

Summary

The submitted National Human Development Report represents the sixth edition of the National Report on Slovakia. Since 1995, the reports have attempted to provide an evaluation of the conditions thought to have key effects upon the quality of life in the country. The cross-sectoral character of the first three editions was gradually replaced by a monothematic focus on selected problems of human development in Slovakia. The reports of the past several years have focused on regional differences, gender equality, and poverty.

The present biannual edition of the Report deals with human health. There are several reasons for selecting this particular topic: health is one of the pillars of the human development concept, it is among crucial life values, and represents a prerequisite for leading a fulfilling life. The importance which people attribute to health is also evident from public opinion surveys; the health sector has been classified by respondents as one of the most burning societal problems. Pronounced growth in dissatisfaction with health care provided by the public health system suggests an intensification of problems in the system.

Health care, however, represents one of many factors that affect the health condition of the population. Although they need not be in direct connection with health care, preventive health measures are not sufficiently encouraged in the Slovak Republic. The health condition of Slovakia's population is not satisfactory; this is partly due to the lifestyles people lead.

The aim of the present Report is to define, based on analysis of major health determinants and their effects, measures that may be expected to contribute to an improved health condition of the population. The team of authors has attempted to present a balanced view of both preventive and therapeutic aspects of health care. The document does not present any specific suggestions for new therapeutic procedures or dietary approaches. The goal of the Report has been to point out the positive aspects and shortcomings identified in the various sectors of human development that affect health; furthermore, the aim was to formulate, based on knowledge thus obtained, a framework of measures leading to gradual improvement of health parameters. The authors of this document want to promote greater public awareness of health issues and factors by means of education and discussion, therefore, leading the public to contemplate the importance of preventive and therapeutic measures. Last but not least, the authors attempt to increase the awareness of individuals and the whole society of their responsibilities for improving public health.

Chapter One presents the rationale of the Report's focus. It summarizes the importance of health for human development and outlines the close links existing between health and other dimensions of development. In addition, the chapter presents a concise overview of the main findings of the preceding National Report.

The public considers health as a major life value; however, people tend to rely on the treatment of diseases rather than on preventive health measures by means of promoting healthy behavior. To a great extent, this approach reflects the development of the society over the past decades. The mutual interactions between health and human development are quite unambiguous; healthy individuals tend to have better chances to enjoy full-fledged lives than persons with poor health. Populations are usually healthier in societies with a higher degree of development.

The content of *Chapter Two* partially branches off from the main topics of the Report. The authors deal with the development of Slovakia's society between 2000 and 2002. The Chapter presents short overviews of past developments in politics, economic development, labor market, and education. Important economic and social measures from this period are evaluated from the viewpoint of their influence on the quality of life. The final sections include analyses that turn back to the main topics of the Report. Furthermore, the Chapter presents the traditional discussion about human development indices, with emphasis on public health.

During the past two years, domestic political developments were mainly influenced by the autumn 2002 parliamentary elections, in which the outcome created preconditions for the continuation of stable democratic development. Economic discussions were still dominated by issues of high unemployment rates and their negative impacts on the social situation of the population, by progress achieved in integration processes, which helped make the country more attractive to foreign investors. Concerning the quality of education, no major developments in the education sector were brought about; however, several promising legislative and institutional changes were launched. In the opinion of the professional public, the most appreciated economic and social measures in 2000-2002 include Slovakia's membership to the OECD, adoption of the amendment to the Bankruptcy and Settlement Act and adoption of the Free Access to Information Act. International assessments of human development conditions brought no pronounced changes for Slovakia. Being ranked by the Human Development Index, Slovakia has confirmed its position among countries at a high level of development.

Chapter Three is the heart of the document. Using morbidity and mortality parameters, the authors analyzed the health condition of the population. They compared the development and the trends with other countries. An analysis of selected health determinants is presented, with an emphasis on lifestyles and health care. The section dealing with the health care sector includes a detailed analysis on the current critical condition of the entire system. The Chapter elaborates on patient rights issues as clients of health services.

The main features of demographic development include the complete slow-down of natural population growth and the gradual aging of the population. Life expectancy has slightly increased; however, the health condition of mainly the male population remains pronouncedly behind that of most developed countries. The major reasons for this include, apart from historical context, negative trends in key health factors, such as increasing tobacco consumption, unhealthy dietary habits, worsened social situation (in particular concerning the poorly educated portions of the population with problems in the labor market), but also the crisis in the health sector. The Slovak health sector suffers from much needed reform which would address problems of health care accessibility, quality of services, financial sustainability of the system, and rampant corruption. In the current system, the patient seems to play no substantial role.

Chapter Four summarizes the main findings and presents a vision of the health "recovery". The Chapter points to the need of a comprehensive approach to health issues. The authors define the principal framework of health sector and non-health sector related measures that may present the potential of gradually improving health in Slovakia. The draft reform is based on the existing strategy in the preparation of which the authors of the present National Report were participating.

Non-health sector related measures include, above all, primary prevention. More targeted preventive measures need improved monitoring of health risk factors. Of similar importance is improved public access to health risks-related information. Preventive health measures are connected to behavioral changes. The priorities include fighting smoking habits and changing dietary habits. Health care reform should strengthen the relationship between what the citizens put into the system in the form of contributions and taxes and what they get out of it in the form of health services. As an important step in the reform movement, an optimal mix of solidarity and personal involvement must be found. Bringing the growing debt in the health sector to a halt will require systemic changes in health care financing and in organizational and institutional accountability. Reform will be oriented towards raising citizen's responsibility for one's own health, which will require a system of targeted assistance to vulnerable groups of the population.

Attached to the Report is the *Statistical Annex*, offering an overview of the basic indicators of human development in the Slovak Republic, ranking of selected economic and social measures taken within 2000-2002, as well as international comparisons of countries by the Human Development Index and Gender-related Development Index.

1. Health – A Pressing Priority

In recent years, public opinion surveys focusing on pressing social issues have gained popularity. Such surveys represent a reflection of the development of the society and of the hierarchy of values of people. Their „strategic“ importance, however, resides in the public’s evaluation of the success or failure of reforms. Consequently, surveys present a good compass to aim efforts towards improvement of the quality of life.

Areas that may be considered as the anchoring points of human life remain in the leading positions when it comes to the evaluation of acute problems. The following are considered to be the acute problems: inadequate standard of living, high unemployment rates, extensive crime rates and corruption, critical condition of the health care system, insufficient quality of education, unsatisfactory housing that are the reasons for negative feelings of a large portion of the population. In the opinion of Slovakia’s population, the quality of life in this country is behind the times in some key areas (see Table 1.1).¹

Table 1.1

Most Pressing Problems to Be Solved (% of positive answers)

Problem areas	1997	1998	2001
Unemployment	60	65	82
Health care	48	50	69
Standard of living	65	65	64
Crime and personal safety	62	66	46
Housing	29	29	26
Ethics, quality of interpersonal relations	43	36	24
EU and NATO integration	11	18	12
Environment	18	14	9
Ethnic and minority problems	6	7	5

Source: Public Opinion Research Institute of the Statistical Office of the Slovak Republic.

Table 1.1 also provides a picture of what problems people view as being dealt with and what are viewed as stagnating or getting worse. Apart from the labor market, it is the public health system that witnesses the worst development; this has been confirmed by surveys conducted by all significant agencies. The proportion of individuals who view the situation in the public health system as a pressing social problem grew from half to two-thirds of the population between 1998-2001.

Health is among the most precious life values. It is, therefore, understandable that people perceive rather sensitively any stimuli that negatively impacts upon their health. Experts agree that there are a number of factors that affect human health; the public, however, keeps critically commenting upon the very health care system. Other factors (such as diet, lifestyles or environment) are much less frequently subject of health-related discussions. As a natural explanation, the fact may be incurred that as a rule people become aware of the value of health only when they themselves or their relatives

Box 1.1

Domestic vs. Foreign Assessment of Development

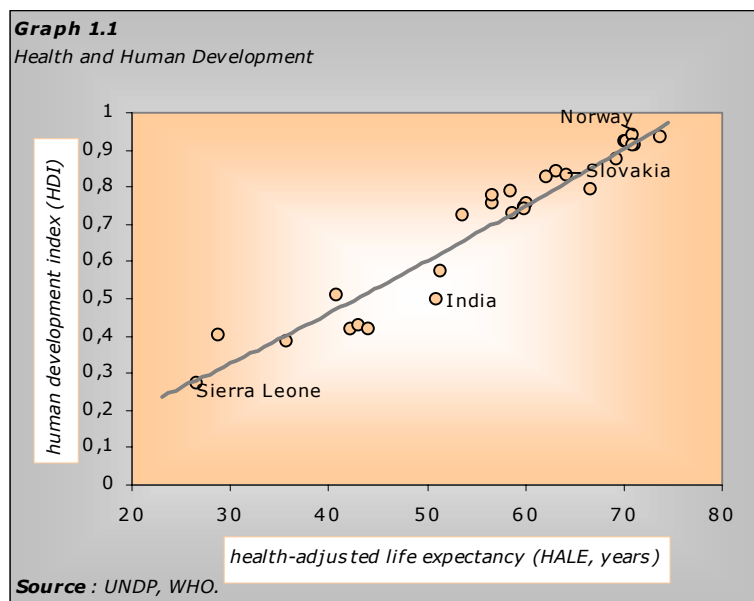
The critical assessment of the conditions for human development by the citizens themselves (Table 1.1) contrasts with the relatively favorable assessment of Slovakia in the international comparison of human development. Over long periods of time, the Slovak Republic has been ranked among countries with high levels of human development (see the Statistical annex), and it could have improved its position over the last several years. How can this discrepancy be explained?

Disregarding the imperfections of various statistical surveys, the reasons for this difference may be sought for above all in the development of factors that act on the satisfaction of human beings. Probably more than with macroeconomic figures, subjective satisfaction of an individual with his/her life is linked with income and expenditures of the household, with the purchasing power, satisfaction with employment, health care upon sickness, housing quality, fairness at authorities, etc. An overall view of the development of these parameters suggests stagnation rather than positive development of reasons for satisfaction. However, there is a number of more or less unchanging psychological factors that act upon the well-being of Slovakia’s population. They are connected with e.g. unfulfilled hopes concerning societal changes after 1989, disappointment with and lack of understanding of the growth of differences in wealth and income, underdeveloped democracy, as well as with the typical mentality features of the nation such as egalitarianism, pessimism, dissatisfaction and poor willingness to bear responsibility for one owns fate (see chapter 2.1.1 for details).

¹ Numerous discussions go on, in particular among sociologists, about the extent to which public opinion actually mirrors the lives of individuals and the society. The subjective feeling of satisfaction with one’s own life namely represents an „equation“ comprising numerous variables of which not all necessarily reflect the measurable actual status. This may be evidenced by the surveys themselves that confirm that negative assessment of some areas prevail in periods of improvement and worsening of the real situation in economy or society (e.g., assessment of the financial condition of households).

need health care. It is but then that they quite logically make a connection between their health condition and health services. To a certain extent, this attitude is a heritage of the preceding social system that failed to motivate people to be responsible for their own health. This, nevertheless, does not change the fact that the health care system is in a real crisis. Slovakia has successfully coped with a majority of the transition steps leading towards a functioning market economy, while there still remain distortions from the preceding period in the field of public health.

In addition, health represents one of the main pillars of the human development concept. The tight links between health and human development are given by their mutual interactions. Individuals who live their lives in full health usually have better conditions to live fulfilling lives than individuals suffering from physical or mental problems. Populations tend to be healthier – both according to how they perceive their own health and as reflected in statistics (see Graph 1.1) – in societies that find themselves on a higher level of development.



The list of the principal factors of health remains the same virtually all over the world. It includes lifestyles and nutrition, the general working environment, genetic and biological preconditions, education, social and economic situation, health care. However, in highly developed countries, health is influenced by the choices of the individuals themselves to a significant extent (such as selection of diet, housing, doctor, drugs, etc.), whereas health condition problems frequently derive from lacking or inadequate meeting of the basic needs in poor countries (such as lacking drinking water, shortage of medicinal drugs, etc.). Health is also an issue of inadequate quantities and quality of nutrition, inadequate condition of housing, lacking education and health protection, poverty, non-democratic political establishment, natural disasters or military conflicts – i.e., factors that restrict the potential of individuals as well as the society as such with respect to the overall human development.

