciences. Firstly, the modern human being neither reacts solely to economic or material incentives nor is he/she limited only by income in making choices. Economics now tries to take into account the results of psychological experiments that have shown people often choose co-operative behaviour when they should have opted for selfishness in line with pure economic reasoning. Co-operation and trust are fundamental impulses of human behaviour that cannot be explained by simply assuming that they arise only when they benefit an individual. Secondly, in addition to external, material or compulsory motivation, a person's inner or intrinsic motivation is also important; its compatibility or incompatibility with external incentives can provide a good explanation of the behaviour of people with economic implications. Thirdly, human beings' cognitive limitations are increasingly taken into account in economics; people are 'rationally uninformed' and often make decisions in line with conventions or the general frame of their thought and views rather than in line with a detailed cost and benefit analysis. Fourthly, people are limited by the rules imposed from the outside and by the norms and morals they have internalised; they are the result of complex processes of socialisation and assimilation in the social networks of mutual control. Fifthly, a growing share of economics deals with the analysis of the evolutionary processes of social change rather than with the search for an efficient general equilibrium.

This new image of the human being, through which economics admits that material incentives are not the only thing to which people react, means that development cannot solely be stimulated by increasing unequal rewards and tightening competition. On the contrary, two factors that contribute to overall welfare and also serve purely economic development goals are co-operative behaviour and mutual trust. Introducing a dynamic perspective into our analysis of the adjustment process resulting from external incentives enables one of the main findings of the human development paradigm to be taken into account, that is, that one's ability to choose depends more on his/her opportunities to strengthen one's capabilities and the rules of access to various social services than on one's current income and endowed abilities. This, in turn, opens up a much wider space for the state's legitimate intervention: the state must provide conditions where people can develop their abilities and have access to important social services, such as education and health, on equal terms.

The Strategy for Economic Development did not fully take into account the development policy implications of the shift away from the reductionist view of the human being to the focus on human development. On the one hand, the Strategy's paradigm argues that human development, which affords individuals more opportunities and improves their capabilities, also affects the efficiency of different methods of societal governance. Enhanced human abilities and greater access to information create an increasingly autonomous individual. An individual's autonomous participation in social life requires the highest possible protection of human and civil rights in relation to the state and other disproportionately powerful agents such as multinational corporations and the media. That is why the state's governing role should be more and more constrained; the state should stimulate development only in co-operation and partnership with other social agents such as social partners, non-governmental organisations and professional associations at the national, regional and local levels. Formulating development objectives should not be considered only as an expert task most effectively carried out by relegating it to a team of experts, no matter which paradigm they take as their starting point. Formulating a development strategy and implementing it must take place in the context of an open and active dialogue between different social players and must aim for the broadest possible consensus, at least on its most fundamental points.

On the other hand, despite these declared goals, the Strategy primarily stresses the importance of the human factor of production in its guidelines. Although its guidelines also include investment in human development, especially education, the meanings ascribed to the human factor of development through the concepts of human and social capital still treat the human being primarily as an instrument and not the ultimate goal of development. Previously, the main role was played by natural resources and created assets. Now, they have been replaced by human resources.

As explained, the concept of human development builds on a different perspective; human development is the goal and not just a means of economic development. This is why it is not enough to make the human development index for (one of the many) indicators of successful development. It is necessary to thoroughly examine all elements that comprise human development, the mechanisms of its strengthening and methods of monitoring its realisation.

Dialogue must be established between social players

2. Macroeconomic determinants of development in Slovenia

Slovenia has a relatively good record of its economic development in the eleven years of its independence. It was one of the first countries to overcome the transition depression typical of transition economies in the early 1990s; economic growth recovery underpinned by domestic demand already began in mid-1993. It exceeded the pre-transition level of economic activity relatively fast – in 1996 it surpassed the pre-transition level of 1990 and in 1998 the level of 1987, when the economic crisis of former Yugoslavia began to be reflected in the falling gross domestic product. At the beginning of the new millennium, Slovenia is still one of the few countries in transition to have outstripped the pre-transition level of its economic activity. The level of gross domestic product of 1989 was exceeded in 2000 only by Poland (by 27%), Slovenia (by 14%), Hungary (by 4%), and Slovakia and Albania (by 3%) (EBRD, 2001:59). Slovenia is also reducing its development gap with the industrialised nations of Europe. In 1996, it achieved 64% of the EU's average gross domestic product per capita in terms of purchasing power, and 70% in 2000. In 1997, Slovenia had already caught up with the development level of the worst-performing EU country (Greece) and had drawn close to Portugal. If we look at candidate-countries seeking EU membership, Cyprus was the only country ahead of Slovenia, achieving 74% of the EU's average gross domestic product per capita in terms of purchasing power.

Backlogs in restructuring the corporate and financial sectors and the public administration

After eleven years of transition, reforms remain pending (the implementation gap) mainly in the areas of restructuring the corporate and financial sectors, and reforming the public administration, i.e. improving how the public sector functions.

Even though total corporate profits exceed losses, about one-third of companies are still operating at a loss. The government is still significantly involved in the economy – following the privatisation of socially-owned assets, the private sector's share in gross domestic product climbed from 30% in 1992 to 65% in 2000 – this is, however, still below the shares seen in other transition countries (EBRD 2001). In 2002, the processes of ownership transformation and privatisation were also launched in the financial sector – after lengthy discussions about its national interest, the government sold its 39% stake in the NLB bank off to foreigners, while the insurance sector will witness changes in its ownership structure when the share of social ownership has been determined in non-privatised insurance companies. The public administration's reform is proceeding slowly, while the costs of the public sector's functioning are rising, mainly due to rapid wage and employment growth.

Inflation is the main macroeconomic problem

2.1 Economic growth and inflation

After the transition depression that characterised the late 1980s and early 1990s, gross domestic product began to grow in 1993. In 1994, Slovenia achieved its highest economic growth in the 1990s (5.4%), which was the result of its effective re-directing to advanced Western European markets, the resumed extensive utilisation of existing capacities, and the favourable international economic environment. After 1994, the pace of economic growth slowed down, but still amounted to an average of 4.3% a year in 1994-2000. Due to its small and open economy, Slovenia was highly susceptible to external economic conditions, so domestic economic developments in the 1990s depended significantly on those of the main trading partners. The slowdown in 1995-1996 was therefore the result of the economic downturn in the EU, while in 1998 it was related to the Russian crisis and the recession in Croatia. In 1999, the negative effects stemming from the international environment were more than offset by the robust domestic demand fuelled by the anticipation of the introduction of value-added tax. Achieving 5% economic growth that year, Slovenia was the most successful economy among all EU candidate-countries. The slowdown in 2001 and 2002 was again strongly related to deteriorating conditions seen in the international environment, also coupled with a slump in investment activity.

Table 1: Economic growth, productivity, external (im)balance and inflation

	1996	1997	1998	1999	2000	2001	2002
Economic growth, %	3.5	4.6	3.8	5.2	4.6	2.9	3.2
Export growth, %	3.6	11.6	6.7	1.7	12.7	6.4	6.1
Import growth, %	2.1	11.9	10.4	8.2	6.1	3.0	4.8
Trade balance as a % of GDP	-4.5	-4.2	-4.1	-6.2	-6.0	-3.2	-1.1
Current account balance as a % of GDP	0.2	0.3	-0.6	-3.5	-2.8	0.1	1.7
Public finance balance	0.3	-1.2	-0.8	-0.6	-1.3	-1.3	-3.0[3]
Inflation (annual average)[1]	9.7	9.1	7.9	6.1	8.9	8.4	7.6
Labour productivity[2]	4.4	5.2	3.6	3.4	4.0	2.5	3.2

Source: SORS, Bank of Slovenia, Ministry of Finance, calculated by the IMAD.
Notes: [1]up to 1998 inflation was measured by the retail price index, after that by the consumer price index; [2]value added per employee; [3]provisional figure.

While achieving 4% average annual economic growth in 1993-2002, Slovenia kept its public finances in balance up to 1997 and did not record any significant deficit in its current account balance of payments. The main lever of economic growth was foreign demand, except in 1999, while the structure of domestic demand was favourable up to 2000 in terms of development opportunities, with gross fixed capital formation recording almost three times stronger growth than final consumption. The public finance balance was undermined in 1997, when the revenue side was affected by the reduction of social security contributions and falls in revenues from customs duties and import taxes. On the expenditure side, pressures from wages, employment, pensions and other social transfers began to mount gradually. In 1997-2001, the general government deficit (according to Government Finance Statistics – IMF) ranged between 0.6% and 1.4% of gross domestic product, significantly below the levels seen in most transition countries over the last few years.

The external balance was undermined in 1999 as a result of the strong import growth

fuelled by robust domestic demand, which was stimulated by the anticipation of the value-added tax introduced that year on one hand, and by the modest export growth resulting from the economic downturn in the international environment on the other. In 2000, the current account deficit remained relatively wide because of the worsened terms of trade and strong growth in imports of intermediate goods. The balance of payments was brought back into equilibrium in 2001, due to weak domestic consumption growth and the sustained robust export growth (increased exports to the markets of South-east Europe and the former Soviet Union). The current account surplus was also maintained in 2002.

While the issue of the balance of payments deficit was resolved in the period after 1999, negative trends emerged in the area of inflation, which has become the most pressing macroeconomic problem. The relatively fast stabilisation of price rises from the three-digit level in 1992 to the single-digit level in 1995 was followed by a period of moderate inflation with a slow downward trend. However, this came to a halt in 1999 after value-added tax was introduced and world commodity prices began to rise. With monthly price rises recording increased volatility, price levels were on the increase up until the second half of 2001 when inflation began to slow down again to reach 7% at the end of the year. In 2002, inflation was strongly affected by fiscal changes – higher rates of value-added tax, excise duties and environmental taxes – which brought inflation's downward trend to a halt in early 2002 together with rises in administered prices. Inflation began to fall again in the middle of the second quarter; however, the rate seen at the end of 2002 was still higher than at the end of 2001.

The gradual rise in prices seen in 2000 and the first half of 2001 was primarily due to the continued rise in world oil prices, which was also the reason for the slow pace of deceleration in 2001. Internal factors that kept inflation at a relatively high level were the rapid rise in administered prices, frequent changes in the tax sphere, and monetary policy's focus on managing the tolar's exchange rate. This pushed up growth in monetary aggregates together with the increased financial inflows. While in 1996 Slovenia's inflation rate was the lowest among the Luxembourg candidate-countries for EU membership, excluding the Czech inflation rate, it was the highest at the end of 2002. Further, it was about three times above the level set by the Maastricht convergence criteria concerning price stability.

Steep rises in administered prices

This relatively fast and robust economic growth was accompanied by dynamic labour productivity growth, one of the main synthesised measures of economic development. In the 1990s, Slovenia recorded one of the most dynamic productivity growth rates seen in Europe. However, Slovenia's productivity level is still relatively low compared to advanced industrialised countries, achieving about 45% of the EU average. In the early years of transition, productivity mainly increased due to cuts in employment; it only began to be more influenced by the effects of corporate restructuring after 1998, when productivity rose in step with employment growth.

2.2 Labour market

The labour market recorded positive trends as late as in 1999 despite the robust economic growth seen after 1993. Employment either fell or stagnated as a result of intensive corporate restructuring, mainly in industry, while employment in the service sectors rose gradually. Up until 1999, the registered unemployment rate did not fall markedly, while the survey unemployment rate dropped slightly. In 1993-1998, the number of registered unemployed ranged at about 125,000, while the registered unemployment rate was between 14% and 14.5%. The unemployment rate established by the labour force survey varied between 7% and 8% in the period after 1995, it dropped to 6.4% in 2001 and maintained this level in 2002. Up until 1996, the male unemployment rate was higher than the female rate because the industrial sector, employing mainly males, was hit hardest in the early period of transition. After 1996, the female unemployment rate was higher, as shown by both the labour force survey and registered unemployment figures.

Labour productivity continues to be low

Employment growth slowed down and registered unemployment fell

In 1999, the strong employment growth and falls in unemployment were due to changes in the records on the unemployed who took part in public works schemes and training programmes. Up until 1999, they were registered as unemployed, whereas after 1999 they were registered as either employed if they took part in the public works scheme or employment policy programme or unemployed if they were in training. The positive trends were sustained in 2000-2002, however, registered unemployment began to grow and employment fell in line with the slowing economic growth. In 2002, employment growth slowed down significantly, while falls in unemployment practically came to a halt.

Table 2: The main labour market indicators, 1996-2001

	1996	1997	1998	1999	2000	2001	2002
Unemployment rate	7.3	7.4	7.9	7.6	7.0	6.4	6.4
- Men	7.5	7.1	7.7	7.3	6.8	5.9	5.9
- Women	7.0	7.6	8.1	7.9	7.3	7.0	6.8
Employment rate[1]	61.9	63.5	63.3	62.5	62.9	63.9	63.4
- Men	66.2	68.0	67.6	66.9	67.2	68.7	69.1
- Women	57.7	59.0	58.9	57.8	58.5	58.9	59.2
Employment growth in the full-time equivalent	-1.0	-0.5	0.0	1.2	1.1	0.9	-0.1
Average gross wage per employee - real growth, %	5.1	2.4	1.6	3.3	1.6	3.2	2.0
- Private sector	4.0	1.5	2.2	3.2	1.3	2.3	2.3
- Public sector	6.8	3.8	-0.2	3.7	2.1	5.0	1.1

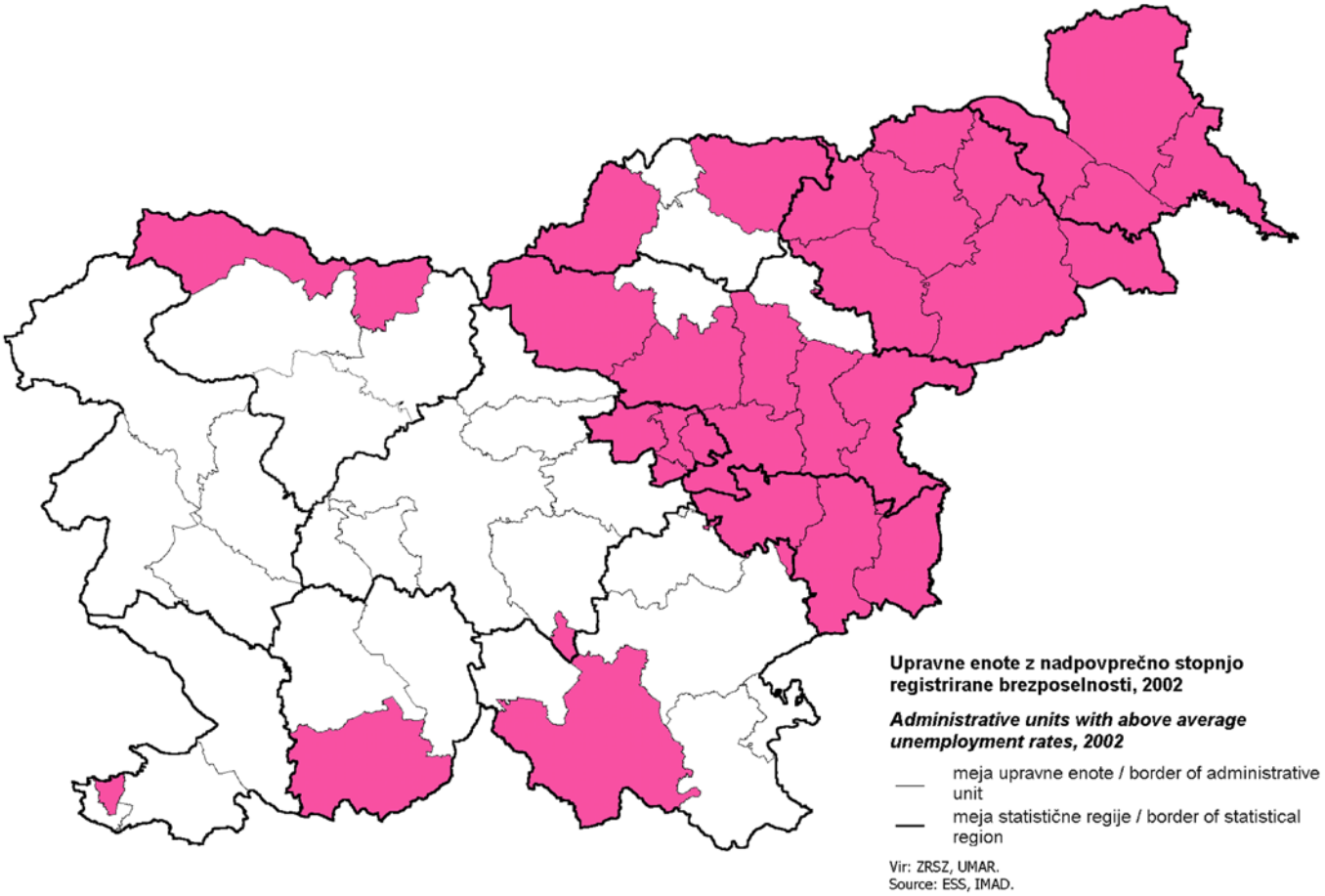
Source: SORS, wages broken down by sectors calculated by the IMAD
Note: [1]persons in employment as a % the working-age population (15-64 years of age)

The process of employing the unemployed is hampered by structural unemployment reflected in long-term unemployment, the high proportion of unskilled unemployed, and the unfavourable age structure of jobless people. The share of the long-term unemployed shrank slightly in 2001 due to retirements and deletions from unemployment registers (down from 63% in 2000 to 59%), and this share continued to fall in 2002 as a result of the employment policy's greater focus on people with low employment prospects and the retiring of people who had fulfilled retirement criteria. It is much harder to find jobs for the unskilled unemployed, and their share continues to persist at 47% of the unemployed.

Structural unemployment is also shown at the regional level, with particular features being evident in every region. Pomurska and Zasavska have above-average shares of unemployed young people, South-eastern Slovenia records above-average shares of long-term and unskilled unemployed, Gorenjska those aged over 40 etc. There are significant disparities between regional registered unemployment rates. The most conspicuous difference is the variation between the western and eastern parts of the country. In western regions, registered unemployment rates are way below the national average, while unemployment rates in the east are well above the average. In 2002, the highest unemployment rates were seen Podravska and Pomurska, followed by Zasavska, Spodnjeposavska and Savinjska. The unemployment rate in Koroška hovered around the national average, while the lowest rate has for some time been recorded in Goriška (it did, however, climb in 2002), with low unemployment rates also being seen in Obalno-kraška and Central Slovenia.

Above-average unemployment rates are typical of regions that used to be important industrial and mining centres and are now burdened by outdated industrial structures. These regions were the first to suffer growing unemployment rates as the economic conditions changed. The ratio between the two regions with the lowest and highest registered unemployment rates climbed from 1:2.7 in 1997 to 1:3.1 in 2001. This ratio fell again to 1:2.7 in 2002 because of the rise in unemployment in the region with the lowest unemployment rate. Further, the coefficient of variation in unemployment across regions increased from 32.3% in 2001 to 33.4% in 2002, suggesting that regional disparities in unemployment are increasing.

Figure 1: Administrative units with above-average registered unemployment rates in 2002



2.3 Wage policy

Wage policy has always pursued the goal of keeping growth in the gross wage per employee below the rate of productivity growth. This goal, however, was not achieved in some years. Up until 1997, this was only realised in 1994. In 1997-2000, the agreement concluded by the social partners was effective and the appropriate macroeconomic balance was achieved, but it was again undermined in 2001. Wage growth exceeded productivity growth primarily because of public-sector wages, which climbed by 5% in real terms. This was due to wage supplements introduced in the state administration and education, representing the second wave of supplement growth that began in 1998. In 2002, wage growth in the public sector slowed down, and the overall wage growth was again below the rate of productivity growth.

Slovenia's wage policy has also aimed at minimising wage differentials. In 1995, the social partners signed the Social Agreement where they introduced the minimum wage. The highest wage level was also set. The reason for this measure was the increasing wage dispersion seen in both the lower and upper wage distributions. The provision on the highest wage level was introduced for one year; however, subsequent wage agreements also contained restrictions on wage growth not determined by the collective agreement. In 1997, the social partners agreed on a wage policy for 1997-1999 in which they introduced the same adjustment mechanism for the minimum wage and the basic wage as well as an additional adjustment of the minimum wage based on the previous year's gross domestic product growth. This measure sought to push up the lowest levels of the gross wage per employee, thereby reducing wage dispersion at the lower end of the wage distribution. The effects produced by this measure were positive. However, in 1999 the existing wide ratio between the gross wage of the median and ninth deciles increased further, meaning that wage distribution deteriorated at the upper end. Two inequality measures also revealed that wage distribution began to deteriorate in

Increasing wage differentials

Table 3: Inequality measures showing the distribution of employees relative to the gross wage level in Slovenia in 1996-2001

	1996	1997	1998	1999	2000	2001
9th decile / 1st decile	3.36	3.39	3.34	3.39	3.46	3.51
Media /1st decile	1.67	1.69	1.68	1.70	1.70	1.72
9th decile / median	2.01	2.00	1.98	1.99	2.04	2.04
Gini coefficient	0.278	0.289	0.287	0.293	0.295	0.299
Average gross wage / median*100	120.4	120.2	119.9	121.4	122.1	122.7

Source: SORS, calculated by the IMAD.

1999, the Gini coefficient and the ratio of the average wage to the median gross wage*.

Table 4: Inequality measures showing the distribution of employees relative to the gross wage level in the public sector in 1996-2001

	1996	1997	1998	1999	2000	2001
9th decile / 1st decile	3.30	3.36	3.35	3.43	3.46	3.45
Media /1st decile	1.73	1.75	1.80	1.81	1.85	1.87
9th decile / median	1.91	1.92	1.86	1.89	1.86	1.84
Gini coefficient	0.250	0.270	0.270	0.277	0.273	0.270
Average gross wage / median*100	114.0	115.7	114.1	114.9	112.8	112.2

Source: SORS, calculated by the IMAD.

Wage distribution in the public sector shows that the government did not play its role of employer effectively in the second half of the 1990s in terms of keeping wage disparities in check. The ratio of the gross wage of the ninth to the first decile was on the increase up to and including 2000, even though the Gini coefficient showed an improvement in the public sector's wage distribution for 2000. The median gross wage drew close to the average wage gradually; however, this was more due to greater wage dispersion at the lower end of wage distribution than reduced wage dispersion at the upper end. The decentralised system of collective bargaining in the public sector (at the level of ministries) was a major obstacle to achieving the desired macroeconomic balance in the public sector. The new Public Sector Wage Act, passed in 2002 and entering into force in 2004, prescribes centralised collective bargaining and incorporates explicit mechanisms for reducing wage differentials.

Table 5: Inequality measures showing the distribution of employees relative to the gross wage level in the private sector in 1996-2001

	1996	1997	1998	1999	2000	2001
9th decile / 1st decile	3.10	3.18	3.17	3.20	3.22	3.30
Media /1st decile	1.60	1.61	1.61	1.63	1.61	1.61
9th decile / median	1.93	1.97	1.96	1.97	2.00	2.05
Gini coefficient	0.277	0.284	0.282	0.288	0.292	0.294
Average gross wage / median*100	121.9	120.8	120.5	121.7	122.6	123.8

Source: SORS, calculated by the IMAD.
Note: Value of Gini coefficient at 0 means.

Inequality in wage distribution also increased in the private sector. The introduction of the minimum wage and its additional adjustment by the previous year's gross domestic product prevented any further widening of the ratio of the median to the first decile, however, these measures did not improve wage distribution. The slightly higher ratio of the gross wage of the ninth decile to the median compared to the ratio of the first decile to the median is not unusual for the private sector because wage distribution includes both wages determined by collective agreements and wages determined by individual contracts (executives). What is more critical is the rapid rise in high wages (a widening of the difference between the gross wage of the ninth decile and the median), which gained momentum especially after 1999. The reason for this probably lies in the loose restriction of growth in wages not determined by the collective agreement laid down in the Wages Policy Agreement for 1999-2001. This was also due to slack supervision of the implementation of the Wages Policy Agreement, resulting from the dissolution of the Agency for Payments when the payment transactions system was reformed.

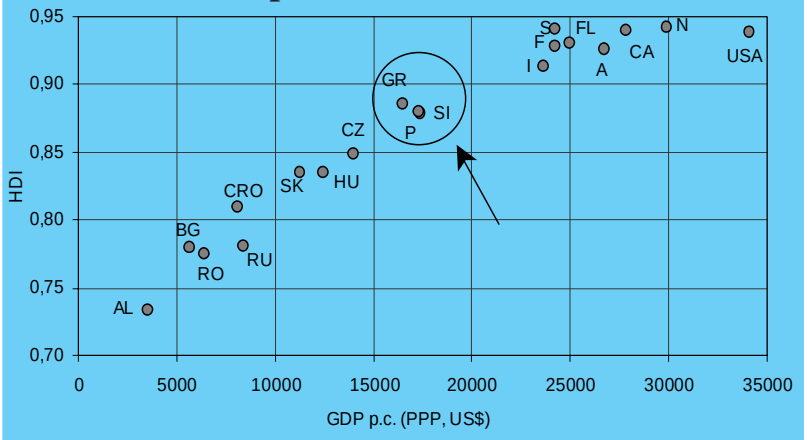
* The 0 value of the Gini coefficient means complete equality in wage distribution, the value of 1 means complete inequality. The closer the average gross wage to the median, the more is distribution equal.

3. Implications of the (macro)economic determinants for human development

As far as human development is concerned, there is no fundamental dispute in the argument that economic growth (measured by the determinants of development set out above) is important. On the contrary, it appears that the relationship between gross domestic product and the human development indicators is positive and statistically significant.

It is therefore possible to say that the higher the average income of a country, the more likely it is that life expectancy will improve, infant and child mortality will fall, and that the human development index will climb – coupled, of course, with other factors. We should, however, bear in mind the 'accidental' nature of economic growth. The effectiveness of economic growth as a means of development depends on a number of social and economic conditions, while an important role is also played by the distribution of surplus income. Economic growth helps create wealth, but this wealth should be distributed so that inequalities and opportunities are evenly distributed. The biggest effect may be expected in areas where average growth in gross domestic product is closely related to reducing inequalities, especially poverty. Evidence shows, however, that these relations are not perfect and that economic growth provides a necessary but not sufficient foundation for human development.

Figure 2: Gross domestic product per capita relative to the human development index, selected countries, 2000



Source: (2002) HDR. UNDP, Oxford University Press, New York, Oxford

3.1 Social protection and social cohesion

People as social beings need to satisfy not only their material, but also their social, cultural, spiritual and other needs, including their need for social protection and social cohesion. The main element of social cohesion is contact with fellow human beings and integration into the environment. The individual's contribution to development of this environment should take place on equal and reciprocal terms with the others, thereby mutually improving one's personal potential. One of the main preconditions for social cohesion is the individual's material security which, in turn, provides opportunities for social co-operation, social inclusion, and the development of one's own abilities.

Political stability and social cohesion stimulate economic growth

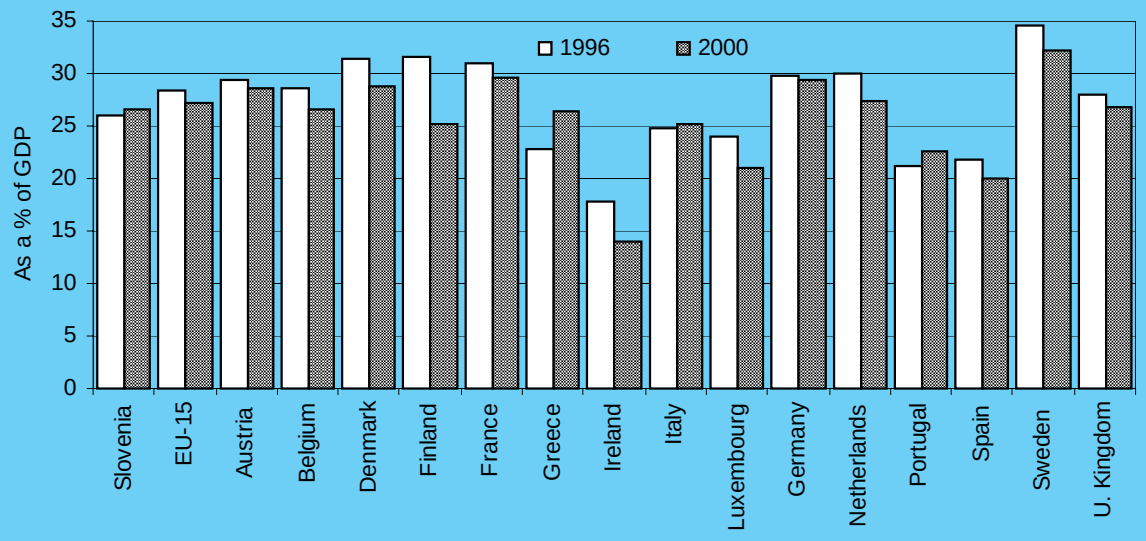
The quality of life depends not only on individual initiatives but also on social circumstances. The idea of sustainability crucially depends on appropriate systemic support and institutional organisation in addition to individual efforts.

The resources necessary for fulfilling one's needs should be (re)distributed equally, which is one of the tasks of the social protection system. The government uses this system to look after people who have become excluded from the labour market for various reasons (sickness, disability, unemployment), are too young to enter or not yet old enough to leave the labour market, or simply do not have enough money to survive. It is important that the social protection system indirectly strengthens and supports the informal social protection network. At the same time, such a system provides a solid basis for political stability and social cohesion while stimulating economic growth.

Poverty rate is relatively low in Slovenia

The level of expenditure on social protection is an indicator of the government's care for the poor; EU members with low shares of social protection expenditure tend to record high rates of poverty (Ireland, Greece, Spain and Portugal). This correlation also holds in Slovenia. Slovenia allocates a relatively large share of public expenditure for social

Figure 3: Expenditure on social protection in Slovenia and the EU, 1996-2000



Source: SORS, Rapid Reports, No. 205, July 2001 and Rapid Reports, No. 143, July 2002. Source for EU members: European social statistics – Social protection, Expenditure and recipients 1990-1999, European Commission, Luxembourg, 2002.; Social protection in Europe in 2000; Eurostat, News Release, februar, 2003
Notes: [1]PPP = purchasing power parity, [2]data on accommodation are not included because they are incomplete.

protection, and it records a relatively low poverty rate.

As shown by Figure 3, Slovenia appropriated 26.6% of gross domestic product for social protection in 2000. This expenditure climbed by 10.7% in nominal and 2% in real terms over the year before. From 1996 to 2000, social protection expenditure rose by 19% in real terms. Slovenia was very close to the EU average; in 2000, it appropriated just 0.7 of a percentage point less funding for social protection than the average EU member-state. Social protection appropriations were on the increase in Slovenia throughout the period, while they were on the decrease in most EU member-states (except Greece, Portugal and Italy). There were, of course, wide differences between individual EU member-states; Sweden allocated the largest share for social protection (32.3% of GDP) and Ireland the lowest (14.1% of GDP). Slovenia was in 8th place with 26.6% of GDP and was followed by Greece, Finland, Italy, Portugal, Luxembourg, Spain and Ireland.

Table 6: Social protection and poverty in Slovenia and the EU, 1999

Country	Appropriations for social security as a % of GDP	Poverty rate* (%)
Slovenia	26.6	13.6
EU-15	27.6	15 s
Austria	28.6	12
Belgium	28.2	13
Denmark	29.4	11
Finland	26.7	11
France	30.3	15
Greece	25.5	21
Ireland	14.7	18
Italy	25.3	20
Luxembourg	21.9	13
Germany	29.6	11
Netherlands	28.1	11
Portugal	22.9	21
Spain	20.0	19 p
Sweden	33.9	9
UK	26.0	19 p

Source: European Social Statistics, Social Protection, Expenditure and Recipients 1980-1999, European Commission, Luxembourg, 2001; for poverty: SORS and EUROSTAT, CIRCA (structural indicators).
Notes: * poverty rate by person; the poverty line equals 60% of median income, the OECD's modified equivalence scale was used.
"s" EUROSTAT's estimate
"p" national estimate

In 1999, Slovenia appropriated ECU 2,522 per capita for social protection, 43.1% of the average value in the EU (ECU 5,851). In 1996, the respective figure was ECU 1,968, representing 37.3% of the average level in the EU. If we look at purchasing power standards, Slovenia earmarked ECU 3,973 per capita for social protection in 1999, 68.6% of the average level in the EU (in 1996, Slovenia's figure represented 61.3% of the EU average). This was more than in Luxembourg, Italy, Greece, Spain, Ireland and Portugal.

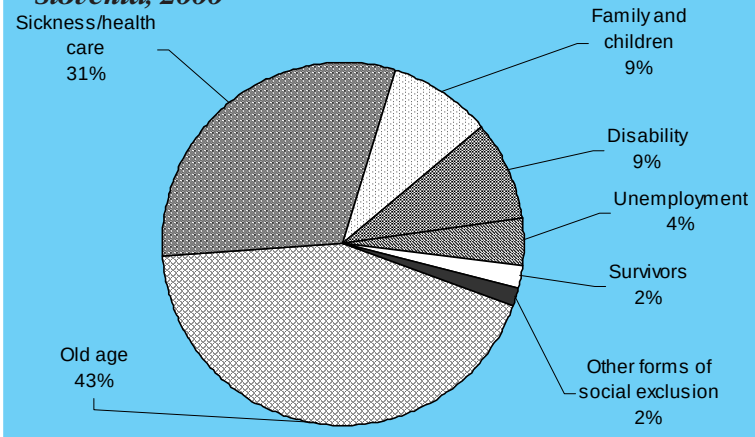
The overall structure of social protection expenditure recorded little change. In 2000,

like before, the largest share was earmarked for old age (43.4%), followed by sickness and health care (30.7%), family and children (9.2%), disability (9%), unemployment (4.1%), survivors (2%), and other forms of social exclusion (1.6%) (see Figure 4).

In 2000 compared to 1996 (see Figure 5), social protection expenditure increased for family and children (up 0.7 of a percentage point) and disability (up 0.5 of a percentage point), while funds allocated for old age (down 0.8 of a percentage point) and other forms of social exclusion fell. The three other areas recorded no change.

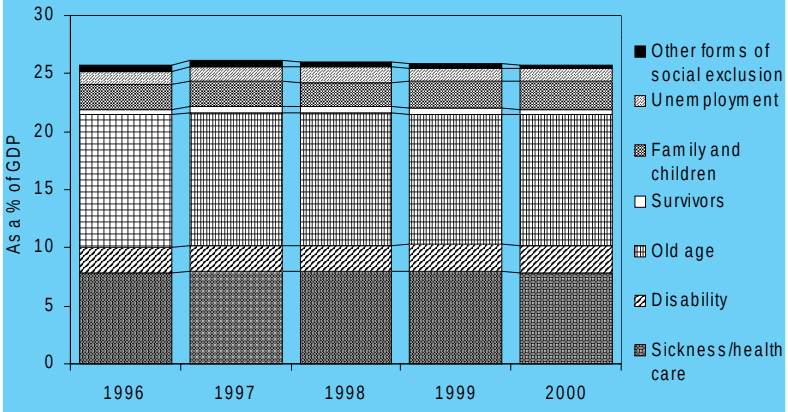
According to figures for 1999, Slovenia appropriated more than the EU-15 for old age, sickness and health care, family and children, and disability, while it appropriated less for unemployment and survivors. The most social protection expenditure in Slovenia was represented by social benefits in cash (69%), while the rest was social benefits in kind (31%) given in the form of services, deferred payments etc. The main financial source was social contributions, the same as in the EU-15 (social contributions of employers and the insured).

Figure 4: Structure of social protection expenditure, Slovenia, 2000



Source: SORS, Rapid Reports No. 143, July, 2002

Figure 5: Social protection expenditure by purpose, Slovenia, 1996-2000*



Source: SORS, Rapid Reports No. 143, July, 2002
Note: *Data on accommodation are not included because they are incomplete.

3.2 Poverty as the most drastic form of inequality

Poverty in its broadest sense represents a form of inequality that is socially unacceptable and involves material and social deprivation related to limited access to education, health and cultural commodities, and social marginalisation. Poor education, poor health, and social exclusion (including famine and homelessness) deprive people of their dignity and are the most widespread causes of human rights violations in the world. This is why the General Assembly of the United Nations Organisation announced the period from 1997 to 2006 as the decade of eradicating poverty (see Box II).

Poverty is the result of different forms of material and non-material deprivation and inequality. This is a very variable and relative notion which depends on the socio-economic conditions against which it is examined. It depends on a wide range of issues that go beyond the individual or family's income. What is also important is the non-economic aspect of co-operation and activity; significant elements here are education, information, and communication, which enable social inclusion and social cohesion together with developed social and emotional competence.

In early 2000, the government adopted the *National Programme on the Fight against Poverty and Social Exclusion*, thereby following the EU's strategic objectives (Lisbon 2000). In order to realise these objectives, it will be necessary to upgrade the European social model, invest in human capital, and reduce poverty and social exclusion.

Box II: Millennium Development Goals

The United Nations Millennium Declaration adopted by the General Assembly in September 2000 sets eight goals. The Declaration was adopted as Resolution 55/2 by 147 Heads of State or Government, or 191 nations in total. Its goals incorporate eighteen targets.

These goals are:

1. **Eradicate extreme poverty and hunger.**
   Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than USD 1 a day.
   Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.
2. **Achieve universal primary education.**
   Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
3. **Promote gender equality and empower women.**
   Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005, and to all levels of education no later than 2015.
4. **Reduce child mortality.**
   Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.
5. **Improve maternal health.**
   Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality rate.
6. **Combat HIV/AIDS, malaria and other diseases.**
   Target 7: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS.
   Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.
7. **Ensure environmental sustainability.**
   Target 9: Integrate the principle of sustainable development into country policies and programmes and reverse the loss of environmental resources.
   Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water.
   Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.
8. **Develop a global partnership for development.**
   Target 12: Develop an open, rule-based, predictable, non-discriminatory trading and financial system.
   Target 13: Address the special needs of the least developed countries.
   Target 14: Address the special needs of landlocked countries and small island developing states.
   Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.
   Target 16: In co-operation with developing countries, develop and implement strategies for decent and productive work for youth.
   Target 17: In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries.
   Target 18: In co-operation with the private sector, make available the benefits of new technologies, especially information and communications.

These goals and targets are highly important for people's welfare, especially those in the least developed countries where they suffer from hunger, have no access to drinking water, live in slums without any utility services, where mothers die at birth, many children die before their first birthday, general education levels are low and the education of women is inferior to the education of men, where equality between genders is at critically low levels or non-existent, where AIDS kills especially the middle-aged generations etc. Slovenia, a medium-developed social state with a regulated system of social insurance and social protection, does not face such grave problems. This, of course, does not mean that development problems or different forms of inequality or social uncertainties do not exist in Slovenia. The government tries to alleviate these problems by enacting social policy measures and by ensuring equal conditions of access to all social levels and functions. One of the biggest barriers to ensuring equality in opportunities and access to vital resources is poverty. What we have in mind here is not absolute poverty, which barely sustains survival and pushes people to the edge of their physical existence, but relative poverty[i], which is caused by the material, cultural and social circumstances in a country. This is a condition where households or an individual may be excluded from everyday life due to material deprivation. Relative poverty also means that a person enjoying certain living standards may be poor in one country but not in another. The contextual determinacy of the goals for the new millennium is therefore all the more apparent and important.

[i] Slovenia's Statistical Office uses the definition of poverty adopted by the European Council in 1984, according to which the poor are: 'persons, families and groups of persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the member state to which they belong.'

Since 1993, Slovenia has monitored relative poverty in line with the methodology that sets the poverty line at 50% of the average equivalent[6] household expenditure (the old methodology). Calculations based on this methodology (see Table 7) show that the rate of households' poverty fell by 1.4 percentage points from 1993 to 1999. The household income opinion surveys conducted by the SORS also suggest that the share of households that can barely manage with their monthly incomes is on

[6] In order to be able to compare the living standards of different households, we should take into account their size and composition. All household members do not have the same needs, so equivalence scales are used which are based on the economies of scale of household expenditure. The SORS uses the OECD's modified equivalence scale to calculate expenditure per one equivalent member. This scale gives a weight of 1 to the first adult, a weight of 0.3 to each other member aged 14 or over, and a weight of 0.3 to each child aged under 14.

Highlight 2: Implementation of the National Programme on the Fight against Poverty and Social Exclusion

The programme was adopted in early 2000 and is being implemented in line with the set guidelines. Short-term measures, which mainly involve increasing the social benefits for the most materially-deprived people, have largely been enacted. This measure introduced social assistance (regulated by the Social Assistance and Services Act as of September 2001) which raised social benefits for the poorest to the level of the minimum guaranteed income. Since January 2003, individuals without their own income have the right to receive SIT 43,522 a month. Two new social benefits were introduced in the area of pension and disability insurance (state pension and widow(er)'s pension). As far as children and family care are concerned, changes were introduced in the areas of parental and paternity leave and compensation, a lump-sum allowance for families with three or more children, and partial compensation for income loss, with the right to this last benefit given to a parent who has quit their job or taken up a part-time job because of nursing a child with special needs, child benefits for single-parent families were increased; (these rights began to be exercised on 1 January 2003). In the area of housing, the right to reduced non-profit rent was introduced. Measures taken in the area of education and employment should produce a longer-term and preventive impact on poverty and social exclusion. Therefore the strategy of increasing social inclusion also involves the following priorities:

- widening the possibilities for raising education levels and improving possibilities and incentives for education;
- widening the possibilities for the unemployed persons in active employment policy programmes which improve their employability through new knowledge and training;
- more rapid addressing of the possibilities of education, training, employment and independent living for disabled persons

In order to effectively implement the National Programme on the Fight Against
Poverty and Social Exclusion, the government passed a decision in 2002 that each ministry whose line of work concerns social well-being should carefully review any measures that might aggravate the situation of people with the lowest incomes.

Slovenia is also taking part in the European Commission's efforts to increase social cohesion. It will prepare a Joint Inclusion Memorandum in 2003, thereby helping to modernise the European social model.

a steady decline. Public opinion surveys conducted by the Faculty for Social Sciences in 2001 show similar results; the share of people who believe they live in deprivation or economise on food halved compared to 1993 (from 8.9% to 4.5%) (Highlight 3). Similarly, the Gini coefficient shows that income inequality fell in 1999 over 1993.

Since 2000, a new methodology has been used in Slovenia to calculate poverty. The concept of relative poverty and the OECD's equivalence scale are still used, while the changes are as follows: (i) the risk of poverty line equals 60% of the median equivalent money income; and (ii) the unit of distribution and analysis is the individual and not the household.

Calculations made on the basis of the new methodology show that poverty increased slightly from 1993 to 1999 (up from 13% to 13.6%), but that it has been on a downward trend since 1997. In 1999, about 265,000 people lived below the poverty line, while the depth of poverty fell compared to 1993.[7] The SORS' calculations also show that the risk of poverty rate would have been 6.9 percentage points higher if there had been no social transfers and that the risk of poverty continues to be higher among women than men.

Table 7: Households' poverty rate[1], Slovenia, 1993-1999

Poverty line	Poverty rate, %			
	1993	**1997**	**1998**	**1999**
Average equivalent income:				
40% of average	5.2	4.9	4.5	4.5
50% of average	11.2	9.0	9.2	9.5
60% of average	20.5	17.4	17.9	17.7
Average equivalent expenditure:				
40% of average	5.7	5.7	6.0	6.2
50% of average	**13.6**	**11.2**	**11.9**	**12.2**
60% of average	24.6	19.8	20.1	20.9
Gini coefficient[2]	0.29	0.26	0.27	0.27

Source: SORS, analysis of poverty made on the basis of the Household Budget Survey, Slovenia, 1999; Rapid Reports No 165, June 2002.
Notes: [1]The poverty line equals 50% of the average equivalent household expenditure. The OECD's modified equivalence scale was used. [2]The Gini coefficient is a measure of concentration of household expenditure distribution, i.e. inequality in distribution. The coefficient's value ranges between 0 and 1. The higher the value, the greater is inequality.

[7] In 1999, the risk of poverty line was at the level of SIT 58,291 a month, while the people below this line had an average income of SIT 45,350 a month, meaning they were about 22.2% of their income short of achieving this line. This is called the relative gap of poverty risk and best illustrates the depth of poverty. In 1993, this gap amounted to 25.2%.

Box III: Household expenditure on food

The share of household consumption expenditure spent on food is an important indicator of living standards and poverty. Poor households spend the biggest share of their income on food. In 2001, the average Slovenian household spent about 25% of its income on food[i] (see Table 1). This share has been falling steadily but is still large compared to EU members, where it averages around 17%. On the other hand, Slovenia's share of food expenditure is the lowest among applicant and candidate countries[ii], which record an average share of about 40% (see Figure 1).

Table 1: Share of food in total consumption expenditure by households, annual average (%)

Expenditure by purpose / Year	1997	1998	1999	2000	2001	Differ. 97-01, %
Food and non-alcoholic beverages	26.1	25.8	23.4	22.8	22.2	-4.0
Alcoholic beverages and tobacco	3.4	3.1	2.9	2.8	2.6	-0.8
Food total	29.5	28.9	26.3	25.6	24.8	-4.7

Source: SORS, Household Budget Survey (HBS)

In 2001, expenditure on food fell by 3.1% in real terms[iii] compared to 2000 and by 15.3% compared to 1997. These falls can be explained by the growth in average income; this is in line with *Engel's law*, according to which people who enjoy greater purchasing power spend more on other, more luxurious goods after they have satisfied their basic needs for food. Further, the consumption of food is physiologically limited. This is also supported by the correlation between the share of food consumption of the average household in different European countries and its living standards measured by gross domestic product per capita. This correlation is highly negative (-0.87).

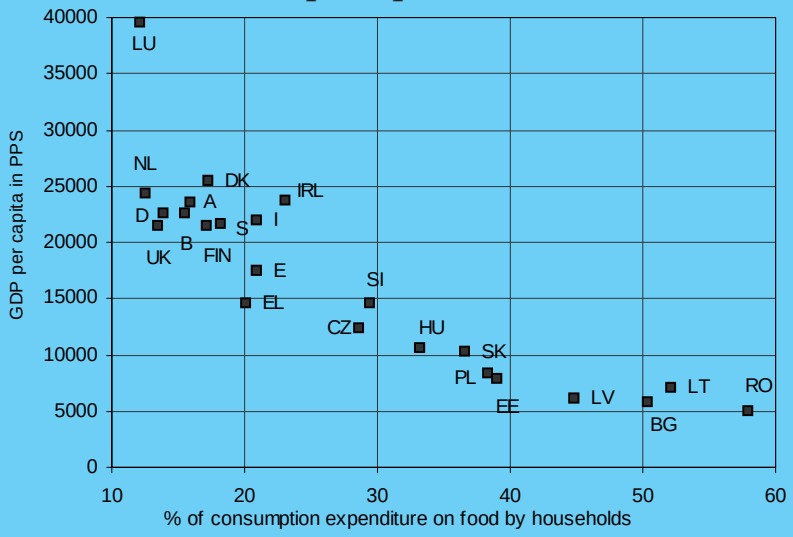
Table 2: Consumption of food and non-alcoholic beverages broken down by income quartiles, 1998-2000 (%)

Structure / Quartile	1st quartile	2nd quartile	3rd quartile	4th quartile	Average
Food and non-alcoholic beverages	28.3	23.8	21.0	16.8	22.5
Alcoholic beverages and tobacco	2.8	2.4	2.1	1.8	2.3
Food total	31.1	26.2	23.1	18.6	24.8
Consumption expenditure	100.0	100.0	100.0	100.0	100.0

Source: SORS, HBS 1998-2000, calculations IMAD.

Table 2 shows that food and non-alcoholic beverages represented the biggest share in the consumption expenditure of households in the lowest quartile (28.3%). This item only accounted for 16.8% of the total consumption expenditure of households in the highest quartile. Differences were also seen in the type of food purchased; households in the highest quartile consumed more fish and meat on average, while households in the lowest quartile bought more bread and fats. If we look at average consumption in 1997-2001, Slovenian households spent more on non-alcoholic beverages, fruit juices and dairy products and less on alcoholic beverages, sugar and fats.

Figure 1: Share of food in consumption expenditure by households and GDP per capita, 1999



Source: Eurostat New Cronos Database, SORS, calculations IMAD.

Households run by a retired or unemployed person allocated about 26% of their total consumption expenditure on food and non-alcoholic beverages, widow or widower's households and households with a large number of children spent 28% on food, while households run by a person without primary education spent as much as 33%. If we compare absolute amounts spent on food and non-alcoholic beverages the differences between households become wider. Households of the fourth quartile spent almost twice as much on food and non-alcoholic beverages than households of the first quartile. Inequality among households is therefore evident even in expenditure on food.

[i] According to the COICOP classification, household expenditure on consumer goods is divided into 12 groups; food and non-alcoholic beverages belong to the first group, and alcoholic beverages and tobacco to the second group. If not otherwise indicated, we mean both groups when speaking about food.

[ii] Non-weighted average calculated for ten applicant and candidate countries: Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, and Slovenia.

[iii] Deflated by the consumer price index.

Table 8: Indicators of social inclusion - poverty and the inequality of income distribution, Slovenia, 1999 (%)

Risk of poverty[1]:	
- Risk of poverty rate after social transfers[2]:	13.6
- men	13.0
- women	14.0
- Risk of poverty rate before social transfers[2]	20.5
- men	19.7
- women	21.3
- Threshold of poverty risk in euros (Eurostat's exchange rate)[3]	3,596.00
- Relative gap of poverty risk:	22.2
Inequality of income distribution:	
- Quintile ratios	3.6
- Gini coefficient	0.25

Source: SORS; First Release No 133; Social Cohesion Indicators - Income and Poverty, November 2002.
Notes: [1]the threshold of poverty risk equals 60% of the median equivalent income in cash. The unit of distribution is an individual; the OECD's modified equivalence scale was used. [2]Excluding income in kind; pensions are included in income. [3]Year on year.

Highlight 3: Self-assessment of Poverty

Can you say that you and your family:	1993	1997	1999	2000	2001
- lack nothing; do not economise on anything	9.5	6.9	11.6	13.6	13.6
- economise more, particularly on less important things, luxury etc	33.6	40.1	47.8	43.5	46.3
- have to spend more carefully or limit your purchases of equipment, clothes etc	45.7	37.1	33.3	36.9	35.0
- limit your purchases of food	6.7	2.8	3.5	4.0	3.4
- lack basic consumer goods	2.2	1.0	0.7	1.2	1.1
- live in poverty	0.9	0.6	0.4	0.7	0.4
- undecided	1.4	1.4	2.6	0.2	0.4

Sources: SPOS93, SPOS97, SPOS99, SPOS00, SPOS01.

One possible way of measuring and presenting poverty is its subjective evaluation as carried out in the longitudinal research of the Slovenian Public Opinion Survey (SPOS). Respondents give their personal opinion about how they manage to survive (not just from the economic point of view); i.e. how they make ends meet. Since this is a subjective evaluation, results should be interpreted with two caveats: (i) an individual's satisfaction with their given conditions depends on their aspirations; and (ii) the fact of admitting you are not doing well in your life is stigmatising and detrimental to one's self-image.

Despite these limits, trends in practically all questions show that the feeling of economic deprivation subsided in the given period.

The households of single elderly people recorded the highest poverty rates; however, poverty fell the most in these households in 1993-1999 (down from 48.4% in 1993 to 23.5% in 1999). On the other hand, poverty in households with children rose. This is also shown by the analysis made by Stropnik and Stanovnik (2002), despite differences in the methodology used, according to which the income position of households with children up to 18 years of age deteriorated, while the income position of elderly households (with at least one person aged 60 and over)

Table 9: Poverty rate according to household type[1], Slovenia, 1993-1999

Type of household	Poverty rate (%)			
	1993	1997	1998	1999
Single person aged 65 or more	48.4	23.1	27.6	23.5
Single person under 64 years of age	27.1	14.1	15.4	14.3
One adult with children under 16 years of age	6.9	(5.2)[2]	8.2	14.3
Childless couple, at least one member aged 65	25.7	20.2	19.5	15.9
Childless couple, both under 65 years of age	7.7	6.4	6.5	7.8
Couple with one child under 16 years of age	2.6	5.0	7.0	9.1
Couple with two children under 16 years of age	4.0	5.7	5.2	4.4
Couple with three or more children under 16 years of age	9.0	13.8	13.7	13.6
One adult or couple with children over 16 years of age	8.0	9.4	/	/
One adult with children under or over 16 years of age	/	/	15.2	19.9
Couple with children under or over 16 years of age	/	/	8.3	9.0
Other	9.0	11.5	11.7	13.0

Source: SORS analysis of poverty made on the basis of Household Budget Survey, Slovenia, 1999; Rapid Reports No 165, June 2002.
Notes: [1]poverty line equals 50% of the average equivalent household expenditure. The OECD's modified equivalence scale was used. Calculations based on the new methodology are still unavailable, except for 1999. [2]the figure is not reliable because the number of this type of households is too low; / not available.

Box IV: Improving the income position of pensioners and pensioners' households

The income position of pensioners and elderly people in general has being improving for a long period of time. This is a general trend which has also been seen in other countries in transition. A comparative analysis[i] covering Slovenia, Hungary and Poland revealed that the share of pensioners fell markedly in the lower three income deciles in all three countries. Tables 1 and 2 show that the share of all pensioners in the lower three deciles decreased from 38.7% in 1983 to 31.4% in 1993 in Slovenia. It should be noted that the share of pensioners in the lower three deciles fell more than their share increased in the upper three deciles. In other words, a growing share of pensioners is now found in the middle of the income distribution.

Table 1: Share of pensioners in the bottom three income deciles

Country	Share of pensioners (%)		Difference(in percentage points)
	mid-1980s	mid-1990s	
Hungary	40.7	20.7	-20.0
Poland	28.6	16.6	-12.0
Slovenia	38.7	31.4	-7.3

Source: Stanovnik, Stropnik and Prinz, 2000, Table 1.12a.
Note: Persons are included with their equivalised household income. The standard OECD equivalence scale is applied (1; 0.7; 0.5). Years relevant for Hungary are 1987 and 1996; for Poland, 1987 and 1996; and for Slovenia, 1983 and 1993.

Table 2: Share of pensioners in the top three income deciles

Country	Share of pensioners (%)		Difference(in percentage points)
	mid-1980s	mid-1990s	
Hungary	20.9	23.8	+2.9
Poland	27.6	36.7	+9.1
Slovenia	23.7	26.9	+3.2

Source: Stanovnik, Stropnik and Prinz (2000), Table 1.12b.

The income position improved not only for pensioners, but also for pensioner households – i.e. households with at least one retired member and without any active member (i.e. the employed, self-employed or unemployed). Table 3 shows that couple pensioner households were enjoying the highest living standards. *Other pensioner households* is a heterogeneous and residual group which does not comprise a high number of households. The group of single male pensioner households is small in number. The biggest group is single female pensioner households, whose share in lower income deciles continued to be large in Slovenia and Hungary despite the relative improvement in their income position. In Hungary, for example, as much as 45.9% of all women living in single pensioner households were in the lower three income deciles in 1996.

Table 3: Share of pensioner households in the bottom three income deciles, by household type

Country	Pensioner household type				
	Single male	Single female	Couple	Other	All pensioner households
1980s					
Hungary (1987)	50.2	69.7	45.7	61.0	57.8
Poland (1987)	30.8	50.5	22.9	45.5	41.8
Slovenia (1983)	(50.8)	55.5	46.6	61.7	52.8
1990s					
Hungary (1996)	(10.9)	45.9	14.4	60.0	33.3
Poland (1996)	20.0	24.8	8.7	42.6	22.0
Slovenia (1993)	(36.2)	42.8	28.0	54.2	39.0

Source: Stanovnik, Stropnik and Prinz, 2000, Table 1.13a. Note: Brackets denote small sample size.

Improving the income position of the elderly

Table 4 shows the share of elderly people (as a percentage of all people in a given age group) situated in the bottom three income deciles. The data in the table illustrate that the relative income position deteriorates with age. For example, persons in the 60-69 age group enjoy a relatively better income position than persons in the 70-79 age group etc. The only exception was Poland in 1987; 36.4% of all persons aged 70 to 79 were situated in the bottom three income deciles, while the share of persons aged 80 and more situated in the bottom three income deciles was just 29.3%. The worsening of the income position of higher age groups can be explained by the fact that younger age groups received higher income from employment and, as a result, are eligible for higher pensions. Another equally important factor is the growing share of women in higher age groups. This tends to undermine their relative income position because pensions received by women (old-age pension or survivor's pension) in the Bismarckian social insurance system are lower than pensions received by men.

Table 4: Share of persons in the bottom three income deciles, by age group

Country	Age group (years)		
	60-69	70-79	80+
1980s			
Hungary (1987)	36.4	56.4	58.4
Poland (1987)	28.1	36.4	29.3
Slovenia (1983)	46.0	52.7	55.6
1990s			
Hungary (1996)	17.4	20.4	28.4
Poland (1996)	18.5	18.8	19.0
Slovenia (1993)	37.4	48.7	52.7

Source: Stanovnik, Stropnik and Prinz, 2000, Table 1.14a.

[i] A joint project called 'The Economic Well-Being of the Elderly and Pension Reform.' Results were published in T. Stanovnik, N. Stropnik, C. Prinz (eds.): Economic Well-being of the Elderly. Ashgate: Aldershot, 2000.

improved. An important element in this type of analysis is one's lifestyle. Hence, elderly households are more often placed among poor households on average because they spend less, even though their disposable income is higher than that of younger households (see Box IV). The fact that elderly households were frequently thought to be poorer than they actually are is further supported by the income distribution survey (Stropnik, Stanovnik, 2002), showing that the position of elderly households improved in the period from 1993 to 1999.

3.3 The regional dimension of poverty

While no data on income inequality and poverty by region are available in Slovenia, information about social assistance beneficiaries and unemployment can be used to show the regional dimension of poverty. Figures show that the regional distribution of social assistance beneficiaries (Figures 6 and 7) fairly closely corresponds with areas recording above-average registered unemployment rates. They also suggest a division of the country into the eastern part, faced with deep social problems, and the western part, where social problems are less pressing. According to figures for October 2002, the most social assistance beneficiaries per 1,000 people were found in Pomurska, exceeding the national average more than twofold. This is not surprising because Pomurska not only records an above-average rate of registered unemployment, but also has a large share of farmers earning a low income and an above-average share of elderly people. The consequences of high unemployment and low income (as shown by the personal income tax base per person) are also revealed in above-average shares of social assistance beneficiaries in Podravska, Zasavska, Savinjska, and Spodnjeposavska. Other regions, mainly located in the western part of the country, reveal a more favourable situation. Goriška recorded the lowest number of social assistance beneficiaries, reaching a solid quarter of the national average.

If we add the figures on the number of people receiving unemployment benefits or unemployment assistance, regions that also diverge from the national average become Koroška and Gorenjska. Koroška was below the national average in terms of registered unemployment up to 2002, as was Gorenjska, but climbed to a level above the national average in 2002. Both regions recorded above-average numbers of people receiving unemployment benefits or unemployment assistance. In Koroška, this was mainly due to the low-income levels and the rise in unemployment in 2002, while in Gorenjska this was the result of its specific unemployment structure (permanent redundancies and a large share of old unemployed people).

Figure 6: Administrative units with above-average shares of social assistance beneficiaries, October 2002

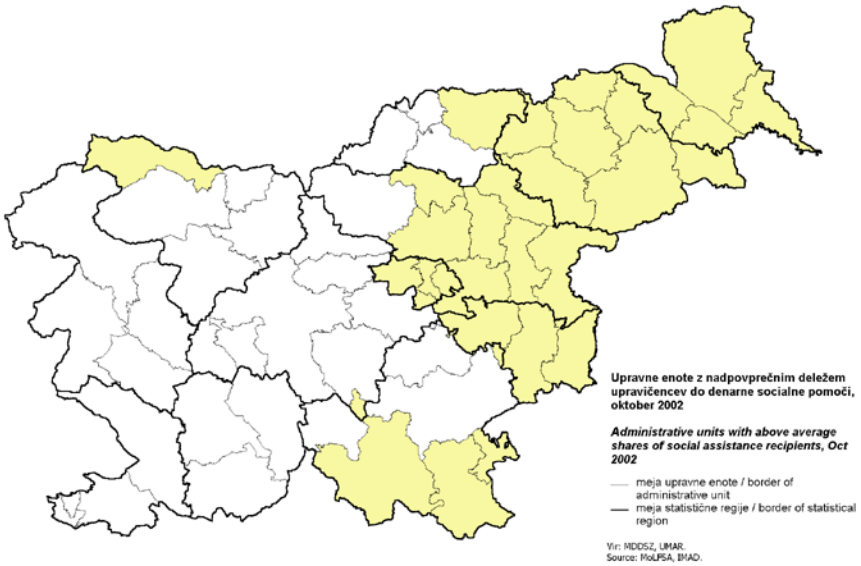
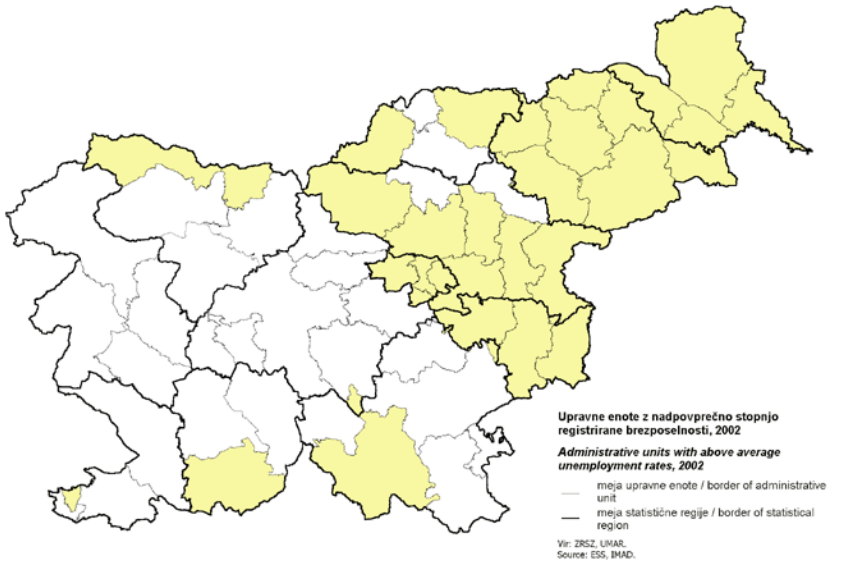


Figure 7: Administrative units with above-average registered unemployment rates, 2002



3.4 Income inequality

The share of the unemployed has increased markedly in the lowest income decile

Significant income inequality leads to a subjective feeling of poverty and social exclusion, while low income, primarily resulting from high unemployment, is one of the indicators of poverty. In Slovenia in 1998, 60% of total household income was generated by employment, 6% by self-employment, 25% came from pensions, and 6% from social benefits.[8] The share of social benefits increased by 1.5- percentage points from 1993, the share of income from employment by 2 percentage points, and the share of pensions by 4 percentage points. This suggests that the income position of pensioner households continued to improve (see Box IV).

The income shares of the first seven deciles have increased, except for the third decile, where the income share remained unchanged, while the income shares of the top three deciles decreased (see Table 10). In 1993, households from the tenth decile received 21.4% of total household income, but this share dropped to 19.3% in 1998. In the same year, the poorest tenth of all households received 3.6% of total household income, just slightly more than in 1993. Hence, from 1993 to 1998, the income of affluent households decreased in relative terms, while the income of households in lower and primarily the middle deciles increased.

Table 10: Income by income deciles (%)

Deciles	1993 (1)	1998 (2)	Differences (2-1)
1	3.4	3.6	0.2
2	5.5	5.8	0.3
3	6.5	6.5	0.0
4	7.7	8.1	0.4
5	8.8	9.6	0.8
6	9.2	10.2	1.0
7	10.4	11.3	0.9
8	12.2	12.1	-0.1
9	14.9	13.6	-1.3
10	21.4	19.3	-2.1
Total	100.0	100.0	0.0

Source: Stropnik and Stanovnik, 2002, Table 7.
Note: Rows may not sum to 100% due to rounding.

This analysis also aims at presenting the income source structure and income distribution of the three groups of households that are at the highest risk of poverty. These are households with unemployed members, households with children up to age 18, and households with persons aged 60 and over. Households with unemployed members were over-represented in the lower income deciles. We should also note the greater concentration of households with unemployed members in the lower deciles in 1998 compared to 1993, suggesting that the income position of these households **worsened**.

The same is true for households with a person aged 60 and over; they were also over-represented in the lower income deciles. However, unlike households with unemployed members, these households recorded an **improvement** in their income position in the period from 1993 to 1998.

The distribution of households with children up to 18 years of age was rather uniform; however, their income position **worsened** from 1993 to 1998. In 1993, these households were under-represented in the two lowest income deciles. In 1998, this was only true of the bottom income decile, while the shares of these households in the top two income deciles decreased considerably.

The share of households with children up to age 18 decreased from 47% of all households in 1993 to 42% of households in 1998, while the share of households with unemployed members increased from 14% to 18%. Table 11 also shows that the share of households with unemployed members increased markedly in the bottom income decile – one in four households had an unemployed member in 1993 and almost one in two (46.1%) in 1998. The share of households with persons aged 60 and over

[8] Social benefits included unemployment benefit, sickness benefits, maternity/parental leave wage compensation, social assistance, war-related benefits (benefits of war veterans, war invalids and the victims of war), birth grant, parental allowance, child benefits, child care supplement, and educational grants.

did not change markedly in this period and ranged around 40%.[9]

Table 12 shows the values of three income inequality measures: the Gini coefficient, the 90/10 percentile ratio and the 75/25 percentile ratio.[10] They are calculated on the basis of the total equivalent household income and total equivalent household income excluding social benefits.[11]

The Gini coefficient rose throughout the period after 1983, but decreased considerably between 1993 and 1998, down from 0.2696 to 0.2356. Without social transfers, the Gini coefficient would have amounted to 0.2915 in 1993 and 0.2568 in 1998. It should be noted, however, that changes in the income inequality measures were primarily due to the slow rise in the real income of affluent households (it is difficult to assess the extent to which the statistically established facts from the surveys match the actual circumstances[12]). Regardless of the measure we use, income inequality had decreased considerably by 1998 as compared to 1993. If social benefits are excluded (pensions are not part of social benefits), income inequality would be significantly higher for both 1993 and 1998, meaning that the relative income position of poor households would have been much worse without these benefits. Consequently, social transfers have significantly alleviated income inequality and Slovenia's social policy seems to be relatively effective.

Table 11: Shares of selected groups of households as percentages of all households in income deciles, 1993 and 1998

Income decile	Households with unemployed member		Households with children aged 18 and under		Households with persons aged 60 and over	
	1993	1998	1993	1998	1993	1998
1	24.3	46.1	35.2	38.5	60.0	50.3
2	24.7	34.4	45.0	42.1	55.6	52.1
3	15.2	20.2	47.0	40.8	48.6	52.2
4	14.5	19.2	54.3	49.6	38.7	37.8
5	16.7	19.6	53.5	52.0	34.3	38.3
6	14.0	10.9	49.1	46.0	40.6	42.2
7	10.5	11.7	47.2	44.5	33.7	39.4
8	6.9	8.3	47.7	42.1	31.6	31.6
9	9.0	5.3	48.5	37.2	28.8	33.8
10	4.9	3.4	42.0	27.8	20.7	31.0
Total	14.1	17.9	46.9	42.1	39.2	40.9

Source: Stropnik and Stanovnik, 2002, Table 8.
Note: A household may appear in more than one group of households.

Table 12: Income inequality measures, 1993 and 1998

	1993	1998
Gini coefficient	0.2696	0.2356
Gini coefficient (without social benefits)	0.2915	0.2568
Percentile ratio 90/10	3.38	3.22
Percentile ratio 90/10 (without social benefits)	3.92	3.83
Percentile ratio 75/25	1.83	1.77
Percentile ratio 75/25 (without social benefits)	1.94	1.89

Source: Stropnik and Stanovnik, 2002, Table 9.
Note: Social benefits excluded from household income are unemployment benefits, sickness benefits, maternity/parental leave wage compensation, social assistance, war-related benefits (benefits of war veterans, war invalids and the victims of war), birth grant, parental allowance, child benefits, childcare supplement, and educational grants.

[9] However, their distribution across deciles changed significantly. In 1993, 60% of households in the bottom income decile had at least one member aged 60 and over, but this share decreased to 50% in 1998. The share of these households increased markedly in the top income decile. This suggests that the income position of these households improved significantly. In 1993, 21% of households in the top income decile had a member aged 60 and over, compared to as much as 31% in 1998.

[10] The Gini coefficient represents twice the area between the Lorenz curve and the line of complete equality (see Figure 6). It shows how equally (or rather, unequally) income is distributed. The nearer its value to zero, the more equal the income distribution. The 90/10 ratio (also labelled the decile ratio) shows the ratio of equivalent income in a household situated at the 90th percentile to that of a household situated at the 10th percentile. Ten percent of all households have income higher than a household at the 90th percentile, while the converse is true for a household at the 10th percentile - 90% of households have a higher equivalent income. The 90/10 ratio thus gives a measure of the extremes of the income distribution whereas the 75/25 ratio gives a measure of income inequality of households situated more toward the middle of the income distribution.

[11] For the definition, see Footnote 8.

[12] It is quite safe to claim that a decrease in the real value of income of affluent households was partly the result of their reluctance to give out actual income figures while surveyed.

Box V: Globalisation - 'Fear that walks the Earth'

Social science has labelled the last decade as a period of new threats and risks, which seem to have overpowered the challenge of further modernisation, involving a wide range of scientific, technological and cultural changes and novelties. Over the last ten years, when the term globalisation became widely used, globalisation turned from the prospect of emancipation to a 'fear that walks the Earth,' as expressed by the known German sociologist Ulrich Beck (1998: 28). Economic and social development world-wide is leaving the framework of national government policies and becoming organised at the global level. Social consequences of this process have to be increasingly shouldered by individual states. Governments, in turn, channel these consequences to local levels. Finally, the huge weight of social costs incurred by globalisation and modernisation rests on the individual, their families, and other ad hoc social networks.

This is why the individual has become the 'strategic site' of all new social divisions. He or she has to take on a growing share of the social costs and burdens of modernisation and globalisation. This breaks up the institutions of solidarity in society, which are not founded on the principle of profit and loss, as well as the 'supporting network.' People are forced to assume an individualistic style of life, work, education etc. It seems that the individual is directly becoming the intermediary between the private and public, as well as the general and particular interests.

Dr. Mirjana Ule

Human development as an opportunity

'The duty imposed by sustainability is to bequeath to posterity not any particular thing, but rather to endow them with whatever it takes to achieve a standard of living at least as good as our own and to look after their next generation similarly.'

/R. Solow, 1992:15/

The gradual and steady improvement in the values of these indices points to a stable and continuous upward development trend in Slovenia. However, Slovenia remains some distance from the maximum value of social development (=1) in the key areas. Countries closest to this value in 2000 were Norway, Sweden and Canada[13].

Even though the value of its HDI is increasing, Slovenia still lags behind the most in terms of life expectancy – one of the summary health indicators. Wilkinson (in Annandale, 1998: 94-95), for example, argues that there is a threshold at which the absolute rise in society's living standards is no longer related to prolonging an individual's life expectancy. In societies where a given threshold of welfare has been exceeded, the key factors of health become relative social differences. This prompted us to dedicate this Human Development Report to the issues surrounding the socio-economic conditions of health.

We should, however, be careful in dealing with interpretations based solely on indices. Development is not solely determined by the indicators covered in these indices. The overall picture of development cannot be painted by a single statistical item, regardless of its complexity. In order to move beyond figures and analyse human development in detail, the Human Development Report must go beyond the narrowly conceived Human Development Index. It is necessary to look for detailed information in the changing reality. Different kinds of indices, of course, remain a useful tool for practical work because they provide an alternative to the general focus of attention (when development is only measured by economic growth). At the same time, these indices are important for interpretation because they enable the relative evaluation of the state of development and development trends. What should be avoided is any mechanical interpretation of one single truth, while ignoring the other truths painted by transition, the adventure of the last decade. Human development is a plural and integrated concept that complements economic growth with various other dimensions of development. The evaluation of development must therefore be based on a plurality of approaches because the world is changing while we are monitoring it.

While economic activity is essential for human development, what is equally important is its structure and quality. Politicians are too frequently mesmerised by the quantity of economic growth because development tends to be equated with economic growth. This growth, however, is not necessarily accompanied by employment growth, reduced inequality, greater democracy etc. Furthermore, rapid growth does not necessarily take into consideration the principle of sustainability. On the contrary, economic advancement may be achieved to the detriment of the environment and the individual, both now and in the future.

Development, conceived by the human development paradigm, contains all the characteristics of sustainable development. The idea of sustainability reflects the underlying conviction that the interests of both current and future generations should be taken into account. The institution of human development in the modern world should therefore be closely linked with the protection of resources for the future. Only then can we talk about *sustainable human development*. However, we should not neglect the requirements and needs of current generations when looking after those of generations to come. This would breach the principle of universality: being obsessed with inter-generational (in)equalities and forgetting the intra-generational issues. We must ensure equal opportunities today so that people will be able to enjoy them in different periods in the future.

[13] Canada was the first country to exceed a value of 0.9 in the HDI.

HUMAN DEVELOPMENT AND HEALTH

1. Health in a social context

*Salus rei publicae lex maxima**

Health is a socially defined phenomenon[14] and a dynamic concept. As a result, there is no conclusive or standard definition or measurement of health, only a consensual one. In a wider sense, health can be classified within one of the following conceptual models or within a combination of them:

- health as the external or internal equilibrium of the human organism
- as the absence of disease
- as the ability to function or
- as an indicator of well-being.

The Ottawa Charter (1986) states that a person's health depends to a large extent on the provision of fundamental living conditions and resources, such as a place to live, education, food, income, peace, social justice, equity and a stable eco-system. Modern approaches to comprehending health thus refer to a combination of the abovementioned models. A holistic comprehension of health is in the focus of attention and is defined as a state of 'complete physical, mental and social well-being' (SZO 1948; Declaration of Alma-Ata, 1978).

One can speak about health within the framework of multidimensional models of comprehending health. The definitions indicate interdependence between an individual's health and the external factors defining it. Although the more recent socio-environmental-economic models of health development go beyond the dilemma of individual versus supra-individual social structures, both the media and the social system propagate an exclusivistic concept of responsibility, i.e. the individual's responsibility for his/her own health. It is expected that an individual autonomously - regardless of his/her economic and

* The well-being of society - the highest law.

[14] As the concept of health is socially conditioned, different measures and assessments of health have been adopted by different societies. It depends on the 'level of (non)development' or economic conditions etc. See Box VI.

Box VI: Health as a value and problem of youth

Research carried out among youth in Slovenia over the last decade indicates that the value system of Slovenian youth has gradually changed (Ule, 1996). In the historic formation of modern urban youth, the very process of internalising, forming and comprehending values, norms and goals in one's life has also changed dramatically. The great values based on strong ideologies (politics, religion, nationality) are replaced by values closer to the individual and their personal experience (material and social security, friendship and relations, a healthy environment, quality of everyday life). The 'socially correct' values, such as health, order and stability and family life have gained importance in the analysis of the value space.

Things important in one's life and to which one aspires (in %)

	Very	Medium	Insignificant
Health, well-being	93.9	5.3	0.8
True friendship	93.4	6.3	0.3
Security of my family	91.3	7.9	0.8
Peace on earth with no wars and conflicts	83.0	14.0	3.0
Freedom of acting and of thought	81.4	17.6	1.0
Nature conservation	71.3	26.8	1.9
Order and stability in society	63.0	34.0	3.0
The world of beauty, beautiful nature, arts	60.0	36.0	4.0
Security of my nation	57.9	33.4	8.7
Material goods, money	48.1	46.9	4.9
Creativity, originality, imagination	48.8	45.1	6.2
Exciting life	47.2	46.1	6.7
Preservation of traditional values	32.3	54.2	13.5
To be an authority, leader	15.7	57.4	26.9
To have power over others	11.6	50.5	37.9

Source: Youth 98 (the responses of students in the 8th year of primary school in Slovenia); N = 1687

In creating an everyday lifestyle and the world of values, today's youth have to seek an equilibrium between their personal desires and expectations on the one side, and the possibilities and requirements of society on the other. In the contemporary world, however, this equilibrium can only be conditional and is often exposed to numerous risks. In their search for self-fulfilment, young people travel to hidden corners of the world, they let themselves become re-educated, they go on fasts, do jogging, change their image and fashion styles etc. Obsessed with this desire for self-fulfilment, they pull themselves out from the soil to find out whether their roots really are healthy.

The fact that health is ranked at the very top of their value scale cannot be interpreted literally. It is a symbolic response to the many dimensions of the lives of young people.

- That health has become a value is a sign of the newly developing ethics of a 'responsibility for oneself'. It is a new ethics of individualism which seems to be in stark contrast to the traditional ethics based on duties to others in society. It might give an impression of egoism and narcissism. However, it is merely a sign of something new which does not necessarily preclude sensitivity to other people.
- Health as a value is also a response to the new risks of everyday life incorporated in and exposed by modern society, i.e. environmental, nutritional risks.
- Fear of disease is also a manifestation of the fears of adults, parents, teachers, and social institutions, which have found in health care a new way of pressuring and forcing an individual, sometimes bordering on moral panic.
- Focusing on health is also a means of reducing the complexity of problems encountered by youth today. Youth react to this complexity by focusing on the problems that are close to them personally and, in particular, physically. An increased concern with one's health and psychophysical condition is typical of this reduction of complexity. It is also strongly supported by the media, who popularise the perception of what a healthy young body should be etc.

An individual's youth is a period in life during which they have to face the daunting tasks of development and integration. Most young people enter the world of adults successfully. Despite problems related to the scarce job opportunities and general uncertainty about the future, these young people succeed in retaining the feeling of 'purpose' and their personal integrity. For a significant minority, the 'society of risks' is a mirror image of the information society. The disappearance of the 'social order', of support networks and their accompanying sense of reassurance, causes insecurity and increases the vulnerability of youth. In the nineties, young people believed that finding employment and gaining economic independence were their main problems (Ule, Miheljak 1995, Ule et al. 1996). In a study of youth carried out in 2000 among the general population aged between 16 and 29, the youth suddenly declared that their main problems were disease, disability and a lack of free time.

Fear of disease and concern for one's health is not only in the personal interest of an individual, but has become a social norm. Health has become a value which, in some aspects, resembles a secularised everyday religion. Concern for one's health and psychophysical condition is a central component of the individualised lifestyle, ranking right alongside the concern for one's personal appearance. The short- and long-term concern for one's health is not only a desirable aspiration for an individual but also a result of social norms and an individual's internalised social

Some potential problems of youth. For each, describe the extent to which it concerns you...

	Very	Medium	Not
Disease, disability	40.5	24.3	34
Lack of free time	37.3	33.7	28.8
Lack of money	33.6	38.8	27.5
Housing problem	30.8	20.5	46.8
Fear of losing employment	24.1	24.9	36.8
Fear of being unable to find employment	19.5	22.5	47.7
Fear of failure at school, work, occupation	19.1	36.9	43.2
Sex	12.8	20.9	65
Loneliness	9.1	17	72.6
Fear of becoming a drug addict	4.5	3.3	90.7

pressures. The main reason behind this is the fact that an individualised society calls upon an individual to be concerned about developing their personal capacities and transforming them into various forms of capital (economic, psycho-social, cultural capital). Should an individual not be concerned about their capacities and capitalise on them, they may soon face social exclusion and marginalisation. Youth recognise and perceive these responsibilities at a very early stage, at first as the norms of everyday culture and then as necessary investments for the future.

The results of the youth study thus indicate that young people are changing their identities and social roles. The spirit of the time has changed over the last few years. It calls for changes to the identity categorising apparatus, not in the area of successful identities but in the area of unsuccessful identities (Giddens, 1991). The process of individualisation and the changed social and economic relationships have pushed youth into constructing identities which, in terms of the earlier criteria, may be classified as unsuccessful identities (Ule, 2000). The results also show that in their identities, young people are not at all expansive but defensive. They are more oriented towards simulating various stereotypes of normality rather than toward experimenting and innovating, and this is true for all of them, regardless of their different original situations. It is interesting to note that elsewhere in Europe, researchers are also reporting an increasing tendency of youth to aim for 'normality'. Youth want a 'normal life', 'normal completion of education', a 'normal job' and health. Young people aspire to security and, for them, health means security, certainty and normality. They have neither unusual ideas nor desires. This reality can be explained by the re-orientation towards the general living norms of adults characterised by a small deviation from reality and a demonstrative perseverance to normality. It seems as if the results of the studies say: 'I am not special and I do not want to be special, I only try to succeed in understanding things as they are but, at any moment, everything could change.'