The link between greater wealth and better health is not universal. Similar to human development in general, health is not only dependent on a sufficiency of funds, even if a positive correlation between them is evident.² Health is the result of a number of factors that go beyond geographical borders, while being of different weight in different parts of the world.

Poverty is among the important factors of health (and vice versa). Similar to human development, poverty is a multidimensional phenomenon. Most frequently, poverty is associated with inadequate income; however, poverty is a result of the interaction of numerous causative factors. In individuals who are poor and/or excluded from mainstream society for prolonged periods of time, their status will negatively impact upon their physical and mental well-being as well. Studies have confirmed the relationship between lacking education and unemployment on the one hand and disturbed health condition on the other one.³

² There are several countries that have lower per capita incomes, while their population enjoying a better condition of health than populations in some wealthier countries. Life expectancy at birth serves as a recognized health condition indicator. WHO data suggest that the populations of Cuba, Albania and Jamaica live longer than the populations of the wealthier Central and Eastern European countries and the oil-producing countries of the Gulf.

³ For details see chapter 3.2.

Various shapes and consequences of poverty were the focus of the preceding Slovak Human Development Report. The authors concluded that:

- ❑ Poverty means a condition when material, social or cultural resources of an individual get restricted to the extent that he/she gets excluded from the minimally accepted standard of life. The official language in Slovakia does not include the term poverty and there is yet no integrated strategy addressing poverty and social exclusion.
- ❑ At present, exclusion from the labor market and low levels of education may be considered the most important drivers of poverty. The groups at the highest risk include long-term unemployed who also have highest shares among recipients of social assistance benefits. The elderly, children, single-headed families and families with multiple children are among the groups traditionally at risk of poverty. Due to lower average earnings and pensions, women are more susceptible to poverty than men.
- ❑ All the characteristics mentioned, above all, low level of education and the long-term unemployment peak with respect to the Roma population whose significant portion live in extreme poverty. The culture of poverty is emerging in the most backward Roma colonies. The parameters of human development identified for the isolated Roma settlements are comparable to those for developing countries – bad health condition, short life expectancy, inadequate housing and hygiene, illiteracy, and hunger.
- ❑ There is no panacea to eliminate poverty. Dealing with poverty requires eliminating the reasons resulting in the rise and spread of poverty, as well as a functional social safety net available to groups of population at risk. Finding a solution to unemployment and greater emphasis on education remains a priority.

Box 1.2

What is Human Development?

Human development can be characterized as an enlargement and deepening of people's opportunities to live healthy, long and creative lives. Factors such as favorable political climate, democracy, political freedom, adherence to and enforcement of rights, developed informal rules, stable economy, a functioning and open education system, development of science and research, good quality health care services, a targeted social system, environmental protection, tolerance, respect, etc. contribute to human development. Certainly, these facts alone do not guarantee satisfaction and well-being to individuals. They nevertheless represent the basic and inevitable precondition for the creation of a favorable environment for people that will enable them to further develop these choices according to their needs. Human development thus means more than simply being healthy, educated or adequately wealthy; it also includes the ability of people to take advantage of these opportunities in their daily lives, be it in the family, at the workplace or during their leisure time. The feeling of a meaningful and happy life thus arises as a combination of the favorable action of the external environment on the development of human choices and of the ability of people to develop these choices according to their needs and interests.

It may be stated that poverty is a consequence of inadequate human development. The concept of human development is based on equality irrespective of gender, age, nationality, and race. The preceding National Report analyzed human development in Slovakia through gender equality. The quality of life of both men and women is determined not only by different biological but also social structure. The authors stated:

- ❑ The position of women and men in the family, at the workplace, and in society represents a reflection of the development of mutual relationships and their arrangements within the given environment. The stereotypical perception of man as being the "breadwinner and protector of the family" and of woman as being the "mother and the housewife" has been the result of the traditional perception of the male and female roles crossing almost all geographical and cultural borders.
- ❑ In Slovakia, inequality is most strongly reflected in lower participation of women in decision-making areas such as politics and in business. In view of comparable levels of education and qualifications, the participation of women in the executive and legislative branches is low.
- ❑ The weaker position of women in the labor market is evidenced by lower average earnings and a predominance of women in lower job positions and less remunerated jobs. On the average, women earn three quarters of what men earn, and their share on managerial and controlling positions is about thirty percent. On the other hand, women have a significant share on unpaid work in the household. In this way, many women become financially dependent on men.
- ❑ Democratization of the family and education in the spirit of equality of genders and of respect to the other gender represent a precondition for a society that is fair in respect of genders. Tolerance of others as a standard arrangement of life, accepting the rights to choose one's own lifestyle, elimination of all forms of discrimination – all these are preconditions for equality of opportunities and for strengthening the principles of a fair society. The family and state, schools, the media and churches, play important roles in this respect.

The gender dimension and the phenomenon of poverty are interconnected. The preceding National Report dealt with the feminization of poverty as a result of lower economic power of the female

population. Feminization of poverty is closely linked with feminization of old age and/or is a result thereof. The demographic development namely heads towards growing shares of women on the older population. Higher mortality of middle age men causes Slovak women to live eight years more on average than men. Taking into account the aforementioned facts, smaller income of women, their prevalence of unpaid work, as well as deep-rooted stereotypes, intensification of the feminization of poverty may be expected.

The different life expectancies of females and males are not only due to biological preconditions but also to other health-related factors such as lifestyle, smoking, and nutrition. A comparison with developed countries suggests that the health condition of Slovakia's population, in particular of its male portion, is inadequate. High death rates of cardiovascular and malignant diseases suggest that attention paid to the prevention of risk factors (such as high blood pressure, smoking, alcohol consumption and obesity) is insufficient. However, health is not only the result of the action of numerous phenomena, but also the cause of their emergence. The population's poor health increases the costs of health care, raises opportunity costs, and lowers the potential and productivity of the economy.

The structure of this publication differs from the preceding editions of the National Report. The cross-sectoral character was replaced by a monothematic focus of the report, in which the authors deal in detail with one key area of human development. Human health is the central theme of this National Report, in particular of chapters 3 and 4. Chapter 2 outlines recent developments in the society, namely politics, the economy, and the labor market and education field, i.e., areas that have an important impact on the formation of human development conditions.

Chapter 3 analyzes the health status of the population, the links between health and other dimensions of life, while special attention is devoted to different determinants of health, including health care services. Chapter 4 presents a vision of health for Slovakia; it includes proposals for measures that should strengthen health prevention, improve health care provision and eventually lead to improvements in public health. The National Report aims to raise public awareness about the main drivers of health and contribute to the discussion about prospects of improvements.

2. The State of Human Development

2.1 POLITICAL CONTEXT OF HUMAN DEVELOPMENT

The last National Report concluded in its analysis of the political situation that "Slovakia needs a social consensus of the relevant political stakeholders with respect to reforms that are necessary". No significant step forward can be expected in the treatment of acute social problems or a successful catching up with what has been missed in the process of the Euro-Atlantic integration unless the relevant stakeholders agree upon the basic parameters of the foreign policy orientation, of the constitutional framework and economic directions. Without such a consensus, it will be difficult to prevent further marginalization of the country and to generate resources for a development of the quality of life.⁴

Looking at the situation after a lapse of two years, it may be stated that the unavoidable consensus could have been achieved during the second half of the existence of the broad ruling coalition, despite a demanding agenda and intricate methods of coalition negotiations.⁵ Since the very beginning, the coalition had been burdened by problems of fragmentation both within and between political parties. Compared with the preceding term, a positive shift was achieved in foreign policy orientation. As a result, Slovakia successfully caught up with its Central European neighbors in the Euro-Atlantic integration.

2.1.1 Democratization and Its Attitude-related Dimension

Data on the social and political climate have confirmed something that the media started referring to (following the Czech model) as "dull moods." According to surveys undertaken in 2001, a majority of the public (66 percent) evaluated the government as unsuccessful, considered successful by only 8 percent.⁶ A comparison of public opinions on the outcomes of the government policies points to a pronounced discrepancy between the achievements of the government and public perception. In addition, foreign observers have repeatedly pointed out that the subjective perceptions of the country's situation is substantially more pessimistic than the real reasons that may justify them.

Principally, the balance of the government's achievements is more positive than negative. The strengths include Slovakia's membership to OECD; stabilization of the economy, ongoing restructuring and privatization of banks, improvement of investment rating, partial privatization of politically motivated cases by the preceding government. Experts and the public agree on the country's foreign policy outlook. The following have been stated as the most significant achievements: Slovakia has succeeded in catching up with its neighbors in the number of chapters completed with respect to EU integration, and the country is among the leading candidates for further NATO enlargement. On the domestic scene, constitutional amendments also represent success since they were a precondition for progress in integration processes. These amendments also introduced the institution of ombudsman; as a matter of fact, implemented public administration reform also represents an important step towards decentralization of state power. Reforms that represent a precondition for a more efficient spending of public funds could not be pushed through: in particular, reforms of the pension system, health care and education could not be launched.

Based on the surveys of attitudes and value orientation, it may be stated that "democratic political culture is slow in becoming anchored in the Slovak society, although a positive trend may be traced from the long-term prospective".⁷ It is important to point out attitudes on issues that are at the center of the so-called new policies that characterize the post-modern stage of developed western countries indicate a prevalence of liberal orientation over the traditionally conservative one. This disturbs one of the stereotypes characterizing Slovakia as a conservative, Catholic country, while providing evidence for a pronounced shift towards Europeanization.

According to the authors of a report on political opinions and values of people in Slovakia⁸, paternalism has been represented by 63 percent and egalitarianism by 55.8 percent in Slovakia. This dimension of attitudes may be assessed as being the toughest problem for Slovakia by comparing with other countries. For example, data on the proportions of the estatistic attitude, measured as a low readiness of individuals to assume responsibility for one's own fate suggest that only 14 percent of Slovakia's population are willing to assume such responsibility, whereas the corresponding figures for the

⁴ Source: National Human Development Report Slovak Republic 2000, p. 16.

⁵ Coalition formed by SDK, SDL, SMK, SOP (1998 – 2002). For abbreviations see p. iv.

⁶ Survey conducted by MVK within 9-15 October 2001.

⁷ Source: Gyarfášová – Krivý – Velšic (2001).

⁸ Ditto.

Czech Republic and Slovenia are 23 percent and 24 percent respectively; on the other hand, Hungary and Croatia show even lower proportions (12 percent and 11 percent, respectively). The countries mentioned show a similar distribution concerning negative assessment of preceding authoritarian establishments; the highest figures were established for the Czech Republic (33 percent) and Poland (29 percent), whereas they were only 13 percent for Slovakia, and even less for Hungary (10 percent). In addition, Slovakia shows the smallest support for "private ownership" (23 percent), the corresponding figures for Slovenia, Hungary, Poland and the Czech Republic being 49 percent, 40 percent, 31 percent, and 38 percent, respectively (for comparison, these figures are as high as 74 percent and 61 percent for the US and Germany, respectively). With respect to this attitude, it may be assumed that the historical reasons for such weak support of private ownership in Slovakia have been strengthened by experiences with the consequences of the privatization and the so-called "domestic layer of entrepreneurs".

The distribution of democratic attitudes is as follows: those who prefer dictatorship over democracy, so-called "hard anti-democrats" have the strongest representation in Slovakia – 15 percent, and the lowest in Poland – 10 percent, with Hungary, the Czech Republic, Spain and Italy (1985 data) are in between with 12 percent, 13 percent, 10, and 13 percent respectively. "Convinced democrats" preferring democracy and believing in its ability to resolve problems of the country are represented by 46 percent in Slovakia, and by 47 percent, 47 percent, 48 percent, 74 percent in the Czech Republic and Hungary, Poland, and Austria, respectively. "Worried democrats" subscribe to democratic values but doubt about the ability of democracy to resolve problems. Slovakia and the Czech Republic have the same representations of this layer – 18 percent, there are represented in 14 percent and 25 percent in Poland and Hungary, respectively. It is interesting to compare the diffuse support of democracy in CEE region with that identified within a comparable period of time in other post-authoritarian countries. Data for the Czech Republic, Slovakia and Poland are similar to those identified for Spain in 1989. Comparing with the fragility of the support of democracy as a form of government in Russia or Brazil, the process of democratic attitudes becoming anchored in the Visegrad 4 countries is considered remarkably progressive.⁹

Overall, it may be concluded with respect of the support of democratic establishment that despite some differences, there are no more reasons to mark Slovakia as deviant within the eastern-central European group of countries in transition, as has been suggested by developments after the 1994 elections. At present, Slovakia is at the same level as the Czech Republic, Hungary, and Poland as far as the proportions of so-called „convinced democrats“ as well as „worried democrats“ are concerned.

One basic finding of empirical surveys of attitudes and values of Slovakia's population suggests that the cultural and political splitting line is represented by "political liberalism versus authoritarianism". Taken together with the identified ethnic splitting, this allows characterizing the Slovak society as rather heterogeneous. According to sociological analyses, this manifests itself as a strong participation of the "anti-Communist liberals and conservatives" block (together 42 percent) and anti-liberal nationalists and communists (together 32 percent).¹⁰

2.1.2 What is the Real Impact of People's Attitudes upon the Country's Politics?

It is key to the politics of the country which of the segments of the society that principally shows a normal differentiation of attitudes, participates in the elections and partisans of which prefer to stay home. The urban-rural split of cultural and political orientations and links to political parties create parameters for decision-making by political élites. In other words, it depends on which of the rivaling political élites are able to more efficiently mobilize supporters. If the disgusted voters from large cities remain home on election day, they would leave the decision on the further orientation of the country and thus on their own fate to those who rather naturally, by the time and the contents of their socialization statistically belong to mostly the losers of the post-November 1989 change: the older generation, pensioners, people with lower education level, Roma, population of smaller villages?

Citizens taking up the role of voters are not at all powerless. Even to the contrary, at the time of elections, they get the opportunity to decisively influence development in the country. It is up to them whether the future coalition will be comprised of numerous small parties or based on the experience of the broad coalition (1998-2002); they will support parties that have a chance to win a larger share in parliament. The government coalition of 1998-2002 has been blamed for failures that resulted not only from its broad range but also from weak internal cohesion and insufficient crystallization of their programs.

Despite the important role to be played by the decision of the electorate, it may be assumed that it will be negotiations of party leaders that will decide whether the political shift after the 2002 elections

⁹ Source: Fuchs – Klingemann (2000).

¹⁰ Source: Gyarfášová – Krivý – Velšic (2001).

will mean a shift from cultural and political split typical of Slovakia in the 1990s (political liberalism versus authoritarianism borderline) towards a socio-economic left-right division..

2.1.3 From Broad Left-Right Coalition Towards a Coalition of Parties with Similar Policies

The political necessity to establish a broad left-right coalition that made a significant contribution towards political and economic stabilization of Slovakia brought in at the same time also a rather complicated situation with respect to the need to regulate and to implement reforms of the public health, education and the whole social security system, in particular of the launching of the pension reform and public service reform. Without them, the systemic change in Slovakia cannot be considered as completed. It was in these issues that discrepancies between the parties of the right center – SDKÚ, SMK, KDH – and the leftist parties SDĽ and SOP came to the foreground. Especially, it was difficult to achieve a uniform approach at the parliamentary coalition level that not only jeopardized the fulfillment of the Government Program but also stability of the government.

In connection with the need to implement the reforms mentioned, the requirement of the formation of a functional coalition of clearly reform-oriented parties therefore arises with a particular edge. One of the findings of a comparative survey of preconditions for democratic governance in CEEs was whether parties that are close to each other from their policy aspect are able to create stable coalitions.¹¹ The quality of democratic governance, however, gets jeopardized if the parties – and in the case of Slovakia this concerns the right centrist parties – lack this ability.

Despite the pre-election uncertainties and domestic and foreign political leaders calling the 2002 elections as the most critical for the Slovak Republic, it was evident from the academic bird's-eye view, even prior to the elections, that they will be about efficiency of democracy rather than about its survival.¹² Today, it may be stated that these most recent free elections were no more critical in the same sense than all the preceding ones. It currently (October 2002) may be stated with a much higher certainty than a year ago that the political conditions have been established for the "continuity of change" that, after the 1998 elections, meant bringing Slovakia back to the path of a stable democratic development. The outcome of the 2002 elections enabled a continuity of the rule of reform forces from the preceding wide coalition, marginalization and elimination of the extreme nationalist forces from the parliament, and thus arriving at a wide consensus of the relevant political élites.

When comparing the formulated hypotheses, assumptions or fears voiced towards the end of 2001 with what actually happened, it may be stated that the leaders of the right-wing center had not failed and showed the potential to negotiate and to make compromises to arrive at a consensus. The experiences from the acting within a wide coalition led them to a consensual style of politics.

2.1.4 Outcome of the 2002 Parliamentary Elections and Their Consequences

Compared to the preceding elections, the elections that took place on September 20th and 21st, 2002 were characterized by lower participation (70.1 percent) and a high drop of the vote (18.2 percent) that became redistributed to the more successful parties. As compared to the neighboring countries, even this participation that has been historically the lowest one in Slovakia, was still significantly higher than that in the Czech Republic (58 percent), Poland (46 percent), and almost identical with that in Hungary. A total of twenty-five political entities took part in the elections, seven of them getting to the parliament: HZDS, SDKÚ, SMER, SMK, KDH, ANO and KSS. SDĽ, SOP, SNS and PSNS (that during the preceding term had their independent caucuses), and DS, SZS and SDSS (whose representatives were elected members of the National Council of the Slovak Republic in 1998, on the list of candidates of SDK) lost their representation in parliament. HZDS won the most votes; compared to the preceding election, this party witnessed a pronounced drop of its electorate, from the initial 1,148,625 votes in 1992 to 560,691 in 2002. This confirms the expected trend of the gradual weakening of this originally large party.

The combination of the participation in the election and the high percentages of the flopped vote means that as little as 56.6 percent of the total numbers of eligible voters became reflected in the mandates.¹³ A comparison with the preceding four elections since 1990 suggests that, even if the parliamentary representation is at the lowest level, the fact that several small parties dropped out significantly reduces the considerable fragmentation of the party structure of the Slovak parliament, thus creating more favorable conditions for the government coalition. And this even in the face of the fact that this new coalition of the four center right-wing parties (SDKÚ, SMK, KDH, ANO) only enjoys the support

¹¹ Source: Kitchelt (1999).

¹² Source: Szomolányi (2002).

¹³ Source: Krivý (2002).

of 78 mandates, which corresponds to the support by 29.4 percent of the adult electors. The opposition parties (HZDS, SMER and KSS) enjoy the overall support of 27.17 percent of the vote, which was enough for 72 mandates.

The coalition that was set up represents an even more programmatically homogenous and pro-reform oriented composition than assumed by the pre-election analyses. The fact that a majority government could be established from as few as four parties of the center right wing without the programmatically amorphous SMER has been a result of the (hardly foreseeable) coincidence of several circumstances that could have been forecasted, such as the failure of the center left wing and national parties (SDĽ, SDA, SOP, SNS, PSNS), the shares of the lost votes however were difficult to forecast. It should at the same time be stressed that the failure of the aforementioned parties is mainly the consequence of intra-party relationships that became the reason for splitting of the original parent parties.

The outcome of the elections has not indicated any pronounced shift of the population's attitudes. The initially significant differences in the participation between rural areas and big cities was reduced. SDKÚ is most pronouncedly an "urban" party; it won 7-8 percent of the vote in smaller municipalities, as many as 33 percent in large cities. HZDS remains the strongest opposition party, with its strongest support still coming from municipalities with a population of up to 5,000 inhabitants.¹⁴ This shifts Slovakia from the post-Communist formula of election behaviors of insufficiently modernized countries towards a standard socio-economic model of election behavior and/or a model of political participation that assumes growing participation with growing education and income levels.

The KSS party's success was unanticipated. The yield of 6.3 percent of the vote does not constitute any dramatic change in the attitudes of the population, in particular if taking into account the fact that for the first time it was the national parties that did not get to the parliament. KSS gained a portion of the votes of the original electorate of SDĽ, SOP and HZDS, especially in the Eastern Slovakian districts with high unemployment rates. The correlation with high unemployment rates was also typical of the success communists had in the Czech Republic. When leaving this most pressing socio-economic problem of Slovakia unresolved, KSS support may grow; this time not because of any nostalgia but as a manifestation of radicalism in the affected regions. Paradoxically, however, the success of KSS is part of a more general shift at the level of the party contest from "national issues" towards socio-economic topics, which per se can be considered as a rather positive shift. It allows attention to be focused on the treatment of structural problems in the society that represent a precondition for improvement in the quality of life.

The failure of the two national parties, the original SNS and the spin-off PSNS suggests that the "Hungarian card" no more appeals to the electorate. After four years of participation in the first Dzurinda's government (1998-2002), SMK, a stable element of the coalition government, also acquired electors of Slovak nationality. This contributed to SMK's success in these elections (11.16 percent), which means that this party ranks second, after SDKÚ, as far as the strength of the government coalition parties is concerned. The dominance of the ethnic principle in the case of the election-related decision-making by the Hungarian minority contributed to draining of a non-negligible portion of socio-economically frustrated electors from the expected subscription to what today are opposition parties.

2.1.5 Government, Parliament, and Relationship between Coalition and Opposition

The Program Declaration of the second Dzurinda coalition government (comprised of SDKÚ, SMK, KDH and ANO) suggests continuity of policy. The new government intends to aggressively pursue reforms for which there was no political will in the preceding coalition with the leftist entities SDĽ and SOP. Postponing reforms in the area of pension and social system, public health and education sector was the price paid for maintaining the stability of the previous coalition government. The most significant tasks faced by the second Dzurinda's government include reduction of unemployment and corruption, improvement of law enforcement, improvement of conditions of life of the Roma. The European Commission critically pointed out these problems.

The course and the results of the first post-election session of the parliament indicate a significant shift from confrontation to consensual style. This is evidenced by the fact that parliament leaders were also elected by a significant vote of opposition MPs. The opposition gained one position of the Vice-chairman (HZDS) in the parliament's presidium (out of four). Proportionate distribution was consistently followed with respect to filling chair positions of various commissions (9:8 for the coalition vs. opposition).

During the first Dzurinda's government, the coalition at the parliamentary level represented a much less stable element despite the initial constitutional majority (93 MPs). The current parliamentary coalition of 78 MPs, although quantitatively weaker, makes the functioning of the government coalition

¹⁴ Ditto.

likely since there are no election coalitions and various blocks of small parties in the parliament. A more clear-cut program profile and the previous governing and cooperation experiences are a good prerequisite for the stability of the caucuses of SDKÚ, SMK and KDH. ANO is a new party without any preceding parliamentary experiences, and its stability will thus be proved by the parliament.

Whereas the government coalition is comprised of right-centrist parties with related programs, even if with different proportions of economic liberalism and social conservatism, the three opposition parties represent a rather heterogeneous blend, from the extreme left of the KSS to the amorphous SMER intending to take the left-centrist position and the people's party HZDS. The actual orientation of HZDS will be suggested by the voting on laws that are necessary for the reforms pursued by the government. Statements by HZDS representatives have so far suggested HZDS has learnt lessons from the preceding period, and, therefore, will be a more constructive opposition.

2.1.6 The Risk of Great Expectations

In Slovakia, there is widespread belief that the government is responsible for the economic standard of individuals. The political culture changes slowly, but the ideas on what the government can be expected to do can be changed to make them more realistic. This applies in the face of the growing proportions of people with personal experiences with the private sector. This would require less populist media that would point to the limits of government action as well as to the significance and roles of additional stakeholders with respect to the success of reforms. This specifically concerns a variety of interest groupings and clients. Experience from the preceding election term points to the risks of big and non-realistic expectations. They may result in frustrations. It is the unmet expectations rather than worsening economic conditions as such that usually represent the source of extremism, as suggested by the history of many European countries. That is why it is both up to the government and the media to avoid excessive public expectations. Room still exists for experts to educate and cultivate the public.

The scheduled cuts in the budget, increased energy and transport prices, payments for hospital stays and medicine will non-negligibly impact upon the budgets of households. Consequently, the implementation of necessary reforms may also prompt protests on the part of trade unionists who probably will seek support in the opposition. With its ambitions to represent the left wing, SMER will likely replace the former ally of the Trade Unions, SDL. Hesitating with reforms, even if facing the risk of social protest, might have even more severe implications for political stability.