The desire for normality may be a result of the changed social and economic circumstances. Normality might have become something very difficult to achieve. It may be a safe haven from the 'terror of individualisation'. At the same time, it is also an expression of individualist self-protection in the sense that 'my own solutions to my life's problems are no better and no worse as a whole than the solutions of others'. Therein lies the possibility for 'acknowledging the differences', with people associating with one another despite their individual differences. In any case, the process of growing up and forming one's own identity contains less and less playfulness. Instead, the process seems more like a form of 'crisis management' or risk aversion, and it is through this perspective that it becomes evident that the fear of disease has become the greatest problem for youth and that health has become their most cherished value.

Dr. Mirjana Ule

political power - monitors and controls his/her highly complex social environment.

The contradictory combination of circumstances (economic crisis, politicising of ideas about the social production of disease, criticism of medicine and the belief that health care is a right of every individual) led to the emergence of a new ideology: individual responsibility for health (Crawford, 1977: 665). A 'healthy lifestyle' became the recipe for a long life and this comprehension came with its own ideological demands. However, the social risks for health were overlooked, such as social exclusion, social inequality, exposure to sources of pollution or living in buildings made of environmentally-unfriendly substances, exposure to dangerous substances at work, cancerous food additives, mutagenic additives in cosmetic products and all the unforeseen and undesired consequences of (technological) progress in modern times (Tivadar, 1996). Health can therefore only be presented comprehensively through a set of intertwining views:

- (estimates) of the physical and mental condition
- presence of harmful/useful habits
- social well-being
- social differentiation
- social cohesion; and
- social inclusion.

The selected model of thinking then defines the measurement instruments. The indicators of health may roughly be divided into *objectivised* and *opinion-based* indicators. By itself, each specific indicator provides only a limited information base. Objectivised indicators are usually limited to the presence of disease, i.e. they measure health in its absence - which is a unique paradox as most of these indicators measure health from the negative side of the continuum. These indicators may be

A 'healthy way of life' has become the recipe for longevity

defined as *positive* or *negative*. There are definitively more negatively defined indicators. The most indicative of them is *mortality*, a composite part of life expectancy and, as such, also part of the positively defined indicators. The positively defined indicators of health are relatively rare, owing not only to the better statistics of disease than statistics of health but also owing to the too loose definitions of health. *Life expectancy* is the most frequently used positive indicator. Self-assessment of health - an opinion-based indicator - is believed to be one of the strongest indicators of health as it is closely related to the objectivised indicators of health and living conditions of the population. Although a subjective appraisal, this indicator is a combination of an individual's perception of the social, biological and psychological dimensions of health. Influencing this perception are various elements: medical diagnoses, its duration, severity and symptoms, functional capacities, perception of well-being and the ability to face different situations in life, personal attitudes and optimistic/pessimistic orientation and one's concern for one's health.

These indicators thus help us measure the health of an individual, social group or of a population as a whole. In addition, the developed metric system helps us measure health resources which indicate the distribution of health resources and the health standard of a country.

It is wrong to believe that health is only a social matter and has nothing to do with the economy, i.e. the distribution of resources, setting of priorities and other economic principles. No society in the world would have enough resources to provide everyone with the level medical care they desired. Therefore, setting the priorities and application of economic principles in the area of health care is also a necessity. In the past decade, the need for the economic analysis of health care has increased substantially: it has been applied in the distribution of resources, setting of priorities, planning, price setting, placing of drugs on the market etc. An economic evaluation allows health services to be ranked in terms of their relative efficiency. The basic definition of economics, i.e. scarce resources and people's unlimited needs, has a special weight in the health care system. However, when setting health care's priorities we should bear in mind that health issues are important and sensitive. When selecting health care programmes, one should therefore not only consider their short-term efficiency but also take into account other principles, such as solidarity and justice. Improving people's health should, however, be the top priority. This is where the savings - by way of certain investments - may be the greatest.

Slovenia tries to provide its citizens to the greatest possible extent with universal and just access to reliable health care services. This decision is drawn from the following values and principles:

1. people are in the centre of attention;
2. general access is provided for all, i.e. universal health care taking into account people's needs and not their economic status;
3. just access is ensured for all, i.e. reliable health care in equal conditions for all people regardless of their social circumstances or place of residence;
4. health care is a public sector activity based on solidarity, and collective rather than individual rights;
5. the financing of health care rests on the principle of solidarity and permanence regardless of whether the funds are

Highlight 4: Public-health information system

In the period of transition in Slovenia, new databases have been compiled and the ways of interconnecting them examined. The main problems encountered are: defining the variables, linking the data from different databases and general efforts to set up a common information system. We hope to soon overcome these barriers since comprehensive documentation would, in fact, contribute to a better understanding of health problems and stimulate the necessary changes in health policy. We would also like to draw attention to the errors, which, as a rule, accompany any use of statistical data. Despite a carefully conducted analysis and evaluation of data, some errors also remain after publication, which requires some attention by the user when handling the results. Because the public-health information system is so comprehensive, it suffers from the same doubts regarding the suitability and accuracy of data as any other database of its size. Imperfections, errors and misunderstandings regarding the data can be misleading and as a result, wrong or biased conclusions could be drawn. However, it should not be overlooked that the public-health information system has a huge number of participants (information givers - e.g. patients; processors of information - e.g. information support services; users of information - e.g. doctors, health politicians; e.g. inspectors - controllers of the use, provision, storage or distribution of data) and that each and everyone of them may contribute to their quality, reliability and timeliness. As the public-health information system is a public good, all participants are obliged to strive for quality information yet, in practice, this is not always the case.

collected via taxes, social security contributions or a combination of both; and

6. health care services are assured by a variety of health care providers - public, non-profit and private organisations - in line with the goals and values of Slovenian society.

The setting of priorities on the basis of the efficiency of programmes may in fact be morally questionable. The nature of health care services is based on ethical principles such as equality, solidarity and justice. Even more ethically questionable is the sub-optimal distribution of scarce goods, resulting mostly from a lack of funds. To this end, economic goals also have to be pursued in the health care system. Greater efficiency by the providers of services is also required in the programme 'Health for all by 2004' which can be understood as an attempt to achieve the greatest possible efficiency in allocating the available resources (National Health Programme of the Republic of Slovenia, 2000). The national health programme should ensure that decisions about development orientations in the area of health care and the extent of health services take into account both the health, economic as well as the social costs and benefits.

Statistical data were used to reveal the trends of the abovementioned objectivised indicators, and an approximate picture of positively-defined health is based on opinions of the Slovenian population. The sources of statistical data were: the databases of the Statistical Office of the Republic of Slovenia, the National Institute of Public Health of Slovenia, the World Health Organisation - Regional Office for Europe, and the United Nations Development Programme. For the first time, the Report also reveals and uses the partial results of an extensive study of the socio-economic determinants of mortality patterns in Slovenia. The opinion of the population was obtained on the basis of responses to the Slovenian Public Opinion Survey[15]. In the process of forming a proper database, we encountered several deficiencies in the existing input data, largely due to the poor comparability of definitions and time series. As a result, the data relating only to Slovenia were based solely on Slovenian sources. On the other hand, for international comparisons we used the two abovementioned international sources. This explains any potential (minimal) inconsistencies of some data.

Positive health indicators are relatively rare

In this part of the Report we have limited ourselves to those indicators which, in our opinion, reveal the picture of health-disease in the context of social development in Slovenia without any intention of making this exhaustive study of the health condition of the Slovenian population. From the perspective of human development, for which the health of the population and society is definitely an important determinant, we first tried to compare the most important data with other countries (*Slovenia in space*) and, second, to observe their movements in the turbulent period of development seen in the last decade (*Slovenia in time*). Other countries included were divided into three groups: neighbouring countries, countries similar to Slovenia in terms of development, and benchmark countries.

A number of shortcomings seen in the existing health-related data

There is a strong interconnection between the indicators of the social and socio-economic conditions of the population and health, as well as between the indicators themselves and the potential reactions to them. Only when we take a closer look at this 'network of indicators' can we formulate a proper combination of public policies in response. Our intention is not to make a complete assessment of health in Slovenia. However, we try to shed some light on the known facts from different, perhaps less well-known, perspectives. The detailed analysis of facts and phenomena presented in the Report reflects the situation at a given time and space and should serve as the basis for further research by health sociologists, social medicine experts, epidemiologists, health economists and other experts in this field.

[15] The Slovenian Public Opinion Survey (SPOS) is a leading Slovenian empirical sociological project that has been underway since 1968. It is conducted by the Centre for Research of Public Opinion and Mass Media at the Faculty of Social Sciences in Ljubljana. The purpose of the survey is to monitor the opinions and habits of Slovenian people over several decades. It is conducted on the basis of personal interviews. The sample of respondents is taken randomly from the register of the population with a permanent residence in Slovenia. It is representative of the Slovenian population aged 18+ (inclusive). The size of the sample is from 1000 to 1100 realised units. The main users of data from SPOSs are social researchers, teachers, students, the public administration and the media. The Survey is financed by the Ministry of Education, Science and Sport.

2. Socio-economic determinants of health

Risks and stresses accumulate in lower social strata

Health is a *result* of the factors accompanying an individual throughout their life. For almost a century and a half, researchers in social medicine and health sociology have dealt with the question of which factors are most crucial to health – biological, geographical or socio-economic ones. If the question is posed in this way, it attempts to find universal etiological factors which explain all health phenomena in all periods in history, whilst in reality health should always be placed in a specific social context. Despite this complexity, we should attempt to understand how an individual's health is affected by static dimensions of their socio-economic condition (such as their sex) and dynamic ones (such as age, education, income, occupation, social inequality). Health is part of the social context and various socio-economic deprivations have multi-dimensional consequences, so poorer health may only be one of them.

Socio-economic deprivations have a permanent nature

In modern society, income and consumption serve not only as a means of satisfying basic needs but also help assure one's identity. Such a (psycho-social) interpretation of health takes into account the influences of the underlying structural, political and economic processes. As a result, this approach also considers the material situations of everyday life which help create inequality even before it is actually felt at the level of the individual. Social inequality (absolute and relative) leads to an accumulation of risks and stresses for those in lower social classes and, in general, the concentration of opportunities for those in upper classes (Müller, Nemeth, Toš, 2002:21)[16]. For example, apart from its link to social status and (the feeling of) security, disposable income ensures that individuals can consume various goods and it, in effect, links incomes and health. By having the chance to use these goods, individuals and households can more easily confront any potential adverse circumstances in their life. Income and its distribution among the population proves to be a very good indicator of the (adequacy of) nutrition, living conditions and – particularly in those countries with more market-oriented ways of financing the health care system – also of access to proper health care.

Permanent deprivation and living in poverty have proved to have many more pronounced negative consequences for health than mere periodical episodes of economic deprivation. Low incomes, low educational attainment and poor skills generally have a permanent nature. Consequently, after a certain period of time, socially conditioned stresses manifest themselves in physiological symptoms of disease[17]. We should, therefore, explore the link between the indicators of social inequalities and the indicators of health.

2.1 Socio-economic indicators

Income status

The effect of income inequality on health is one of the most controversial issues of research in this area. Income inequality is a result of historical processes that have caused (under)investment in human, physical, health and social infrastructure. Wilkinson (1997, 1992) finds that life expectancy is not the highest in countries with the highest GDP per capita but in those with the most equitably distributed income (see Figure 8). By contrast, Gravelle (1998) contends that income inequality is a statistical fallout induced by the use of aggregated data. He maintained that, by

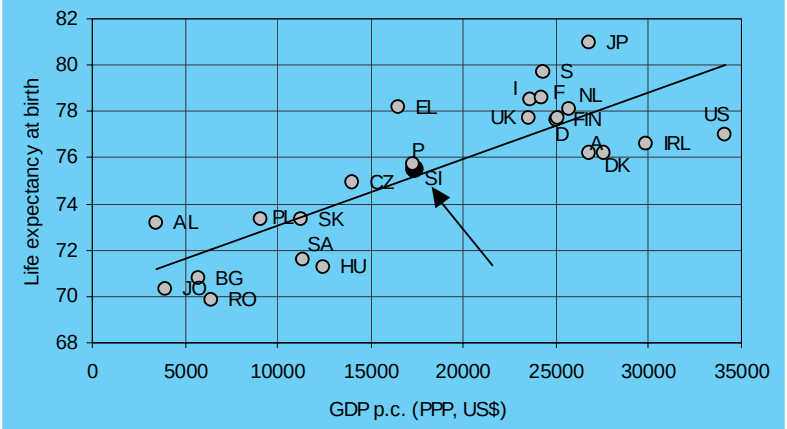
[16] These come in several forms: sensorial stresses (strong light, noise), stresses of achievement (work tasks), social stresses (lack of privacy or extreme loneliness, isolation), environmental stresses (noise, dirt, poisonous substances), decision-making stresses (conflicts of goals), fear of the future. The socio-economic variable 'occupation' is one of the key generators of socio-economic stress. Monotonous work (assembly line), de-qualified, overtime, shift work and, in particular, the fear of losing one's job or actual dismissal from employment cause nervousness, neurosis, headaches and stress (Doyal, 1984:74). The lower the position that one occupies on the occupational scale, the worse is one's health and the shorter the life span (White, 2002:37). However, stressful events in one's life are not only subject to social but also private conditions (family problems, death of a close one, accidents etc.)

[17] Physiological reactions of individuals to stress can be measured through increased blood pressure, increased pulse, rapid breathing, skin changes, and the accumulation of fatty acids. Social stresses most directly affect the cardiovascular and immune systems (see Müller, Nemeth, Toš, 2002:27-29), and indirectly affect heart diseases, diabetes, cancer, stroke, depression, and low weight at birth (White, 2002:66).

itself, income inequality is not a decisive determinant of health. In fact, an extensive body of research supports his idea that it is an individual's income that is the decisive factor. This takes the form of a complex relationship in which the effect of income on health is more pronounced at lower than higher income levels. Therefore, its contribution to better health becomes ever less significant as incomes grow. This correlation can be seen as a form of the decreasing marginal utility of income.

Life expectancy is significantly related to social infrastructure, i.e. the largely publicly financed health care system, public safety, public schooling, housing conditions, nutrition etc. Social position (in)directly affects an individual's psycho-social condition and, consequently, also their general health. The actual correlation between health and income is examined by using data from the Slovenian Public Opinion Surveys (SPOS). In model A (Table 13), average household income[18], sex and age were used as predictive factors of health[19]. This relationship is statistically examined by odds ratios[20]. In our case, an odds ratio greater than 1 indicates that an individual's self-assessed health improves alongside increases in average household income. The results show that in all observed years for those respondents who completed schooling, each higher income decile to which a household belonged was reflected in a 15%-30% higher odds of an individual assessing their health as positive. At the same time, this odds ratio (together with an estimate of a determination coefficient) shows an upward trend. The estimated odds ratios were lowest in the eighties and started to rise in the nineties. In each year of the observed period average household income played an increasingly important role in determining self-assessed health.

Figure 8: Correlation between GDP p.c. (PPP, US$) and life expectancy, selected countries, in 2000



Source: (2002) HDR. UNDP, Oxford University Press: New York, Oxford

In addition, we assessed the correlation between the subjectively assessed lack of available financial assets[21] of household and with their self-assessed health in 1999 (Table 14). A certain correlation between these two factors was revealed for both males and females. It was particularly significant in the 45-64 age group. This is group that is largely still economically active and thereby exposed to family financial obligations and to a certain degree of uncertainty about future income from work. Vulnerability in this age group may also be explained by the process of accumulating socio-economic influences throughout one's life. For males who have completed schooling, household financial difficulties appears to make them up to seven times more likely to assess their health as poor compared to their peers who face fewer household income constraints (Table 14). For women, the odds ratios are lower than 3 (where for both sexes, the

Income is one of the important factors of health

[18] This variable is not sufficiently reliable in the databases used since 30%-40% of data on household income has typically been missing since 1994. It can be shown that the revelation of this information is related to a respondent's education and age. To this end, in the analysis those respondents with missing answers were substituted by those with complete information. We identified individuals with complete information who resemble those who did not reveal the information about their household income, and then weighted the individuals with complete information for each survey. Given that this is actually a simulation of data of the individuals about whom data is missing, we encounter a certain degree of uncertainty. Therefore, interpretation of the results should cautiously take these aspects into account.

[19] As a result with two possible values: 0 - if health is assessed as bad or very bad and 1 - if health is assessed as very good or excellent.

[20] Odds ratios are antilogarithms of estimated regression coefficients from relevant logistic regressions. In simpler terms, oddss themselves are a ratio between the number of certain events of interest (e.g. the number of individuals with good self-assessed health) and the number of opposite events (in this case, individuals with poor self-assessed health) in the same group (e.g., in the third decile of income distribution), or $p_1=q_1/(1-q_1)$, where q_1 denotes the share of events of interest (the share of individuals with good self-assessed health in a given income decile). The odds ratio further compares the prospects in two different (but successive) groups (i.e., the odds in the fourth decile of income distribution (p_2) against the odds in the third income decile (p_1)), i.e., $p=p_2/p_1$.

[21] This is (subjective) information which links the absolute level of available income with the self-perceived needs. An individual is attributed the value 0 if the income of their household is insufficient or hardly sufficient, and the value 1 if it is sufficient or even more than sufficient.

Table 13: Estimated odds ratios for (good) health with respect to the decile of average household income, 1982-2001 (only respondents who had completed schooling)

Model A					
	1982	1994	1996	1999	2001
Estimated odds ratio (for good health) for income decile of average household income of the respondent	1.13	1.22	1.20	1.27	1.26
Estimated odds ratio for sex (1= females)	0.70		0.65		
Estimated odds ratio for age (age in years)	0.96	0.95	0.95	0.95	0.94
Estimated determination coefficient	**0.129**	**0.176**	**0.198**	**0.202**	**0.233**
Model B					
	1982	1994	1996	1999	2001
Estimated odds ratio (for good health) for income decile of average household income of the respondent	1.11	1.19	1.14	1.16	1.19
Estimated odds ratio for (good health) in case of completed secondary school	1.46		1.91	4.62	
Estimated odds ratio for (good health) in case of more than secondary school		2.40			
Estimated odds ratio for sex (1= females)	0.744				
Estimated odds ratio for age (age in years)	0.959	0.96	0.95	0.97	0.94
Estimated determination coefficient	**0.133**	**0.186**	**0.214**	**0.279**	**0.248**

Source: Toš et al. 1982; Toš et al.1989; Toš et al.1994; Toš et al.1996; Toš et al. 1999; Toš et al. 2001; own calculations.
Notes: All presented estimated odds ratios are estimated by using logistic regressions and significant with P<0.01. Where the estimated odds ratios are not statistically significant at 0.05, the result is not shown. The determination coefficient (an estimate of the share of explained variance) is estimated by Nagelkerke R^2.

Table 14: Estimated odds ratios for (good) health with respect to the financial situation of the respondent's household, and the respondent's educational attainment (only respondents who had completed schooling), 1999

	18-44 years		45-64 years		65 years and more	
	Males	Females	Males	Females	Males	Females
Estimated odds ratio for (good) health in case of sufficiency of available financial means for the respondent's household			7.66**	2.77*		
Estimated odds ratio for (good health) in case of completed secondary school		3.95*	3.40*	3.43*		
Estimated odds ratio for (good health) if additionally more than secondary school						
Estimated determination coefficient	0.118	0.167	0.235	0.174	0.167	0.090

Source: Toš et al. 1999; own calculations.
Notes: All presented estimated odds ratios are estimated by using logistic regressions and significant with * P<0.05, ** P<0.01. Where the estimated odds ratios are not statistically significant at 0.05, the result is not shown. The determination coefficient (an estimate of the share of explained variance) is estimated by Nagelkerke R^2.

influence of the highest education level attained was taken into account). In two other age groups - younger and older - there is no statistically significant correlation between the financial situation of a household and its self-assessed health, although this might also be a consequence of the small number of respondents in some sex, age, and education groups. It should also be noted that the odds ratios of assessing one's health as bad are twice as high for those respondents with financial difficulties than for those without such difficulties. For those in the 45-64 age group, these odds are even higher. This means that they are confronted with (at least) a dual deprivation: financial and health-related. Based on the SPOS data, it can be concluded that the influence of all determinants included in the analysis (income, education, sex) on the self-assessment of health has gained importance over the observed 20-year period.

Foreign research has also shown that health is a function of income at the bottom of the income scale; at the top end of income distribution education becomes increasingly more important. When incomes reach a normal/satisfactory level, other determinants gain importance, amongst others those related to having access to and the use of adequate information.

To find out which level of education affects health most significantly we incorporated education in model B (Table 13)[22]. As a consequence of the correlation between education and average household income, the estimated odds ratios for the income variable drop slightly in model B relative to model A, but nevertheless remain significant. Tables 13 and 14 indicate that, despite taking into account the factor of education, a household's income situation has a fairly stable influence on health, whereas the education level is also significant. The shift from primary to at least secondary school education seems to be particularly significant.

It can be concluded that both the levels of education and income are interrelated and significant, yet distinct self-assessed health

[22] In this model, the level of education is taken into account by using two dichotomous variables. The variable 'secondary school' denotes that the respondent completed at least 9 years of schooling and has thus attained at least some kind of secondary-level education. On the contrary, the variable 'secondary school' denotes that a respondent has additionally attained a higher or high education level.

indicators. Since 1982 (the first year of analysis) and in particular from the beginning of the nineties to date, average household income has become increasingly significant (also see the chapter Household Expenditures on Health). As seen from the text that follows, the situation differs slightly for psychosomatic indicators as they are more clearly defined in socio-economic terms. The indicators of psychosomatic problems have specific theoretical importance as these problems indicate the presence of psychosomatic stresses and are, as such, a midway point between social stress and physiological disease (Müller, Nemeth, Toš, 2002).

2.2 Psychosomatic indicators

Income situation

The 'psychosomatisation' of economic stresses as a phase precedes their somatisation. This systematic correlation can be seen in Table 16. People belonging to higher income brackets on average report a lower prevalence of psychosomatic symptoms. The last two indicators (Tables 16 and 17) are based on subjective assessments. In the first one, respondents assessed their happiness and satisfaction with their lives. The data reveal a great discrepancy in the share of those feeling generally happy between the lowest and highest income brackets, whereas the share rises systematically in the brackets lying in-between. The income situation no doubt is related to the feelings of pleasure with life. The second indicator - a subjective assessment of one's health - reveals an even greater relative discrepancy: respondents from the lowest income brackets perceive their health as being notably worse.

The correlation between the income and characteristics of one's *work environment* is also interesting. Higher income is usually related to a less demanding physical workload, a greater degree of autonomy and lower degree of uncertainty regarding employment and the need for sub-ordination. Research shows that the employed who have physically and/or mentally more demanding jobs feel less satisfaction performing them, while at the same time earning less, and that are the most vulnerable group with regard to health.

Table 15: Comparison of average self-assessed health on a 0-4 scale, Slovenia, 1982-2001

Year	Average self-assessed health[a]	Change relative to 1982[b]
1982	1.97	
1989	2.03	0.06
1994	2.04	0.07
1996	2.08	0.11**
1999	2.11	0.14**
2001	2.14	0.18**

Source: Toš et al. 1982; Toš et al. 1989; Toš et al. 1994; Toš et al. 1996; Toš et al. 1999; Toš et al. 2001; own calculations.
Notes: [a]Calculated as an arithmetic mean of the responses to the question about the self-assessment of health condition (on a scale 0-very bad to 4-excellent). As this is an ordinal variable, some cautiousness in interpretation is warranted. [b]Significance of changes towards 1982 was estimated by post-hoc tests; statistical significance at * P<0.05 and ** P<0.01.

Highlight 5: Changes in average health self-assessment (on a scale of 0-4) for respondents with different education levels in the observed period, Slovenia, 1982-2001

	Primary school		Secondary school		Higher education	
Year	Average self-assessed health[a]	Change relative to 1982[b]	Average self-assessed health[a]	Change relative to 1982[b]	Average self-assessed health[a]	Change relative to 1982[b]
1982	1.87		2.08		2.08	
1989	1.77	-0.10	2.20	+0.12*	2.35	+0.27**
1994	1.79	-0.08	2.14	+0.06	2.41	+0.33*
1996	1.78	-0.09	2.22	+0.14*	2.49	+0.42**
1999	1.73	-0.14*	2.28	+0.20**	2.25	+0.17
2001	1.89	+0.02	2.21	+0.13*	2.44	+0.36**

Sources: Toš et al., 1982; Toš et al., 1989; Toš et al., 1994; Toš et al., 1996; Toš et al., 1999; Toš et al., 2001; own calculations.
Notes: [a]Calculated as an arithmetic mean of the responses to the question about the subjective appraisal of one's health condition (on a scale 0 - very bad to 4 - excellent). This is an ordinal variable so some caution in interpretation is warranted. [b]The significance of yearly changes has been estimated by using post-hoc tests. * P<0.05 and ** P<0.01.

The results in the Table show that the self-assessed opinion of one's health depended on the education level of respondents even before the economic and political systems changed in Slovenia. On average, those with lower education assessed their health as worse than those with secondary or higher education. However, self-assessed health by those with a low education level has not improved significantly through the last two decades. Up to 2001, the average self-assessed health of less-educated respondents did not improve. On the contrary, it slightly deteriorated; however, this trend cannot be confirmed statistically. Conversely, respondents with education higher than the primary level on average assessed their health as being better in the same period. This is true for those with secondary and any higher level of education. In the latter group, positive changes have been the most significant. People with a high education gained the most in this period. It can be concluded that the already existing educational differences reflected in public health have only increased over the last two decades.

Employment

Employment is a source of financial and social capital. Since becoming unemployed means losing both of these elements at once, it is very stressful and damaging to one's health. To some extent, this is also

Table 16: Correlation between economic situation and psychosomatic problems (respondents aged up to 55 years)

Income per household member (ranking on the income distribution scale)	0-37 thousand SIT (bottom 14%)	38 - 54 thousand SIT (15% - 31%)	55 - 74 thousand SIT (32% - 50%)	75 - 125 thousand SIT (51% - 85%)	above 125 thousand SIT (top 15%)
OFTEN HAS PROBLEMS WITH...	**%**	**%**	**%**	**%**	**%**
Strong heartbeat	**30**	29	23	15	**8**
Nausea	**18**	18	16	8	**4**
Problems breathing	**20**	8	11	10	**5**
Problems sleeping	**32**	34	29	27	**20**
Vertigo	**21**	17	18	11	**7**
Chest pain	**18**	12	14	7	**7**
Restlessness	**45**	43	40	38	**30**
Feelings of sadness	**30**	29	24	21	**18**
LAST YEAR HAD PROBLEMS WITH..	**%**	**%**	**%**	**%**	**%**
Nerves	**33**	14	18	12	**16**
Increased blood pressure	**16**	16	14	10	**7**
SUBJECTIVE INDICATORS	**%**	**%**	**%**	**%**	**%**
Percentage of happy individuals*	**36**	39	46	48	**61**
Percentage of respondents with good self-assessed health**	**18**	26	28	37	**49**

Source: SPOS 2001/3
*Estimate on the scale from 0 ('very unhappy') to 10 ('very happy') as a sum of answers 8,9,10. **Self-assessment of health on the scale: 1 'excellent 2 'very good 3 'good 4 'bad 5 'very bad'. The sum of answers 'excellent' and 'very good' health.

true of retirement as it brings about changes in income, status and social ties. The specific status of a housewife is also relevant, as many studies have defined this economic activity category as being 'hazardous' to health. An increased rate of depression, anxiety and mental disturbance can generally be found among housewives, possibly because their work has a very low status, does not provide economic independence, is socially isolated, monotonous and generates a negative self-image (Doyal, 1984:75). It can be concluded that a lack of social ties is risky for one's health: the employed generally have the lowest load of psychosomatic symptoms. Those with jobs are also more satisfied with their lives and assess their health more positively.

Subjective social classes

Subjective self-ranking in a social class[23] is an important indicator because it captures

Table 17: Correlation between employment and psychosomatic problems

Type of employment (non)activity	Employed (49%, N=536)	Unemployed (6%, N=62)	Housewives (4%, N=43)	Retired (31%, N=337)
OFTEN HAS PROBLEMS WITH...	**%**	**%**	**%**	**%**
Strong heartbeat	**17**	**33**	36	33
Nausea	**9**	**26**	24	21
Problems breathing	**10**	**16**	33	28
Problems sleeping	**27**	**34**	45	52
Vertigo	**13**	**14**	33	26
Chest pain	**9**	**21**	21	19
Restlessness	**37**	**52**	55	45
Feelings of sadness	**21**	**33**	45	31
LAST YEAR HAD PROBLEMS WITH..	**%**	**%**	**%**	**%**
Nerves	**14**	**26**	39	27
Increased blood pressure	**13**	**19**	26	34
SUBJECTIVE INDICATORS	**%**	**%**	**%**	**%**
Percentage of happy individuals *	**46**	**28**	33	32
Percentage of respondents with good self-assessed health**	**31**	**23**	14	12

Source: SPOS 2001/3
*Estimate on a scale from 0 ('very unhappy) to 10 ('very happy) as a sum of answers 8,9,10.** Self-assessment of health on the scale: 1 'excellent 2 'very good 3 'good 4 'bad 5 'very bad'. The sum of answers 'excellent' and 'very good' health.

[23] Respondents ranked themselves in one of the following classes: bottom, working, middle, upper-middle and upper.

Table 18: Correlation between self-ranking in a social class and psychosomatic problems (respondents aged 18 and over)

Subjective social class	Bottom*** (4%, N=40)	Working (38%, N=400)	Middle (52%, N=544)	Upper middle*** (6%, N=67)
OFTEN HAS PROBLEMS WITH...	**%**	**%**	**%**	**%**
Strong heartbeat	47	**30**	**18**	13
Nausea	42	**19**	**12**	9
Problems breathing	45	**22**	**12**	9
Problems sleeping	62	**42**	**30**	27
Vertigo	45	**23**	**14**	10
Chest pain	37	**16**	**9**	3
Restlessness	80	**42**	**40**	37
Feelings of sadness	52	**33**	**22**	9
LAST YEAR HAD PROBLEMS WITH..	**%**	**%**	**%**	**%**
Nerves	45	**25**	**16**	9
Increased blood pressure	52	**25**	**15**	13
SUBJECTIVE INDICATORS	**%**	**%**	**%**	**%**
Percentage of happy individuals *	13	**33**	**47**	73
Percentage of respondents with good self-assessed health **	10	**15**	**32**	51

Source: SPOS 2001/3

*Estimate on a scale from 0 ('very unhappy) to 10 ('very happy) as a sum of answers 8,9,10.** Self-assessment of health on the scale: 1 'excellent 2 'very good 3 'good 4 'bad 5 'very bad'. The sum of answers 'excellent' and 'very good' health. ***Owing to a small number of respondents in this group, the interpretation of these data requires certain caution.

a subjective aspect of a respondent's socio-economic optimism or pessimism. Self-ranking in a certain social stratum roughly matches the indicators of a respondent's economic status. It is interesting, however, that respondents in similar economic situations rank themselves quite differently in social classes, in 'bottom' or 'middle', or in 'middle' or 'upper-middle' (respondents tend not to rank themselves in the upper class). Therefore, these discrepancies are more a consequence of the respondent's greater or smaller socio-economic optimism and self-confidence than of the actual differences in economic status.

Self-ranking in the extreme social groups points to the correlation between a respondent's socio-economic optimism or pessimism and their psychosomatic indications. This correlation is confirmed by both social groups in the middle of this ranking, where most of the sample is concentrated: the 'working' class and the 'middle' class. Although the differences between these two groups may not seem as important as the differences between the extreme groups, they are easily noticed and systematic. In the category of those ranking themselves in the working class, there is a greater presence of psychosomatic symptoms, lower satisfaction with life and a worse (self)assessment of health. There is a wide gap between the bottom and the working classes and a slightly narrower one between the middle and upper-middle classes. The general rule seems to be the higher the class, the more significant is the improvement in psychosomatic indicators. Overall, what the research reveals is the great importance of including both economic status and the individual's subjective perception of this status in determining the individual's health.

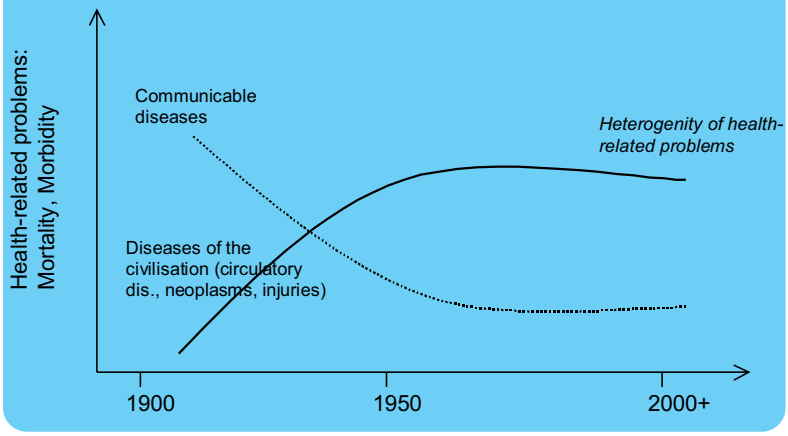
Psychosomatic symptoms prevail among 'the working class'

Health and its perception are thus very closely related to a specific social and historical context. The aforementioned empirical facts confirm that poverty and other forms of socio-economic deprivation affect an individual on several levels - and (poor) health is just one of them. Income and income inequality affects an individual's health in particular because of the decreasing marginal utility of income for health. A given drop in income has greater negative consequences for health than a given increase in income does. On average, individuals belonging to the bottom end of the income distribution face the worst health and the highest rates of premature death.

3. Analysis of selected health indicators in Slovenia

During the last hundred years, the process of industrialisation and urbanisation has been accompanied by two important side processes: demographic and epidemiological transition (Figure 9). Mortality rates started to decline, while morbidity and mortality patterns changed significantly.

Figure 9: Epidemiological transition of diseases in the 20th and 21st century



The discovery and increasing use of antibiotics gradually contributed to the reduction and eventual eradication of deaths due to communicable diseases. In turn, in this relatively short period of time, life expectancy rapidly increased. However, when the progress fuelled by the use of antibiotics lost momentum the incidence of degenerative and social diseases increased, and the downward trend of mortality rates was halted for some time. In Slovenia, a temporary halt in the trend of increasing life expectancy was also observed in the early nineties, which experts attribute to the problems related to the transition to a new social system.

In Slovenia, life expectancy at birth was 71 years for males and 79 years for females in the 1997-1998 period. According to these indicators, Slovenia ranked in the middle of the life expectancy scale for European countries. Compared to the countries of Eastern Europe, Slovenia's life expectancy is the highest, while compared to the countries of Western Europe, it is the lowest. It is 6 years lower than in those European countries with the lowest mortality rates (Switzerland, Sweden, France) and 6 to 7 years higher than in those European countries with the highest mortality levels (Ukraine, Belarus, Hungary, Romania, Russian Federation). Although life expectancy - one of the summary indicators of health - is rising, Slovenia still lags behind in terms of some other indicators, e.g. deaths due to injuries, in particular self-inflicted injuries.

Life expectancy for Slovenians born in the 1931-1933 period was 50 years for males and 54 years for females. Life expectancy rose fast in the two decades that followed, and afterwards at an ever-slower rate. The life expectancy of males born in the 1997-1998 period is 21 years longer compared to those born in the 1931-1933 period; for females this difference amounts to almost 25 years. Parallel to the fall in mortality rates, the gap between the mortality of males and females also increased. In the 1930-1933 period, female life expectancy was 4 years longer than that of males, while

Table 19: Life expectancy, by age and sex, in Slovenia from 1931-1933 to 2000/2001

Age	Period								
	1931-33	1952-54	1960-62	1970-72	1980-82	1990-92	1997-98	2000-01	**2020**
Males									
0	**50.1**	**63.0**	**66.3**	**65.4**	**67.5**	**69.6**	**71.1**	**72.1**	**76.0**
1	57.8	66.8	67.7	66.1	67.5	69.1	70.5	71.5	
10	52.8	58.9	59.3	57.6	58.9	60.3	61.7	62.6	
20	44.2	49.5	49.8	48.0	49.3	50.6	52.0	52.9	
40	28.7	31.7	31.6	30.2	31.1	32.2	33.4	34.1	
60	14.4	15.7	15.3	14.7	15.8	16.3	17.0	17.7	
80	4.5	5.0	5.0	5.0	5.4	5.6	6.0	6.4	
Females									
0	**54.2**	**68.1**	**71.9**	**72.9**	**75.1**	**77.2**	**78.7**	**79.6**	**82.5**
1	60.6	71.0	72.8	73.5	75.1	76.7	78.0	78.9	
10	55.4	63.0	64.3	64.9	66.3	67.9	69.1	70.0	
20	46.6	53.3	54.5	55.2	56.5	58.0	59.3	60.1	
40	30.4	34.5	35.4	36.0	37.3	38.6	39.8	40.5	
60	14.9	17.2	17.7	18.4	19.7	20.7	21.7	22.4	
80	4.8	5.4	5.4	5.7	6.3	6.7	7.0	7.4	

Source: SORS

Table 20: Mortality by age and sex, Slovenia, 1981-1998

Sex Year	Deaths per 1000 in each age group							
	All ages	0 years	1-14	15-29	30-44	45-64	65-79	80 and over
Females								
1981	9.2	12.0	0.3	0.6	1.5	6.5	35.7	130.6
1991	9.2	5.6	0.2	0.4	1.1	6.1	30.1	132.4
1998	9.2	4.1	0.2	0.4	1.0	6.3	25.1	134.4
Males								
1981	10.6	14.0	0.5	1.7	3.5	14.1	60.5	153.6
1991	10.1	10.3	0.3	1.4	3.0	14.0	53.7	160.1
1998	10.1	6.4	0.3	1.2	2.6	14.4	47.2	164.8

Source: SORS

in the 1970-1972 period it was 7.5 years longer. This difference has to date remained at about the same level. The fact that females live longer than males has become a rule in the developed world. Countries differ only in terms of the size of this gap.

Health in a given moment reflects what an individual and a population has gone through up to that time. The events that have an impact on health are concentrated transversally and accumulated longitudinally. The *mortality rate* is used as an indicator of health as it measures an outcome (or absence) of health problems. Mortality as an indicator of (the lack of) health is subject to factors that are present throughout people's lives. An increase in life expectancy was possible once mortality in younger age groups started to drop and was delayed until later in life. The ratio between the number of deaths and the size of the population in Slovenia has witnessed almost no change since the Second World War and has remained stable at a level of between 9 and 10 deaths per 1000 people. This ratio, also known as the (overall) mortality rate, is always slightly higher for males than for females.

Mortality changes with age. It is high in the first year of life and falls up to the age of 15 when the trend is reversed throughout the remaining life span. In the 1981-1998 period, mortality rates decreased in all age groups except the oldest (Table 20). The infant mortality rate and mortality in the 65-79 age group dropped the most. Males die more often than females in all age groups. Among the young age groups, this sex difference is most obvious. In the 15-29 age group, up to three times more males die than females.

In the most recent almost forty-year period, the structure of the causes of death has changed markedly. Chronic non-communicable diseases have superseded communicable ones. An increasing number of people, in 1998 as many as 67%, die of cardiovascular (circulatory) diseases and neoplasms. These are followed by physical injuries and respiratory diseases. In fact, physical injuries are the leading cause of death for people up to 45 years of age, neoplasms for those between 45 and 64, and circulatory diseases for those above the age of 65. Since the early eighties, the incidence of communicable diseases (including AIDS) as a percentage of total illnesses has been just 1%.