In addition, the changing perception of Slovakia by foreign investors represents an important indicator of ongoing political stabilization; as a result, the currency has become over-valued compared to the real status of the economy. The Slovak currency is no more perceived as being connected with political risk as it used to be during the time of the pre-election uncertainty.¹⁵

Trust in the Slovak currency will further rise due to the expected invitation to the NATO. Slovakia may be invited at the November NATO Summit to join the Alliance, and to gain full-fledged membership within several months. After joining the OECD, this will represent another foreign-political manifestation of significant strengthening of Slovakia's political stability and also a precondition for EU accession.

2.1.7 Slovakia and the EU

Slovakia started negotiations with the EU two years later than its neighboring countries and hardly anybody expected it to catch up with them after the switch of the governing elite. The completion of the long-term process of approaching the EU at the December 2002 Copenhagen Summit was generally perceived as a clear success for Slovak foreign policy.

The evaluation report by the European Commission from October 2002 states that Slovakia meets the political and economic criteria of EU membership. The report also lists a number of shortcomings; it views corruption as "seriously worrying", points to the complex position of the Roma minority, and expresses concern about the professional impartiality and political independence of the judicial system. These problems are also among the priorities of the presented government Program Declaration.

The Dzurinda's first government managed to eliminate doubts about the political stability of Slovakia, and this resulted in rather specific technical issues of the accession process to replace the question of "whether and when" Slovakia will join the EU. The stated absence of a wide discussion on the EU at both the level of the political élites and the public is a natural consequence of the previous problems that Slovakia had first to manage. Slovakia's population favors joining the EU much stronger (77.3 percent in October 2002) than is the case in the Czech Republic or Poland. Evidently, strong support reflects the desirable target rather than thorough information on the specific implications of membership.

¹⁵ Source: Brondošová (2002).

The outcome of the 2002 elections and the confirmation of the integration-related willingness opened up room for European integration, becoming the topics of the political and public discussions.

External pressure and requirements on the part of Brussels make Slovakia develop more expediently; during the first stage, however, this process of modernization intensifies the divergence between the relatively developed centers and less developed regions. This also appears to be the source of socio-political strains. EU accession however will offer growing opportunities of drawing sources from structural funds to develop historically marginalized regions. And that is why Slovakia has to speed up the completion of state and public administration reform as well as fiscal decentralization. Combined with the capacities of the domestic stakeholders, the external pressure on efficient use of EU resources to eliminate inter-regional differences pushes the society in the direction of the civilization standard.

Slovakia faces a series of events within which the outcome of the first one will show how successful the country will be with respect to the subsequent events: 2002 parliamentary elections, the November 2002 NATO Summit in Prague, EU enlargement. At the time of the 2002 parliamentary elections, Slovakia was a country different from that it was before the 1998 elections. The realistic view, however, suggests that the elections were similarly critical as were the previous ones. However, voters decided not about the mere survival of democracy, rather about its efficiency, and about Slovakia's integration into Euro-Atlantic structures.

2.1.8 Political Context of Health Care

An unfavorable heritage of the former regime is a generally (especially with regards to the political parties) valid belief that the public sector is solely a political issue to be decided upon only based on the political interests of the given party leaving out a serious economic analysis. This does not hold in reality. The public sector also has its economic laws and equations, including provision of health care services.

A straightforward preference of politics to economics is a dominant sign of all up to date governments' approaches to the health care reform issue. It took more than five years for the idea of the disproportion of the sources and required health care services to appear. This idea is still not respected. Expectations now lie with the functioning of the new cabinet.

It is impossible to make any progress without getting rid of the politicization of the reform, without respecting basic economic rules and rules of health care economy as they are well known in the developed world, without using methods of economic and social analysis, economics and management of health care. In the area of health care services provision both market and state fail as there is significant social element incorporated. Consequently, there are no straightforward solutions. There is a dominant need to react to the changing external and internal conditions.

Health care is expected to be at the same time effective, high quality, and generally accessible for all. These three objectives are not consistent; moreover, they become antagonistic from a certain phase. Therefore, all decisions on the economic aspects of health care are very demanding, and there are no optimal solutions available.

Quality and consistency of all up to date reform materials and reform steps are a clear evidence of the fact that there is no real health/health care policy in the SR. Government program declarations may be characterized as political proclamations (in their essence repeating themselves regardless the authors), in many aspects unable to materialize.¹⁶

As a rule, preparation of reform documents is entrusted to a group solely or practically exclusively represented by doctors. However, it is generally known that successful health care reform is in contradiction with the short-term individual interests of doctors.¹⁷

The Health Care Minister is the least stable position in the Slovak government. The problem rests in the fact that each new minister begins anew. This is a rather expensive and perspective lacking approach.

The capacity of the Ministry in creating an effective and consistent health policy is a problem in and of itself. Not even developed countries where the central sphere is better equipped intellectually and materially, delegate the creation of health care policy solely to the center. Participation of the opposition, interest groups, civic sector and academic population is a rule.

¹⁶ Source: Radičová – Woleková – Nemeč (1999), Pažitný – Zajac (2001).

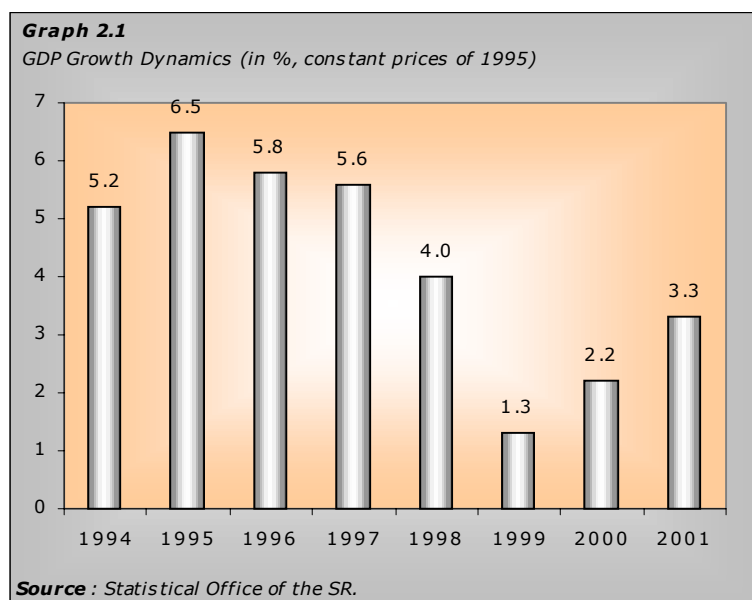
¹⁷ This concerns particularly hospital doctors whose volunteerism must be according to insufficiency of resources (respected by even the highly developed economies) regulated.

2.2 ECONOMIC DEVELOPMENT AND THE LABOR MARKET

Since 2000 the development of Slovakia's economy has been characterized by the efforts of the government and the Central bank to stabilize macroeconomic factors in order to gradually bring about a recovery of the economic growth dynamics. As a positive stimulus and confirmation of progress achieved in this area, Slovakia was admitted to the Organisation for Economic Cooperation and Development (OECD) on December 14, 2000. At the end of 2001, based on favorable economic development, Moody's Investor Service and Standard & Poor's improved their rating outlook to positive and increased Slovakia's rating, returning it to investment level. However, Slovakia's economic development still remains branded by structural problems in foreign trade, public finance sectors, and labor market.

2.2.1 Performance of the Economy

Between 2000 and 2001, gross domestic product (GDP) witnessed favorable development (Graph 2.1). Macroeconomic stabilization displayed slight GDP growth in 2000 (2.2 percent) and suppression of domestic demand, resulting in short-term improvement of external disbalance of Slovakia's economy. The upward trend of the GDP continued in 2001 (3.3 percent).



In 2000, the major determinant of the real GDP growth was due to foreign trade growth. In 2001, due to successful privatization and restructuring of the banking sector and partial restructuring of the private sector, the most dynamic GDP component were domestic investments with a year on year increase of 9.6 percent (generation of gross fixed capital, see Table 2.1). On the one hand, this trend was caused by a pronounced increase in foreign direct investments (the year on year FDI increment reached 83 percent and 28 percent in 2000 and 2001, respectively¹⁸); on the other hand, it supported demand for investments by domestic companies, thus imports of machines and equipment went up. The growth of domestic consumption in that year was also supported by the State which, despite the declared restrictive position, actually increased its consumption by 5.1 percent, thus making a contribution of about 1 percent to the growth of the economy.

¹⁸ As at end of the respective year. Source: National Bank of Slovakia.

Table 2.1*GDP Structure (1999-2001)*

Indicator (in constant prices of 1995, SKK billion)	1999	% of GDP	2000	% of GDP	2001	% of GDP
GDP	670.0		684.8	-	707.3	
<i>year-on-year change (%)</i>	<i>1.3</i>		<i>2.2</i>		<i>3.3</i>	
Consumption of households	361.2	53.9	354.6	51.8	368.9	52.2
<i>year-on-year change (%)</i>	<i>2.9</i>		<i>-1.8</i>		<i>4.0</i>	
Consumption of nonprofit entities	6.3	0.9	6.2	0.9	6.0	0.8
<i>year-on-year change (%)</i>	<i>35.0</i>		<i>1.5</i>		<i>3.4</i>	
Consumption of State	135.8	20.3	137.5	20.0	144.5	20.4
<i>Year-on-year change (%)</i>	<i>-7.7</i>		<i>1.3</i>		<i>5.1</i>	
Generation of gross fixed capital	193.7	28.9	196.1	29.0	214.8	30.4
<i>Year-on-year change (%)</i>	<i>-18.5</i>		<i>1.2</i>		<i>9.6</i>	
Export	456.3	68.1	519.2	75.8	552.8	78.2
<i>Year-on-year change (%)</i>	<i>5.2</i>		<i>13.8</i>		<i>6.5</i>	
Import	472.5	70.5	520.8	76.0	581.5	82.2
<i>Year-on-year change (%)</i>	<i>-6.3</i>		<i>10.2</i>		<i>11.7</i>	

Source: Selected Indicators of Economic Development in the SR 1991-2001 Statistical Office of the SR (2002).

2.2.2 Price Development

The inflation rate kept decreasing throughout the period monitored. The dynamics of consumer prices within 2000-2001 were mostly influenced by the government's decision to release the regulated prices of electricity, gas, and water for households and industrial customers. High prices for energy raw materials (oil and gas) as well as food prices added to these pro-inflationary factors during the first half of 2001. Oil prices, however, dropped during the second half of the same year, pushing (together with a slight appreciation of the domestic currency) the domestic level of non-regulated prices (i.e., core inflation¹⁹) to the year-on-year level of 4.3 percent, thus markedly below the currency expectations of the central bank. Food prices grew due to the poor harvest in 2000, and ignored seasonal development during the first half of 2001 (foods and soft drinks increased by about 7 percent in 2001 compared to 2000²⁰). Despite the aforementioned factors, the overall inflation rate kept decreasing, reaching yearly average values of 12 percent and 7.3 percent in 2000 and 2001, respectively (see Graphs 2.4 and 2.5).

2.2.3 Foreign Trade and Currency

The gradual decrease of the domestic price level and the recovery of the economy also manifested themselves with respect to the year on year growth of real wages, which – together with the amortization, in 2001, of the privatization bonds of the National Property Fund (SKK 30 billion, about 3 percent of GDP)²¹ – markedly influenced growing domestic demand.²² Linked with the growth of oil prices in world markets, in the view of the unilateral dependence of the country's economy on imports of strategic energy raw materials, it intensified the foreign trade deficit towards the end of 2000 and during 2001. The period of stabilization was replaced by a period of a record deficit of the current account of the balance of payment, reaching about 8.8 percent GDP in 2001.²³

¹⁹ Core inflation measures the price level increase of a consumption basket net of state-regulated prices.

²⁰ In constant prices of 1995.

²¹ According to analysts, about one half of the amount mentioned was spent on household consumption in the second half of 2001.

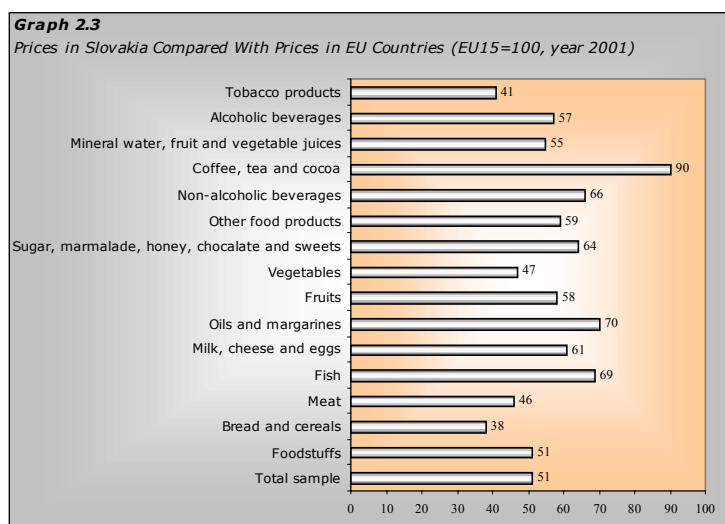
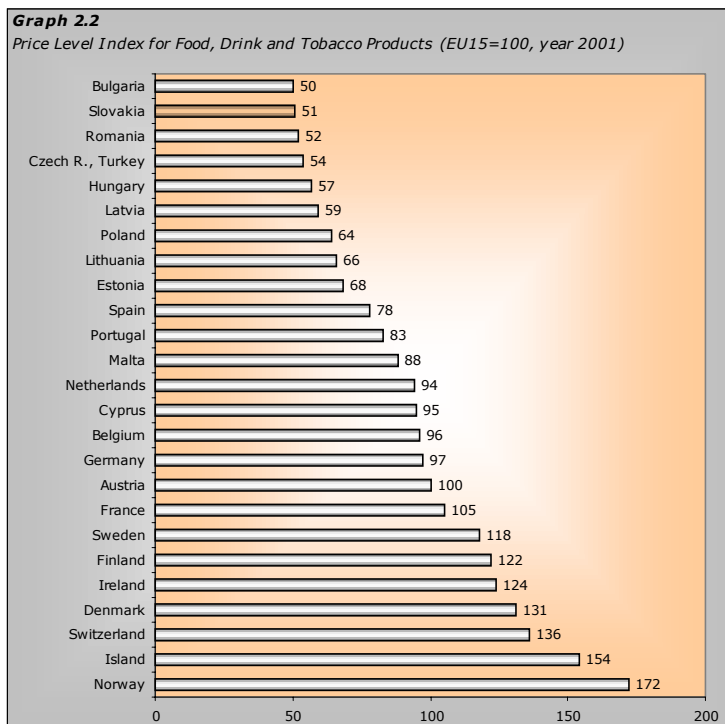
²² More than 3.3 million individuals registered for the second wave of voucher privatization in 1994. V. Mečiar's government abolished the second wave in 1995, and the registered owners of voucher booklets received non-tradable bonds worth about SKK 10,000.

²³ The deficit level thus approaches the figures from the unquiet years between 1996 and 1998, which witnessed a marked fall of the Slovak currency and the decrease of the rating of the country. However, in the face of a markedly higher inflow of FDI

Box 2.1*Slovaks Spend One-Third of Their Income on Food and Drink*

Even though food prices have risen almost 30 percent since 1995, they are still among the lowest ones in Europe, as suggested by a recently published comparative Eurostat survey. Slovak households spend on average 32 to 34 percent of their net financial income on purchases of basic food and drink, which is the highest proportion among all the OECD member states. In addition, this proportion is differentiated in dependence upon the social group. According to official 2001 data from the Statistical Office of the Slovak Republic, farmers, employees, self-employed persons, and pensioners spent 25.8 percent, 25.2 percent, 25.3 percent, and as much as 36.2 percent of their monthly expenditures on consumption of food, respectively.

In cooperation with OECD, Eurostat collected in the spring of 2001 data about prices of 550 comparable goods from 31 European countries. Based on this sample, Eurostat construed the so-called Price Level Index (PLI) for selected food, drink, and tobacco products. This parameter was calculated as the ratio of Purchasing Power Parity (PPP) to the exchange rate of the corresponding country, and can subsequently be compared with, e.g., the average value calculated for the European Union. Values above 100 suggest that the selected goods are relatively more expensive in the given country than the EU average, and vice versa. *Source: Eurostat (2002).*

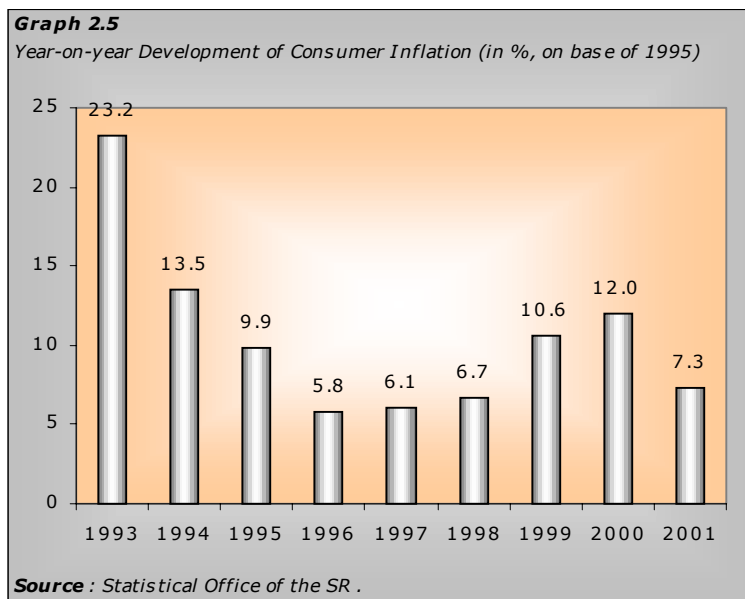
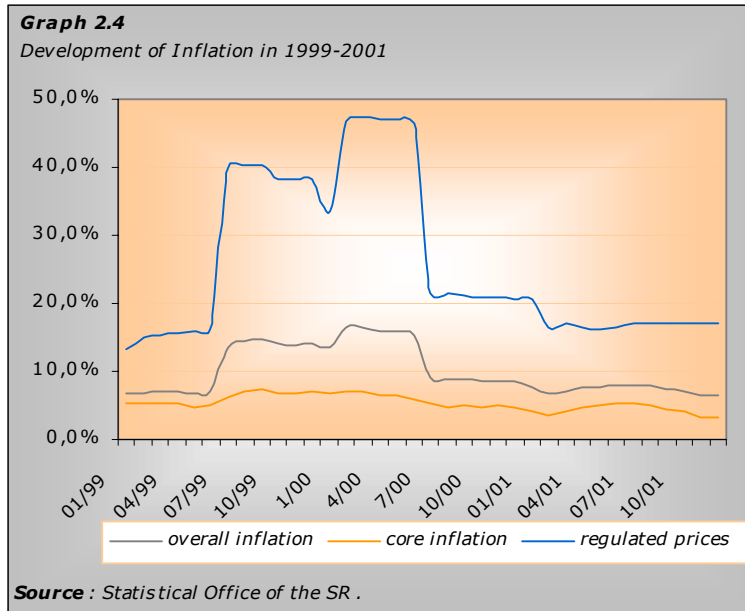


In the opinion of several analysts, this development suggests that the so-called package of measures of 1999²⁴ only had a short-term effect upon the development of foreign trade; the growth of

(which, in 2001, exceeded the volume of the deficit of the current account almost three times, and covered more than four-fifths in 2001), the risk of financial destabilization of Slovakia is significantly smaller as compared to the said period of time.

²⁴ For details, see National Human Development Report Slovak Republic 1999 (1999) or Norway (2002).

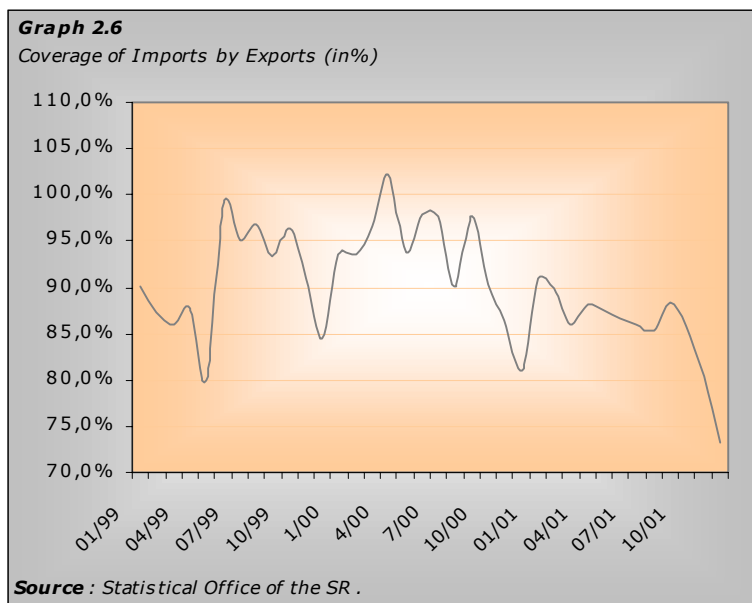
unemployment and the pointing of problems which mainly small and medium enterprises oriented towards the domestic market were suffering from, had a more significant impact. On the other hand, it may be stated that the "deficit of the current account reflects the restructuring of Slovakia's economy through a pronounced inflow of FDI and imports of capital goods. The resulting modernization of the domestic capital stock represents a positive factor of convergence with EU countries".²⁵



The development of the Slovak currency within 2000 and 2001 can be viewed as stabilized. In the first half of 2000, due to the restrictive policy of the government and the central bank, appropriate macroeconomic conditions were established to appreciate the domestic currency against the reference EUR. During the said period, domestic currency strengthened to reach a historical maximum of SKK 41.170/EUR. The development in the world foreign exchange markets during the monitored period, however, brought an additional drop of EUR against the US dollar, which subsequently became reflected in a sudden growth of the US dollar-Slovak crown exchange rate. Later on, the development of the Slovak currency was mostly influenced by domestic political events, including the resignation of B. Schmögnerová as the Minister of Finance, the dramatic illness of President R. Schuster, or the opening referendum on pre-term parliamentary elections in late 2000. In 2001, however, the Slovak currency

²⁵ Source: OECD Economic Surveys: Slovak Republic, pp. 31-32.

gradually appreciated against the EUR; its exchange rate being positively influenced by the aforementioned improvement of Slovakia's international investment ratings.



2.2.4 Public Finances

The State Budget recorded deficits over the last two years. In 2000, the deficit reached SKK 27.7 bn (i.e., 3.1 percent of GDP), growing to as much as SKK 44.4 bn (about 4.6 percent of GDP) a year later.²⁶ Even though it failed to meet its pre-accession plan to reduce the deficit below the 3 percent GDP level within 2000-2001, the government succeeded in achieving some improvements in this respect. The tax-related burden on individuals and companies could be reduced without a significant decrease in tax revenues. Public administration reform was launched; it is expected to result in more decentralized public financing and democratization of decision making.²⁷ As one of the reform steps implemented towards making the system of public finances more efficient, it was decided to abolish the majority of state funds, effective January 1, 2002 (with the exception of State Housing Development Fund²⁸ and State Nuclear Energy Installations and Spent Nuclear Fuels and Radioactive Waste Management Fund). Social security and health care system have become the agenda of the day.

As of the end of 2001, the official State debt reached the volume of SKK 365.8 bn, representing some 39.7 percent of GDP. With the volume of State guarantees included, the total State debt to GDP ratio makes up as much as 54 percent, still in compliance with the corresponding Maastricht criterion with respect in the European Monetary Union membership. According to this criterion, the overall indebtedness of the public sector must not exceed 60 percent GDP. Among the priorities of the Slovak Government during this election term, the recovery of the banking sector was mentioned; the State spent SKK 180 bn on restructuring of the sector.²⁹

2.2.5 Labor Market and Social Situation

In recent years, the Slovak labor market has been dominated by relatively pronounced trends; growing numbers of economically active population, stagnating employment, and high and regionally differing unemployment rates. About one-fifth of the labor force is officially registered as unemployed, which in statistical terms means that virtually one in four Slovak households has an adult member officially receiving no income from employment. Table 2.2 illustrates the development of the principal labor market parameters during the last five years.

²⁶ Using the ESA 95 methodology, the state budget deficit reached 6.5 percent and 5.9 percent as a share on GDP in 2000 and 2001, respectively. For details, see Tóth (2002).