Table 21: Mortality by cause of death, Slovenia, 1960-1998 (%)

Percentage of cause of death groups in total mortality, Slovenia					
	1960	1970	1980	1990	1998
Number of deaths (=100%)	**15145**	**17353**	**18820**	**18555**	**19039**
Communicable diseases	4	2	1	1	1
Circulatory diseases	25	41	47	47	42
Neoplasms	15	16	19	22	25
Respiratory system diseases	10	8	7	6	8
Digestive system diseases	3	4	7	6	6
Injuries	8	11	11	9	8
Other	34	18	9	9	11

Source: SORS

Cardiovascular diseases leading cause of mortality

The number of people who die due to neoplasms and circulatory diseases has been rising. The prolonged life span and related increase in the share of older people plays a part in this since such diseases are closely related to age - their prevalence rises as people get older. Behavioural changes - in particular, bad habits such as excessive alcohol consumption, smoking,

Table 22: Deaths due to injuries, by cause, 1970-1998

	1970	1980	1990	1998
All fatal accidents	**1248**	**1436**	**1139**	**1017**
Traffic accidents	563	549	494	342
Traffic accidents with motor vehicles	485	502	442	299
Other traffic accidents	78	47	52	43
Other accidents	685	887	645	675
Accidental falls	115	395	332	346
Other	570	492	313	329

Source: SORS

a sedentary lifestyle and an unhealthy diet - also contribute to the increased occurrence of these diseases, resulting in an increased number of premature deaths. These deaths could be postponed by (at least) a few years.

The number of deaths due to injuries is on the decline and their composition has changed. In the 1970-1998 period, the percentage of deaths due to traffic accident injuries decreased, while the percentage of deaths due to accidental falls increased. Since victims of the latter are largely the elderly, the share of accidental falls is likely to increase in the future. The number of deaths due to traffic accidents has been declining since the second half of the seventies when, on average, two people died per day in traffic accidents. By 1998, this figure had been halved. Nevertheless, Slovenia still has one of the highest rates of traffic accident related deaths in Europe.

Slovenia also has one of the highest suicide rates among European countries. Higher rates are only known in some other Eastern European countries. Of all neighbouring countries, Hungary records the most similar suicide rate. Over the last thirty years, the number of suicides per 100,000 people has oscillated around the level of 30. Males are 3.5 times more likely than females to commit suicide. Although this is an important difference, it is even higher in countries with higher suicide rates, where males are 5-6 times more likely than females to end their life by suicide. The probability of suicide is related to age - it rises from adolescence towards old age. In Slovenia, a gradual decline in the suicide rate in the age group above 45 has been observed since the mid-eighties. This trend was less favourable for younger people, except for females in the 15-24 age group.

Life expectancy increased in the course of the demographic transition. As a consequence, this led to changes in the prevalence and incidence of chronic diseases. The changes in mortality rates and life expectancy, witnessed in the restructured economic and political environments of post-socialist countries, shed light on the importance of the socio-economic determinants of health.

Box VII: Self-inflicted injuries (suicide)

Self-inflicted injuries are a reality that is concealed and unarticulated. Mostly, we do not talk about it openly. According to the general consensus, there is something wrong with people who inflict injury upon themselves. It is easiest to call them drunkards or mentally disturbed, stigmatise them, make them out to be somebody who 'has nothing in common with us'. However, this is not true. Every human being can experience moments when they consider carrying out a self-inflicted injury.

The idea of a self-inflicted injury is related to personal and inter-personal interaction with mental and physical reactions. Problems may be either primarily socially conditioned (in economic or cultural areas) or they may be primarily individually conditioned. The inter-personal, psychological and biological dimensions of an individual play a crucial role here. These problems, levels and dimensions usually intertwine and enhance each other. Possible relations may be positive, neutral or negative. A self-inflicted injury is the final result of a long process of an individual's alienation. Thinking about a self-inflicted injury matures over a long time - up until the last straw. Every human being, regardless of their age, education, occupation and experience, can find themselves on the edge.

A self-inflicted injury happens due to the loss of an object (another or oneself), which hurts one's feeling of identity. There is extreme stress; the feeling for the future is lost. It is a painful process of (mentally) going through the phases of conflict, crisis, loss of self-respect, self-degradation and self-accusation. It is followed by depression and self-targeted aggression - (self)punishment (idea, plan and act).

Source: from the homepage of the Slovenian Association for Suicide Prevention (www.zrc-sazu.si/prepreci-samomor/)

The idea of a self-inflicted injury is passed on through imitation and modelling. Cultural traditions have a significant influence. Successful socialisation and social cohesion are revealed through respect for culturally-determined social roles. The number of self-inflicted injuries in a society indicates how successfully individuals socialise and integrate into that society. The number of self-inflicted injuries is therefore an indicator of the level of a society's cohesion. Through their social norms, some societies prohibit self-inflicted injuries while others do not.

3.1 Socio-economic determinants of mortality in Slovenia

Mortality is only indirectly a socio-economic phenomenon. The correlation between mortality rates and economic development can be observed by noting that the factors which increase or decrease mortality are often subject to socio-economic factors.

Highlight 6: Methodology and the course of research on socio-economic determinants of mortality

The main purpose of the research conducted at the Institute of Social Medicine (today the Department of Public Health), the Institute for Biomedical Informatics at the Faculty of Medicine, University of Ljubljana, and the Institute of Macroeconomic Analysis and Development was to study the influence of selected biological (age, sex), socio-economic (marital status, education, occupation, nationality, income etc.) and geographical factors on the causes of death, classified according to the International Statistical Classification of Diseases and Related Health Problems, tenth revision (ICD-10). The analysis focuses on all deaths in Slovenia in the 25-64 age group, in 1992, 1995 and 1998 (N=14816). The research was cross-sectional. Data were provided by the Statistical Office of the Republic of Slovenia (SORS), and the Institute of Public Health (IPH) (the population register containing data from the census and various statistical reports containing demographic, economic, and health-related data were combined). The diagnosis of the cause of death, as well as the month and year of death in the selected years 1992, 1995 and 1998, were obtained from the death registration form (DEM-2 form), which is filed for each person who dies in Slovenia. SORS linked the diagnosis of the cause of death to the data on the deceased from the 1991 Census (Census form P-1) and we thereby obtained the following indicators: sex, age, statistical region of permanent residence before the death occurred, marital status, education, occupation and mother tongue. For individuals who died in 1998, SORS appended information on the economic status in 1996 (from the data on personal income tax for 1996).

We studied the relationship between certain biological, social, economic and geographical factors, and the causes of death. The causes of death were classified according to the ICD-10. For 1992 and 1995, when the ICD-9 still applied, the diagnoses from the ICD-9 were translated to relevant diagnoses from the ICD-10. Causes of death by the ICD-10 were further aggregated into the following groups (taking into account the declining frequency in the total sample of deaths in the 25-64 age group):

1. Neoplasms
2. Circulatory diseases
3. Injuries, poisonings and other deaths due to external causes
4. Digestive system diseases
5. Respiratory diseases
6. Other diseases/causes of death.

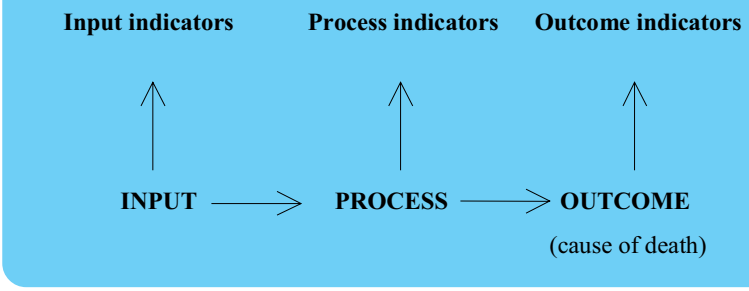
In addition to descriptive statistics (arithmetic mean, median, frequency distributions, central tendency and variability), we used classical bivariate methods. For numerical variables, we used a one-way analysis of variance by ranks (using the nonparametric Kruskal-Wallis test), and for categorical variables, the chi-squared test was applied. We used hierarchical log-linear models for assessing independence between the studied variables. In addition, we developed a predictive model of the cause of death and life expectancy on the basis of all the considered independent variables (using regression with optimal scaling - the CATREG procedure in the SPSS statistical package).
Because the theoretical foundations in the field are fragmentary and not always relevant for Slovenia, we decided to check the following assumptions:

- that socio-economic status has an influence on mortality in Slovenia, which is reflected in the ICD-10 cause-of-death structure;
- that a higher socio-economic status (i.e., higher education, higher employment, higher income) correlates with higher age at death; and
- that mortality in Slovenia is dispersed geographically and depends on unequal social and economic characteristics resulting from the heterogeneous development levels of individual regions.

To avoid any potential errors related to the small sample involved, we included in the analysis the total number of deaths in Slovenia. Even though the data pertain to concrete individuals, they were kept unidentifiable. In order to protect their privacy, we deleted the names and personal registration numbers of the deceased individuals before proceeding with the analysis. The Medical Ethics Commission of the Ministry of Health established on 26 June 2001 that the study was ethically irreproachable and, as such, could be carried out. Even though the analysis covers mortality for just three selected calendar years (1992, 1995 and 1998), it allows a further upgrading of the database every three years. This will enable the continuous monitoring of causes of death and their relation to different risk factors.

Mortality statistics raise numerous political questions and at the same time reveal the nature of the existing social inequality. The purpose of the study[24] whose results are partly published in this Report is to reveal the structure of the causes of death in the 25-64 age group in Slovenia and to identify the risk factors, as well as the most vulnerable groups, in the Slovenian population in 1992, 1995 and 1998. The definition of the underlying causative mechanisms and their direction is difficult (Diagram 1). In the analysis, the resulting

Diagram 1



[24] The research was conducted in co-operation with the Faculty of Medicine (the Department of Public Health, formerly the Institute of Social Medicine, and the Institute for Biomedical Informatics) and the Institute of Macroeconomic Analysis and Development.

differences in health (or mortality) between selected age groups could only be a consequence of using a selected socio-economic indicator. It is this indicator that determines the nature of socio-economic inequalities in health.

Cause of death changes with age

Since the relationship between socio-economic factors and health is of a dynamic nature, it is virtually impossible to compile an exhaustive list of all the potential mortality determinants. While analysing the state of health (using mortality as an indicator), it is imperative to carefully choose the explanatory variables. One of the main problems to be avoided is the problem of two-way causality (one factor both having an effect and being affected by another). Basic research and reliable functional models in the area of the socio-economic causes of diseases and death are scarce. The reasons for the inclusion/exclusion of selected factors are largely based on the researchers' decisions and established hypotheses. The interpretation of the results may have been different if some other factor had been taken into account. Despite serious problems with the input data, we at least partly succeeded in revealing the complexity of the system of non-medical health determinants, i.e. of those socio-economic factors that proved to be relatively reliable in predicting health. Below, we try to at least partly explain the significance of individual indicators in defining socio-economic effects on health (in)equality.

We assumed that differences in socio-economic status (assessed by the levels of education, employment and income) lead to different causes of death and/or a different age at death (life expectancy), and that the causes of death in Slovenia vary between individual regions based on their social and economic characteristics (with some regions being more developed then others). Based on the (small number of) existing theories, we divided the socio-economic determinants of mortality into those depending on the individual's characteristics and those determined by the environment (Diagram 2). In the analysis, we are mainly concerned with factors that proved to be statistically significant with regard to the cause of death.

Given the biological characteristics of the human body and the level of socio-economic development, mortality before the age of 65 is often referred to as *premature mortality*. In order to take into account the prolonged adolescence period that ends at around 25 years of age, we examined **the population between the ages of 25 and 64** (which also corresponds to the World Health Organisation's (WHO) definition of the adult population). Our examination of premature death not only deals with the issue of lengthening life spans. What is important is the difference between a long and a short life, and the fact that some people do die prematurely. The purpose of our research is importantly linked to the *prevention* of premature mortality. The analysis of mortality in Slovenia shows that, in each year examined, around one-third of deaths in Slovenia occur between the ages of 25 and 64.

Diagram 2: Analysed determinants of mortality as determinants of the standard of living

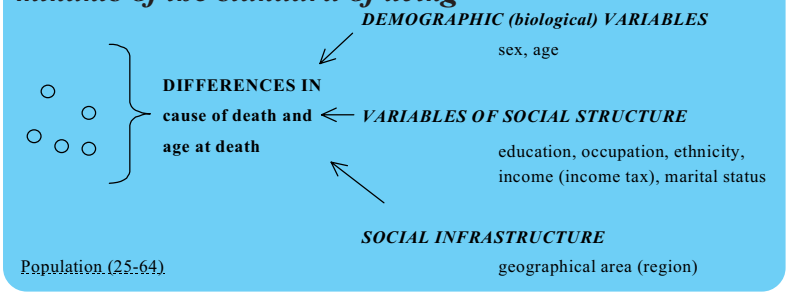
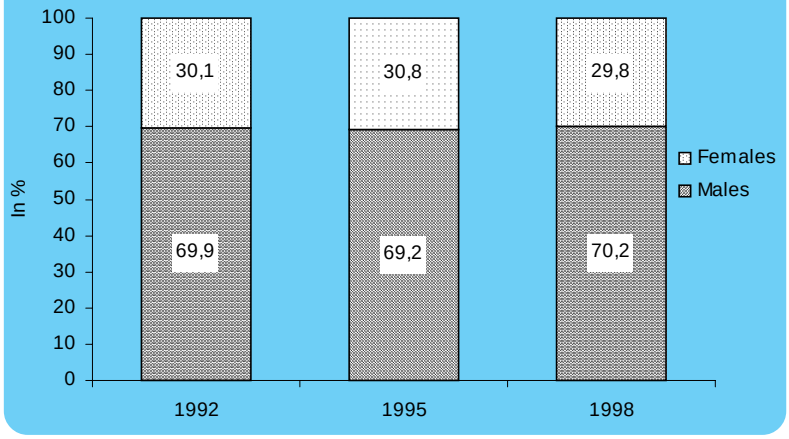


Figure 10: Share of deaths at age 25-64 by sex in the examined years (in %)



Age and sex

Age and sex are biological factors. When included in explanatory models, their effects as a rule reduce the estimated influence of other factors on (in)equality in health. Mortality related to old age rises with age, which is a result of other factors,

in particular biological ones. In our sample, as expected, the majority of deaths occurring each year are concentrated in the higher age groups. The structure of the causes of death also changes with age: older age groups die of different causes than younger groups (Table 23).

The main cause of death for males aged between 25-44 are injuries. The older the males, the greater the probability that they will die of neoplasms or circulatory diseases, and the lower the probability that they will die of other causes. Neoplasms as a cause of death for females are more common in the 35-44 age group. Injures are, in general, rare for both sexes in the 55-64 age group, where circulatory diseases are the leading cause of death. The distribution of causes of deaths is similar in all three years observed.

There are obvious differences in mortality between males and females in the sample of those aged from 25 to 64. Male mortality is considerably higher than female mortality (Figure 10). These differences in mortality rates and causes of death can largely be attributed to biological differences and different lifestyles. Thus, one can speak of female as opposed to male diseases and causes of death. Females in this age group die predominantly due to cervical and breast cancer. Physical injuries, most often caused by traffic accidents, and respiratory system cancer are less frequent causes of death for females than males. The connection between social status, social roles and lifestyles on the one side and differences in health between the sexes on the other is also seen in Figures 11 and 12, which display the main causes of death for males and females.

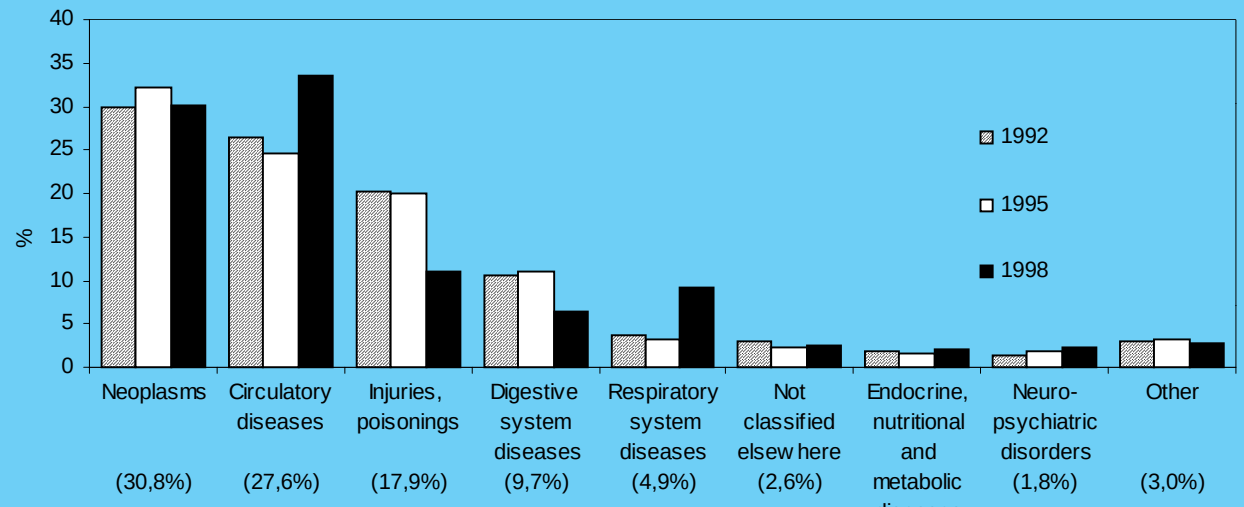
Indices of excess age specific mortality rates (Figure 13) show that, on average, males in the age group examined die at a rate that is twice the level for females. This difference is particularly obvious in the 25-34 age group, where the rate is four times higher

Table 23: Correlation between age groups from 25 to 64 years old and the cause of death*

		Neoplasms		Circulatory diseases		Injuries, poisonings etc.		Digestive system diseases		Respiratory system diseases		Other	
Age group	Year	M	F	M	F	M	F	M	F	M	F	M	F
25-34	1992	-	-	-	-	+	+	-		-			
	1995	-	-	-	-	+	+	-				+	
	1998	-	-	-	-	+	+						
35-44	1992	-		-	-	+	+			-			
	1995	-		-	-	+	+						
	1998	-		-		+							
45-54	1992									-	-		
	1995		+					+					
	1998				-							+	
55-64	1992	+		+	+	-	-			+			
	1995	+		+	+	-	-					-	
	1998	+		+	+	-	-					-	

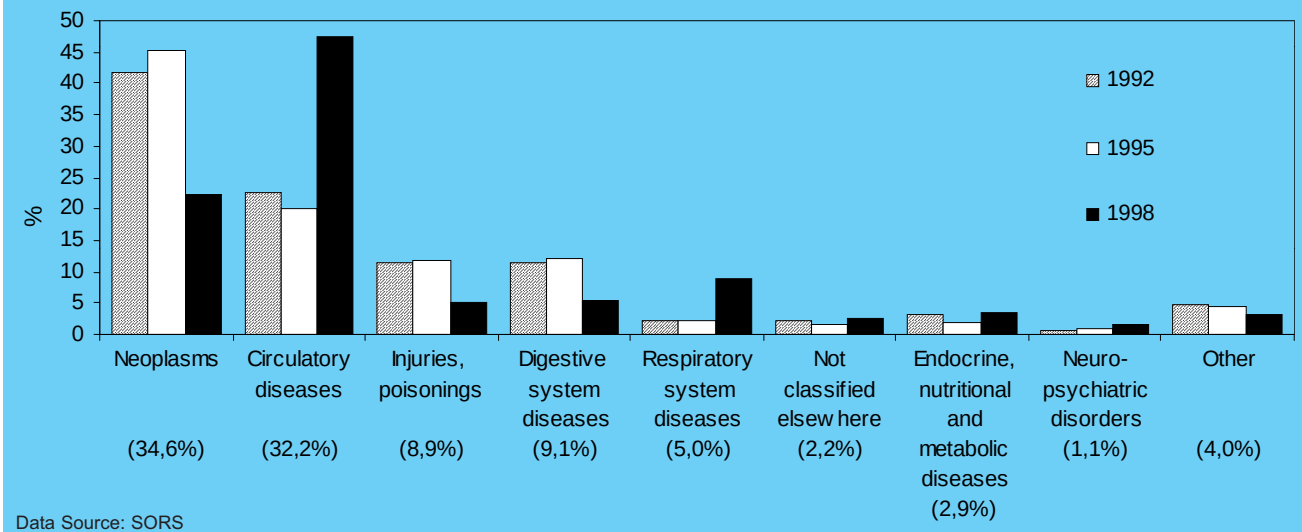
Note: *The "+" symbol denotes significant deviation of the contingency-table cell for a given year towards higher share (standardised normalised residual 2 or more), the sign "-" towards lower share (standardised normalised residual -2 or less). In the cells with no symbol, the share of the cause of death for given age group does not deviate significantly from the share of that cause of death in total sample. In all the years and for both sexes, the age group is statistically significantly correlated with the cause of death ($p<0.05$). Table should be read vertically.

Figure 11: Cause of death - males 1992, 1995 and 1998 (in %)



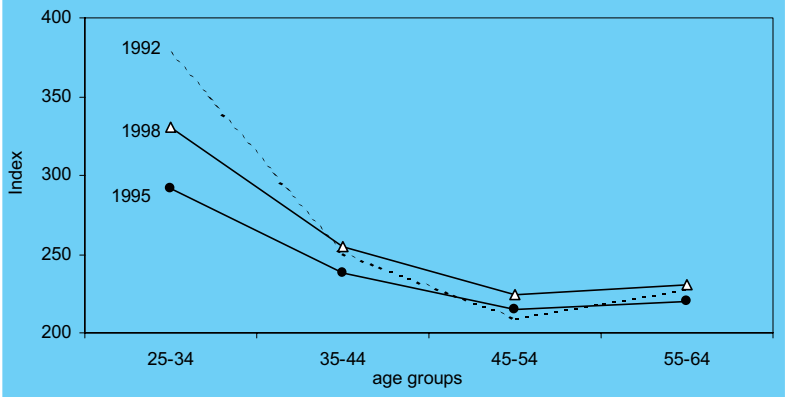
Data Source: SORS
Note: Values in brackets show the average of all three years.

Figure 12: Cause of death - females 1992, 1995 and 1998 (in %)



Data Source: SORS
Note: Values in brackets show the average of all three years.

Figure 13: Indices of excess* specific mortality for males in 1992, 1995 and 1998



Note: *Indices are computed on the basis of age-specific male and female mortality rates, whereby the female age-specific mortality equals 100.

Table 24: Standardised age specific mortality rates*, by sex, for 1992, 1995 and 1998 in Slovenia (per 100,000)

Age group	1992		1995		1998		Difference 1998-1992	
	Males	Females	Males	Females	Males	Females	Males	Females
25-34	167.4	44.5	137.7	47.6	130.2	40.4	-37.2	-4.1
35-44	313.6	132.2	286.0	127.1	280.4	115.0	-33.2	-17.2
45-54	743.3	359.2	704.6	333.8	645.8	305.4	-88.4	-53.8
55-64	2033.1	774.4	1814.8	729.4	1642.6	654.5	-390.6	-119.9
25-64	690.9	294.6	626.8	278.8	586.6	251.9	-104.3	-42.8

Note: *Standardised age specific rates relate to selected population from the database (N = 14816). For every year and for both sexes, the age group is statistically significantly correlated with the cause of death.

(Table 24). As expected, the lion's share of premature mortality is concentrated in the 55-64 age group. Specific mortality rates by sex decline with age (for males more than for females), whilst the (dis)proportion among the sexes remains high.

An analysis of the correlation between one's age at death and selected socio-economic and geographical characteristics using the one-way analysis of variance by ranks (the Kruskal-Wallis test) reveals statistically significant differences ($p<0.05$) with regard to *marital status*, *education* and *occupation* in all the observed years for both the deceased males and females in the studied population of premature death. Within this population, there is also a statistically significant correlation between *age at death* and *mother tongue*, which exists for deceased women in all selected years and for males in 1992. The development level of a region was found to be statistically significantly related to age only for males in 1998. The correlation between *personal income tax and age at death* is statistically significant for economically active males in the 26-64 age group. This is an expected result given the large sample size, and is practically negligible[25]: the values of the Pearson and Spearman correlation coefficients are below 0.1.

Income

An individual's *income* is an important determinant of survival (or, broadly, of the quality of life) and death. It is nevertheless only one of many factors affecting our opportunities to enjoy life (see Socio

[25] It explains a very small share of variance.

economic indicators – Income Status). The correlation between income (proxied by personal income tax) and mortality (all causes of death included) proved to be very complex and non-linear. Since no data on personal income tax were available for years other than 1998, more detailed results are not presented here. The analysis of existing data shows that the income of females is concentrated at lower values than the income of males, but these data should be compared to data on personal income tax for surviving individuals from the same period, which we have not obtained yet.

Education

The education level of an individual, as an important determinant of one's socio-economic status and social mobility, is a less controversial explanatory determinant than income and can, unlike occupation, be attributed to (almost) everyone. The study shows that individuals with the lowest education levels have higher mortality rates for certain diseases. An individual's health is strongly negatively correlated with worse educational and material opportunities. Educational differences in the mortality of the population aged between 25 and 64 indicate that in absolute - and even more so in relative - terms, people who did not complete primary school are most prone to premature death, and that a higher education level is an important protective factor.

The analysis of contingency tables (as summarised in Table 25) shows that, in statistically significant terms, females with the lowest levels of education die less frequently due to neoplasms (marked by "-") than females who have completed higher education levels. However, the term neoplasms is an umbrella term for a variety of neoplasm (cancer) types, which have different effects on various socio-economic groups. Females with a higher level of education more often die from breast cancer, whereas females who did not complete primary school more frequently (marked by "+") die from cardiovascular (circulatory) diseases. The latter, on the other hand, significantly less frequently afflict those females with tertiary education than other groups.

Table 25: Correlation between education and cause of death*

		Neoplasms		Circulatory diseases		Injuries, poisonings etc.		Digestive system diseases		Respiratory system diseases		Other	
Education	Year	M	F	M	F	M	F	M	F	M	F	M	F
Unfinished primary school	1992												
	1995		-		+		-			+			
	1998		-		+	-		+	+	+			
Primary school	1992						-						
	1995								+				
	1998					+					+		
Vocational school	1992				-						-		
	1995		+										
	1998								-				
Secondary school	1992									-			
	1995		+			+	+	-	-	-			-
	1998		+	+				-		-			-
Higher, high education	1992			+	-		+	-		-			
	1995				-		+	-		-			
	1998		+		-				-	-			

Notes: *The "+" symbol denotes significant deviation of the contingency table cell for a given year towards higher share (standardised normalised residual 2 or more), sign "-" towards lower share (standardised normalised residual -2 or less). In the cells with no symbol, the share of the cause of death for given level of education does not deviate from the share of that cause of death in total sample. In all the years and for both sexes, the level of education is statistically significantly correlated with the cause of death ($p<0.05$). Table should be read vertically.

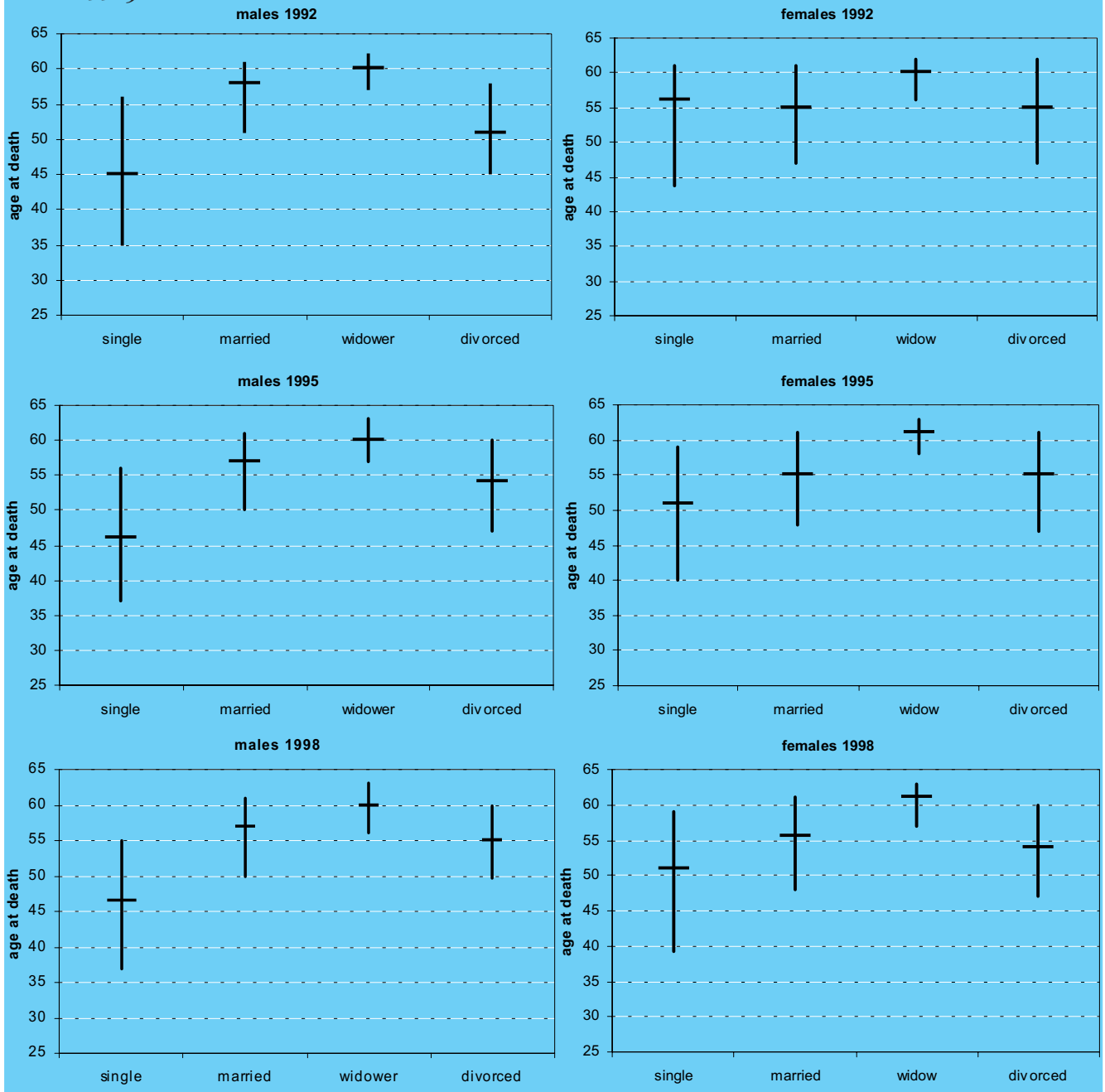
Males who did not complete primary school die significantly more frequently due to respiratory system diseases that - together with digestive system diseases - are less common among males who have completed secondary or tertiary education. These groups of males, however, die more often due to circulatory diseases, of which ischaemic heart disease stands out.

Education is closely related to the cause of death

Marital status

In line with the theory of the socio-economic determinants of health, marriage or a stable relationship has a positive effect on an individual's health. Such a relationship, acting as a social (protective) network and source of emotional support, provides a buffer against social stresses. The correlation shown in Figure 14 shows that, on average, single individuals of both sexes die earlier than others, followed by divorced individuals. Married and widowed males live longest among males in general. For females, there are no significant differences in mortality between being divorced and being married, but married women die somewhat younger than married men. It seems that the

Figure 14: Quartiles of age distribution with regard to marital status* (by sex, for 1992, 1995 and 1998)



Note: Each diagram shows the median (horizontal line) and 1st and 3rd quartiles (the upper and the lower end of the vertical line) for each marital status.

accumulation of social roles (the cumulative principle holds in particular for females, which increases the probability of related stress), also has negative consequences and can thus be referred to as a risk factor.

The analysis also shows lower mortality due to neoplasms among single males and single females, and lower mortality due to circulatory diseases for single males. For married males, the trend is the opposite (Table 26) as they die more often due to neoplasms (lung cancer in particular) and circulatory diseases (ischaemic heart disease in particular). Single individuals more often die from external causes of death, which are a less pronounced cause of death for married males.

Occupation

As one's work environment is one of the important factors influencing health, we selected occupation as one of the explanatory variables. However, the test statistics show no statistically significant differences in deaths between various occupations neither for males nor for females. The only exceptions are deaths due to external causes (injuries) in all

occupation groups for males. For retired people, however, mortality due to neoplasms and circulatory diseases is statistically significantly more frequent. However, this pattern cannot be observed in all analysed years and these differences require further analysis.

Table 26: Correlation between marital status and cause of death*

		Neoplasms		Circulatory diseases		Injuries, poisonings etc.		Digestive system diseases		Respiratory system diseases		Other	
Marital status	Year	M	F	M	F	M	F	M	F	M	F	M	F
Single	1992	-	-	-		+	+				+	+	+
	1995	-		-		+				+		+	+
	1998	-	-	-		+	+			+	+	+	+
Married	1992	+	+	+		-							
	1995	+		+		-							
	1998	+		+		-						-	-
Widowed	1992				+		-		+	+			
	1995								+				
	1998							+	+				
Divorced	1992												
	1995												
	1998												

Note: *See Tables 23 and 25 for explanation. Marital status is statistically significantly correlated with the cause of death in all years for both sexes.

Environment

In the study, *the environment* is defined by the residence of the deceased individual at their death. The most important characteristics of the environment, especially the geographical differences, are linked to differences in mortality. The environment determines one's quality of life and mortality because it determines the accessibility of health care, other social services and the quality of urbanisation. Individuals dynamically interact with their environments. The environment and the degree of urbanisation determine the economic as well as the social infrastructure. Our analysis was based on 12 statistical regions, which can be grouped into three clusters in terms of their developmental opportunities[26]: (i) *prosperous regions* with positively assessed developmental potential - Central Slovenia, Obalno-kraška, Gorenjska, Dolenjska and Goriška regions; (ii) *stagnant regions*, with some positively assessed developmental potential - Savinjska, Podravska, Koroška and Notranjsko-kraška; and (iii) *regions with poor socio-economic conditions*, with limited developmental potential - Spodnjeposavska, Pomurska and Zasavska.

Statistical tests confirm our hypothesis regarding disparities among the regions. They show statistically significant correlations between regions (statistical regions as well as clusters), causes of death and age at death (Table 27). Detailed results are not included in this Report due to their complexity and the need for further analysis.

As shown in Table 27, differences in the average age at death between statistical regions can be observed. In 1992, the difference between regions with the lowest and regions with the highest average age at death was 6 years. Over the course of the years the differences have narrowed but they nevertheless remain significant. The data for regional clusters are relatively surprising since the differences are hardly noticeable. The differences in the median age at death among the active population (both sexes) are not statistically significant between statistical regions nor between the clusters of regions in all the observed years. The only exception is a statistically significant difference for *deceased males* in the 25-64 age group in 1998 between prosperous regions, stagnant regions and those with poor socio-economic conditions.

The environment is an important determinant of the quality of life

An unanswered question here is the extent to which health affects development and vice versa. No answer cannot be given on the basis of the available data, although it has engaged researchers in social medicine, health sociology and health economics in a lively debate. Moreover, it should also become part of the public policy agenda.

[26] In 1997, experts from the Institute for Economic Research (IER) in co-operation with colleagues from the Urban Planning Institute of the Republic of Slovenia and the Faculty of Economics in Ljubljana developed a method for the expert assessment of developmental opportunities of Slovenian regions, which was subsequently further improved (Kavaš Damjan, IER). This method is based on the assumption that the development of a region cannot only be measured by routine statistical data. In addition to the current situation in the region, its developmental opportunities are vital. These are to a large extent based on the endogenous potential of regions.

Figure 15: Cause of death by region, males, 1992, 1995, 1998

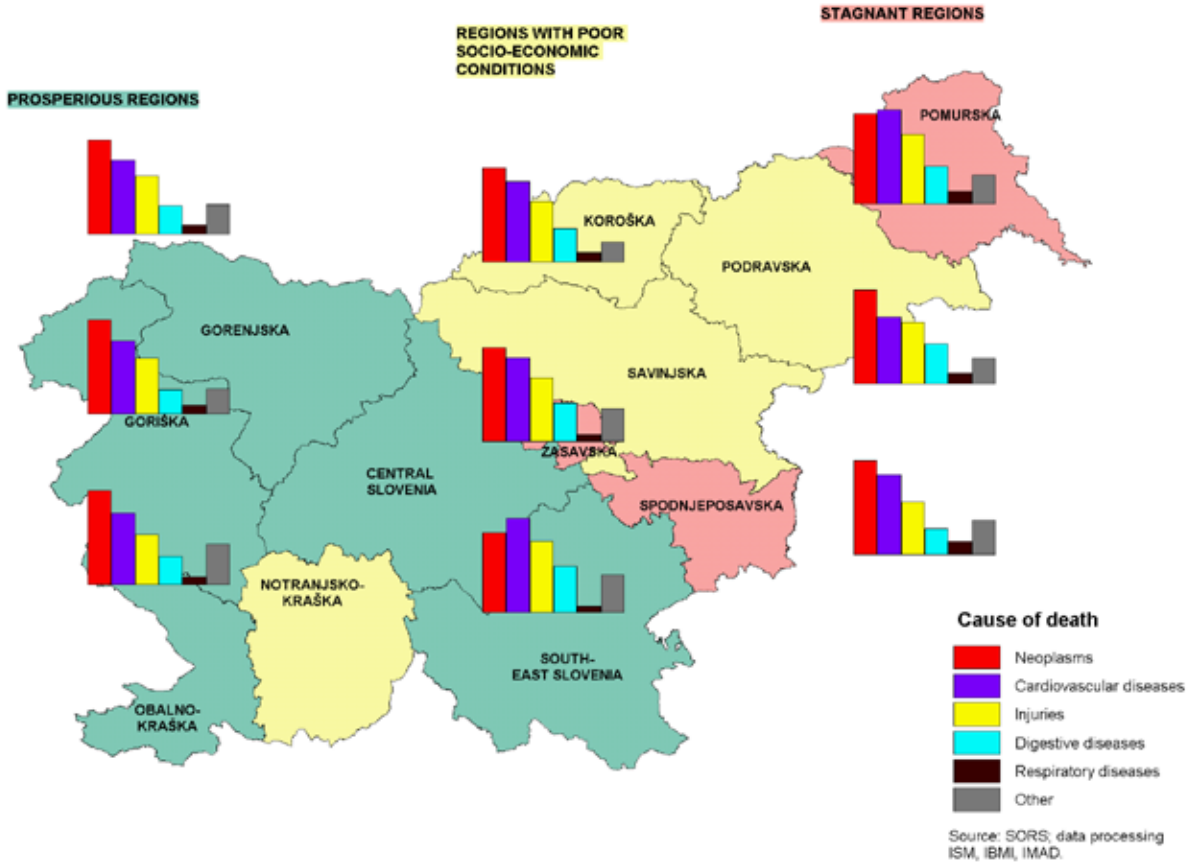


Figure 16: Cause of death by region, females, 1992, 1995, 1998

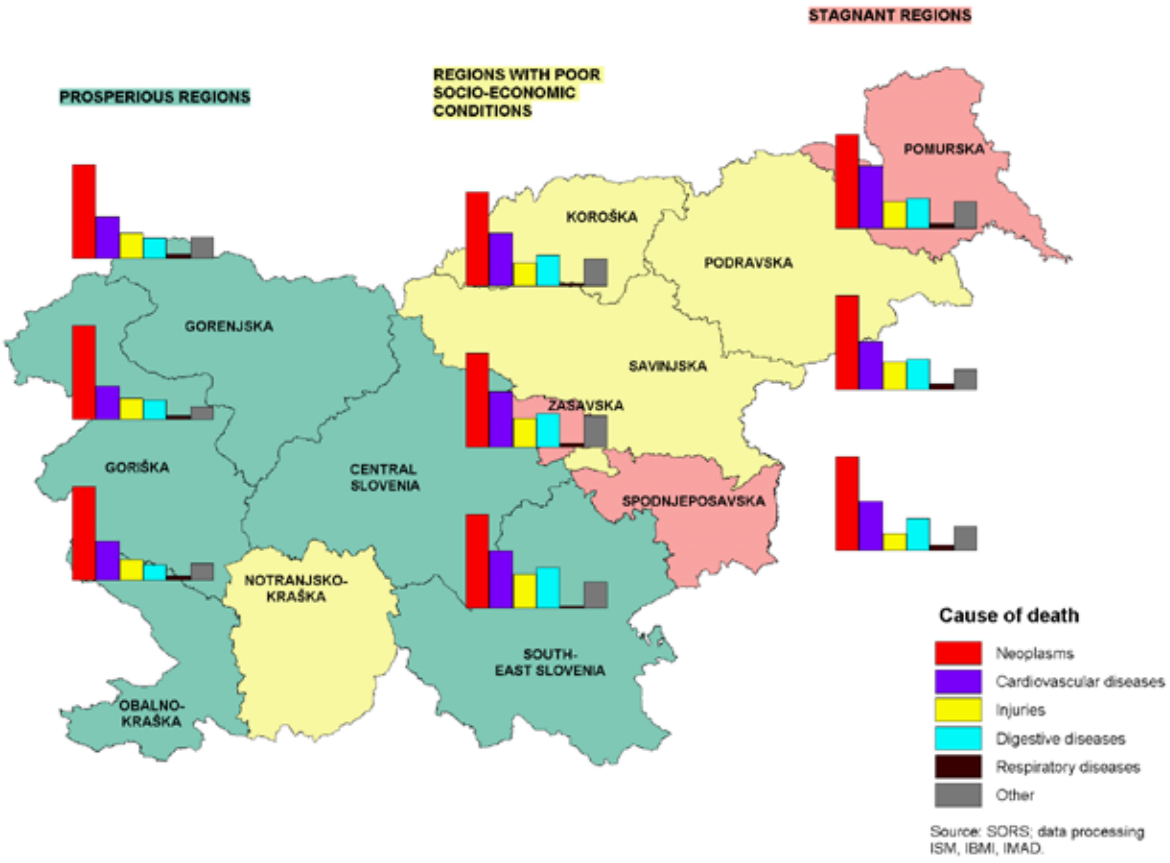


Table 27: Average age at death (in years) by region and cluster of regions, by sex for selected years*

Sex and year	Average age at death	Median age at death	The lowest average of all regions	The highest average of all regions	Difference betw. lowest and highest average	Average of prosperous cluster of regions	Average of stagnant cluster of regions	Av. of regions with poor socio-economic conditions
Males 1992	66.3	68	63.8 (Zasavska)	70.0 (Goriška)	6.2	66.5	65.6	66.7
Females 1992	74.8	79	73.7 (Zasavska)	77.1 (Goriška)	3.4	75.2	74.2	75.2
Males 1995	66.8	68	65.0 (Dolenjska)	69.3 (Notranjsko - kraška)	4.3	67.0	66.3	67.0
Females 1995	75.4	79	73.86 (Koroška)	78.8 (Goriška)	5.0	75.8	74.7	75.5
Males 1998	67.0	69	65.3 (Dolenjska)	69.8 (Notranjsko - kraška)	4.5	67.4	66.6	66.6
Females 1998	76.1	78	75.0 (Koroška)	78. 4 (Notranjsko - kraška)	3.3	76.5	75.5	76.0

Note: *N (aged 0+) = 54,419

The age at death has become an important indicator next to causes of death and should be given appropriate attention particularly in health care. A regression model with optimal scaling, with sex, cluster of regions, occupation, marital status, mother tongue and education as independent variables, and the age at death (for the entire population) as a dependent variable explains more than 50% of the respective variance. A more detailed interpretation of those results is beyond the scope of this Report. It must be emphasised, however, that the results of a similar multivariate procedure (CATREG) used in predicting the causes of death for the active population on the basis of selected independent factors almost entirely confirmed the results of bi-variant analyses and hierarchical log-linear models.