²⁷ The first elections for self-governing bodies took place in 2001 (so-called higher-tier territorial units, regional parliaments).

²⁸ Scheduled to become abolished on January 1, 2003.

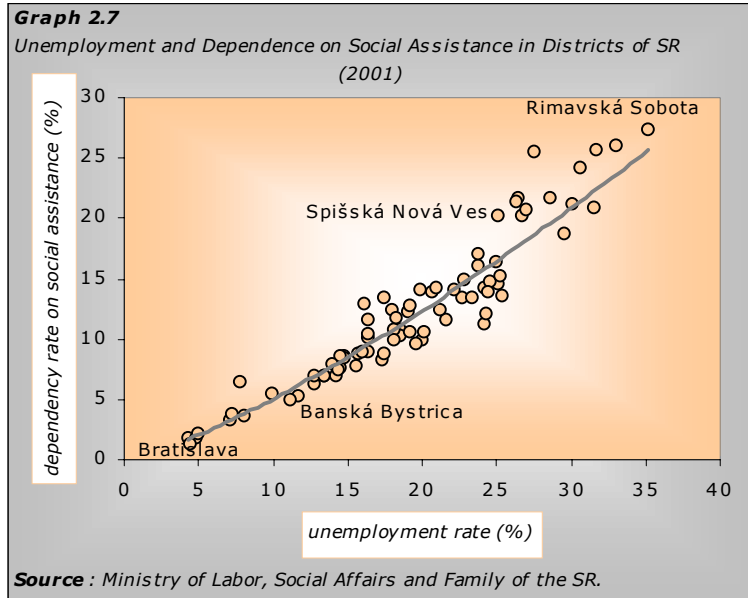
²⁹ These costs include the payoff of the principal of SKK 102 bn, estimated interest of SKK 56.59 bn, and costs of increasing equity of SKK 18.9 bn.

Table 2.2*Development of Labor Market Parameters, by Regions (numbers in ,000 persons, rates in percent)*

Region	Indicator	Year				
		1997	1998	1999	2000	2001
Bratislavský	Economically active population	325.1	331.1	335.8	337.2	337.4
	of which					
	Employed/self-employed	304.1	308.6	309.2	310.8	308.3
	Unemployed	18.5	20.0	24.6	24.4	28.2
	Economic activity rate	64.7	65.2	65.6	65.4	64.8
	Employment rate	60.5	60.8	60.4	60.3	59.2
	Unemployment rate	5.7	6.0	7.4	7.2	8.3
Trnavský	Economically active population	260.1	260.2	266.5	273.0	286.0
	of which					
	Employed/self-employed	230.0	226.3	229.8	225.0	232.4
	Unemployed	28.8	30.7	32.8	44.7	51.5
	Economic activity rate	59.7	59.1	59.9	60.9	63.2
	Employment rate	52.8	51.4	51.7	50.2	51.4
	Unemployment rate	11.1	11.8	12.3	16.4	18.0
Trenčiansky	Economically active population	285.9	297.9	288.4	294.1	296.7
	of which					
	Employed/self-employed	259.6	270.7	252.4	247.8	254.0
	Unemployed	25.4	23.0	32.9	44.2	39.8
	Economic activity rate	59.4	61.3	58.9	59.6	59.6
	Employment rate	53.9	55.7	51.5	50.2	51.0
	Unemployment rate	8.9	7.7	11.4	15.0	13.4
Nitriansky	Economically active population	332.7	329.3	328.2	335.3	343.1
	of which					
	Employed/self-employed	279.4	285.2	266.9	263.3	261.7
	Unemployed	50.6	39.9	58.3	69.8	79.4
	Economic activity rate	57.9	56.9	56.4	57.2	58.2
	Employment rate	48.6	49.3	45.8	44.9	44.4
	Unemployment rate	15.2	12.1	17.8	20.8	23.1
Žilinský	Economically active population	326.2	332.5	332.3	332.1	334.9
	of which					
	Employed/self-employed	294.7	292.9	275.1	266.7	267.6
	Unemployed	27.5	34.8	52.6	61.4	63.3
	Economic activity rate	61.6	62.1	61.5	60.9	60.8
	Employment rate	55.6	54.7	50.9	48.9	48.6
	Unemployment rate	8.4	10.5	15.9	18.5	18.9
Banskobystrický	Economically active population	307.7	308.3	313.8	317.4	327.6
	of which					
	Employed/self-employed	262.7	257.4	246.2	245.7	251.2
	Unemployed	42.8	48.2	66.3	69.6	73.4
	Economic activity rate	58.5	58.2	58.9	59.2	60.7
	Employment rate	49.9	48.6	46.2	45.8	46.5
	Unemployment rate	13.9	15.6	21.1	21.9	22.4
Prešovský	Economically active population	338.5	342.5	357.7	362.4	366.2
	of which					
	Employed/self-employed	284.6	282.4	285.9	278.4	279.7
	Unemployed	51.0	56.2	68.3	80.1	83.1
	Economic activity rate	58.7	58.6	60.5	60.5	60.4
	Employment rate	49.4	48.3	48.4	46.5	46.1
	Unemployment rate	15.1	16.4	19.1	22.1	22.7
Košícký	Economically active population	346.0	343.1	350.5	356.7	360.6
	of which					
	Employed/self-employed	291.0	275.2	266.9	264.1	268.8
	Unemployed	53.0	64.3	81.0	91.2	89.3
	Economic activity rate	59.0	58.0	58.7	59.2	59.2
	Employment rate	49.7	46.5	44.6	43.8	44.1
	Unemployment rate	15.3	18.7	23.1	25.6	24.8

Source: Labor Force Survey. Statistical Office of the SR.

Corresponding with the regional distribution of unemployment are also numbers of individuals in need of social assistance. In recent years, the unemployed account for approximately 90 percent of recipients of social assistance benefits in material distress, with most persons at risk of material distress, which is a certain parallel to material poverty, in regions with the highest unemployment rates (Graph 2.7). The regional differences are even more pronounced at the lower tier, e.g., between districts. There were 11.7 percent of Slovakia's population in material need in 2001.³⁰



Despite its long history, poverty in Slovakia still remains a new policy issue. Even if definitions and policies are missing and poverty indices are unsatisfactorily monitored, the development of the main factors, in particular unemployment rates, would suggest that poverty in Slovakia has grown since 1996.³¹ However, awareness is also growing in Slovakia that poverty and social exclusion are not only consequences of insufficient or missing income but that they result from effects of multiple factors reflecting dimensions such as education, health, housing, social contacts, etc. The development of several parameters concerning these areas has been on the other hand positive. The basic human development indicators show evidence of this.

A World Bank report from 2001 confirmed that the extent of absolute poverty in Slovakia bears comparison with the best performing transition countries. However, the share of inhabitants living at extremely low-income levels is substantially higher compared with neighboring countries. The analyses speak about deep pockets of poverty in the midst of a relatively well-off population.³² These pockets or islands of poverty are thought to significantly overlap with isolated and segregated Roma colonies. Estimates suggest that they are the home of about one-third of the Roma population.³³ Due to cumulated handicaps, long-term and permanent unemployment among the Roma is rather widespread, and isolation from the labor market is then transferred to the following generations. Table 2.3 illustrates the high unemployment rates of the Roma compared to the other ethnic groups in Slovakia.

³⁰ Recipients of social assistance benefits, including dependents.

³¹ Reliable data, which may be used to document the income situation of households, are collected at long and irregular intervals. The last Microcensus was undertaken in 1996, preventing a more updated analysis.

³² For details see World Bank (2001).

³³ Source: Vašečka (2001). In the 2001 population and housing census, 89,920 inhabitants claimed Roma nationality, which equals 1.7 percent of Slovakia's population.

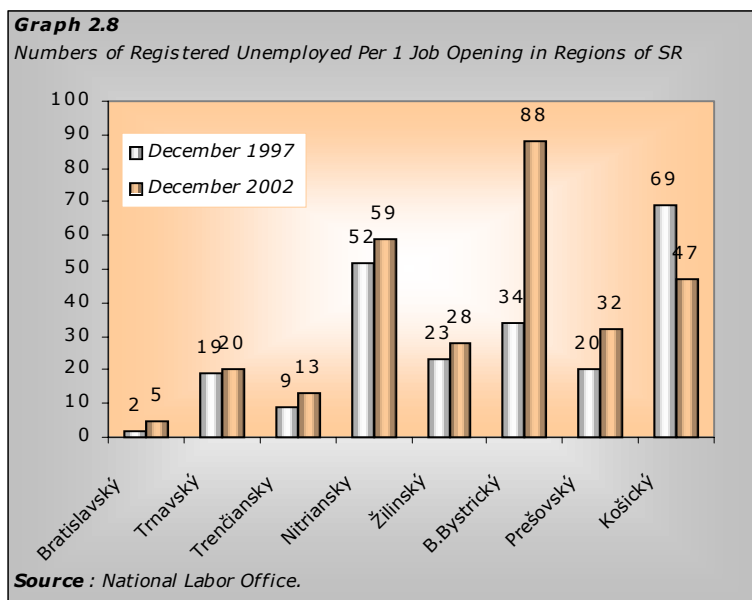
Table 2.3*Unemployment Rate by Ethnic Groups (age group 15-64 years, in percent)*

Indicators	1998	1999	2000	2001
Total	12.5	16.2	18.6	19.2
Slovak	10.9	14.9	17.5	17.9
Czech	7.6	11.5	13.3	23.9
Hungarian	18.1	22.4	25.5	27.1
German	11.4	-	-	-
Polish	2.0	5.5	23.9	19.9
Russian, Ukrainian, Ruthenian	15.1	21.6	22.0	17.6
Roma	83.2	77.5	73.5	72.6
Moravian	11.6	20.0	-	-
Other	8.1	17.5	2.4	16.5

Source: Labor Force Survey. Statistical Office of the SR.

Statistical figures suggest that there is a shortage of official jobs in Slovakia (see Graph 2.8). As stated in the last National Report, in an economy that indicates low generation of job opportunities, the demographic growth of the productive population component will show as growth of unemployment. The demographic development itself, however, cannot be considered the reason for high unemployment. Similar demographic trends namely prevail in a majority of developed countries whose economies, however, are able to cope with this development in the labor market.³⁴ Unemployment (and thus also shortage of jobs) is a consequence of a whole complex of problems. Most experts agree that the major reasons include:

- ❑ inefficient social protection system (relatively generous and not overly motivating, with significant redistribution of sources and solidarity, with prevailingly passive measures);
- ❑ insufficient education of a portion of the labor force and weak linkage between education and labor market;
- ❑ barriers on the part of the business environment (rigid labor law, instable legislation, low law enforcement, high tax and mainly payroll burden);
- ❑ low mobility of labor and inflexible housing market;
- ❑ other (e.g., passivity, tolerance of shadow activities)



Unemployment remains evidently the weakest point of the socio-economic development in Slovakia and the most sensitive social problem (see Table 1.1). Except for rather occasional cases connected with bankruptcies of enterprises and massive layoffs of employees, high unemployment rates are no reason for serious social unrest to develop in the country. It may be assumed that high incidence of shadow

³⁴ In many countries the demographic trends result in a decrease of the labor force and these countries import labor force from abroad.

labor is one of the reasons.³⁵ Domestic estimates of the extent of shadow labor rather differ (ranging from one-tenth up to one-third of the registered unemployed); a foreign source may offer a detached view. Rather surprisingly, Table 2.4 suggests that the size of shadow (gray) labor and economy in Slovakia is among the lowest ones in Central and Eastern European countries.

Table 2.4

The Size of Shadow Economy in Transition Countries

Country	Size of shadow economy (% of GDP), DYMIMIC method		Shadow economy labor force (% of working age population, 1998/1999) ^a
	Average for 1990-1993	Average for 2000-2001	
Bulgaria	27,1	36,4	30,4
Czech Republic	13,1	18,4	12,6
Estonia	34,3	39,1	33,4
Hungary	22,3	24,4	20,9
Latvia	25,7	39,6	29,6
Lithuania	26,0	29,4	20,3
Poland	22,3	27,4	20,9
Romania	27,3	33,4	24,3
Slovakia	15,1	18,3	16,3
Slovenia	22,9	26,7	21,6

Note: a. Working age population means population between the age of 16 and 65.

Source: Schneider, F.: *The size and development of the shadow economies of the 22 Transition and 21 OECD countries*. Bonn: IZA, (2002) in: *Study on the Social Protection Systems in the 13 Applicant Countries*. Synthesis report, Second draft. GVG, Köln (2002).

Unemployment is not a phenomenon that would show substantial gender disparity. The gender differences in the proportions of the unemployed are but minimal, with unemployment rates tending to be slightly higher for males than females in recent years, and with women on the contrary slightly prevailing among the long-term unemployed. Available records suggest that unqualified labor faces problems in the labor market regardless of gender. Employment and remuneration show a significant disbalance when it comes to the gender aspect. In 2001, women received on the average three quarters of the average wages of men (see Table 2.5).³⁶

Table 2.5

Gender Differences in Remuneration (average wages for females as percentages of average wages for males in the Slovak economy)

Indicator	1997	1998	1999	2000	2001
Female wage as % of male wage	78.5	77.0	75.0	75.0	75.0

Source: Statistical Office of the SR.

The growth of long-term unemployment is also among the marked features of the labor market, along with high unemployment among the young, and marked regional differences. The share of long-term unemployed jobless for 12 or more months reached 57.8 percent of all unemployed towards the end of 2001. The average 2001 unemployment rate among the young people aged 15-24 years was almost twice (37.3 percent) that for the overall population (19.2 percent). Differences in unemployment rates between the individual districts of the Slovak Republic ranged around 30 percent, with the lowest unemployment rate being traditionally recorded for the five districts of Bratislava (3.7 percent-6.2 percent, December 2001) and the highest for the district of Rimavská Sobota (35.5 percent).³⁷

The high unemployment rates are associated with significant economic and social costs. Exclusion from the labor market is generally viewed as the most serious form of social exclusion. Addressing the unemployment issue is connected with the overall positive development of the economy; it, however, also requires the undertaking of specific steps in the above areas that were defined as the main reasons. Some of the measures have been included in the agenda of the new government coalition (social assistance, labor legislation). Evidently, unemployment cannot be addressed by labor market policies

³⁵ Shadow labor also distorts data on the numbers of the population living in poverty or being at risk of poverty. It substitutes official earnings from employment, however to the detriment of all who work and pay taxes and social security contributions.

³⁶ Discussion on the reasons for the gender income gap as well as for the prevalence of women in low-income sectors and their smaller participation in leading positions was one of the key topics of the 2000 National Human Development Report for Slovakia.

³⁷ Source: Study on the Social Protection Systems (2002a).

only. Job positions are – and should be – created above all within the private sector, which is the biggest generator of resources. Consequently, key measures are those which will improve the business environment. In addition, significant will be stimuli in the area of education that should not remain without closer contacts with what is happening in the labor market. The biggest challenge will probably be the reorganization of the social protection system, which will have to respect the economic, social and demographic reality. The social system thus needs a tighter link between what is being contributed to the system and what is being retrieved from it. This does not mean necessarily weakening of social solidarity, but it does certainly mean strengthening of the targeted nature of it, to become aimed at those who objectively need it. The reform of the social system therefore must bring about a strengthening of the motivation of individuals to actively deal with their situation in the labor market. In this respect, also the gradual devolution of the responsibility and competencies to regions can be expected to become a supporting factor. Solution to the problem of unemployment is key to the solution to the associated problems of human development, above all of poverty and social exclusion, but eventually also to improvements in public health.

2.3 EDUCATION

There have been no changes in the education sector that have influenced the functionality and quality of this sector between 2000-2002. According to a World Bank study³⁸, the Slovak education sector has slowly adapted to the needs of a modern market economy. This is partly because the shifts in funding needed to reorient the system have been sluggish, continuing to generate excess capacity in terms of teaching staff and facilities.³⁹

The debt in the education sector keeps growing. The government has attempted to find solutions throughout the year to reduce the debt; however, it has done so without taking any principal measures in refinancing. Despite salary adjustments in the public administration sphere and a certain acceleration trend with respect to income of educators compared to other non-production sectors (culture, public health), many teachers still leave due to financial reasons. In the majority of cases, this concerns higher quality staff. The professional standard and quality of teaching drops virtually at all levels and types of schools.

Certain shifts in statistical figures occurred in 2001 compared to 2000. Despite the relative growth of children enrolled in kindergartens (84.7 percent of the respective population), the absolute number of children has dropped as a result of demographic trends by 8.5 thousand. A similar decrease was reported in elementary schools; the number of pupils enrolled in state primary schools fell by forty-seven thousand. The real picture is documented by the drop in children entering compulsory schooling (first grade); their number fell by almost 10 percent (7,200 children) as compared to the year 2000. This fact, along with the continuing rationalization and reduction of schools due to economic reasons, has led to an overall decrease in the number of schools by three hundred in 2001. This decreasing trend, however, did not become reflected in the number of pupils in special schools. This alarming fact is very likely connected to the issue of education of Roma children and adolescents.

Despite an increase in the numbers of students enrolling at universities, the overall number of university students remains low compared with developed countries; post-secondary and non-university education shows signs of stagnation. A phenomenon important, from the viewpoint of prospects and quality, is the reduction of students in post-graduate study programs (Ph.D.). Table 2.6 indicates the development of school facilities.

Table 2.6
Network of Schools and Teaching Institutions

Type of school	Number of schools		Number of pupils and students	
	1999/2000	2001/2002	1999/2000	2001/2002
Kindergartens	3,314	3,243	161,863	150,587
Primary schools	2,482	2,406	672,042	626,645
Elementary schools of art	194	175	95,561	96,887
Secondary grammar schools	209	217	76,662	86,239
Secondary vocational schools	348	339	89,542	91,820
Apprenticeships	361	374	102,522	106,775
Health care schools	24	31	7,252	9,384
Special schools	371	437	30,736	32,244
Universities (FTS) ^a	18	20	88,192	93,159

Note: a. Full time study.

Source: Statistical Yearbook of Education of the SR. Institute of Information and Forecasting in Education (2000, 2001).

The quality of education has also numerous factors. Experts agree that one of the greatest challenges of the Slovak education system is the change of its philosophy from emphasizing theoretical knowledge to focusing on its application in daily life (in particular, in preparing for the labor market). This challenge comprises of a number of complex reform policies and measures. A chance for higher quality and better adjustment to trends in developed countries lies in the so-called Millennium Project, comprising of the National Program of Educational and Training and the Development Concept of Education, as the main strategic tools of introducing educational reform. The Millennium Project determines 5 strategic priorities:

- ❑ adjustment of the teaching process and its content to the needs of a learning information society;
- ❑ creation and guarantee of quality management in education training under new conditions;

³⁸ Source: World Bank (2002).

³⁹ For example, while enrollments in state vocational and technical schools fell by 16 percent between 1990 and 2000, the number of teachers rose by nearly 20 percent and the number of schools by over 44 percent. Source: World Bank (2002).

- ❑ quality assessment and evaluation of effectiveness of education;
- ❑ improvement in quality, status, and recruitment of teachers;
- ❑ purposive support linking education and the labor market.⁴⁰

According to the World Bank⁴¹, the system needs to be refocused in order to provide more general, higher-level skills that the economy needs (and students demand) by reorienting secondary education and by expanding access to tertiary education. This can be achieved by keeping public spending on education at its current level of under four percent of GDP, by taking advantage of the sharp drop in the school age population, by making efficiency gains in the present system, by increasing the role of private providers, and by generating additional resources from tertiary level tuition fees. This is conditioned by

Box 2.2

Important Legislative Changes in Education

The new Act on Training and Education was supposed to be one of the first steps in the transformation of the school system. This legal norm, falling under so-called euro-legislation, was however not discussed in the government. The Act on Financing Primary and Secondary Schools is effective from January 2002. The implementing provisions attempt to set cost- and output-related coefficients and hence to introduce greater transparency of financial flows. The act also regulates the entitlement of private and church schools for contributions from the State Budget, introducing equal conditions compared with state schools. The act, however, fails to create pressure on the rationalization and reduction of the school network and its adaptation to demographic trends.

The adoption of the Concept of Development of Universities and Colleges brought an increment in the funding of universities by 0.1 percent in GDP terms. After long-lasting discussions in the academic community as well as in political circles, the Act on universities and colleges was passed in 2002. The main changes include:

- ❑ transformation of state universities to public service organizations, which can own property;
- ❑ enlargement of possibilities for multi-source financing;
- ❑ programming and institutional diversification of tertiary education;
- ❑ change in the status of university teachers, introduction of functional positions for professors and associate professors assigned based on tenders;
- ❑ specification of the accreditation system;
- ❑ introduction of a new system of state support for students.

The aim of public administration reform in the area of education, similar to other areas, is a purposeful transfer of competencies and responsibilities from local state administration to local self-governments. The Act No. 416/2001 Coll. regulates the legal shape of reform. The most important change concerns the transfer of school founding competencies from district and regional offices to municipalities and self-governing regions.

the adoption of changes in financing education, which had been slowly and insufficiently introduced. The challenge of decentralization also suggests the need for new, more transparent mechanisms for funding and accountability. The measures to reorient the education system will include:

- ❑ consolidation of schools and teachers with the use of a new financing mechanism based on the capitation principle;
- ❑ reorientation of secondary education toward the requirements of labor markets by increasing the general academic content at all levels and expanding the number of students prepared for tertiary education;
- ❑ reallocation of savings from consolidation to raise quality of education at all levels and to gradually expand tertiary education (by means of introducing tuition);
- ❑ strengthening of accountability mechanisms, including establishing a system of national student assessments and accreditation processes of universities;
- ❑ ensuring equal opportunities and access to education, especially for Roma children at primary and secondary levels and for all students at the tertiary level.⁴²

2.3.1 Health-Related Activities within the Education Sector

School catering makes up a separate closed system within the education sector. Its role is to offer healthy, affordable food and beverages. Out of the total number of students (1,207,578) at kindergartens, elementary and secondary schools, forty-three percent had meals at school cafeterias during the 2000/2001 school years. This represents a strong social group that concerns almost one in every two families.

⁴⁰ See also Chapter 2.4.3 Measures in the education sector.

⁴¹ Source: World Bank (2002).

⁴² Source: Ditto.

In 1999, the school catering system was publicly criticized because of audits conducted by the Slovak Trade Inspectorate. The media, parents, and students publicly criticized the shortcomings of school catering facilities; in particular, they noted the low-quality food and small portions served. Table 2.7 illustrates the evaluation of the conditions of the catering of children and adolescents conducted by the State Health Institute in 2000. The comparison shows that the most serious shortcomings were detected in special schools and homes for children (i.e., in facilities established mainly for socially disadvantaged children and adolescents).

Table 2.7
Evaluation of the Catering Facilities

Type of facility	Total number of catering facilities	of which in %			
		meeting all requirements	small shortcomings without impact on health	shortcomings that may affect health negatively	grave shortcomings threatening health
Day care centers (DCC)	46	73.91	21.73	4.36	-
Kindergartens	2,534	50.75	34.67	12.67	1.91
Kindergartens & DCC	5	80.00	20.00	-	-
Elementary schools	1,449	55.07	30.71	11.25	2.97
Grammar schools	75	49.33	36.00	10.67	4.00
Secondary vocat. schools	110	51.82	32.73	12.73	2.72
Apprenticeships	166	54.82	35.54	9.04	0.60
Faculties of universities	26	88.46	11.54	-	-
Homes for 1-3-year-old children	13	69.23	30.77	-	-
Homes for 3-18-year-old children	66	33.33	56.06	6.06	4.55
Homes for the youth at sec. schools	88	57.96	32.95	7.95	1.15
Homes for the youth at universities	40	80.00	17.50	2.50	-
Special kindergartens	3	66.66	33.34	-	-
Special elem. schools	18	44.44	38.89	11.11	5.56
Special boarding houses	38	39.48	47.37	10.53	2.62

Source: State Health Institute, Bratislava, 2001.

Leisure Time Activities

Activities of leisure time centers, school facilities, and civil associations have to be considered as part of preventive health promotion of children and adolescents. Programs and projects subsidized from public resources include:

- ❑ protective activities - primary prevention in children and youth against negative influences and the creation of conditions for integration of those with health-related handicaps;
- ❑ supportive activities - support of the provision of information and publishing activities, for work with children and youth;
- ❑ holiday and leisure-time activities - support of leisure-time and other events mainly during holidays;
- ❑ training and creative activities - creative and group activities and development of other amateur activities for children and youth.