This Report contains only partial results from the analysis of the correlation between socio-economic factors and health (mortality). To our knowledge, this is the only research in Slovenia that covers all deceased individuals. We expected the differences in mortality to be subject to the socio-economic status of individuals, i.e. that people with a lower education, lower income, the unemployed etc. are on average expected to die younger and from different causes than people with a higher education and higher economic status. However, the results presented in this Report require further analysis. A final answer to the hypotheses set out at the beginning is thus still not possible. We can conclude though that, apart from sex, classical stratification factors are important determinants of the cause of death and the age at death. In the 25-64 age group, marital status, education and income are statistically significantly correlated with the cause of death. For both sexes, being single, having a higher education and a higher income are all risk factors for deaths due to injuries. Death due to neoplasms is more likely for married individuals, those with a high education and higher income. Single males, persons with a lower education and lower incomes die, on average, at a younger age than married, better educated and better paid males. Sex is also an important determinant of the risk factors of mortality - male and female mortality differs greatly. As many previous researchers have shown and our analysis has confirmed, males in all age groups and social strata die on average younger than females and due to other causes.

Traditional stratification factors important determinants of the cause of death

Yet we have to be aware that the overall probability of dying equals certainty, and that the sum of the causes of death is always 100%. Unavoidably, each important drop in a certain cause of death has, as a consequence, led to an increase in another. Every rise in one cause of death is not necessarily a reason for alert. It can only

be a logical consequence of increased life expectancy, which brings along with it increased chances of death due to old-age diseases (Uhl, 2002).

Years of potential life lost due to injuries equal total years lost due to cardiovascular diseases and neoplasms

The research whose results are partly presented in this Report has been designed so as to allow the database to be upgraded every three years. The continued monitoring of the correlations between causes of death and risk factors is thus made possible. By linking different databases, useful information can be obtained about individual dimensions of health and disease. Direct findings are not only related to the prevalence of health conditions but can lay important foundations for establishing socio-economic diagnoses, e.g. for determining the health condition of the general population and the related socio-economic factors. With such analyses, we obtain information about the nature, prevalence and consequences of health problems. This should serve as the basis for setting policy priorities, planning policy measures and for health care services in general. Learning about individual causes of death and their relative significance allows us to monitor the evolution of public health. Each cause of death namely raises many questions about an individual's lifestyle, living environment, health care etc.

Since the patterns of morbidity exhibit similar trends to mortality, we hope that this and other similar analyses of the connections between the socio-economic determinants and public health of the population will contribute to the planning and designing of national programmes to improve the public health of the Slovenian population in the future.

Deaths due to injuries are just the 'tip of the iceberg'

3.2 The problem and conceptualisation of injuries

Injuries are a public health problem, both in Slovenia and around the world. We lose many children and young people because of injuries, which connects this problem with the issue of early mortality. Early mortality is measured by Years of Potential Life Lost (YPLL), i.e. the years of potential life the person could live until the age of 65 if he/she would not have died before that. In Slovenia, approximately one-third of YPLL is lost due to injuries. In 1998 (the year for which most internationally comparable data are available), injuries caused the death of 5.8 million people throughout the world, i.e. almost 16,000 people per day, and accounted for 7 percent of total deaths. According to World Health Organisation projections, by 2020, injuries will have become the second most common cause of death, after chronic non-infectious diseases and ahead of infectious diseases (Melbourne Declaration, 1996).

Mortality is a very important indicator of the magnitude of a public health problem. However, it represents only the top of the pyramid (Figure 17). It is important to realise that for each death from an injury there are many non-fatal injuries that result in hospitalisation, treatment in emergency departments or by general practitioners, and treatment outside hospitals. Thanks to the progress achieved in medicine, the number of people surviving injuries has increased. However, many of them undergo long-term rehabilitation or suffer a lifelong impairment. It is estimated that every year, 78 million people in the world are permanently impaired as a result of injuries. When an injury occurs, a person faces physical, emotional, social and economic problems whereas society experiences a considerable financial loss due to the increasing costs of medical treatment, the loss of days at work as well as the damage, impairment or hindrances of the people recovering from injury.

Each year, direct and indirect injury-related costs account for 1 percent of total gross domestic product, both in industrialised and developing countries. This does not include the psychological distress resulting from disabilities suffered after the injury and the loss felt by family members and the broader community upon the death of an injured person.

According to the epidemiological approach to the study of injuries, injuries are not accidentally (randomly) distributed among the population. The magnitude of the problem varies considerably by age, sex,

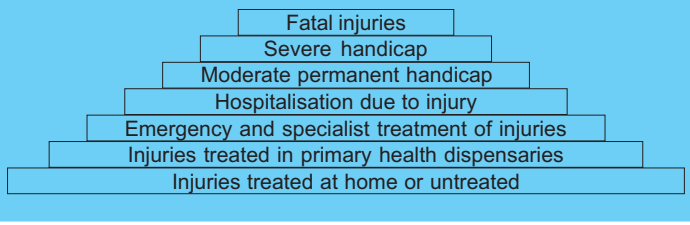
country, region, time, etc. The study and awareness of this unequal distribution or its causal factors is the basis for drawing up prevention programmes. In the analysis and formulation of prevention programmes data on the *external causes of injuries* are used. In this respect, an injury is most often grouped into categories according to whether it occurred intentionally (violence, self-inflicted injury, legal intervention, operations of war), unintentionally (transport accidents, falls, drowning, suffocation, fire exposure, poisoning etc) or as an event of an undefined purpose. Health-related statistics further distinguish between work injuries and injuries that occur away from the workplace, which refers to people in employment. The present text presents injuries through individual years on the basis of the available data: 1) per consequences (fatal injuries, hospitalisations, primary health care dispensary visits etc); 2) per subgroups of injuries in terms of the external causes of injuries (in the event of fatal injuries: car accidents, self-inflicted injury, violence etc; other consequences include falls); 3) per sex; 4) per age groups; 5) with absolute numbers, percentages and standardised rates (if not explicitly indicated otherwise, the standardised death rate per 100,000 inhabitants is used – SDR); 6) with time lines and/or 7) in spatial terms: Europe (51 European countries according to the list of the World Health Organisation), EU-15, CEE (Slovenia, the Former Yugoslav Republic of Macedonia, Bulgaria, Albania, Slovakia, the Czech Republic, Croatia, Romania, Poland, and Hungary; as well as Bosnia and Yugoslavia, for which no data are available), CIS (15 'new' states created in the territory of the former Soviet Union - Common wealth of Independent States. Exceptionally – in order to ensure the consistency of data in the period before 1990 – this group includes Estonia, Lithuania and Latvia).

In 1998, the world's average standardised death rate per 100,000 inhabitants was 97.9; 86.7 in Europe; 171 in CIS; 66.3 in CEE; and 40.6 in the EU-15. The death rate arising from injuries in Slovenia is 77.5; it is below the CIS rate and above the CEE rate. The standardised death rate from injuries in the EU and CEE (including Slovenia) in 1998 was lower than in 1991.

Highlight 7: Defining injuries

An injury (laesio) is a bodily lesion at the organic level resulting from acute exposure to energy interacting with the body in amounts that exceed the threshold of physiological tolerance. Such energy may be mechanical, thermal, electrical, chemical or radiant. In some cases (drowning, strangulation, freezing), the injury results from an insufficiency of a vital element. The time between exposure and the appearance of the injury needs to be short. Injuries do not include the state of health resulting from long-lasting stress such as chronic pain in the renal part of the back or poisoning from an infection.

Figure 17: Injury pyramid



But that is not true of the CIS and, consequently, of the average of the entire European WHO region (Figure 18).

Highlight 8: Methodological explanations

Health-related statistics use the definition of injuries according to the International Statistical Classification of Diseases and Related Health Problems; the ICD-10 has been used since 1997 which makes time comparisons more difficult; Chapter XIX: Injuries, poisonings and other consequences of external causes, and Chapter XX: External causes of morbidity and mortality. This entails different *types* of injury (superficial injury, wound, fracture, sprain, dislocation, strain, poisoning etc) and injured body parts (head, neck, extremities, thorax, abdomen etc). In the 1988-1996 period, groups of external causes are defined according to the ICD-9, whereas in the period after 1997 they are defined according to the ICD-10 as transport accidents (E800-848 or V01-99), falls (E880-888 or W00-19), self-inflicted injury (E950-959 or X60-84) and violence (E960-E969 or X85-Y09).

Data on mortality and morbidity are indicated in absolute numbers, percentages and age-specific rates, i.e. as the number of dead or ill persons of a certain age per 100,000 inhabitants of the same age. The data on deaths are taken from the database of the Slovenian Institute of Public Health on the basis of medical death certificates as well as the cause of death and DEM2 forms. The data on hospitalisations were obtained from the records on hospital treatment for injuries and the records on hospital treatment for poisonings maintained by the Institute of Public Health. The data on medical examinations of injuries and poisonings in primary health care dispensaries are taken from the record of primary health care - the computerised report (ZUBSTAT) maintained by the Institute of Public Health. The data on rehabilitation were obtained from the records on dispensary and hospital physical medicine and rehabilitation (Institute of Public Health), while the data on temporary absences from work are taken from the record of data on temporary and permanent absences from work due to illness, injuries, care, attendance and other reasons (Institute of Public Health). The data on the residents of Slovenia are taken from the Central Population Register (Statistical Office of Slovenia). The data on standardised mortality in various countries come from the Health for All database, 2002, the World Health Organisation.

Figure 18: SDR, external causes in the EU, CEE and CIS, per 100,000 inhabitants

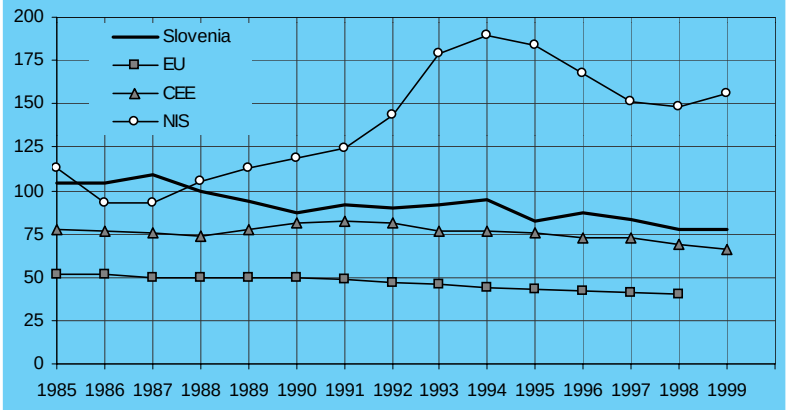


Figure 19: SDR, motor vehicle accidents in the EU, CEE and CIS, per 100,000 inhabitants

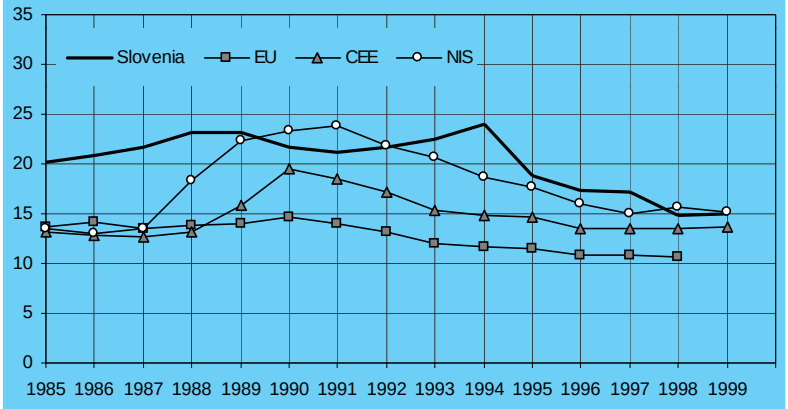


Figure 20: SDR, other external causes in the EU, CEE and CIS, per 100,000 inhabitants

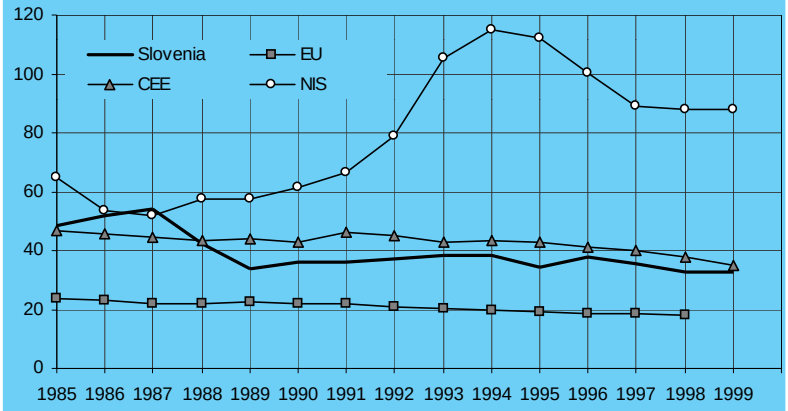
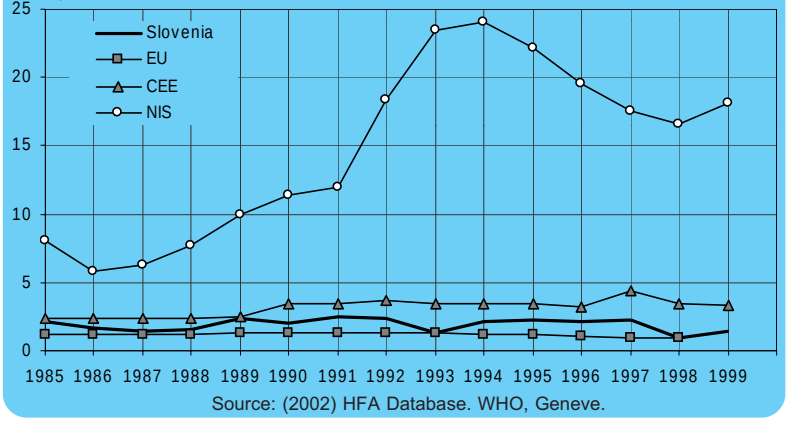


Figure 21: SDR, violence in the EU, CEE and CIS, per 100,000 inhabitants



Source: (2002) HFA Database. WHO, Geneve.

In the HFA database, injuries are divided into four subgroups according to the external cause of injury involved: motor vehicle accidents, other external causes, self-inflicted injury (suicide) and violence (homicide).

In all of the country groups covered by the analysis including Slovenia, the average rate of death from motor vehicle accidents dropped (Figure 19).

In the *EU member-states*, the average death rate in all four subgroups of injuries resulting from external causes fell constantly from 1991 to 1998. In the *CIS* group, only the rate of motor vehicle accidents was lower in 1999 than in 1991, whereas the death rate from violence, self-inflicted injury and other causes increased.

Compared to other countries in the European WHO region, the CIS group of states recorded significantly higher death rates due to 'other external causes of injury' and violence in 1998. In most CIS states, the rates were above 60 (in Russia even 109), while in the CEE countries the rates ranged between 20 and 45 and were even below 20 in the EU (Figure 20). The rate of fatal injuries from violence in the EU and CEE countries was less than 4 deaths per 100,000 inhabitants. Slovenia is *below* the CEE average and very close to the EU average (Figure 21). However, Slovenia's rates of death from self-inflicted injury and motor vehicle accidents are close to the CIS average or even exceed it in certain years between 1991 and 1999 (Figures 19 and 22).

Among the EU-15 countries (Figure 23), looking at all injuries together and comparing 1991 and 1998/1999, Finland ranks the worst, preceded by France, while the UK and the Netherlands rank best on the list. The reasons for their different rankings can be explained if we look at the subgroups of injuries. The differences in the violence subgroup are insignificant. Given the most recent available data (1998/1999), the lowest death rate from motor vehicle injuries is recorded by Sweden, the Netherlands and the UK, whereas the most critical countries in this respect are Belgium, France, Luxembourg and the four southern EU member-states (Portugal, Greece, Spain

and Italy). However these four countries, together with the UK, have the lowest rate of deaths from self-inflicted injury; the highest death rates in this subgroup are recorded by Finland and Austria. In the subgroup *other*, the lowest death rates are recorded by the Netherlands, Germany, Greece, Spain and the UK, and the highest by Finland and France.

In the countries of *Central and Eastern Europe* (12 WHO members, *no data are available for Bosnia and Yugoslavia*), the death rate from injuries dropped from 82.7 in 1991 to 66.3 in 1999. Similarly, the death rates in all four subgroups of injuries resulting from external causes were also lower in 1999 compared to 1991. Hungary, Croatia (this country is questionable; its trends were 'unusual' due to the war), Slovenia and Poland ranked worst among the ten countries in the 1991-1998/1999 period. In the subgroup of self-inflicted injuries, Slovenia ranks just after Hungary, which has the highest death rate, and before Croatia. These countries (together with Poland) are also the most critical in terms of motor vehicle accidents; Hungary even has a considerably high death rate in the subgroup of other injuries. In terms of fatal injuries from violence, there are no significant differences between the various countries; in all countries, the death rates are below 5 cases per 100,000 inhabitants. Both on the whole and by subgroups (motor vehicle accidents, self-inflicted injury, violence, other accidents), the best-ranking countries are the Former Yugoslav Republic of Macedonia, Bulgaria and Albania.

In the CIS group, the three Baltic countries and Russia, together with the Republic of Belarus and Kazakhstan in 1998, recorded the highest death rates due to injuries in 1991. The best ranking countries are Georgia, Azerbaijan and Tajikistan. In terms of mortality due to motor vehicle accidents, the developing and most developed countries are very similar to each other as far as the consequences are concerned, although the underlying causes are different: some countries record fewer deaths due to injuries because of their underdevelopment, while others record fewer due to their development.

Figure 22: SDR, self-inflicted injury (suicide) in the EU, CEE and CIS, per 100,000 inhabitants

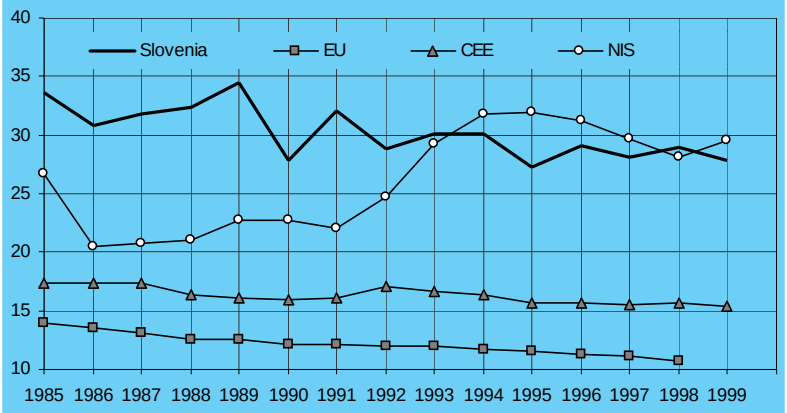
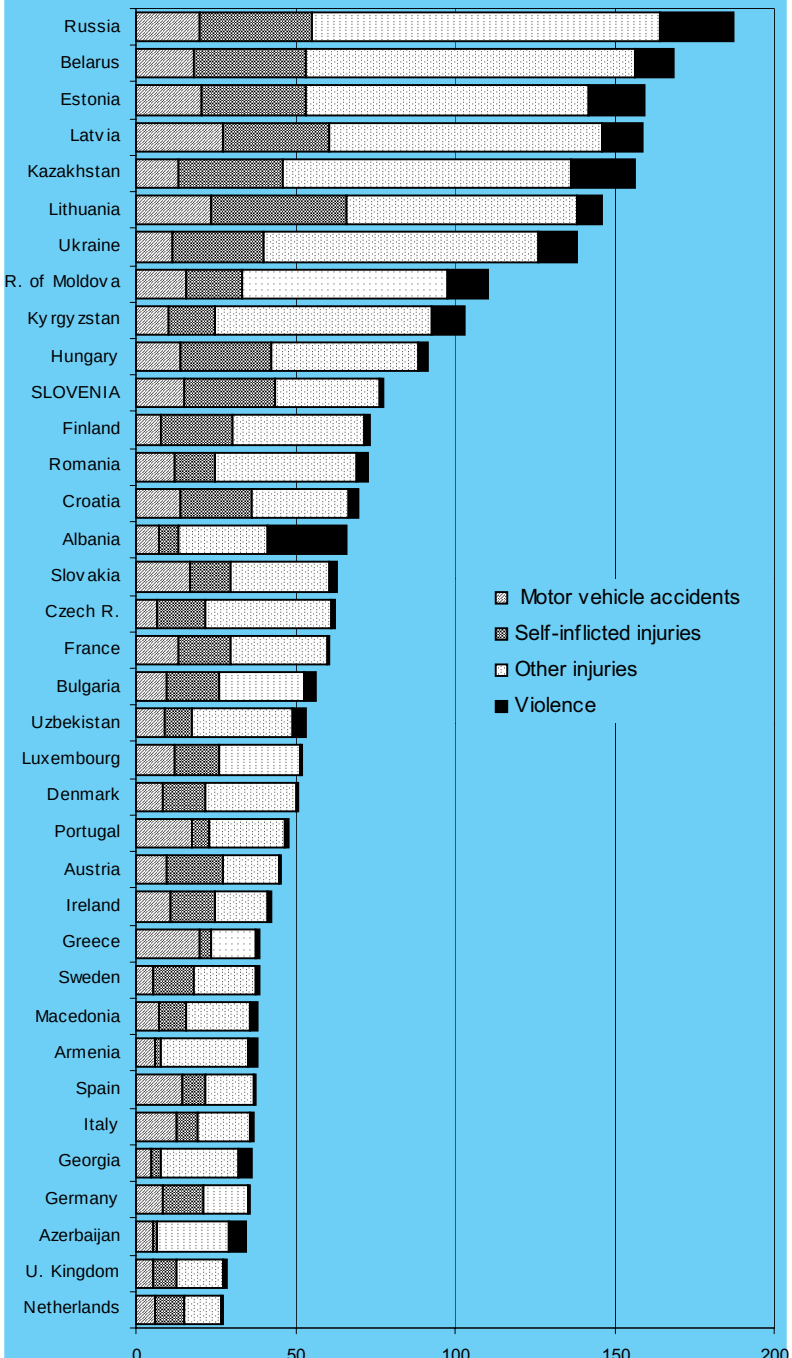


Figure 23: SDR, external causes, selected countries, 1998, per 100,000 inhabitants



Source: (2002) HFA Database. WHO, Geneve.

Injuries and their consequences in Slovenia

Deaths due to injuries in Slovenia

In the period between 1995 and 1999, an average of 1721 people died every year due to injuries and poisoning. What is most striking is the fact that injuries and poisonings were the leading causes of mortality among children (1-14 years), adolescents (15-19 years) and young adults (20-44 years) (Table 28).

Age-specific mortality in Slovenia increases with the age of injured people and is the highest among people aged above 80. Studies have proven that the death rate among the elderly – even when death results from equally serious injuries – is disproportionately higher than the death rate among younger injured people, which is understandable since the health and

Table 28: Injuries - one of the five leading causes of death by age groups, 1998

R/L	0 yrs	1-3	4-6	7-9	10-14	15-19	20-29	30-39	40-49	50-59	60-64	65-74	75-84	85+	All
1	XVII	**XIX**	**XIX**	**XIX**	**XIX**	**XIX**	**XIX**	**XIX**	II	II	II	IX	IX	IX	IX
	41	9	6	3	11	75	154	163	290	657	601	1923	2479	2333	7931
2	XVI	XVII	II	II	II	XVIII	II	II	**XIX**	IX	IX	II	II	X	II
	37	5	3	2	3	8	22	83	231	472	434	1636	1045	535	4795
3	XVIII	II	VI	IV	IV	IX	XVIII	IX	IX	XI	XI	X	X	II	X
	4	2	2	1	3	5	22	45	228	202	144	353	500	447	1538
4	IV	VI	other	XVIII	IX	II	VI	IX	XI	**XIX**	**XIX**	XI	XI	XVIII	**XIX**
	3	2	3	1	3	4	9	41	111	187	108	309	179	229	1462
5	other			I	other	VI	V	XVII/	XVIII	X	XI	**XIX**	**XIX**	**XIX**	XI
	4			1	3	4	8	18	57	49	61	207	164	142	1116
All	93	21	14	8	23	103	240	405	1065	1776	1501	4828	4859	4103	19039
M	E	N													
R/L	0 yrs	1-3	4-6	7-9	10-14	15-19	20-29	30-39	40-49	50-59	60-64	65-74	75-84	85+	All men
1	XVII	**XIX**	**XIX**	**XIX**	**XIX**	**XIX**	**XIX**	**XIX**	**XIX**	II	II	IX	IX	IX	IX
	27	5	5	3	7	57	123	141	196	415	403	1051	968	606	3516
2	XVI	XVII	II	II	IV	XVIII	II	II	II	IX	IX	II	II	X	II
	26	4	3	2	2	8	16	39	167	365	310	1000	494	198	2709
3	XVIII	II	XVIII	IV	IX	IX	XVIII	IX	IX	**XIX**	XI	X	X	II	**XIX**
	2	2	1	1	2	4	15	39	153	146	99	240	256	180	1002
4	IV		XVII	XVIII	X	II	VI	XI	XI	XI	**XIX**	XI	**XIX**	XVIII	X
	2		1	1	1	2	9	28	80	125	75	180	63	52	809
5	**XIX**		I			other	V	V	V	XVIII	X	**XIX**	XI	**XIX**	XI
	1		1			4	7	18	47	60	46	139	62	41	607
All	58	11	11	7	12	76	186	307	751	1249	1035	2817	2018	1188	101731
W	O	M	E	N											
R/L	0 yrs	1-3	4-6	7-9	10-14	15-19	20-29	30-39	40-49	50-59	60-64	65-74	75-84	85+	All women
1	XVII	**XIX**	VI	I	**XIX**	**XIX**	**XIX**	II	II	II	II	IX	IX	IX	IX
	14	4	2	1	4	18	31	44	137	242	198	872	1511	1727	4415
2	XVI	VI	**XIX**		II	XVIII	XVIII	**XIX**	IX	IX	IX	II	II	X	II
	11	2	1		3	2	7	22	61	107	124	636	551	337	2086
3	XVIII	other			other	II	II	XI	**XIX**	XI	XI	XI	X	II	X
	2	4			4	2	6	13	35	77	45	129	244	267	729
4	XV					VI	IX	IX	XI	**XIX**	**XIX**	X	IV	XVIII	XI
	2					2	3	6	31	41	33	113	119	177	509
5	other					X	X	VI	XVIII	XVIII	X	IV	XI	**XIX**	**XIX**
	6					2	2	6	14	17	15	73	117	101	460
All	35	10	3	1	11	27	54	98	314	527	466	2011	2841	2915	9313

Source: www.gov.si/ivz, Number of deaths and mortality rate by ICD-10, 1998.
Note: R- rang; XIX - injuries and poisonings; II - malign tumours; IX - circulation diseases; X - respiratory diseases; XI - digestive system diseases, IV - endocrine, nutrition and metabolism diseases; XVIII - symptoms, signs and abnormal diagnoses not classified elsewhere.

physical conditions of the elderly are, on average, worse than those of the young. At this point, it should again be stressed that comparing the absolute number of deaths per age groups might be misleading. The fact is that more deaths from injuries occur among older people. Older people, however, also die in larger numbers from other causes and the share of injuries among the causes of death amongst older people is thus smaller compared to younger people. The share of injuries among the causes of death for young people is in fact an issue that raises the most concern. Unlike tumours, cardio-vascular diseases and other chronic illnesses, injuries affect mostly younger people. In Slovenia, they represent the main cause of death of people aged between 1 and 44 and result in a 27.4 percent loss of potential years of life.

In the 1995-1999 period, injuries accounted for 35.1 percent of all deaths among pre-school children, 47.3 percent of deaths for those from 7 to 14 years of age, 73.9 percent of deaths for those from 15 to 19 years of age, 46.7 percent of deaths for those from 20 to 44 years of age, and 5 percent of deaths in the age group above 64. There is also a significant difference between men and women (Figure 24): 50% fewer women died from *injuries* than men. For women, injuries are the leading cause of death up until their 30s, while they remain the leading cause of death for men up until their 50s. Between 60 and 64 years of age and above 85, injuries affect both sexes equally and represent the fourth and fifth leading causes of mortality, respectively.

Between 1995 and 1999, the most prevalent injuries were unintentional (65 percent) and only 35 percent were intentional. The external causes of unintentional injuries most often included falls, transport accidents (car passengers, pedestrians, etc.), and accidental exposure to and poisoning from harmful substances. The most frequent intentional injury was self-inflicted injury - suicide (Figure 25).

One can see that in different age groups, different external causes of injury prevail. The most common injuries in the group between 15 and 19 years of age arise from transport accidents; for people between 20 and 64 years of age, from self-inflicted injury; and for persons above 64, from falls. Differences between the sexes are huge. Men are three times as likely to die from self-inflicted injury and transport accidents than women. Self-inflicted injury is the leading cause of death for both men and women: for men, it is the leading cause of death between 30 and 50 years of age, and for women, between 30 and 64 years of age. At older ages, the main cause of death for men and women are falls (Figures 26, 27).

Figure 24: Incidence of deaths due to injuries by sex and age specific death rates, 1998

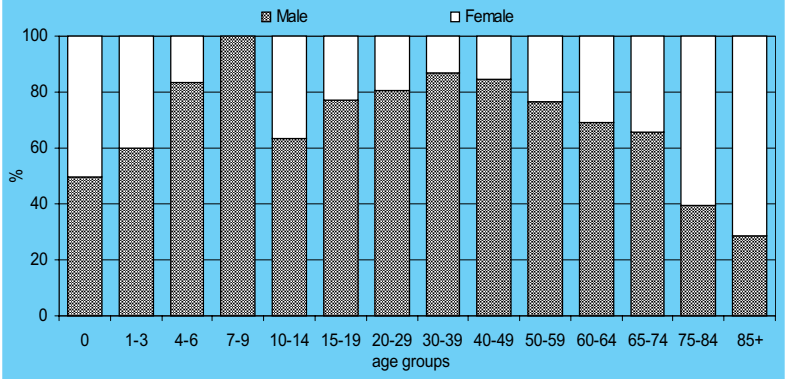
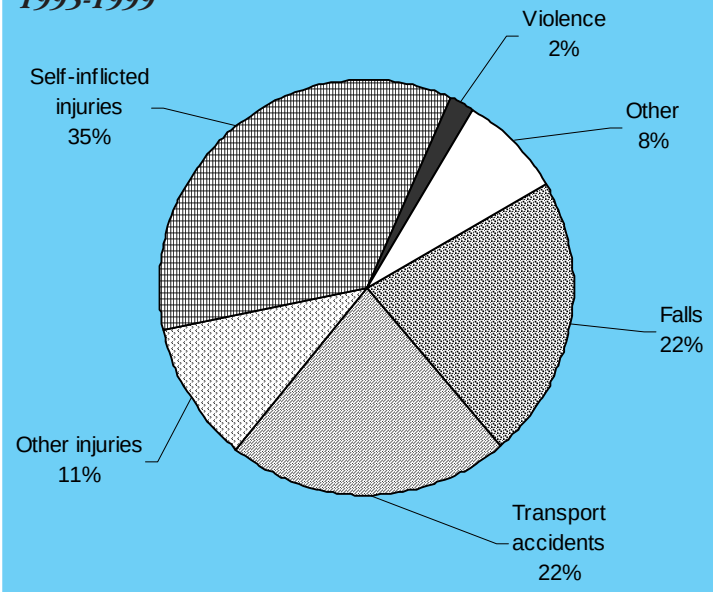


Figure 25: Share of deaths from injuries and poisoning by most frequent external causes, Slovenia, 1995-1999



Source: IPH

Other consequences of injuries

Injuries are the cause of one-third of all hospitalisations around the world. In industrialised countries, for every fatal injury, there are on average 30 hospitalisations due to injuries and 300 emergency room visits.

The incidence of injuries relative to cause, type and number vary according to sex, age, region, country and time

Figure 26: Incidence of death due to injuries by external causes, males, 1998

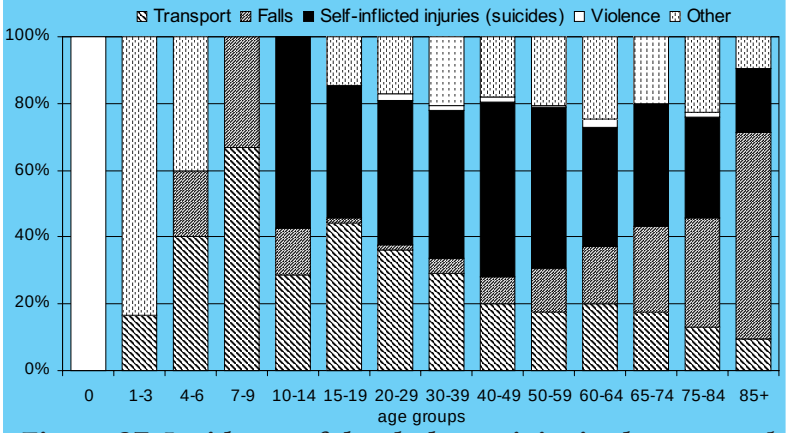


Figure 27: Incidence of death due to injuries by external causes, females, 1998

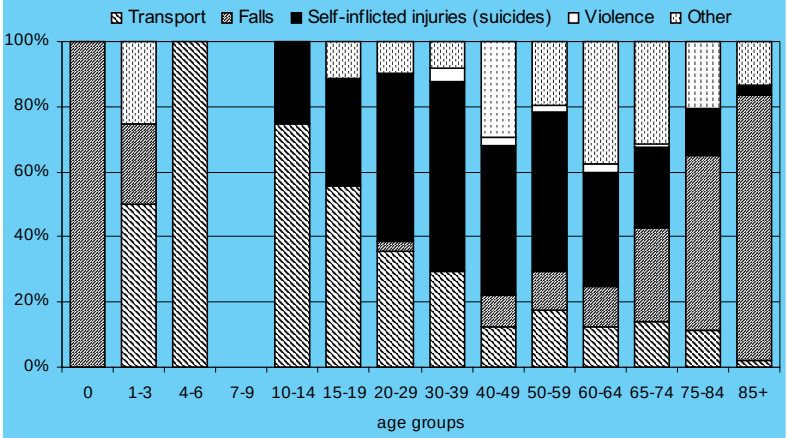


Figure 28: First hospitalisations due to injuries by external causes, males, 1998

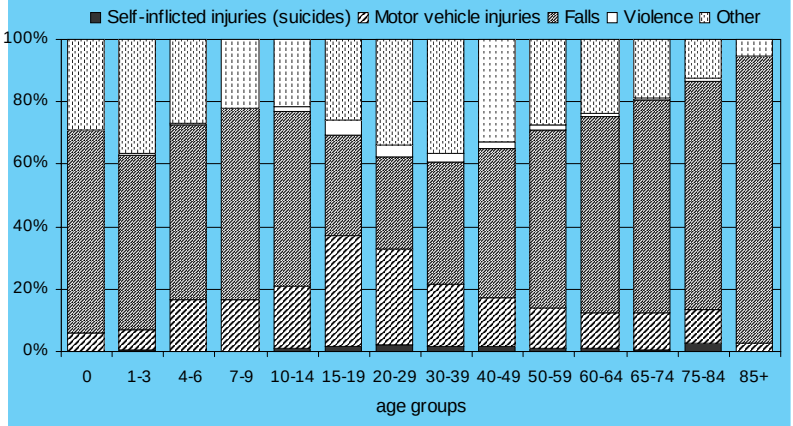
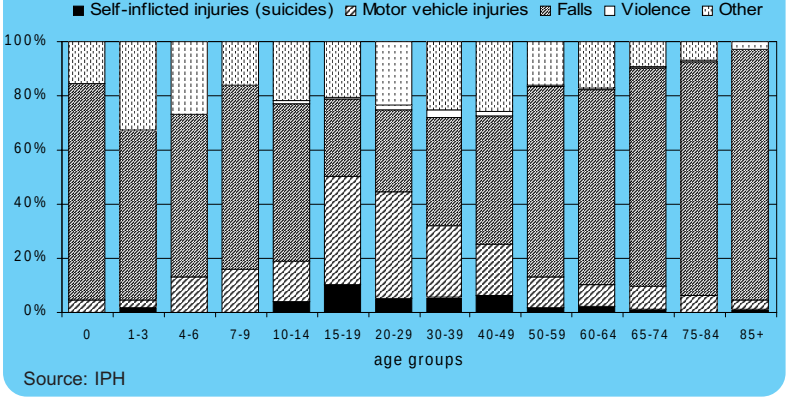


Figure 29: First hospitalisations due to injuries by external causes, females, 1998



Source: IPH

In the 1997-1999 period, an average of 28,196 people were hospitalised in Slovenia every year due to injuries and poisoning, accounting for 9.5 percent of all hospitalisations. Differences between the sexes are again obvious: men (18.5/1,000 inhabitants) were hospitalised more than women (10.3/1,000 inhabitants) (Figures 28, 29). The most frequently hospitalised group was the one aged between 15 and 24, followed by the group above 65 (Figure 30).

Injuries that most often required hospitalisation were head injuries (intracranial injuries) (28.8 percent of all hospitalisations), followed by knee and shank injuries (14.5 percent), hip and thigh injuries (9.7 percent), and wrist and hand injuries (6.8 percent). On average, hospitalisations lasted 7.6 days. The main external causes of unintentional injuries were falls (53 percent), transport accidents (17.9 percent) and exposure to inanimate mechanical forces (12.3 percent of cases). Among intentional injuries, self-inflicted injuries and violence required the same proportion of hospitalisations (1.8 percent) (Figure 31).

In primary health care, an average of 570,932 visits due to injuries and poisoning were recorded each year in the 1997-1999 period, equalling 8.6 percent of total primary health care visits. The main causes of injuries were falls, exposure to inanimate mechanical forces (being hit by a thrown or falling object, a foreign body in the eye, contact with a knife) and transport accidents (involving car occupants or motorcycle riders). Intentional injuries also prompted visits to primary health care facilities, with violence and self-inflicted injury responsible for 1.4 and 0.2 percent of visits respectively.

The highest age-specific rates were recorded among school children between 7 and 14 years of age, adolescents (15-19 years of age) and young adults between 20 and 29 years of age. After this age, the rate of visits decreases (Figure 32). Comparisons show that men (373/1,000 inhabitants) visited their doctors because of injuries and poisoning more than women (209.7/1,000 inhabitants) (Figures 33, 34)

In the same period, the most common injuries among *pre-school* children were unintentional ones: falls (50.5 percent), exposure to inanimate mechanical forces (striking against objects or being hit by a thrown or falling object – 19.1 percent), and exposure to animate mechanical forces (being bitten or stung by non-venomous insects – 15.1 percent). 0.13 percent of injuries resulted from violence by another person and 0.04 percent resulted from self-inflicted injury.

Unintentional injuries remain the leading cause of primary health care visits among *school children and youngsters*. The most common injuries were falls (47.9 percent), exposure to inanimate mechanical forces (striking against or with sports equipment – 32.1 percent) and contact with heat and hot substances (13.8 percent). 0.47 percent of all injuries were due to violence by another person and 0.02 percent were due to self-inflicted injury.

Adolescents recorded similar injuries as children; the prevailing external causes of unintentional injuries included falls (41.4 percent) and exposure to inanimate mechanical forces (striking against or with sports equipment – 30.4 percent), with the first cases of transport accidents starting to occur (involving car occupants or motorcycle riders – 11.8 percent). 0.47 percent of all injuries were due to violence by another person and 0.02 percent were due to self-inflicted injury.

In the given period, 35.9 percent of temporary absences from work were caused by injuries that occurred at work while 64.1 percent were due to injuries that occurred away from the workplace. On average, the absences lasted 24.3 and 28.8 days, respectively (Figure 35).

The most frequent external causes of temporary absences from work due to injuries included exposures to inanimate mechanical forces (hit by a thrown or falling object, contact with a knife - 39.4 percent of cases), falls (38.3 percent) and transport accidents (car passenger, bicyclist - 11.8 percent). Most working days were lost due to falls (44.9 percent), exposures to inanimate mechanical forces (29.3

Figure 30: Hospitalisation rate (per 1,000 inhabitants) due to injuries and poisonings by age in Slovenia, 1997-1999 average

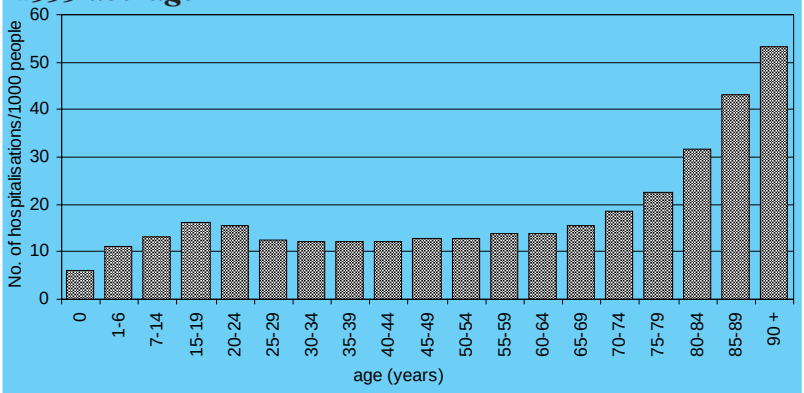


Figure 31: Share of hospitalisations due to injuries and poisonings by the most common external causes, Slovenia, 1997-1999 average

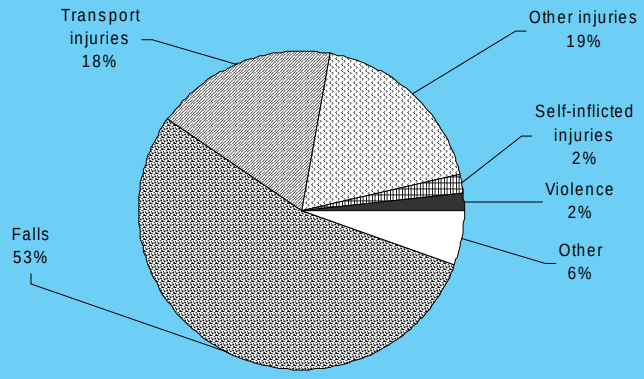


Figure 32: Number of visits to primary health care dispensaries due to injuries and poisonings (per 1,000 inhabitants) by age, Slovenia, 1997-1999 average

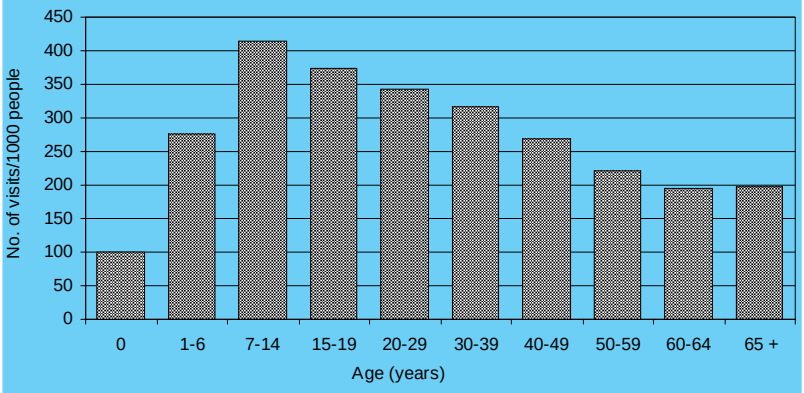
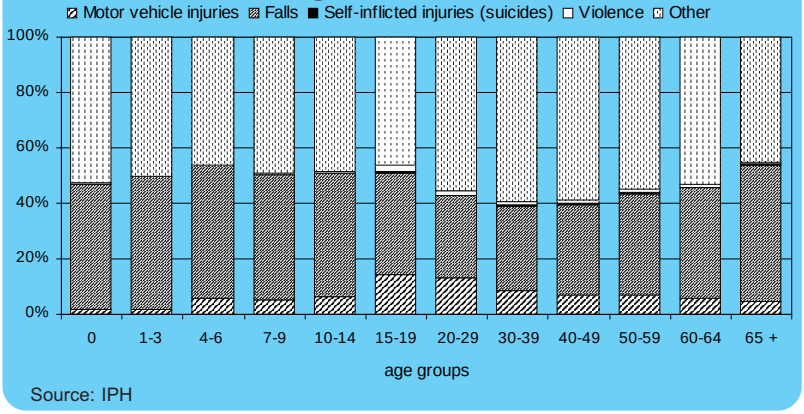


Figure 33: First diagnoses in primary health care by external causes among males, 2000



Source: IPH

Figure 34: First diagnoses in primary health care by external causes among females, 2000

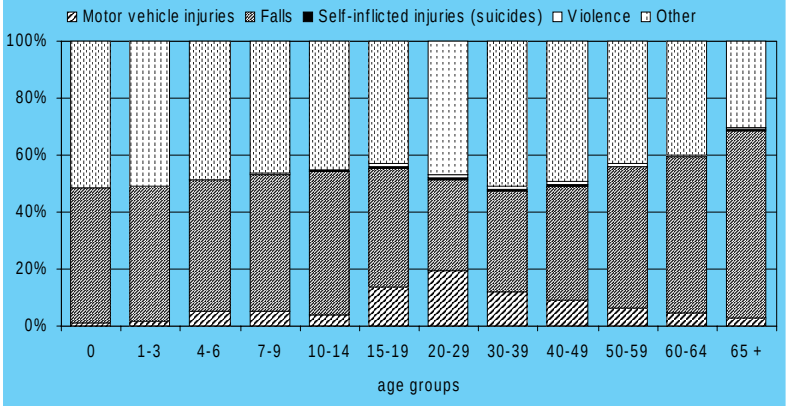


Figure 35: Annual average number of days of absence from work by cause of absence (ICD-10), Slovenia, 1997-1999

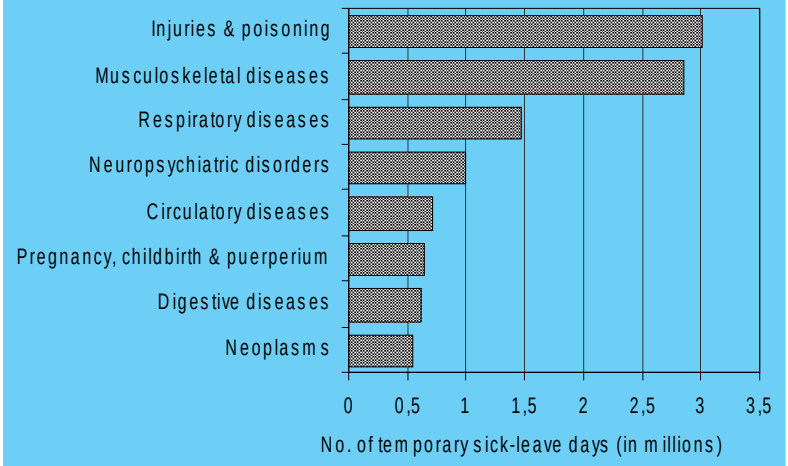
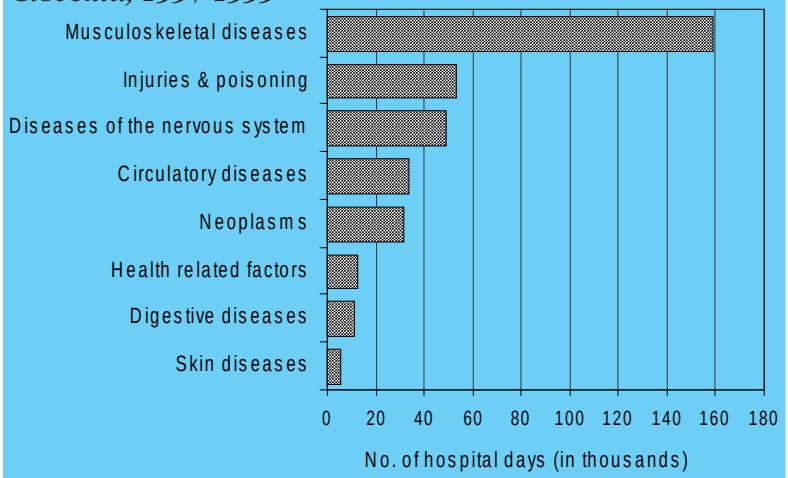


Figure 36: Annual average number of days of treatment in hospital rehabilitation by main causes (ICD-10), Slovenia, 1997-1999



Source: IPH

percent) and transport accidents (18.2 percent).

Between 1997 and 1999, the number of people admitted annually for hospital rehabilitation due to injuries was 3039 on average, accounting for 13.9 percent of all cases of hospital rehabilitation. Rehabilitation from injuries and poisoning lasted an average of 17.5 days. Injuries were among the leading causes of the highest number of days of sick leave 'for rehabilitation' per year. In primary health care dispensaries, the annual average was 420 injured people, accounting for 2.8 percent of all patients (Figure 36).

Although the statistical data indicate that injuries pose a serious threat to public health, the prevention of injuries is not given sufficient attention in Slovenia. One reason for this is that injuries are (still) considered a consequence of 'unlucky and/or accidental events' or even 'fate' or 'negligence'. Another reason is the still prevailing assumption that the victims themselves are to blame for their injury. The modern approach to injuries does not exclude personal liability, yet it also considers other factors to be more decisive for the occurrence of injury. A third reason is that many experts have not yet accepted the fact that injuries can be predicted and prevented. It can indeed be proven that injuries have the same epidemiological parameters as, for example, infectious diseases, and can therefore be predicted and prevented like any other disease. By taking the necessary precautions, we can influence whether or not an event will actually occur; during the accident, we can attempt to prevent injury; and after the event has occurred, when we can minimise the injury's consequences. In reducing injuries and their consequences, the most efficient method has proven to be the application of Haddon's ten prevention strategies: education, changes to products and the environment, technological changes, organisational changes, laws, regulations, standards. This has also been the approach adopted by the World Health Organisation.

The success of the epidemiological approach and the relevant prevention strategies in industrialised countries indicates that reducing the number and severity of injuries requires a multi-disciplinary and multi-sectoral approach. All sectors, disciplines or professions can contribute to the improved security of people (health care workers, teachers,

architects, construction workers, designers, producers, tradesmen, politicians, journalists etc – they all play an equally important role).

According to the data, injuries represent a serious challenge to Slovenian policy-makers. Appropriate resources should be allocated in Slovenia for researching and applying injury-prevention strategies. An inter-sectoral body should be established to ensure – on the basis of clearly defined priorities – co-operation among the various social players promoting a culture of safety. In Slovenia – despite the dimension and severity of the problem – there is still no *integral* national policy of injury prevention that is based on a multidisciplinary and multi-sectoral approach.

4. Health care system

The health of individuals in society does not just depend on the health system. It is the subject of health policy as well as of the broader (perceived) social policy.

According to the Health Care and Health Insurance Act, the state must define, facilitate and monitor the extent, quality and accessibility of health care for all inhabitants, and define the relevant priorities. The amount of funding allocated to health care is a significant indicator of the importance that politics attaches to health.

The Slovenian public health system is structured at three levels: the primary, the secondary and the tertiary levels. Primary health care comprises basic health care activity and pharmacies. It is carried out in health care centres and health care stations. In 2001, there were 64 health centres and 66 health stations in Slovenia. They are available within 20 km of any location in Slovenia. Primary health care is guaranteed by the local community (support is offered by the state in the event of demographic deprivation) and provides general medical facilities, health care for the young, school children and women, home nursing, physiotherapy, dental care and ambulance services. Health care personnel involved in the provision of primary health care include general practitioners ('personal physicians'), paediatricians and school medicine specialists, occupational specialists, gynaecologists, dentists, nurses and administrative and technical staff. In 2001 there were 1209 dentists, 1215 pharmacists, 4526 physicians, 3339 nurses, 11146 health care technicians and 650 sick attendants. In rural areas, a physician's practice is more like that of a family physician and a physician may have as many as 3000 patients, while in Ljubljana, a physician will have about 750 patients. 19 percent of staff in all units are administrative and technical staff.

Health is part of social policy

Table 29: Public health care institutions in Slovenia

Activity	by number	Employees		
		total number of employees	max. No. of employees in one institute	min. No. of employees in one institute
Health centres	59	8409	1283	5
Hospitals	24	11693	2617	34
Clinical centre, Oncology Institute, Institute for Rehabilitation	3	7511	6346	460
Other public health institutes	12	1005	236	3
Total	98	28618		

Source: Annual accounts of the Agency for Payments

The personal physician is the entrance point into the system. If further treatment is necessary, he or she may refer the patient to the providers of health programmes and services at secondary and tertiary levels. The secondary level comprises specialised ambulatory medical services and hospitals. In 2001, there were 3286 specialists and 969 specialist physicians in Slovenia.

The personal physician represents the entrance point to the health system

Hospitals provide about 75% of all secondary care. There are 26 hospitals in Slovenia: nine regional general hospitals, three local general hospitals, two private sanatoriums and twelve specialised hospitals (for orthopaedic, pulmonary, gynaecological, psychiatric and child and youth care, such as the Institute for the Rehabilitation of the Disabled, the Oncology Institute, the institutes in Šentvid pri Stični and Stara Gora).

Tertiary care comprises advanced health treatment, research, education and other expert work in a certain branch of medicine.

Figure 37: Number of hospital beds, selected countries, 2000

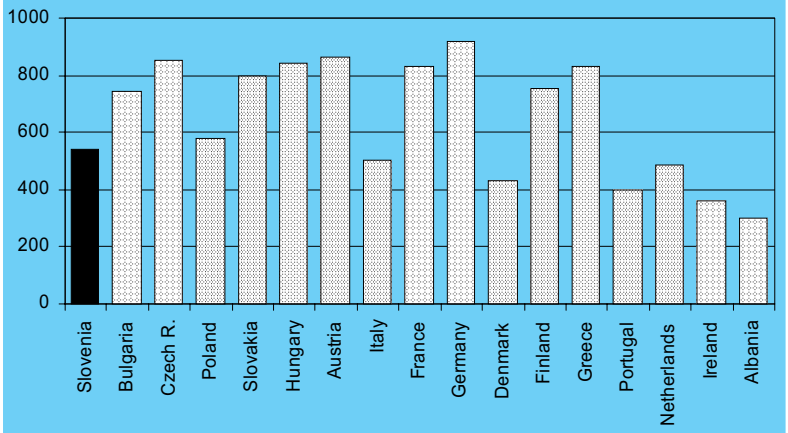
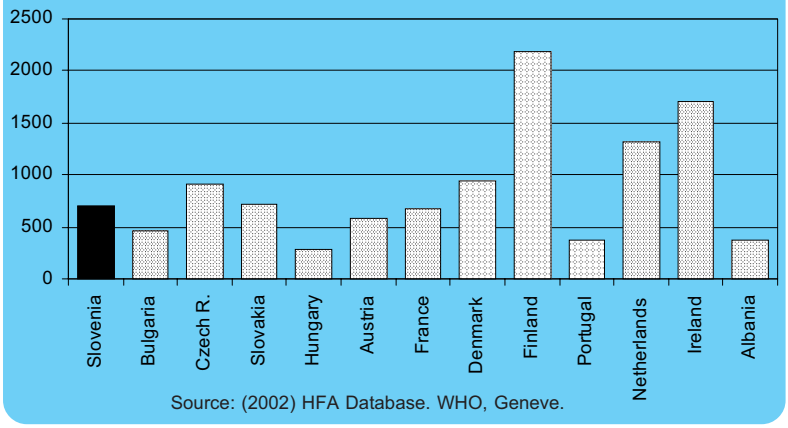


Figure 38: Number of nurses/100000 inhabitants, selected countries, 2000



Source: (2002) HFA Database. WHO, Geneve.

The highest-level institution and university hospital is the Clinical Centre in Ljubljana.

There are 15 health *spas* for adults and two health establishments for children that provide preventive health care as well as specialist ambulatory and hospital rehabilitation. Certain health-related services may also be provided by social care institutions, depending on the nature of the institution.

In 1998, the public health care system employed 34,834 medical and allied professionals. Their number grew to 36,019 in 2001.

Table 30: When you seek help in a health institution are you disturbed by any of the following?

SPOS01	very bothered	bothered	in between	not bothered	not bothered at all	don't know
	1	2	3	4	5	9
a) Unkindness of doctors and medical staff towards patients	9.6	12.7	8.8	27.4	15.3	26.1
b) Privileges, not all patients are equally treated	14.7	19.9	10.7	17.9	9.6	27.1
c) Red-tape, administration, bureaucracy	9.4	17.4	12.3	25.7	9.0	26.3
d) Inefficient organisation of work	5.5	17.8	14.0	23.9	10.1	28.8
e) Inadequate premises	4.2	9.2	10.8	34.1	14.5	27.1
f) Poor quality of service	6.7	11.0	11.5	29.8	12.4	28.7

Assessment of health institution

Satisfaction with the medical service was highest in 1981 which is, however, difficult to compare with today's situation given the great social changes and related health care system changes that have occurred since then. Satisfaction appeared at its lowest in 1999 but rose again in 2001. It should be noted, however, that this indicator is very sensitive to developments in the health care system and its media image. Thus, an event or measure largely exposed by the media during the period of the survey can affect the distribution of responses. A general pattern for all three surveys, regardless of the period and social situation, indicates that despite a certain degree of oscillation, satisfaction is constantly divided into thirds - one-third of respondents is satisfied with the medical service, one-third is not, and one-third believes that the truth lies 'somewhere in the middle'. Similar is the share of those who are satisfied or dissatisfied with the medical service as a whole: 33 percent of respondents are satisfied, 37 percent is neither satisfied nor dissatisfied, and 30 percent is dissatisfied. The most favourable responses are given by elderly people and people with disabilities. Opinions also vary in terms of trust in medical services: 46 percent of people believe that, if they were ill, the medical service would do anything in its power to help them while 54 percent doubt this is the case. Uncertainty increases with education. There is a 53% level of trust among people with only a basic education and merely 39 percent among people with a university degree. Groups that had used the medical services in the last year were more trustful (people with disabilities and injured people). In 2001, 65 percent of people needed the services of a general practitioner, 34 percent needed specialist services, 32 percent needed dental care, 13 percent needed hospital or clinic treatment and 4 percent needed treatment in spas. One percent of the patients waited more than a month to visit a general practitioner, 37 percent to visit a specialist, and 20 percent to visit a dentist. As far as waiting time is concerned, 37 percent of patients waited more than one hour to visit a general practitioner, 43 percent to visit a specialist and 22 percent to visit a dentist. People in direct contact with medical services are generally (very) satisfied with the services in their own town (municipality): 85 percent are satisfied with general practitioners, 78 percent

with dentists, 80 percent with specialists and 95 percent with pharmacies. A similarly stable 'scepticism' is revealed by the response to the question on whether the medical service 'would do anything in its power'. The share of those who are certain of this ranges between 49 and 46 percent. No annual changes are recorded with regard to the level of satisfaction with services at the local level.

What in fact disturbs people when they visit health institutions? To a certain extent (from 'generally' to 'very'), respondents were disturbed by the following: 63 percent (48 percent) by the privileges offered to certain patients; 53 percent (36 percent) by superfluous administrative requirements; 53 percent (33 percent) by the ineffective organisation of work; 42 percent (31 percent) by the unkindness of staff, 41 percent (25 percent) by the poor quality of service; and 34 percent (19 percent) by inadequate premises (the figures in brackets represent the category 'very disturbed', meaning the harshest critics).

Table 31: Do you agree that, in the event of your illness, the medical service would do anything in its power and that it can (within the limits of what is available in medicine today)?

	SJM81/82	$SJM99_2$	$SJM01_3$
1 - Yes, I am convinced	49.6	46.3	45.7
2 - I am not convinced	30.5	42.2	42.3
3 - I don't know, undecided	19.9	11.5	12.1

4.1 Health care and health insurance in Slovenia

Public and private providers of health programmes and services

The link between the public and private spheres is seen as a problem of defining the public functions and forming the public service network[27]. Between 1991 - when there were no private providers of health care programmes and services in the public health system of Slovenia - and 2001, the situation changed considerably (Table 32). Certain health care activities which are not part of the public service network may be performed either by individuals (private practitioners without a concession) or companies. For activities performed in accordance with the Health Services Act (providing services to the population), the providers must meet certain requirements (such as adequate qualifications and licences for health care staff), whereas for those activities related to the health care activity (they do not directly provide health services, material or technical equipment), contractual relations must be established.

The main providers of health services are physicians; those who actively work in the health care network are members of the Medical Chamber which regularly organises additional training for its members and grants or revokes (in the case of any serious violations or mistakes) their licences. The public health care network comprises the staff of public health institutions and private practitioners with a concession.

Highlight 9: Key characteristics of hospital care in Slovenia

Common weaknesses of hospital care in Slovenia	
Poor computer facilities	*
Poorly trained clinical staff	*
Unnecessarily long hospital stays	*
Clinical documentation	**
Patient prioritisation	***
Inappropriate referrals	****
Under-servicing	*****
Mismatch between facilities, staff, and patients	*****
Poor communication with patients	*****
Synchronisation of care components	******
Lack of clinical practice variation	*******
Poor communication between clinical professions	********
Lack of performance data	*********
Few multidisciplinary protocols	**********

Extracted from: Don Hindle (2002): International Conference on Health Care Financing, Bled, 28-29 May.
Note: Greater the number *, greater the shortcoming.

Table 32: Health care staff, Slovenia, 2001

	Health		
	Public	Private	Total
All physicians	3866	459	4325
Specialists	2458	359	2817
Dentists	580	598	1178
Pharmaceut.	650	114	764
Physiotherap.	746	88	834
Nursing staff	13429	1033	14462

Source: Health care statistics, Slovenia 2001, Institute of Public Health, Ljubljana 2003

[27] In the relation between social and commercial insurance, this is manifest in the exclusion of certain risks or payments of social insurance for welfare, which the insured persons normally have the right to. In insuring against the consequences of such risks, commercial insurance companies are part of the public service as well and are regulated separately; they are also further regulated and supervised by state authorities.

Table 33: Physicians and dentists, Slovenia

Physicians and dentists in Slovenia	Employed in health care services									
	Health centre	Hospital	Private practice - concession	Special social institute	Spa, health establish-ment	Public health care network	Specialising physicians	Private practice - no concession	Specialising physicians	Total
	A	B	C	Č	D	E=A+B+ +C+Č+D	F	G	H	I=E+G
Total	1938	2301	923	5	63	5230	691	187	7	5417
Total physicians	1345	2275	441	5	61	4127	663	42	4	4169
Total dentists	593	26	482	0	2	1103	28	145	3	1248

Source: HII Register, 30 June 2002
Specialisations such as cardiovascular surgery, clinical genetics, child and adolescent psychiatry and nefrology are not included since no member of the HII belong to such group (inclusion under a certain specialisation means the last specialisation achieved). Neuropsychiatry (not applied as specialisation at the moment) includes neurologists and psychiatrists.

Figure 39: Number of physicians, selected countries, 2000

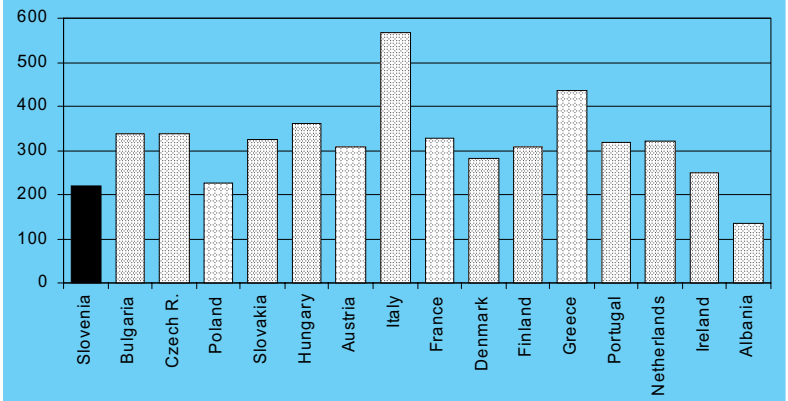
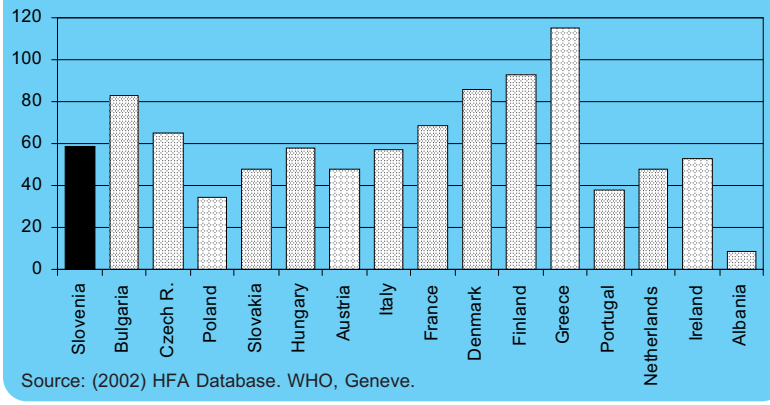


Figure 40: Number of dentists, selected countries, 2000



Source: (2002) HFA Database. WHO, Geneve.

According to data from the Slovenian Public Opinion Survey, 27 percent of people visited a private physician in the last year: 15 percent visited a dentist, 11 percent a specialist and 6 percent a general practitioner. The number of respondents visiting private physicians has been gradually increasing since 1994 (12 percent in 1994 compared to 27 percent in 2001). This increase is due to the growing number of providers of private health care services.

The results of the survey indicate that respondents' opinions vary with regard to the effect of the introduction of private medical practice on the quality of health services. In general, most (36 percent) respondents believe that the quality of health services has improved as a result of the introduction of private practice, 35 percent of them believe it has remained unchanged, and 12 percent of respondents think it has worsened; the remaining 16 percent cannot decide. Between 1994 and 2001, a systematic drop of assessments regarding the improvement of health care services quality upon the introduction of private practice was recorded. Most respondents moved to the category of those who believe that the quality of service will remain the same. The category of those believing it will worsen is not large and is also not increasing (it ranges between 10 and 15 percent).

Satisfaction results remain constant. Among those people who have actually visited a private physician, 66 percent are more satisfied with this type of service than with the services in public health institutions; 32 percent see no difference; and only 2 percent of respondents are less satisfied. Such data is not surprising since respondents consider private services to be above-standard, with shorter waiting times, and probably are also a result of the psychological effect of confirming one's 'investment' in a private physician (which the respondents consider worthwhile).

Table 34: How satisfied are you with the services provided by a private physician compared to the services in public health institutions?

	$SPOS94_1$	$SPOS96_2$	$SPOS99_2$	$SPOS01_3$
1 - more satisfied than in public health institutions	10.7	15.6	17.3	17.7
2 - no difference	1.8	5.0	7.5	8.4
3 - less satisfied than in public health institutions	0.4	0.4	0.8	0.6
9 - did not visit a private physician	87.1	79.0	74.4	73.2

The public health care system provides *health care services, medicine and medical and technical devices*, which are benefits in kind. Public health care expenditure is mostly intended for services.

The main elements of expenditures on health care services are materials (medicines, medical materials) and labour (wages of the public health care staff, taxes, contributions and other labour costs). In order to manage such expenditures, the policies of wages, employment and work process organisation must be carefully considered. Public health care has not been very successful in this respect in the past. In Slovenia, like in other countries, health care encounters the so-called *Baumol's disease* (higher costs due to technological progress in medicine).

Most health systems around the world have had difficulty controlling the costs of medicine. With quantitative restrictions and cost control, Slovenia has successfully transferred part of the expenses directly onto individuals who cover it through (particularly supplementary) health insurance. Thus, public heath care has not had to increase the level of such expenses, estimated as a proportion of GDP, yet the trend is still upward. Since no further transfers of expenses onto private sources are possible, the volume and share of such expenses will expand further if there are no significant changes in the doctrine and rules of prescription.

Table 35: Health care expenditure; Slovenia, 1995-2001

share in GDP in %

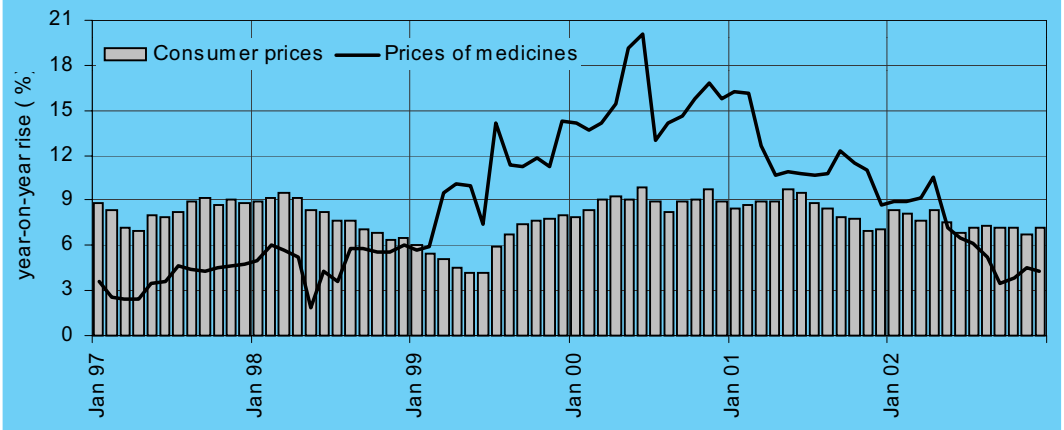
	1995	1996	1998	2000	2001
Public resources	**6.6**	**6.6**	**6.6**	**6.7**	**6.9**
Compulsory health insurance expenses	6.6	6.6	6.6	6.7	6.9
1. Payment for services of health institutes	4.5	4.6	4.6	4.7	4.8
2. Expenses for medicines and orthopaedic devices	1.1	1.0	1.0	1.1	1.1
3. Benefits in cash	0.8	0.8	0.7	0.6	0.7
4. Current expenses for HII work	0.2	0.2	0.2	0.2	0.2
5. Other expenses	0.1	0.1	0.1	0.1	0.1
Private resources	**1.6**	**1.7**	**1.8**	**1.8**	**1.9**
Voluntary health insurance**	0.7	0.8	0.9	1.0	1.1
Other private resources*	0.9	0.8	0.8	0.8	0.8
Total resources	**8.3**	**8.3**	**8.4**	**8.5**	**8.8**

Source: HII Business Reports, MF- Bulletin of public finance, AZZ- Statistical bulletin of health insurance, estimates and calculations IMAD
Notes: *Estimated on the basis of household spending survey data. **Paid damages - accounts settled. All insurance covers for co-payment and other types of health insurance.

In addition to benefits in kind (services), compulsory health insurance also covers benefits in cash: (1) salary reimbursement during a temporary absence from work due to illness, injury or care for a sick family member, i.e. 'sick leave'; (2) reimbursement of funeral expenses to which whoever provided for the funeral of the insured person is entitled; and (3) a death grant, survivor benefits that belong to family members of the insured deceased person.

Health care is financed from both public and private resources[28]. In GDP terms, the share of public and private resources intended for health care in Slovenia is slightly more than 8 percent and is gradually increasing. Since 1992, private resources have grown, particularly those obtained

Figure 41: Annual growth in medicine prices, 1997-2002



Source: SORS, calculations and estimates IMAD.

[28] Slovenia has no balance of financial flows in health care. Usually the data on financing resources are taken into account. The record of public sources is the most complete, the record of insurance sources is not entirely used, the records of other sources including the data on individuals, companies and other data are normally omitted or only roughly estimated.

from voluntary supplementary health insurance.

The main source of public financing is compulsory health insurance paid by economically active contributors and pensioners. Other non-tax expenses and revenues from the budgets account for only 0.2 percent of GDP. Contributions for compulsory health insurance equal three-quarters of all resources intended for health care; their share has been falling slightly over the years.

About 90% of the population have taken out voluntary supplementary health

A significant and even increasing share of resources comes from supplementary health insurance organised according to insurance principles; since 1995 its share has expanded from 11 percent to 15 percent (the index of increase is 134 percent). There are only a few other forms of health insurance and they do not constitute a significant financing source.

Direct payments by individuals and entities of public and private law amount to 10 percent; since there are no means of properly determining the scale of private resources in health care, the estimates are conservative rather than optimistic.

With regard to the share of expenditure on health care in GDP terms, Slovenia does not differ much from countries with which it is usually compared or with which comparisons are reasonable. In all these countries most expenses on health care occur within the public health care system; their average share in GDP terms was 6.3 percent in 1998 (the year data for all countries are available). Changes after this year have been minimal.

Slovenia is also close to European countries in terms of total expenditure on health care. It spends, on average, slightly more than the other countries, and the difference between total and public resources is 1.9 percentage points (1.8 percentage points in other European countries).

Health insurance has a long tradition in Slovenia and constitutes the main source of financing health care expenses incurred by Slovenian residents. It is organised as a compulsory social insurance within the National Health Insurance Institute. The scale of health programmes is determined among the partners[29] through tripartite agreements. The partners have their own specific interests that make the negotiations demanding and delayed. The agreements

Table 36: Share of expenditure on health care in GDP terms, selected EU member-states and Slovenia

Country	Year									
	1996		1997		1998		1999		2000	
	Tot. exp.	Publ. exp.	Tot. exp.	Publ. exp.	Tot. exp.	Publ. exp.	Tot. exp.	Publ. exp.	Tot. exp.	Publ. exp.
Austria	8.7	6.1	8	5.6	8	5.7	8.1	5.6	8	5.6
Italy	7.5	5.4	7.7	5.6	7.7	5.6	7.8	5.7	8.1	5.9
Germany	10.9	8.4	10.7	8.1	10.6	7.9	10.7	8	10.6	8
France	9.6	7.3	9.4	7.2	9.3	7.1	9.4	7.1	9.5	7.2
Denmark	8.3	6.8	8.2	6.8	8.4	6.9	8.5	7	8.3	6.8
Finland	7.7	5.8	7.3	5.6	6.9	5.3	6.9	5.2	6.6	5
Sweden	8.4	7.1	8.1	6.8	7.9	6.6				
UK	7	5.8	6.8	5.4	6.8	5.5	7.1	5.7	7.3	5.9
Ireland	7	5.1	6.9	5.3	6.8	5.2	6.8	5.2	6.7	5.1
Slovenia	**8.5**	**6.7**	**8.3**	**6.6**	**8.6**	**6.7**	**8.6**	**6.5**	**8.7**	**6.6**

Source: OECD Health Data 2002, OECD, Aug. 2002; for Slovenia IMAD

[29] The partners are the Ministry of Health, the National Health Insurance Institute, chambers and providers of health programmes. The providers of health programmes include the Public Health Institutes, the Medical Chamber, the Pharmacies Chamber, the Slovenian Health Spa Association, the National Social Institutes Association, and the Association of Training Organisations.

between the providers and the Institute are thus concluded in the middle of the same financial year referred to in the agreements, or even later. This means that new contractual relations between the providers and public sponsors have to be regulated retroactively which increases the unpredictability of operations and trust among the partners.

Compulsory insurance involves practically all Slovenian residents; insurance statuses vary, and even the scope of rights from compulsory insurance (the scope of benefits in cash and kind) may vary but, as a general rule, the insured person is at least insured for (the payment of) health services. Compulsory health insurance is universal and based on the solidarity of all contributors (which means practically all residents of Slovenia) who, for equal insurance coverage, pay proportionally equal contributions for health care out of their income (a contribution basis).

Compulsory health insurance pays for services and other benefits in kind in different shares of their full price, depending on the type of service or social status of the insured person. Compulsory health insurance covers most health risks, yet not all and not entirely; nevertheless, compulsory health insurance provides for the full payment of a number of health services. The criteria are medical and social; given the changed social structure (demographic changes, different forms of work arrangements, marginalisation of certain groups, differences in income and property, and other different or modified functioning patterns of traditional social forms), one of the main issues of social insurance concerns the inclusion of the population in compulsory social insurance schemes. Nowadays, there is more than just the industrial type of social organisation in which depending employment was the predominant form and manner of inclusion into social insurance. New patterns of social functioning require the rules of social insurance to be adapted in order to avoid increasing the deprivation of certain social groups; in certain industrialised countries, inclusion has already started to decline.

In order to cover the difference between the share paid by compulsory insurance and the full price, insured persons may take out voluntary insurance (supplementary health insurance). Almost all insured persons or residents of Slovenia who, under the rules of compulsory insurance are not entitled to the full coverage of expenses, have taken out supplementary insurance, which means it has become a universal voluntary insurance. This is due to the gradual and regulated reduction of public financing. Compulsory insurance and voluntary supplementary insurance must be closely related in order to function effectively and be considered as a combined (complex) yet uniform system. The universal nature of

Table 37: Health care financing sources

	% of GDP[1]				
	1995	**1996**	**1998**	**2000**	**2001**
Public resources	**6.4**	**6.7**	**6.7**	**6.6**	**6.6**
Compulsory health insurance	6.3	6.6	6.5	6.5	6.5
Transferred revenue from budgets	0.1	0.1	0.1	0.1	0.1
- state budget	0.1	0.0	0.1	0.0	0.1
- municipal budgets	0.0	0.0	0.0	0.1	0.1
Private resources	**1.7**	**1.8**	**1.9**	**2.0**	**2.1**
Voluntary health insurance **	0.9	1.0	1.1	1.2	1.3
Other private resources *	0.9	0.8	0.8	0.8	0.8
Total resources	**8.1**	**8.5**	**8.6**	**8.7**	**8.7**

Source: HII Business Reports, MF- Bulletin of Public Finance, Agency for Insurance Control - Statistical bulletin for health insurance, estimates and calculations IMAD
[1]The sums of individual figures may vary from the whole amount due to rounding up.
*Estimate based on household spending survey data. **All insurance covers for co-payment and other types of health insurance.

Diagram 3: Organisation of health insurance in Slovenia

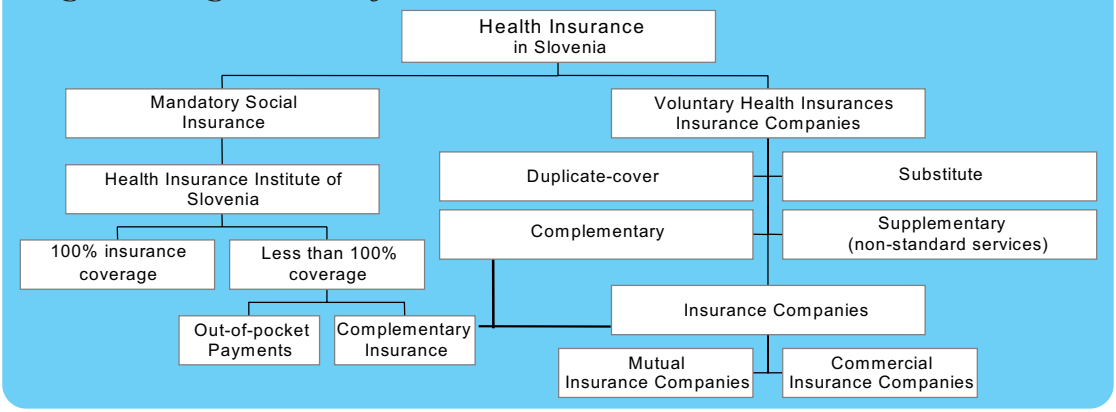


Table 38: Insurance for co-payments, Slovenia, 1995-2000

Year	No. of ins. covers	No. of cases
1995	1,355,356	20,109,504
1996	1,378,335	20,136,889
1997	1,251,458	20,781,930
1998	1,289,372	19,838,208
1999	1,334,680	20,030,432
2000	1,360,242	20,779,960

Source: Insurance Control Agency

both systems represents significant progress and an advantage of the health insurance system. Other forms of health insurance (parallel, substitute, additional) are not well developed in Slovenia.

Highlight 10: Compulsory health insurance coverage

Compulsory health insurance covers the following health services in full:

1. systematic and other preventive care of children, school children and students, as long as they attend school, women with regard to pregnancy and other adults, with the exception of preventive visits provided under the law by the employer;
2. diagnosis and prevention of diseases, in accordance with the programme;
3. treatment and rehabilitation of children, school children and students, as long as they attend school, as well as children and minors with developmental disabilities;
4. health care for women relating to counselling in family planning, contraception, pregnancy and childbirth;
5. services pertaining to programmes of the preventive care, diagnosis and treatment of HIV and those infectious diseases for which preventative measures are prescribed by law;
6. compulsory vaccinations, immunoprophylaxis and chemoprophylaxis in accordance with the programme;
7. treatment and rehabilitation of malignant diseases, muscular or muscular nerve diseases, paraplegia, quadriplegia, cerebral palsy, epilepsy, haemophilia, mental diseases, different forms of diabetes, multiple sclerosis and psoriasis;
8. treatment and rehabilitation of occupational diseases or injuries;
9. medical services related to the donation and transplantation of tissues and organs;
10. emergency medical treatment, including emergency transportation;
11. nursing care visits, treatment and care in the home and in social institutions; and
12. prescription medicines according to the classification of medicines, orthopaedic and other aids related to the treatment of the said persons and states of health.

Furthermore, free emergency treatment is provided for people without sufficient income or those whose social status makes it difficult for them to pay for supplementary insurance, and for people over 75 years of age who must, however, pay part of the expenses of non-urgent emergency transport, dental prosthetics and products, seeing aids and medications from the intermediate list.

Figure 42 indicates that the burden of gross income on health insurance is relatively uniform in Slovenia. If contributions were expressed only as a percentage of taxable income, their distribution would be more progressive. Data show that the 10 percent of the population with the lowest incomes contributes 2.87 percent of the total contributions to health care, while the 10 percent of the population with the highest incomes contributes 21 percent.

4.2 Household expenditure on health

As mentioned above, the health insurance system in Slovenia covers most health risks, yet not all and not entirely. Therefore, households meet additional expenses for health that are paid out-of-pocket. According to National accounts statistics, which is the only consistent comparison of data for Slovenia for the last ten years, such expenditures have increased significantly since 1990. Their share in household spending more than doubled (Figure 43). The highest rise was recorded in household expenditure for out-patient services (in the expenditures for health they rose from 15 percent to 36 percent), expenditure for hospital services increased from 6 percent to 18 percent, while the share of expenses for medicines, medical products, appliances and equipment (which still prevail among health expenditures) dropped respectively. Since national accounts, despite their consistency and completeness in illustrating the household spending structure, do not allow for detailed analyses based on the various socio-economic characteristics of households, this report – unless indicated otherwise – presents health expenditures using data from the household budget survey[30].

Health expenses (group 06) account for a small part[31] of household budgets since

[30] In annual terms, comparable aggregate data from the household budget survey are available for the 1997-2001 period, while the analysis of households' behaviour by income classes and certain socio-economic characteristics refers to the 1998-2000 period and is static. The survey patterns for three consecutive years are integrated and the data are calculated for the year in the middle (1999), which is used as the reference year. Households have been divided into income classes according to their non-weighted income by the income of the head of the household.

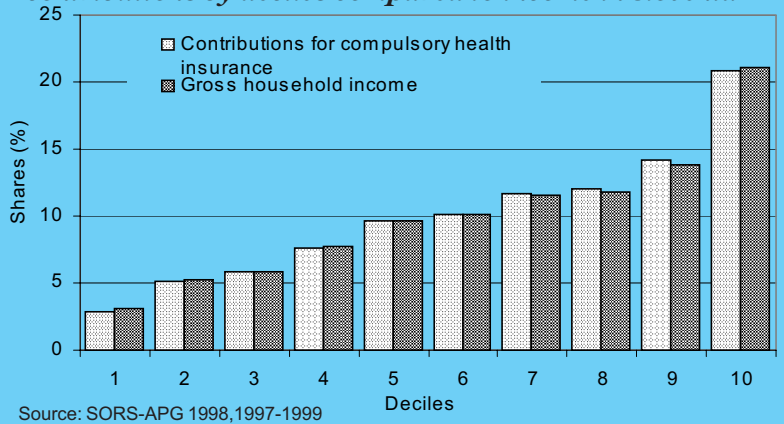
[31] Food (although its share is constantly decreasing, food still represents a quarter of all expenses), housing expenses and transport expenses have the largest shares.

their share is below 2 percent of total consumption expenditure (slightly above 3 percent in the national accounts[32]). Among all groups of consumption expenditure, health expenses recorded one of the highest rises (28 percent) in real terms in the 1997-2001 period (Figure 44). The dynamics varied through the years: they grew considerably in 1998 and 2001 but recorded a slight fall in the period in between (Figure 43). The four-year period for which comparable survey data are available is relatively short for a detailed analysis of the changes in the household consumption structure. In addition, the structural shock induced by the introduction of Value Added Tax undoubtedly affected the behaviour of households and the shares of various expenditures in their resource spending structures. Nevertheless, we are able to understand the behaviour of households in Slovenia and their consumption patterns.

The most surprising data concern the small share of households that reported health expenses - only 57.6 percent. This is partly due to fact that each household was surveyed for two weeks only, during which they did not necessarily incur health expenses, and partly also due to the fact that the expenses on voluntary health insurance were not included in the 'health expenses' category but are included in the 'miscellaneous household expenditure' category. Voluntary or supplementary health insurance was introduced in Slovenia in 1992 and began to be implemented a year later. According to the estimates of the National Health Insurance Institute, supplementary health insurance involved about 90 percent of the population (if we exclude children, school children and students whose rights are entirely covered by compulsory health insurance) or approximately 1,480,000 contributors (Insurance Control Office). It can therefore be estimated that the share of households having health expenses is considerably larger and would be very close to 100 percent if the said insurance was included in the group of health expenses.

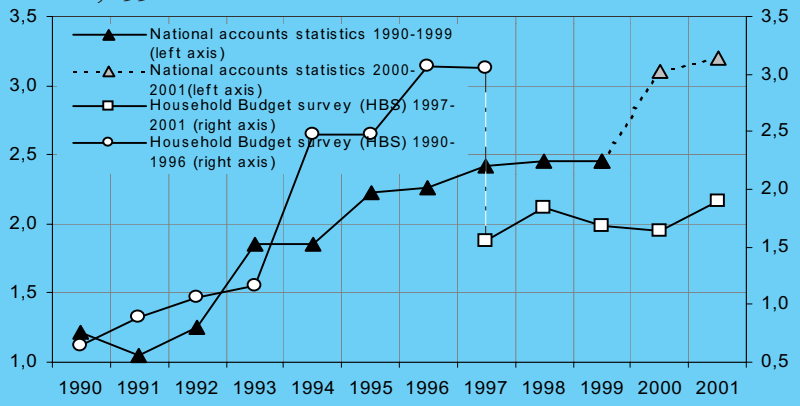
According to the Household Budget Survey data, health expenses totalled SIT 45,639 for the average Slovenian household in 1999; 56 percent was spent on medical

Figure 42: Average gross incomes and health insurance contributions by deciles compared to income in Slovenia



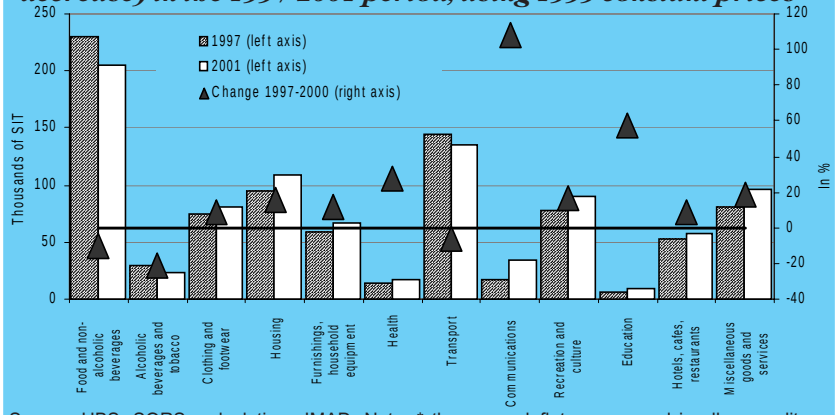
Source: SORS-APG 1998,1997-1999

Figure 43: Share of household expenditure on health in terms of their final consumption expenditure in the domestic market, 1990-2001



Source: SORS; calculations IMAD. Notes: [1]HBS statistics underwent some changes in methodology in 1997 so figures for the preceding years are not directly comparable with figures for years after 1997. [2]GDP was revised within the national accounts statistics in 2002, leading to revision of consumption expenditure by households; figures for 2000 and 2001 are not fully comparable with data series for 1990-1995. Both series, however, show a rising trend in household expenditure on health.

Figure 44: Household expenditure (per household member) broken down by purpose and their changes (increase, decrease) in the 1997-2001 period, using 1999 constant prices*



Source: HBS, SORS, calculations IMAD. Note: * the same deflator was used in all expenditure groups - the consumer price index.

[32] The difference in numbers is also due to the fact that individual households were included in the survey for two weeks. If they had any health expenses in this period, they recorded them, whereas otherwise they did not. National accounts statistics are also more consistent and take into account other sources in the creation of the household spending aggregate.

Table 39: Household expenditure on health by income quartiles, 1998-2000

in SIT	Average amount per household				Share of households declaring health expenditure	Average amount per household declaring health expenditure			
	Health total	Health products	Non-hospital service	Hospital service	in %	**Health total**	Health products	Non-hospital service	Hospital service
1st quartile	24,508	14,999	9,478	31	43.1	56,916	34,832	22,012	72
2nd quartile	41,773	22,453	18,891	428	58.4	71,544	38,455	32,355	734
3rd quartile	51,518	29,625	21,825	68	60.3	85,476	49,152	36,210	113
4th quartile	64,748	33,310	30,827	611	68.8	94,080	48,401	44,792	888

Source: Household Budget Survey 1998-2000, SORS, calculations IMAD.
Legend: .06 - total health expenditure, .061 - medical products, appliances and equipment, .062 - out-patient services, .063 - hospital services.

products, 43 percent on out-patient services and the rest on hospital services. If we only take into account those households that actually reported health expenses, the average amount spent would rise to SIT 77,004. The analysis of data by income classes reveals that as disposable household income increases, the number of households who pay health expenses increases and that their health expenses are higher on average (Table 39).

Household expenditure on health has increased substantially since 1990

The distribution of health expenditure among households is quite disproportionate, with households in the highest income classes spending the largest amounts in relative terms. 10 percent of the poorest households account for 3.5 percent of (total) health expenses, while the 10 percent of households with the highest income spend 4.7-times more.

The average annual health-related expenditure of households in the first income quartile was 2.6-times lower than the comparable expenses of households in the fourth quartile; if only the households that actually reported health expenses during the survey are considered, the ratio is somewhat lower and equals 1.7. The largest share of expenditure in households of all income quartiles goes to expenses related to medical products, appliances and equipment, followed by expenses for out-patient services. The share of expenses for hospital services is insignificant and accounts for only 0.1 to 1.0 percent of total health expenditure.

Comparing households and their health expenditures on the basis of the education level of the reference person, one can establish that expenses grow in proportion with one's level of education (Table 40). This is not surprising since education is one of the main factors influencing household income[33]. In the period under consideration, the average annual expenses of

Table 40: Household expenditure on health by education level of the reference person, 1998-2000

in SIT	% of househ. in group	Average amount per household				% of househ. with health expenditure	Average amount per household declaring health expenditure			
	in %	**.06**	.061	.062	0.63	in %	**.06**	.061	.062	.063
Incomplete primary school	4.7	19,761	12,405	7,355	0	34.5	57,341	36,003	21,346	0
Primary school	22.1	27,971	16,843	11,054	73	46.8	59,764	35,988	23,619	156
Vocational School	26.0	38,843	22,983	15,780	80	53.9	72,015	42,610	29,256	149
Secondary school	29.5	52,479	28,057	24,038	384	64.9	80,809	43,203	37,015	591
Higher education, university or more	17.7	73,133	36,944	35,430	759	70.6	103,613	52,341	50,196	1,075

Source: Household Budget Survey 1998-2000, SORS, calculations IMAD.
Legend: .06 - total health expenditure, .061 - medical products, appliances and equipment, .062 - out-patient services, .063 - hospital services.

[33] The previous paragraph already revealed that expenses increase with income; most reference persons in the first income quartile completed only primary school (45 percent), those in the second quartile completed vocational schools (36 percent), those in the third mostly completed secondary school (39 percent), while several householders (40 percent) in the upper quartile have higher education or university degrees.

households where the reference persons had no formal education were 6.7-times lower than those in households where the reference persons had a high level of education; the latter in fact spent the most on their health; the ratio would again be slightly lower if only households who actually paid health expenses during the survey period were taken into account (4.1). In most groups of households, the greatest amounts of money were spent on medical products, appliances and equipment, except in households where the reference persons had a university or postgraduate degree. This group of households spent money mostly on out-patient services, specialists' visits, dentists etc. The largest positive deviation between the share of households in a certain group and the share of their spending in total health expenditure is found in the case of households with high education levels (they account for about 5 percent of all households and pay almost 10 percent of total expenses), while the largest negative deviation is found in households where the reference persons only completed primary school (according to the household budget survey, they account for 22 percent of Slovenian households and pay 13 percent of total health expenses).

The fact that wealthier households and those in which the householders are more educated spend relatively more on health than others is somewhat logical since such households can probably more easily (afford) and more rapidly decide to visit private specialists where waiting times are shorter and services are more rapidly accessible than in public health institutions. In addition, they also probably spend more on prevention care.

Further comparisons of households and their health expenses on the basis of the formal employment status of the householder reveal that each group's allocation of resources is proportional to its spending. In the 1998-2000 period in Slovenia, there were about 58 percent of households in which the reference persons were employed and these paid almost 60 percent of total health expenses. Households where reference persons were retired accounted for 33 percent of all households and paid 33 percent of total health expenses. The biggest differences - the only ones worth considering - were recorded in households in which the householders were unemployed. According to the household budget survey, these accounted for 2.5 percent of all households and spent only 1.1 percent of the total health expenditure. The average annual health expenses of households in which the householders were employed were more or less close to the Slovenian average (slightly more was spent on average only by the households of the self-employed), while those households in which the householder was incapable of working spent (absolutely) the least. In all household groups, the largest share of

Wealthy households spend more on health than other households

Table 41: Household expenditure on health by the formal employment status of the reference person, 1998-2000

in SIT	% of househ. in group	Average amount per household				% of househ. with health expenditure	Average amount per household declaring health expenditure			
	in %	.06	.061	.062	.063	in %	.06	.061	.062	.063
Employed	58.4	46,610	25,946	20,258	406	59.5	78,377	43,630	34,065	683
Self-employed	5.0	47,590	26,215	21,375	0	58.0	82,076	45,212	36,864	0
Supporting family member	0.3	18,274	17,244	1,030	0	66.0	27,708	26,147	1,562	0
Other types of work (author and other contract)	0.2	11,458	7,855	3,603	0	42.3	27,060	18,552	8,508	0
Unemployed	2.5	21,028	12,989	8,039	0	49.9	42,099	26,005	16,094	0
Retired	32.8	46,558	24,763	21,651	145	55.3	84,176	44,770	39,144	262
Student	0.4	22,901	15,711	7,190	0	32.8	69,756	47,856	21,899	0
Housewife	0.2	12,002	12,002	0	0	32.8	69,756	47,856	21,899	0
Incapable of working	0.1	9,301	9,301	0	0	47.1	25,486	25,486	0	0

Source: Household Budget Survey 1998-2000, SORS, calculations IMAD.
Legend: .06 - total health expenditure, .061 - medical products, appliances and equipment, .062 - out-patient services, .063 - hospital services.

Table 42: Household expenditure on health by type of household, 1998-2000

in SIT	% of househ. in group	Average amount per household				% of househ. with health expenditure	Average amount per household declaring health expenditure			
	in %	**.06**	.061	.062	.063	in %	**.06**	.061	.062	.063
Single households	16.0	31,613	15,140	16,084	388	45.9	68,931	33,013	35,071	847
Two adults	22.3	49,482	28,728	20,541	213	58.2	85,083	49,397	35,319	366
Three adults and more	20.7	54,063	26,181	27,766	116	61.4	88,085	42,657	45,238	190
Households without children	59.0	46,245	24,151	21,868	227	56.0	82,649	43,162	39,082	405
Households with 1 child	20.3	46,324	27,629	18,570	125	59.9	77,284	46,093	30,981	209
Households with 2 children	17.7	43,271	24,579	17,981	711	60.3	71,769	40,766	29,823	1,180
Households with 3 children	2.5	45,854	30,967	14,888	0	61.5	74,607	50,384	24,223	0
Households with 4 or more children	0.6	31,161	23,805	7,356	0	51.3	60,798	46,446	14,352	0
Households with children	41.0	44,771	26,464	17,938	368	60.1	74,539	44,060	29,865	613

Source: Household Budget Survey 1998-2000, SORS, calculations IMAD.
Legend: .06 - total health expenditure, .061 - medical products, appliances and equipment, .062 - out-patient services, .063 - hospital services.

expenses was paid for medical products, appliances and equipment, followed by out-patient services. Only two groups - those with an employed or retired reference person - incurred any expenses for hospital services. In an absolute sense, households with retired reference persons that declared health expenses spent the most on average,

Table 43: Health expenses as a percentage of consumption expenditure; data from national accounts statistics and household budget surveys in selected countries, 1999

Health expenditure as share of households final consumption expenditure	Household Budget Surveys				National Accounts			
	.06	.061	.062	.063	**.06**	.061	.062	.063
Slovenia	**1.8**	**1.0**	**0.8**	**0.0**	**2.5**	**1.1**	**0.9**	**0.5**
Czech Republic	**1.5**	n.a.	n.a.	n.a.	**1.1**	0.0	0.0	0.0
Estonia	**1.6**	n.a.	n.a.	n.a.	**1.7**	1.0	0.6	0.0
Latvia	**3.5**	n.a.	n.a.	n.a.	**3.7**	2.4	1.3	0.0
Lithuania	**3.5**	n.a.	n.a.	n.a.	**3.6**	0.0	0.0	0.0
Poland	**4.4**	n.a.	n.a.	n.a.	**4.2**	0.0	0.0	0.0
Austria	**2.4**	1.2	1.1	0.1	**3.2**	0.7	1.6	0.9
Italy	**4.4**	2.4	1.9	0.1	**3.2**	1.7	1.2	0.3
Germany	**3.6**	1.8	1.5	0.3	**4.0**	1.4	1.4	1.1
Luxembourg	**2.4**	1.1	1.2	0.1	**n.a.**	n.a.	n.a.	n.a.
Netherlands	**1.1**	0.8	0.5	0.0	**4.0**	1.3	1.2	1.5
Spain	**2.5**	1.4	0.9	0.1	**3.4**	1.1	1.8	0.5
Belgium	**4.7**	1.9	2.3	0.5	**3.8**	1.4	1.3	1.1
Denmark	**2.4**	1.3	1.0	0.0	**2.5**	1.2	1.0	0.3
Finland	**3.7**	1.8	0.0	0.0	**3.6**	1.8	1.2	0.6
Sweden	**3.0**	1.1	1.8	0.0	**2.4**	n.a.	n.a.	n.a.
Greece	**6.3**	1.2	4.3	0.8	**5.6**	0.6	5.0	0.0
United Kingdom	**1.1**	0.7	0.4	0.0	**1.5**	0.9	0.4	0.3
Ireland	**1.8**	1.0	0.7	0.1	**2.6**	0.3	0.7	1.5
USA	**n.a.**	n.a.	n.a.	n.a.	**16.5**	2.5	6.8	7.2

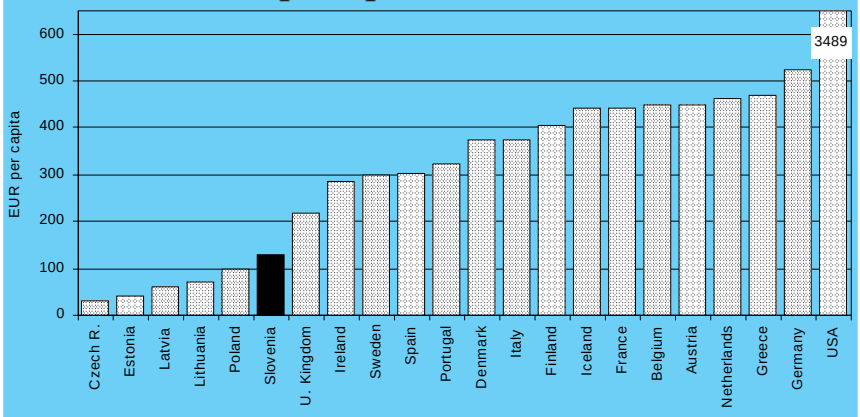
Sources: Household Budget survey 1998-2000, SORS, calculations IMAD.
http://europa.eu.int/newcronos/getExport?OutputDir=EJOutputDir_88&OutputMime=text%2Fhtml&OutputMode =U&OutputFile=b_co3_c.htm and
http://europa.eu.int/newcronos/access/hdr/qry_frm1.m4?thelang=en&theroot=newcron /theme3/hbs/depen/d_spec/t121&aheader=t121
Legend: .06 - health, .061 - medical products, appliances and equipment, .062 - out-patient services, .063 - hospital services.

while those with reference persons incapable of working spent the least. The fact that households with retired reference persons spent a relatively large share of their resources on health was also confirmed by household budget surveys in other European countries.

Speaking in terms of household type, most resources were spent on health by households of three or more adults without children, while less was spent by households with four or more children and single households. The above groups also had the most significant deviations between the share of households in the group and the share of their spending on health (Table 42); differences in other types of households were insignificant, meaning that their expenses were quite uniformly distributed.

According to data obtained in household budget surveys, in the last decade, household expenditures on health were also among the most propulsive[34] in the EU (recording one of the fastest growth rates among all expenditures). From 1995 to 1999, their share in all countries either increased or remained unchanged, and in no case did they decrease. In 1999 the share of health expenses in the structure of consumption expenditure was, on average, about 3 percent in the EU-13[35], and half a percentage point less in applicant and candidate countries[36]. The differences among individual countries were considerable. Greek households spent 6.3 percent of consumption expenditures on health; on the other hand, much less was spent on average by households in the Netherlands, the U.K., Luxembourg and Slovakia (about 1 percent). The share of expenses largely depends on the type of health system (which varies among individual countries). The countries of the former East bloc have obviously inherited socially-oriented health systems providing numerous rights from compulsory insurance, which is reflected in the slightly smaller average share of health expenses in the structure of consumption expenditure in those countries. This is confirmed by an international comparison of average expenditure on health per capita (National Accounts data, Figure 45), indicating that in 1999, households in applicant and candidate countries paid less than EUR 100 per capita for health out-of-pocket, while EU member-states paid about five times more. The most outstanding country is the U.S.A., where households on average spent almost EUR 3,500 on health.

Figure 45: Household expenditure on health in selected countries, in EURO per capita, 1999*



Source: NewCronos. Note: *Figures taken from the national accounts statistics.

With respect to household type, the relatively largest share of health expenses in the EU was paid by households with two adults, followed by (as in Slovenia) single households and households with three adults. Expenses also increased in proportion to the age of the reference person (among householders below 30 years of age, the average EU-13 households spent less than 2 percent of consumption expenditure on health, while households with reference persons above 60 years of age spent more than 4 percent). In terms of income classes (quintiles), there was no inequality on average among the various groups and all households paid about 3 percent of their expenditure (+/- 0.2 of a percentage point) for health; differences arise if we compare the spending patterns in individual countries.

Health is a universal value and a human right

4.3 Commitment to health

Health, health care and health insurance affect the development of human beings in many ways. Expenses for health and health

[34] Given the very obvious and aggressive marketing of the pharmaceutical industry.

[35] No data are available for France and Portugal.

[36] Comprising Albania, Bulgaria, the Czech Republic, Estonia, Lithuania, Latvia, Hungary, Poland, Romania, Slovakia and Slovenia.

care are an investment in economic and social welfare. The main objective of a health care and insurance system is to guarantee the population the possibility of a healthy employment and life. If people are sick, they need to be provided with different health services depending on their needs through an appropriate health care system.

We need well-designed social activities and policies

Regardless of developmental changes, health care must (continue to) be of high quality, safe, financially attainable, accessible, and with minimum waiting times. Solidarity and equity must remain the highest values of the Slovenian health care system, guaranteed by joint and sustainable financing, by promoting the diversity of implementation and by placing the citizens (patients, insured persons) and their choices in the centre of health services activities. The quality of such services must be maintained with the creative and efficient co-operation of the public and private sectors.

Commitment to health and its development must be present at all levels of decision-making in society. Social consensus is therefore particularly important and necessary in this area.

5. Future prospects of health

Biomedicine (and its rigidity) has come under serious criticism

Health is a universal value and human right. It constitutes the foundation for a quality living standard and facilitates productive self-actualisation. Illnesses, on the contrary, reduce the quality of people's lives and generate great costs for the national economy. Regardless of how we describe the function of welfare of a person and of the population, health is definitely an important element of well-being. Based on these considerations, we search for possible ways to avoid, at least in part, the negative consequences of the loss of health. In planning public health policies, we need to be aware that health is defined within a social context. Health must also be developed, strengthened and protected through complex social activities and policies. Unfortunately, the latter are often insufficiently considered and miss their primary objective. Sometimes they may even be counterproductive.

In 'modern Western' thinking biomedicine is still the dominant paradigm. However, in the last few decades it has been the subject of serious criticism from both non-medical and medical circles. Critics present a number of different views and theories casting doubts about biomedicine being the 'one and only' medical science and criticisms about its all-round usefulness. The biomedical scientific model is also criticised because of the monopoly of doctors over the 'formal medical knowledge' and because of the predominantly negative standpoints regarding everything that could be denoted as a different view of an illness/health. Critics of the existing biomedical paradigm indeed base their conclusions on divergent views and different levels of analysis, yet they all have a common denominator: they express the need for complex scientific and research methods, the need to increase the significance of public health and give greater consideration to social stratification, contradictions, and the personal views of patients etc. By considering merely biomedical facts, one denies the historical, cultural and social factors that affect health-related beliefs. Moreover, the individual's own interpretation of illness and health-related problems is denied. In fact, the perception of health and illness varies widely among different cultures and even within a single culture.

Nowadays, in addition to the firmly grounded biomedical understanding of illness and health-related issues, new approaches are emerging such as the unconventional[37], sociological and critical-theoretical approaches, to mention just a few.

[37] An unconventional approach to medical treatment implies a different (alternative; alter, lat. - different), traditional, folk, natural, complementary, unconventional, Eastern type of treatment, and sometimes also paramedicine or quackery. On the other hand, the term 'conventional approach to medical treatment' implies an approach based on a biomedical (naturalistic) scientific paradigm and is also called official, standard and sometimes event scholastic, scientific or Western medicine. Each of these 'two medicines' may be divided into narrower areas that develop in accordance with their philosophy, theory and practice. In Slovenia, official medicine has 43 recognised areas of specialisation, while alternative medicine is only present in a few (some of which, however, have already become part of official medicine): acupuncture, homeopathy, osteopathy, aromatherapy, chiropractic, bioenergy, herbal medicine.

5. 1 Unconventional approach(es) to understanding health and treatment

Doctors, patients, the state and other social institutions have different opinions on both conventional and unconventional views of health; these can be commented on through different theoretical models[38] and the conclusions can be used in planning the measures for regulating such issues. What seems important to the patient is not necessarily relevant for the doctor and *vice versa*. The decision to have recourse to the conventional approach to treatment is only one of the many options to consider when a person is not feeling well. A health problem or a symptom of an illness is not yet a sufficient reason to look for a doctor or healer; such a decision is often related to psychosocial (non-physical) conditions. How and when an individual will attempt to satisfy his/her needs for treatment to a large extent depends on the social network in which that person is included, i.e. on the reference system of the individual with the relevant socio-cultural standpoints, knowledge, values and norms. It is often the patient's social network which influences his/her choice of what, where and when he or she seeks official or unofficial medical assistance. Yet, in practise, there are barriers to adopting the necessary measures to adequately include the positive practices of unconventional treatment. These barriers include the dominance and rigidity of the traditional biomedical philosophy, the political role of the medical profession and relevant action in the area of health-related issues.

Although the attitude of official medicine to unconventional treatment is prevailingly negative, it is not so for the population of Slovenia. The first reliable data on the assessment of unconventional treatment in Slovenia are available in the Slovenian Public Opinion Surveys (conducted in 1994).

Unconventional approaches to treatment indicate an expansion of the process of 'medicalising' society, yet they also imply a restriction on the power of medical professionals. They have different implications for health as well. On the one hand, they (probably) have a positive effect, similar to the 'dialogue' between the doctor

Highlight 11: Application of alternative methods of treatment

	SPOS94$_1$	SPOS96$_2$	SPOS99$_2$	SPOS01$_3$
A. diet, fasting, macrobiotics	30.6	24.9	23.5	26.6
B. herbal treatment	30.7	28.1	24.5	26.3
C. acupuncture, acupressure, shiatsu	3.4	5.3	6.1	5.7
D. bioenergy, radiesthesia	6.9	7.8	8.9	9.1
E. massage, chiropractic, reflexology	10.8	12.5	15.8	18.5
F. meditation, autogenic training	5.8	6.0	5.7	7.1
G. yoga, tai chi chuan, dance therapy	3.3	3.7	3.7	5.2
H. biorhythm, astrology, numerology	2.6	4.1	2.6	2.0
I. homoeopathy	-	-	2.0	1.8

Source: SPOS

On the basis of a representative sample of 870 adult residents of Slovenia, Frankič (1996) estimated that 57.3 percent of the population uses medicines, products and alternative methods for 'self-medication'. The share of women (57 percent) was characteristically larger than the share of men (43 percent). The research indicates that people most often chose self-treatment when they experienced symptoms such as a high temperature, cough, sore throat; followed by symptoms such as general ill-feeling, stress, anxiety, insomnia and tiredness; preventive measures came in third place in terms of their likelihood for self-treatment; and symptoms related to pains in the back and legs and rheumatism came in fourth place.

The results of a second survey[i] conducted in the same year indicate that 83 percent of those surveyed know the term 'alternative medicine' but understand it differently. 49 percent support the application of alternative methods of treatment, and 37 percent actually apply them. Women are more in favour of their use than men, the elderly more than the young, the highly educated more than those with a lower education level; generally speaking, alternative methods of treatment are applied more in preventive care than for curative purposes. Younger patients (up to 49 years of age) more often choose alternative methods without a prior consultation with a physician, while older patients consult their physician before or during treatment in 50 percent of cases. Patients carry out alternative treatment most often on their own (34 percent of cases), under the guidance of a healer (25 percent), together with other family members (22 percent), and with friends and acquaintances (19 percent). 31 percent of respondents believe their physician is supportive of alternative methods. It is interesting to note that almost half (49 percent) of the people using alternative methods affirm that treatment with the alternative methods is successful; 16 percent of them even gave up the treatment prescribed by their personal physician.

The results of the above surveys indicate that people know different alternative methods of treatment, they are in favour of such methods of illness prevention and treatment, and they actually use them.

[i] In 1996, the then Institute of Social Medicine of the Ljubljana Faculty of Medicine carried out an anonymous survey on alternative medicine on a random sample of 1650 patients of general practitioners of the Celje Health Centre.

[38] Among others, Goffman in his book Asylum also presents a critical view of the modern role of medicine. He considers medicine as a system of social control full of values, operating under the guise of a neutral science. In Goffman's opinion, the main control technique is the characterisation of people as patients, sick persons. The repressive aspect of this operation is that such a characterisation is not necessarily based on a biological reality but also reflects the values and prejudices of medical professionals.

and the patient while, on the other, they can also pose a risk to health if they are applied exclusively. With holistic care for health (health promotion) and health education, we could persuade people to search for and use those preventive and treatment methods that are beneficial to their health and contribute to a better quality of life – either within conventional or unconventional treatments. In order to guarantee the legal, economic and health care protection of its citizens, Slovenia will have to regulate its attitude (monitoring, regulation and action) towards the existing unconventional treatments.

Social construction of sickness/ health

In fact, those seeking help from unconventional healers in Slovenia have no legal or health care protection. The state does not regulate[39] unconventional approaches to treatment and the status of healers as providers of such a service, even though they have been constantly present in Slovenia in various forms. No document defines the methods and standards of their work, the minimum educational and training programmes, and no conditions for granting licenses for such activities are specified. In legal terms, Slovenia excludes any practice not based on scientific medicine and any provider not having the formal medical education necessary for such work. By doing so, the state supports the 'black market' for alternative medicine services which has a negative effect on the health, economic and legal security of its citizens and reflects the 'disorganisation' of the state. Therefore, more regulations on unconventional medicine are necessary[40], and the unconventional methods should be examined, explained and included among the measures of modern health care, particularly if they offer curative effects or contribute to people's well-being and satisfaction. In this respect, Slovenia could take advantage of the positive experience of other industrialised countries.

The claims about the universality, neutrality and 'perfection' of the biomedical model of treatment are challenged by both unconventional methods of treatment – already discussed above – and by the sociological (social) approach to health. This approach is based on the assumption that illness is a result of the way of living in certain social environments and that the 'primary (basic)' reasons for ill-health are related to the way of living in an organised and structured society. The social model of health tries to find the roots of ill-health outside of the body and thus confirms the thesis about the 'social construction' of illness and health.

Undoubtedly, (bio)medicine has a significant and positive role in modern society but the critical-theoretical model[41] of analysis is focused mostly on the repressive and disciplinary role of medicine.

[39] In 1996, an initiative was launched in the National Assembly of the Republic of Slovenia to prepare a review of the state of treatment with bioenergy and other complementary methods, promote the development of standardised methods for the assessment of curative capacities of bioenergeticians and other healers, and legally regulate their registration and supervision. The parliamentary initiative for the legal regulation of the status and supervision of alternative medicine in Slovenia was discussed and later rejected by the then Health Board (the highest professional body) of the Ministry of Health.
Prompted by pharmaceutists, the Health Board in 1998 discussed the 'homeopathic treatment and medicines' and became familiar with the positions of the National Commission for Medical Ethics on healers. The Health Board stated that 'the status of homeopathy or alternative healing can be regulated so as to allow the functioning of exclusively those healing disciplines with clearly specified and verifiable education and professional organisations, and for which it can be established with certainty that they do not pose a threat to the health of their clients, under the conditions provided by the relevant minister, and which are subject to adequate professional and administrative supervision'. In this respect, the providers of alternative methods of treatment have already established or are in the process of establishing professional organisations, such as the Naturopathic Therapists Association within the Slovenian Chamber of Commerce and Industry (European Nomenclature - 85, 142).

[40] Important arguments for the regulation of unconventional methods of treatment include the position of the World Health Organisation that supports and encourages its member-states to form their own health policy in relation to such phenomena. The WHO is willing to assist in the evaluation and examination of the safety and efficiency of the curative methods applied (research), to supplement knowledge of traditional (approaches to health transferred from generation to generation in each individual environment) and modern health practitioners, as well as to inform the public about recognised accomplishments in the use of unconventional methods. For that purpose, the WHO founded several centres of traditional medicine throughout the world. The industrial countries in which such centres are located include Belgium, Italy, Japan and the USA. In addition to the WHO, the issue of unconventional medicine is addressed - at the European level - also by the COST B4 project. Spain, Norway, the United Kingdom, Finland and Switzerland agreed in 1993 to study and scientifically enforce unconventional methods of treatment. To date, they have been joined by Belgium, Denmark, France, Italy, Hungary, Germany, the Netherlands and Slovenia (Memorandum of Understanding).

[41] In this respect, the most outstanding figures are Foucault and his followers.

5. 2 The critical-theoretical understanding of the role of medicine

In the critical-theoretical perspective, medicine in modern society is one of the main mechanisms for repressing the individual in the sense of their submission to 'normal' social roles. With their models and definitions, professional groups divide people and their behaviour into normal and deviant ('sick people', 'lunatics', 'criminals' etc.) (White, 2002:9, 120). A new system of authority is established by observing the psycho-physical body of a person – the so-named 'biopolitics'. People are increasingly subject to observation and investigation by new expert systems – medicine, sanitary sciences, or criminology. The expansion of such a panoptical model of power in the area of medicine is seen in the spread of psychiatry, in its imperative self-exposure, and in the spread of preventive medicine, healthy diets, *fitness regimes* etc. (Annandale, 1998:36). Many medical disciplines (psychiatry, general practice, paediatrics, gerontology etc.) place the entire sphere of an individual's privacy or his or her social relations at the centre of their 'investigative approach' (White, 2002:47). In fact, in addition to the biological body, today's medicine observes the social life of individuals and often defines it as problematic.

In submitting to 'normal' social roles, not only does the individual become the object of authoritative mechanisms and practice, but he or she also experiences internal supervision imposed from within. The necessity of professionally defined healthy behaviour ('a healthy life style') is promoted by expert groups and health care policy, but such behaviour is exercised by the individual without any external constraints through techniques of self-control and self-discipline with which the individual tries to harmonise their behaviour with internalised professional models. The enhanced disciplinary role of medicine in modern society is thus shown in its increasingly exposed role in the classification of people by the criterion 'normal-deviant' as well as in the increasing presence of different techniques of self-discipline based on medical norms of a healthy life-style. The process of expanding medical discourse, of classifying healthy and unhealthy practices, to an increasing number of areas of social life is called the process of the 'medicalisation of society'.

Society is being medicalised at a fast rate

The leading role in the context of medicalisation is played by general medicine. After all, the process of medicalisation of society has both status-based and economic dimensions. This can be associated with Berger's (1997) concept of 'knowledge classes'. According to his theory, the educational-professional class, which includes the medical professional elite, supports the expansion of the welfare state (e.g. programmes of preventive visits to the doctor) since in this area their acquired education is highly valued. By doing so, the said class intends to realise its cultural capital. Such programmes create additional needs for medical expertise or services and redirect financial resources to this area; as a consequence, they raise the social status of these experts. According to this theory, the expansion of preventive care programmes and health promotion campaigns can be interpreted as an instrument of self-promotion for medical professionals who advocate that individuals continuously nurture their health through a 'healthy life style'. The latter comprises all areas of life – an adequate diet, a proper way of spending free time, recreation, the reduction of work and personal stress, preventive care visits etc. With the medicalisation of everyday practices, we should ask ourselves whether a person really wishes to medicalise every aspect of his/her life.

Expansion of preventive programmes to promote health

With the empirical-critical analysis of the 'healthy life style,' we have sought to highlight certain elements of the concept of the society's medicalisation. We have thus not (in this particular text) devoted as much emphasis on its determinability with socio-economic differences as we have on another, similarly 'provocative' aspect – a healthy life style as an ideological concept and as a collection of self-disciplinary practices.

After a brief review of the selected elements of 'healthy life style' (Highlight 12) – which is, however, not exhaustive and does not include certain equally important elements

(such as alcohol, drugs etc.) – it can be established that health or care for health and body fitness is an important (internalised) social norm with which, as a general rule, respondents wish to comply. This internalised norm does not necessarily generate a determined behaviour, but it nevertheless generates a 'feeling of guilt' in the individual. This feeling may induce the above-mentioned idea of shift in responsibility for an individual's ill-health onto the individual and their particular life style[42].

A healthy lifestyle as an ideological concept

Highlight 12: An empirical-critical analysis of the concept of a 'healthy life style'

Recreation

According to the Slovenian Public Opinion survey, sport or recreation is practised regularly by respondents from the top of the social ladder. This fact can be interpreted as the effect of life style inequalities on the one hand, and through the paradigm of self-discipline on the other. In the latter case, educated-professional groups can be described as the most 'ideologically interested' in this aspect of self-disciplining practices or - in general terms and resulting from the entire data sample - in the 'healthy life style' as an ideological concept. Several other indicators show that in this social class, the concern for health and fitness is a stronger internal social requirement than in other classes, for it is naturally included in the (liberal) individualistic ideological sphere surrounding the said groups. The positive attitude to these practices may be seen as a consequence of favourable status effects. On one hand, there is the social prestige and, on the other, these groups consider fitness and the appearance of their body as 'capital'. Depending on which paradigm we choose, such a group can be described either as a group of privileged persons (Marxist paradigm), a group of the 'aware' (in the language of health care policy) or as a group of ideologically subservient persons (in the language of ideological analysis).

Body weight

Control over one's body weight is one of the main elements of healthy living and an outstanding element of self-disciplinary practices. The reason is not so much health than the social ideal of beauty most often associated with body weight. In today's Western culture, only a slim body is considered beautiful. Obesity is stigmatised as not beautiful, funny, disgusting, asexual (Braziel, LeBesco, 2001: 2-3,64). A fat body is also seen as a symptom of internal deficiencies, a weak character, immorality in the sense of laziness, a lack of self-control, or negligence. The media and the fashion industry constantly promote the said ideal of beauty and consider obesity - at best - 'invisible'. Several studies reveal a significant degree of dissatisfaction with one's own body (mostly by women), which is a result of this social ideal of beauty.

National and international data reveal how intense the effect of the internal social requirement is for slimness. (Slightly) heavier persons (mostly women) see themselves as deviant ('they would like to be slimmer') only because their body weight is not proportional to that of the prevailing social norm. Both 'too heavy' and 'normally heavy' persons (as pointed out by Foucault, the 'normality' is here defined by medical professionals) are subject to an internal imperative of self-limitation, attaining or maintaining the ideal weight through diet and fitness. In addition to the health-related disciplinary aspect, limitations in terms of food also have a significant aesthetic disciplinary aspects due to their relation with the aesthetics of the body.

Smoking

Smoking is probably one of the most exposed unhealthy practices and has been the subject of a great deal of debate in the last few decades. The tobacco industry is making every effort to deny or downplay the importance of the data on the harmful effects of smoking. On the other hand, particularly in the last ten years, the practice of smoking has been stigmatised to the extent that it sometimes looks like a 'witch hunt' conducted by the promoters of a healthy living. Data indicate that smokers themselves consider their habit unhealthy or deviant compared to the promoted doctrine of a healthy life style. 72 percent of smokers express a willingness, in principle, to give up smoking. Like with recreation, we can conclude that the estimated value of these replies is low, yet at the same time they indicate the presence of the self-stigmatisation of smokers and the recognition of the need for self-discipline when it comes to smoking.

[42] With the reform of health care financing under the second pillar, Slovenia is already considering adopting this line of thought. In the Preaccession Economic Programme for 2002 it wrote: "Under this (i.e. second) pillar of reform it will be necessary to increase the participation of those insured persons who are more likely to need expensive medical services then others due to their life style, and for greater responsibility of employers for the health of their employees by implementing legal provisions providing for them higher insurance premiums for an above- average number of occupational injuries and higher occurrence of occupational diseases".

Instead of a conclusion

In political terms, health issues have so far been relatively marginal, mostly due to their complexity and conflicting opinions on the topic. In this sense, a particularly important fact is that radical changes in this area require a strong political will and perseverance; particularly if we know that socio-economic policies in the area of health mostly have medium- and long-term time horizons in terms of preparation and visible effects – in any case, in a longer run than election cycles. Radical changes in this area normally require a social consensus and relatively high initial investments in terms of time, money and political support. On the other hand, given the lack of experience, we cannot know precisely what to expect from the actual implementation of such policies. In fact, no cost analysis of the consequences of ill-health has been carried out in Slovenia. In most cases, the only sources of information are know-how from abroad and the small amount of national data and studies on the effects of the implemented measures on stratification in health. The purpose of the present Report is to stimulate the expert, political and interested public to support multi-disciplinary approaches to public health and, consequently, the exchange, upgrading and integration of such knowledge. It is necessary to stimulate participation in international comparative studies, but this will only be possible if adequate and comparable databases and analyses are available.

Given the presently exclusive and indivisible link between health and the Ministry of Health, as well as given the poorly defined and insufficiently recognisable network of links with other social actors, it seems that more network-interdisciplinary-oriented public health policymaking would be welcome. With its expert knowledge and with a shift in its human resource policies to emphasise multidisciplinarity, the Ministry of Health could indeed play the main integrating role. It would therefore be necessary – following the best practises of most European countries – to also provide for the adequate qualification and training of staff in the complex multidisciplinary area of public health. To this end, a (postgraduate) course in public health could be introduced, which would concurrently provide an opportunity for the adequate production, reproduction and application of multi-disciplinary knowledge, thereby creating better opportunities for analytical and developmental work in the broad field of the public health care system.

In accordance with the established socio-economic subjectivity of health, it can be affirmed that solving problems in other areas (e.g. increasing unemployment to save firms) has certainly had negative effects as well. With the transfer of knowledge, the media and pressures of the critical public, the research sector should play the main initial role in the intense problematisation of socio-economic inequalities in health and should place this issue on the political agenda. Creative co-operation would thus make it possible to co-ordinate these various measures. Of course, such co-operation and co-ordination would become more complex (like these issues are, after all), yet socially and politically more balanced.

Urgent need for a multidisciplinary approach to health

This Report tries to empirically prove that poverty and the other dimensions of socio-economic deprivation affect the individual not only as such, but often also (in/directly) through health. Behind each factor of the social conditions and socio-economic status of the individual lies an extremely complex network of links with health, among the factors themselves and the responses to them. Only when we get to know this network better will we be able to adequately respond to it with a set of public policies.

The understanding of health from a socio-economic point of view does not require any fundamental changes of conceptualisation. Moreover, there is no doubt about the necessity to reduce the gap between socio-economic layers in health. The issue is not about setting the 'right' standard of health or about the lack of support for this objective. The problem remains the rigid denial of multilevel, multidisciplinary and multisectoral approaches to health issues and the (more or less grounded) fear of adopting (non-proven) long-term alternatives.

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REVIEWS

Dr. Marko Kranjec[i]

As stated in this Report, human development is not a new concept. Man has always questioned the essence of being and searched for answers about how to improve his life. The quality of life is not only guaranteed by material goods but also depends on the environment and spiritual development and on a whole range of social relations, including the family, politics etc. Today, there is no doubt about this and the merit of the human development reports is that they draw attention to the multidimensionality of this concept.

Concerning the question of whether material progress is a precondition for improving the quality of life, as an economist I believe that without material progress no improvement of the quality of life can be achieved in areas such as health care, science, culture and the arts, to mention just a few. In a certain sense, material progress is the 'price' for improving the quality of life. I use the term 'price' because the market economy brings about numerous negative aspects that impoverish human life with side effects such as degradation of the environment, unemployment, the breaking off of human relations, inequalities in income and property distribution, social exclusion and possible political manipulation. The question of material progress is therefore a question about where the limits of such progress are set and whether man is reasonable enough to be able to set them. Unfortunately, no positive answer has yet been given by development hitherto.

For the first time ever, the market economy has brought about such material progress (development of production forces) to enable a considerable part of the world's population to live in relative prosperity and without fear for its immediate future. Even Marx, who can hardly be described as a supporter of capitalism and the market, described market production as heavy artillery that no society - not even the most barbaric one - willing to become civilised can resist. For most modern societies and for the world as a whole, the problem is no longer sufficient production but the accessibility of its results, i.e. how to guarantee access to its results to all or most members of society.

In my opinion, two things in addition to material goods are particularly important for human development:

[i] Dr. Marko Kranjec is a Professor of Public Finance at the Faculty of Administration of the University of Ljubljana.

work and the social system enabling man to freely decide on how to develop his capacities and pursue his interests. Work is not only a means of survival but also a social relation within which man pursues his social interests. The form of work and type of employment are not important. However, care for work must concern every single person while society can only provide temporary support. If we agree that work is so important for human development we should, at the same time, be aware that work requires the will for continuous, lifelong learning and adaptation to new circumstances. Most people are reluctant to change their usual way of living and expect lifelong employment without any additional training; this results in the need for social intervention aimed at maintaining the status quo, representing a similar threat to freedom and human development as the lack of work.

Once having established that economic, social and spatial aspects must be considered for balanced human development, the main question to be posed is who, in the broader interest, will correct the results of the market and how can these be corrected. In economics it is well known in which circumstances social intervention is justified: in the case of market failure which includes public goods, negative externalities, technical monopolies, lack of information, macroeconomic stability and solidarity allocation. In supporting the multidimensionality of human life there is a great risk that a certain institution or individual considers themselves competent for deciding when social intervention is justified. A subjective evaluation of the consequences of material progress may well also become a motive for justifying state intervention in areas where there are no reasons for that. Public choice theory is right in drawing attention to the threat posed by the interests of bureaucracy (the state) in regulating social issues. In this case, we cannot talk about a better quality of life since the corrections of market results are achieved on the account of reduced personal freedom and lower economic efficiency. It is well known that political decisions, except in the case of a consensus, do not satisfy every single member of society and it is, therefore, in the interest of social liberalism to transfer as many decisions as possible to the market where decisions are always consensual and voluntary and do not cause social tension. History is full of attempts to guarantee a subjective understanding of social justice which, however, ended with tragic consequences as well as in economic and social disasters.

As seen in the chapter on Slovenia's economic development, the increase in material welfare has had a significant effect on the human development index. According to this index, Slovenia ranks 29th among 173 countries. Thanks to prosperous economic development in the period since it has been independent, Slovenia has successfully resolved several other aspects of human development. The average annual economic growth (4 percent in the 1993-2002 period) was achieved with a relatively moderate balance in public finances and international trade and a stable unemployment rate. As a result of the transition to a market economy, income differences increased but are still lower than those in comparable economies. The poverty risk rate in Slovenia is below the EU-15 average. Problems of social exclusion, unemployment and poverty are closely related to education, which is high on average, although in some areas it is insufficient and inappropriate for today's requirements. Regional disparities have also grown, mostly due to restructuring, but they are only temporary and can be controlled through an appropriate regional policy.

In the past, social and economic problems of the most vulnerable parts of society were mitigated by social security policy. I believe, however, that this policy was insufficiently targeted and insufficiently targeted to those actually in need of assistance. The systemic and global guaranteeing of rights that exceed the possibilities for the sustainable development of society does not contribute to human development; instead, man becomes dependant on assistance. Demographic movements, the political philosophy of the 'cost-free' provision of health care and schooling, and the expansion of the public sector are a threat to a moderate public finance balance and to economic development that represents the basis for guaranteeing social rights.

The Report on Human Development in Slovenia promotes a 'quality shift in developmental concepts' and in some cases raises doubts about the development so far that has overemphasised the economic aspects. The report supports a clear developmental vision but does not define exactly how to implement it. We can agree that the creation of developmental orientations is not merely a technical task, yet supporting social intervention in the name of human development - without sufficiently identifying whether there are reasonable grounds to say such intervention makes it more efficient than market mechanisms - poses a threat to the bureaucratisation of social life, thereby limiting man's freedom and the entire socio-economic basis for human development.

Ljubljana, 7 May 2003

Dr. Anton Kramberger[ii]

The purpose of human development Reports sponsored by the UN is to draw attention to major international problems, particularly poverty and unequal human development between and within various countries. We can hardly say that this is a new idea still searching for its proper place in the public eye. On the contrary, the idea of justice is very old and has always had a place in society, yet today it is difficult for it to find its way amidst the increasingly selfishly defined programmes and objectives of everyday making by corporate and, particularly, national and international politics. Surprisingly, the latter two tend to guarantee freedom and development to those who are already well provided for, who already 'have it all' and can provide for themselves, although it is politics that actually uses and manages public resources, i.e. resources intended for general and not private welfare. Human development Reports thus have an additional purpose and try to move the paradigmatic economic emphasis from merely structural or macroeconomic views about the growth and development of countries to views that are closer to the objectives of individuals and humankind. In such endeavours, human messages are always, like Sisyphus, at the beginning.

The Human Development Report -Slovenia 2002/2003 is divided in two parts; the first part contains a general review of Slovenia's development while the second deals with health in its various aspects. In the first part - which in my opinion is far too gentle in criticising the indifferent, imitating and unoriginal Strategy for Economic Development of Slovenia - the Report deals with the usual governmental topics such as economic growth and inflation, employment, wages policy etc. Then it summarises the main social and economic problems including the oscillating social security and social cohesion, the segregation of poverty into its class-related and regional dimensions, and the relatively unclear dynamics of income inequality. The tiny imperfections and ambiguities in this part of the Report are probably due to the lack of staff with support and enough ardour to prepare sufficiently precise and pungent comments (indeed, the Institute of Macroeconomic Analysis is more dependent on the Government than independent of it). For example, the causes of inflation and new imbalances in public finances are not explained in detail but are described as 'having just occurred'; with regard to income inequalities we learn about the hardly estimable quantification of differences among households yet we do not receive much information about all the resources available to families, about whether the calculations took account of the considerable property changes that followed denationalisation, the privatisation of property and the yield growth from the various financial and business services that prosper in Slovenia. Personally, I have been disturbed for some time now by the use of the term 'the labour force market' to indicate the problems of the population's employability - as if we are dealing with an archaic slave market and not with relatively sophisticated forms of labour and employment (i.e. labour market). But I will wait patiently since the lax and imprecise technical terms seen in Slovenian professions take some time to die off naturally. When these general comments on the mostly economic indicators of Slovenia's development integrate with international comparisons of human development indices, we learn that Slovenia is relatively a fully structured social entity, that it has an enviable position compared to other countries and that its politicians even know which dimensions are its main weaknesses, e.g. the absence of women in leading positions and in the public sphere.

The second part, focusing on health issues in Slovenia, is more innovative and also very interesting since it attempts to analyse and integrate the objective and subjective factors that influence health. It comprises four specific issues: the impact of the socio-economic determinants on self-assessed health; the analysis of correlation between demographic characteristics and the (excessive) specific mortality rate; the analysis of injuries; and the evaluation of a complex health care system functioning. The first issue is based on the data from Slovenian Public Opinion Surveys for the 1982-2000 period; the analysis thereof indicates that the self-assessment of ill-health is related to the burdens imposed on people by discriminatory socio-economic features: low income, low level of education, poor economic status, and even an abstract lower social class characterised by a range of deficiencies.

The second topic, prepared by social medicine experts and others, is based on one of the most important classical synthetic indicators of a population's health: life expectancy. The study - based on a rarely accessible database including various official statistical data on the population - shows that the typical pattern of morbidity or mortality is significantly correlated, in addition to a broader demographic and epidemiological transition, to socio-economic factors (sex, age, marital status, profession, income, employment, education, lifestyle). These indisputable findings, such as the

[ii] Dr. Anton Kramberger is the President of the Slovenian Sociological Society.

striking regional distribution of causes of death for such a small country like Slovenia, are more of an interim report since research is still taking place but will certainly, and I hope, become more pronounced - despite the resistance to multidisciplinary research in medical field. Before such knowledge is disposed and forwarded, it is necessary to examine several other mechanisms (complexity, the non-linearity of correlation), as is well put by the authors.

The third topic deals with injuries, which are the leading cause of death among Slovenians aged below 45 years. The most intriguing is the introductory statement about epidemiological research indicating that injuries are not randomly distributed among the population and that the pyramid of injuries is much more reliable than one would initially think. This approach justifies systematic analyses, whose results are supposed to increase the number of preventive programmes in public health care, although it is often and - in my opinion - justifiably believed that expansive prevention is only a cheap excuse to expand medical expertise and the profession to all spheres of life. However, this is a low price to pay for the benefits obtained from such studies and programmes (for example, increased awareness of the fact that morbidity and mortality are socially determined). After all, such researches bridge the undernourished social analyses in medicine and in society as a whole since we too often say that victims are themselves responsible for their own injuries and death.

The last topic in the second part of the Report refers to the public health care system and the source of its financing - public health insurance. Despite the wealth of financial macroeconomic data and the interesting review of household expenditure on health, I feel this part of the Report is to some extent superficial; it fits too much the medical profession's own internal objectives, i.e. the three-phase organisation of the health care, and its public financing, and does not focus enough on health care as a complex profession or activity, with the extremely wide institutional structure and several internal contradictions. After reading this text, we may well have a good overview of some visible aspects of public health care, of the number of doctors and support staff, of the number of hospitals and other health institutions etc.; but what is less clear are the dilemmas and imbalances regarding the objectives of the medical profession, the patients and the payers, the relations between jobs and human resources flows (education), and the processes between public and private financial resources and the medical practice. Further, there is no description of the inconsistent coalition between health care and the pharmaceutical industry increasing the prices of health care services. If such a complex subsystem were to be the subject of gradual improvements and not simple and destructive interventions, as the passer-by politicians usually assign the amount of resources for the entire system, it should be presented more deeply and broadly, albeit only briefly, than it is currently presented in the Report.

I would like to conclude my comment on the Report with praise and scruples. Despite some well-intended comments, I would like to praise the authors and editors who correctly and firmly indicated that the average health status of the population is strongly influenced by socio-economic regularities that result from the regional habits of people and certain rules and institutions and which cannot be cured with pills but in the long-term only with structural and systemic reasoning. However, I am concerned that such reports might turn into the mere non-binding bad conscience of politicians. In my opinion, the Human Development Report will only have a social and developmental meaning if its socially-attentive approach becomes the core of socio-economic reports of each country and not merely a supplement for a better image. One of today's biggest liberal mistakes, committed particularly by young and obedient countries like Slovenia, is that the administrations of such countries too easily accept and allow such an inconsistent distribution of work in the economy and, unfortunately, also in politics. In development, including public finances, leading positions are held by egoists who think that the consequences of their negligence will be dealt with by someone else, probably the social state, through different techniques of social engineering. This is an illusion of the worst kind. The said mistakes lead directly to disasters such as Chernobyl, Enron, construction tragedies in the event of earthquakes etc. In order to avoid them more easily, we need to be tolerant yet, at the same time, unambiguously demanding and radical as against those primitives near the state who indulge in fantasies - thereby ignoring the real A. Smith that everyone should grab for him/herself and that this will also be good for others. Therefore, there should be more reports like this year's Human Development Report for Slovenia.

Ljubljana, 8 May 2003

Institute of Public Health[iii]

The 2003 Human Development Report deals with several different concepts and is divided into chapters and subchapters presenting issues that have only been fleetingly outlined in texts published so far. The main and most complex part of this year's Report is the chapter on health. It comprises five subchapters and begins with general introductory considerations based on the sociological and public-health-care-related analysis of health as a value and on determinants affecting its maintenance or loss. The authors rely on research work in the area of sociology and on theoretical aspects contributed by the latter to the understanding of health-related phenomena. Such considerations and findings are important since the situation in Slovenian society is changing rapidly as a result of transitional and post-transitional processes - loss of job security, greater stress in the work, social and family environments, the prevalence of personal and individual values over collective values (as opposed to the previous socio-political system), economic uncertainty, the need to prove one's 'efficiency' in different school and work environments, the technological revolution resulting from the use of information technology etc. All these elements are successfully considered by the authors of the 2003 Human Development Report. In this respect, the considerations about the intertwining of such views with the biomedical model are also very important, e.g. on page 38 where the authors discuss the relationship between positively- and negatively-defined indicators and the self-assessment of health. Equally important are the clearly stated positions on the close link between health and social and economic factors. In the first subchapter, the authors present the socio-economic determinants of health analysed in terms of system equity and the existing or changing inequities. It is followed by a subchapter dealing with the analysis of selected indicators of health in Slovenia and including the report on the project of the socio-economic determinants of mortality in Slovenia. In addition to general data on mortality, particular attention is given to early mortality, regional disparities and injuries. The thorough analysis of the latter is needed since injuries are the main cause of early death in Slovenia, particularly among the male population.

In that part of the Report dealing with health-related issues, the authors quote the sources used when presenting the quantitative indicators of health and the health status of Slovenia's population. These sources include the Institute of Public Health, the Statistical Office of the Republic of Slovenia and the WHO, as well as the results of the Slovenian Public Opinion Polls (with regard to health) and the above analysis of the socio-economic determinants of mortality in Slovenia.

The Report continues with a subchapter on health care and health insurance and presents the characteristics of the health care and health insurance system by means of quantitative data. In this part we miss more information on capacities since it is limited to data on the number of physicians, specialists, nurses, hospitals, health centres and health stations. The 1990s were, in fact, characterised by the gradual but constant trend of introducing private practice that today encompasses a significant part of health care. Unfortunately, no data on the infrastructure and no physical indicators referring to productivity are presented, although they are available in the sources quoted by the authors. The description of the health insurance system is correct but an assessment of the regressiveness or progressiveness of the existing system (which could easily be linked with the considerations set out in the introductory part) would also be useful since an assessment of the universality of the system based on solidarity is insufficient. It should, however, be stressed that the mere statement of contributions from gross income is not a sufficient presentation of the system's progressiveness since certain income categories in Slovenia are not taxable or not sufficiently transparent. This issue is addressed by the Health Insurance Institute in its annual business reports in which the Institute also assesses the contributions thereby foregone. With regard to voluntary health insurance, more emphasis should probably have been given to the fact that this type of insurance covers co-payments and is not the classic type of voluntary insurance where the contributor chooses a certain package of services. In the next part, the authors address another complex issue - household expenditure on health. Due to the still non-applicable health accounts system in Slovenia, there is still no exact overview of total expenditure on health and health care. Moderate changes to the rules on compulsory insurance, the movements of medicines on the lists, changes in voluntary insurance premiums and the introduction of out-of-pocket payments also in public health institutions are factors that increase household spending. Given the methodology used, the authors have gathered interesting and quality data on household spending on health.

[iii] Institute of Public Health of the RS covers Social Medicine, Hygiene and Enviromental Health, Epidemiology of Communicable Diseases, Public Health Laboratories and Health Promotion.

The final part entitled 'Challenges' comprises clear and relevant decisions that are well defined in the document. In this respect, we are pleased to support the views on the enhancement and development of the public health profession, although the authors rely on just two pillars: the Ministry of Health and the School of Public Health that is being established. The role of the Ministry of Health is important since it prepares the strategy and directives for the entire health care system, while the schooling system introduces multidisciplinarity and dynamics into its own profession. Moreover, we cannot ignore the role of public health institutions that employ most of the experts who need to connect and supplement their expertise with experts from other areas - which should be included in the concept of public health - both individuals and institutions that might be more oriented to application than to research or academic pursuits.

This year's Human Development Report offers a quality and comprehensive review of the findings and assessments relating to the broader social and economic approach that explains the role of health and illness determinants by applying a different and non-biomedical approach.

Ljubljana, 14 May, 2003

HUMAN DEVELOPMENT INDICATORS

Statistical Appendix

Table 1
Gross domestic product (at constant prices)

	1992	1997	1998	1999	2000*	2001*	2002
GDP per capita							
- national currency (000 SIT)	510	625	650	683	713	733	758
- US$ purchasing power parity	8,847	13,929	14,342	15,816	15,600	16,300	n.a.

Source: SORS, IMAD
Notes: *In the year 2000 and 2001 new methodology was applied according to Eurostat (ESA95). Value of GDPppp in year 2000, calculated by old methodology, is US$ 16,433. n.a.: Not Available.

Table 2
Inflation, indebtedness and international assistance and aid (in %)

	1992	1997	1998	1999	2000	2001	2002
Inflation: % change in consumer prices	92.9[1]	9.4[1]	6.5	8.0	8.9	8.4	7.5
Budget deficit % of GDP	0.2	-1.1	-0.8	-0.6[2]	-1.4	-1.4	-2.8[2]
Current account balance as % of GDP	7.4	0.3	-0.6	-3.5	-3.0	0.2	0.3
External debt as % of GDP	13.9	22.6	25.1	26.9	34.3[3]	35.7	n.a.

Source: IMAD
Notes: [1]Retail prices as a measure of inflation until 1998, after 1998 consumer price index. [2]In year 1999, in the revenue from value added tax and excises,VAT and excises from January 2000 was also included. The opposite was done in the year 2002 (in budget revenue only taxes from 11 months for VAT and excises were included). [3]Rapid change in external debt was the result of current account deficit which was financed by external debt (Economic Mirror 2000/3/II).

Table 3
Public revenue and expenditure (at constant prices)

	1992	1997	1998	1999	2000	2001	2002
Public revenue*							
- per capita (SIT in 000)	220,9	262,9	279,3	297,7	305,0	316,1	314,3
- % of GDP	43.3	42.1	43.0	43.6	42.8	43.1	41.5
Public consumption expenditure*							
- per capita (SIT in 000)	214,7	270,2	284,5	302,0	314,6	326,2	337,0
- % of GDP	42.1	43.2	43.7	44.2	44.1	44.5	44.5
Public expenditure on health							
- per capita (SIT in 000)	36,5	n.a.	43,6	n.a.	47,0	48,4	n.a.
- % of GDP	7.2	n.a.	6.7	n.a.	6.6	6.6	n.a.
Public expenditure on education							
- per student (SIT in 000)	n.a.	640,8	215,3	216,8	201,1	197,7	n.a.
Expenditure on social protection per capita (constant prices)		178,725.0	186,029.3	196,171.4	198,820.8	n.a.	n.a.

Source: IMAD
Note: *GFS IMF methodology

Table 4
Economic activity by sex (in %)

	1997	1998	1999	2000	2001	2002
Men						
Economically active as % of population aged 15-64*	73.2	73.3	72.3	72.2	73.1	72.9
of which (as % of economically active):						
fully employed	92.9	92.3	92.7	93.2	94.1	94.0
sub-total: all employed (including self-employed)	68.0	67.6	66.9	67.2	68.7	68.7
unemployed	7.1	7.7	7.3	6.8	5.9	6.0
Women						
Economically active as % of population aged 15-64*	63.5	63.3	62.5	62.9	63.9	64.3
of which (as % of economically active):						
fully employed	92.4	91.9	92.1	92.7	93.0	93.7
sub-total: all employed (including self-employed)	59.0	58.9	57.8	58.5	58.9	59.6
unemployed	7.6	8.1	7.9	7.3	7.0	7.0

Source: IMAD
Note: *As defined bi ILO

Table 5
Net annual wages and net earnings per month, at constant prices, by sex (in SIT)

	1992	1997	1998	1999	2000	2001	2002
Men							
Average wage	56642.0	73655.9	74058.0	75403.8	79397.6	80297.0	n.a.
Average wage in non-agriculture employment (without services)	n.a.	64284.7	63936.9	66725.6	73886.8	62682.5	n.a.
Women							
Average wage	49913.0	64037.3	65839.7	65259.5	69693.8	71600.9	n.a.
Average wage in non-agriculture employment	n.a.	50148.1	51510.2	51593.0	56906.7	50216.4	n.a.

Source: IMAD

Table 6
Poverty

	1992	1997	1998	1999	2000	2001
Persons in absolute destitution - number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Persons in absolute destitution - % of total population	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Persons in absolute poverty as % of total population	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
At risk a poverty rate (below 60% of national median income)	n.a.	14.0	13.8	13.6	n.a.	n.a.
Average expenditure on food as % of total consumption expenditure[1,2]	27.7	25.9	25.5	24.0	22[3]	22[3]

Source: SORS
Notes: [1]National accounts; [2]The figure includes expenditure on food and non-alcoholic beverages (01) and expenditure on alcoholic beverages and tobacco (02); [3]Figures for 2000 and 2001 are not fully comparable with the 1990-1999 data series due to the national accounts revision in 2002.

Table 7
Demographic structure

	1992	1997	1998	1999	2000	2001	2002
Population							
% women	51.5	51.2	51.3	51.2	51.1	51.1	51.1
% men	48.5	48.8	48.7	48.8	48.9	48.9	48.9
% under 15	19.8	17.2	16.8	16.4	15.9	15.6	15.2
% 65 and over	11.2	13.0	13.4	13.7	14.0	14.3	14.6
% refugees and IDP	0.0	0.0	0.2	0.3	0.2	0.1	0.1
Natural increase per 1000	0.3	-0.4	-0.6	-0.7	-0.2	-0.5	n.a.
Total increase per 1000	-3.0	-2.2	-2.1	1.5	2.4	0.9	-1.5
Dependancy ratio*	45.0	43.4	43.3	43.0	42.7	42.6	42.5

Source: IMAD, SORS
Note: *Persons aged under 15 plus 65 and over as per cent of age group 15-64.

Table 8
Health services

	1992	1997	1998	1999	2000	2001
Private as % of total expenditure on health	1.2	1.5	1.8	1.6	1.6	1.8
Per capita private health expenditure (constant prices, base = 1992)		21144	23407	25955	n.a.	n.a.
Average cost of medical consultation as % of total household consumption expenditure	0.3	1.5	1.5	1.4	n.a.	n.a.

Source: IMAD

Table 9
Mortality rates by sex

	1992	1997	1998	1999	2000	2001
Males						
Life expectancy at birth, years	69.43	71.03	71.20	71.64	75.97	n.a.
Deaths under 5 per 1000 live births	11.08	6.79	7.99	6.39	6.40	n.a.
Mortality from malignant neoplasm per 100,000 males	254.3	277.4	283.3	281.7	282.7	280.3
Mortality from cardiovascular diseases in males below 65	117.7	101.2	101.9	95.9	96.1	91.2
Females						
Life expectancy at birth, years	77.27	78.65	78.72	78.93	79.55	n.a.
Deaths under 5 per 1000 live births	9.69	5.40	5.30	5.00	4.60	n.a.
Mortality from malignant neoplasm per 100,000 females	196.5	213.9	204.9	214.5	208.1	212.4
Mortality from cardiovascular diseases in females below 65	43.3	41.6	35.5	31.9	32.2	32.4
Maternal mortality ratio	5.0	11.1	0.0	17.3	27.6	n.a.

Source: IPH

Table 10
Morbidity

	1992	1997	1998	1999	2000	2001	2002
New cases of vaccine related diseases, per 100,000 population							
- diphtheria	0	0	0	0	0	0	0
- tuberculosis	n.a.	24.29[1]	21.48[1]	21.4[1]	18.61[1]	18.02[1]	n.a.
New cases of other major disesases							
- HIV/AIDS - females	0.681	0.098	0.295	0.393	0.197	0.098	0.689
- HIV/AIDS - males	0.620	0.825	1.242	0.929	1.234	1.540	1.439

Source: IPH
Note: [1]Standardised on European demographic structure of population.

Table 11
Security from crime

	1992	1997	1998	1999	2000	2001
No. of violent crimes reported per 100,000 persons*	192.9	149.8	183.7	197.5	222.1	
No. of white collar crimes reported per 100.000 persons**	5.8	7.1	9.6	8.3	9.5	
Felling of safety at home after dark (males), %	n.a.	73.0[1]	n.a.	n.a.	n.a.	72[2]
Felling of safety at home after dark (females), %	n.a.	56.4	n.a.	n.a.	n.a.	47
% of criminal offences where offencer has been brought to justice	55.5	64.5	52.9	48.3	46.9	n.a.

Source: Ministry of the Interior, SORS
Notes: *Criminal offences against life and body, sexual violence and public order and peace
**Criminal offences against official obligation and public authority
[1]In home environment; [2]At home.

Table 12
Net enrolment ratios by sex

	1992	1997	1998	1999	2000	2001	2002
Boys							
Basic (7-14)	98.3	100.3	100.0	100.1	102.0	n.a.	n.a.
Upper secondary, including vocational and technical* (15-18)	76.6	85.5	87.6	88.8	91.6	97.5	n.a.
Tertiary (20-24)	20.2	20.8	16.7	17.7	16.1	18.0	19.4
Girls							
Basic	97.5	100.1	100.1	100.3	99.8	n.a.	n.a.
Upper secondary, including vocational and technical*	81.9	90.2	93.6	95.0	96.7	101.4	n.a.
Tertiary	23.2	30.1	38.4	41.9	45.8	47.1	51.7

Source: IMAD
Note: *Primary and lower secondary

Table 13
Educational status of persons aged 25 and over by sex

	1997	1998	1999	2000	2001	2002
Highest level attained						
Men						
% with completed upper secondary	59.6	60.3	61.5	62.5	63.6	64.2
% with completed tertiary	13.2	13.8	14.0	14.4	14.2	14.4
Women						
% with completed upper secondary	43.5	44.5	45.2	47.2	47.0	48.8
% with completed tertiary	12.1	13.7	13.8	14.6	15.0	15.3

Source: IMAD

Table 14
Housing characteristics

	1992	1997	1998	1999
Average sq.m. of habitable space per household (m^2)	n.a.	n.a.	n.a.	84.2[1]
Cost of accommodation, including services, as % of total household expenditure*	20.5	18.6	18.6	18.4

Source: SORS
Notes: *Including also water, electricity and gas supply, heating
[1]Average in the period 1998-2000

Table 15
Enviromental risk, management and protection

	1992	1997	1998	1999	2000	2001	2002
Budgetary funds allocated to environmental protection and relief, per capita (constant prices)	n.a.	8.4	7.8	9.3	9.7	n.a.	n.a.
Area protected to mantain biological diversity (% of total land)	6.8	n.a.	n.a.	n.a.	n.a.	n.a.	7.4
Energy use (in stantard units)* per unit of GDP	212.5	205.1	203.6	198.4	193.8	n.a.	n.a.

Source: Environmental Agency, IMAD
Note: *Tones of oil equivalent

Table 16
Levels of principal air pollutants, kg per capita

	1992	1997	1998	1999	2000
Pollutants per capita					
Carbon dioxide (CO_2) in tones	6.5	8.1	8.1	7.6	7.5
Sulphur dioxide (SO_2) in kg	93.2	59.4	62.0	52.9	48.2
Nitrogen dioxide (NO_2) in kg	29.1	35.7	34.3	29.2	29.1
Volatile organic compounds in kg	20.0	24.2	21.2	20.1	20.1

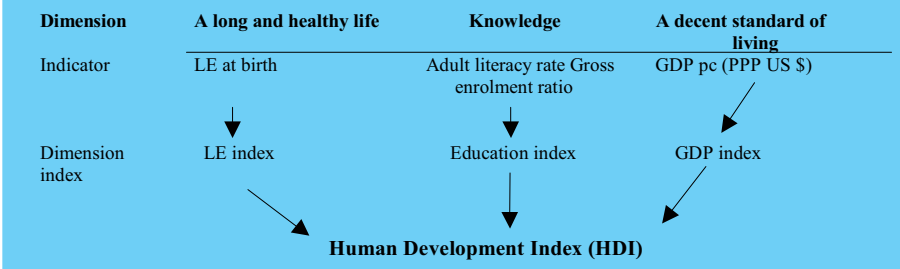
Source: Environmental Agency

Table 17
Social inclusion/exclusion (in %)

	1997	1998	1999	2000	2001
Share of households with phone line	88.0	92.0	93.0	96.0	95.0
Share of households with mobile phone	9.0	20.0	43.0	75.0	90.0
Share of households with personal computer	32.0	35.0	42.0	46.0	47.0
Share of households with access to the Internet	8.0	9.0	15.0	21.0	24.0

Source: SORS

Highlight 13: Calculating the Human Development Index



HDI is a summary measure, calculated as a simple average of the dimension indices =1/3 (Lei) + 1/3 (Ei) + 1/3 (BDPi)

Table 18
Human development index

	1992*	1997*	1998**	1999**	2000**	2001
Indicator values						
Adult literacy	99.6	99.6	99.6	99.6	99.6	99.6
Combined gross enrolment ratio	76.7	82	81	83	83	83
Life expectation at birth	73.4	74.9	74.6	75.3	75.5	75.9
GDP per capita (ppp)	8847	14000	14293	15977	17367	17130
Index values						
Education index	0.92	0.93	0.93	0.94	0.94	0.94
Life expectation at birth	0.81	0.83	0.83	0.84	0.84	0.85
GDP per capita (ppp)	0.75	0.825	0.83	0.85	0.86	0.86
Human development index	0.823	0.864	0.864	0.874	0.879	0.881

Source: *(1999) Human Development Report. Slovenia 1999, Hanžek, M. (ed). IMAD, UNDP: Ljubljana.
**(2000-2003) Human Development Report. UNDP, Oxford University Press: New York, Oxford.

Table 19
Regional disaggregation

Relevant economic indicators for statistical regions	1997	1998	1999	2000	2001	I-VI 2002
Gorenjska						
unemployment (registered unemployment rate)*	12.0	12.6	11.9	10.1	9.0	8.5
GDPp.c. (PPS)	11860	12586	13358			
Goriška						
unemployment (registered unemployment rate)*	9.6	9.2	7.7	6.2	5.8	6.2
GDPp.c. (PPS)	12646	13807	14794			
South East Slovenia						
unemployment (registered unemployment rate)*	14.0	12.0	11.7	10.8	9.9	10.0
GDPp.c. (PPS)	11884	12581	13203			
Koroška						
unemployment (registered unemployment rate)*	13.0	13.0	11.7	10.3	10.2	11.2
GDPp.c. (PPS)	11123	11687	12551			
Notranjsko - Kraška						
unemployment (registered unemployment rate)*	12.0	12.5	12.2	10.8	9.7	9.2
GDPp.c. (PPS)	10962	11720	12384			
Obalno - Kraška						
unemployment (registered unemployment rate)*	11.0	10.6	10.1	9.2	9.0	8.9
GDPp.c. (PPS)	13184	14241	15180			
Central Slovenia						
unemployment (registered unemployment rate)*	10.2	10.5	10.1	9.2	8.3	7.9
GDPp.c. (PPS)	16959	17845	19425			
Podravska						
unemployment (registered unemployment rate)*	22.4	22.0	20.6	18.7	17.9	18.0
GDPp.c. (PPS)	10560	11107	12035			
Pomurska						
unemployment (registered unemployment rate)*	17.8	18.7	18.2	17.2	16.7	17.6
GDPp.c. (PPS)	9935	10524	11103			
Savinjska						
unemployment (registered unemployment rate)*	16.1	16.7	15.3	13.6	13.5	14.0
GDPp.c. (PPS)	12030	12362	13211			
Spodnjeposavska						
unemployment (registered unemployment rate)*	16.4	15.9	14.9	13.9	14.3	14.2
GDPp.c. (PPS)	10967	11461	12113			
Zasavska						
unemployment (registered unemployment rate)*	17.9	19.2	17.5	15.5	14.7	15.1
GDPp.c. (PPS)	10543	10936	11639			
Slovenia						
unemployment (registered unemployment rate)*	14.4	14.5	13.6	12.2	11.6	11.6
GDPp.c. (PPS)	12800	13500	14500			

Source: IMAD
Note: *in %