Box 2.3

The School Milk Program

The School Milk Program was implemented in 1999 based on the Methodological Instruction of the Slovak Ministry of Education. The general objective of the program is to improve the health condition of the population and to strengthen prevention of civilisation diseases. The specific objective is to increase calcium intake by school-age children through consumption of milk in the so-called milky breaks at elementary schools.

WHO Projects "Health Promoting Schools" and "CINDI"

The main objective of the project *Health Promoting Schools* within the field of primary prevention has been raising the health awareness of children from earliest age possible, and then leading their parents to live healthy lifestyles. Several kindergartens have been involved in the subproject, *Healthy*

Kindergarten. The objective of these activities has been to create favorable preconditions for correct mental, physical, social, and emotional development of pre-school age children. In addition, kindergartens of a new orientation have started appearing; e.g., facilities that care for autistic children, as well as integration centers (vision disturbances, allergic conditions, mental damage) and day care centers for children who suffer from various diseases (ophthalmologic diseases, diseases of the respiratory, digestive tract, diseases of the locomotion system, skin diseases).

The CINDI project's priority has been the prevention of biological and social risk factors. The educational and training activities at primary and secondary schools and universities run in the form of working meetings and case studies directly at the schools. The major focus is on the prevention of addictions, prevention of smoking, moral development of young people, healthy nutrition and exercise, sexual education, personality formation of young people, and stress management. In 2000, the following projects were implemented under CINDI: *Repeated Surveys of the Use of Legal and Illicit Drugs by Pupils and Students of Elementary, Secondary Schools and Universities in the Slovak Republic*⁴³, *Survey of Physical Development of Children and Adolescents in the Slovak Republic*, and *Healthy Children in Healthy Families*.

Apart from the aforementioned conditions, health of children and adolescents is also influenced by the work/rest cycle and the hygienic situation in schools. Table 2.8 presents an overview of the hygienic situation in teaching facilities.

Table 2.8

Evaluation of the Hygienic Standard in Schools and Teaching Facilities

Type of facility	Total number of catering facilities	of which in %			
		meeting all requirements	small shortcomings without impact on health	shortcomings that may affect health negatively	grave shortcomings threatening health
Kindergartens	3,287	48.95	38.39	10.61	1.95
Elementary schools	2,473	44.84	40.80	13.27	1.09
Grammar schools	204	39.22	49.02	11.76	-
Secondary vocat. schools	321	47.35	46.42	5.61	0.62
Apprenticeships	302	47.35	44.04	8.28	0.33
Faculties of universities	123	45.59	47.97	2.44	-
Special kindergartens	13	61.54	38.46	-	-
Special elem. schools	147	26.53	46.26	21.92	5.29
Special boarding houses	44	40.91	50.00	7.14	1.95
Homes for 1-3-year-old children	14	64.29	35.71	-	-
Homes for 3-18-year-old children	69	21.74	63.77	12.31	2.18
Homes for the youth at sec. schools	231	42.42	48.92	7.80	0.86
Homes for the youth at universities	76	47.37	48.68	3.95	-
Homes of social care	104	45.19	47.12	7.69	-

Source: State Health Institute, Bratislava, 2001.

Health-related issues may significantly determine the functionality and quality of education and training in Slovakia. Among the most pressing problems with respect to the health condition of children and adolescents include the following:

- ❑ education to positive attitudes aimed at healthy nutrition, exercise, refusal of smoking, alcoholism, drugs, and stress management is not sufficiently incorporated into the curricula of elementary and secondary schools;
- ❑ there is an inadequate care of resource for maintenance, rehabilitation and the very operation of school facilities, determining shortcomings that may threaten or already do threaten the health of children and adolescents to keep growing;
- ❑ the recipes of meals at public catering facilities for children and youth do not reflect most recent knowledge concerning healthy nutrition of children and youth;

⁴³ See also National Human Development Report Slovak Republic 2000, Chapter *Education and Training*.

- ❑ children and youth from socially needy families, in particular Roma families, have less access to catering facilities;
- ❑ health professionals do not visit families with poor hygienic habits, in particular Roma families;
- ❑ the curricula of physical education at all types and levels of schools are more orientated toward sporting performances than toward general physical fitness;
- ❑ preventive influence has a low share, though prevention (clinical, hygienic as well as prevention based on the principle of health education) not only is able to maintain the health condition of the society at an optimal level but also represents the most efficient investments in also economical terms.

Based on the above, the following recommendations for adequate measures can be made:

- ❑ support for raising health awareness orientated toward the individual's own responsibility for his/her health and of parents for the protection of their children's health;
- ❑ provision for continuous preventive care within the whole population of children and adolescents, for medical supervision at school institutions, regular inspections at catering facilities;
- ❑ making the process of comprehensive health education orientated toward daily exercise, personal hygiene, fight against alcohol consumption, smoking and other addictions, toward a healthy lifestyle, more efficient;
- ❑ reinforce the share of preventive influence within the structure of care for children and adolescents;
- ❑ extension of primary health care of children and adolescents in their home environment (also through the existing network of home nursing agencies), thus enabling early identification of abused and neglected children.

2.4 EVALUATION OF THE REFORM ATMOSPHERE

The developments outlined in the preceding chapters were determined and accompanied by reform measures suggested and implemented by representatives of the citizens elected to public offices at the national and local level. Decisions made by executive and legislative bodies and other public institutions affect the quality of life of the population of the country. The relationship between policy makers and citizens depends on how the former respects the needs of the latter, and vice versa, how citizens are informed about reforms and how able they are to provide their representatives with feedback. This relationship is crucial for the quality of the decisions adopted and their impact upon human development. The following paragraphs of this section present an overview of important measures in the field of economic, politic, and social spheres, as viewed by the expert public (see Box 2.4).

Graph 2.9 is based on the average rating of measures adopted during the corresponding quarter; it documents the development of reform in the society. A decreasing trend can be observed during the monitored period of 2000-2002, which may be attributed to the parliamentary elections. It was during the pre-election period that politicians tended to focus on short-term targets rather than so-called public interests. The adoption of low-quality laws and decisions favoring certain groups of people may be popular though over the long run these actions fail to positively influence the quality of life of the population. As a rule, their negative effects will show up in the income of the ordinary taxpayer being limited, and in economic growth and wealth of the country being slowed down.

Professional public has kept up its critical commentary on health care, education, and social policy measures. Some concepts included visions of positive change; however, the actual steps remain but fragmented measures rather than systemic initiatives. As an illustration may serve the extension of the ban on executions of health insurance companies and health care facilities. This operative ad-hoc measure was intended to prevent Slovakia's health sector from collapse. In addition, the new University Act turned down tuition fees therefore avoiding a resolution to the burning problem of funding Slovakia's education sector. Keeping the public's wrong idea of "free-of-charge" studies and health services just intensifies the problems and delays of making the necessary decisions concerning a stronger direct participation of citizens in the financing of health care and education.

Evidently, the reform potential and the readiness of the population to accept draconian changes, which were present after the 1998 elections, remains unused. Namely, the commitments of politicians to pursue reforms and to undertake the unpopular steps happened to subside with the approaching parliamentary elections in September 2002. This applies mainly to the absence of the pension reform. Leaving the social system unreformed, populist bidding on the amounts of pensions cannot be eliminated, even if there are no funds to cover the needs, as was the case during the preceding period. Any preferences given to a particular group of the population will eventually have to be borne by the taxpayer. Therefore, financing the increased pensions was dealt with by the government by increasing contributions to public funds. Increasing the contributions alone, while failing to reform the health sector and the social system, will not resolve the accumulated problems, since it only represents "throwing money into a huge black hole". The level of the tax and contributions-related burden rather envisaged a reduction as stated in the Program Declaration of the government. The opposite trend increases the price of labor, acts counter-productively upon the reduction of unemployment, and disfavors economically active individuals.

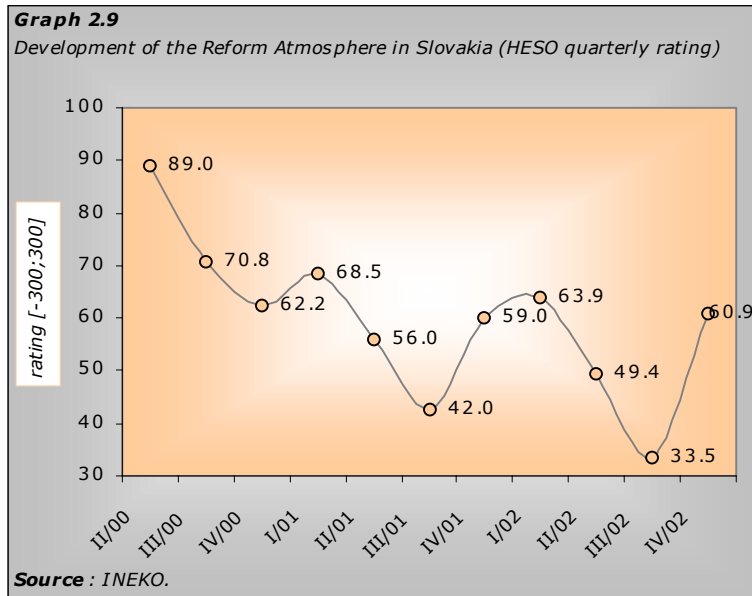
The principal standard of the labor law, the new Labor Code, is also in contradiction to its declared aims, which are expected to provide for optimum functioning of the market economy, reduce the extent of enforcement provisions, and strengthen the principle of contractual freedom of employers and employees. The new Labor Code has not resulted in the declared improvement of flexibility of the labor market; to the contrary, some of its provisions have made labor more expensive and less flexible, restricted competition, which may result in an increase in unemployment and an increase in the extent of

Box 2.4

The HESO Project

Under the project of the Institute for Economic and Social Reforms, INEKO – entitled Evaluation of Economic and Social Measures (Slovak acronym HESO) – a wide professional public including independent economists, analysts, professional journalists, business people, academic community, non-profit, professional organizations and local government representatives, comment on selected suggested and implemented measures taken by the legislative and executive power as well as on decisions made by public institutions, which may significantly affect the quality of life of the country's population. The comments are taken at regular quarterly intervals. Based on the evaluation made by experts, the measures are ranked by their rating scores, which reflect the opinion of the evaluation commission concerning the quality and importance of the adopted and drafted laws, standards, decisions. The value of the rating suggests which measures and reforms represented and represent an important contribution towards the social and economic transition of Slovakia and which, to the contrary, hinder the process. Since the launching of the HESO Project in April 2000, the evaluation commission has commented upon 252 economic and social measures (see Statistical Annex).

shadow labor. The measures adopted and suggested with respect to employment have frequently been but partial, introducing no principal systemic changes. As already suggested in chapter 2.2, the problem of unemployment and generation of new jobs can be resolved through improving the quality of the business environment and through improved flexibility of the labor market.



2.4.1 Measures in the Field of Economic and Political Development

Public Finance

Partial changes were introduced to the management of public finances. New methodology was used to set up the State Budget (so-called program budgeting); this method replaced the sectoral budgetary classification by a program-related one, thus classifying expenditures on programs by the various functions of the government. Budgets over the following years will not lack medium-term outlooks, which is expected to enable budgeting within a multi-year frame. This is expected to bring about a better approach to measure efficiency of the funds spent, stabilization of their budgeting, stronger responsibility of the sectors in drafting their budgets and following them, as well as making budgetary funds more focused upon government priorities. The State Treasury system under preparation, which envisages centralizing records of revenues and expenditures of state and public administration agencies, should also make a contribution to higher transparency of financial flows of public funds.

During the second half of its term, the government failed to provide for a continuity in the gradual reduction of the public service management. For the time being, the deficit exceeds 4.5 percent GDP (the deficit scheduled by the budget was 3.5 percent).⁴⁴ It will be efficient to cut high public expenditures, but this will only be possible after health and social security reforms are launched. Reform of public finances and sustainable reduction of their deficit will be one of the most important tasks of the new government. The aim is to direct public budgets towards balanced management since the ongoing accumulation of deficits may represent major problems for the Slovak economy.

The overall tax- and contributions-related burden (estimated tax-related burden for 2002: 18.6 percent of GDP, contributions-related burden: 12 percent of GDP)⁴⁵ is high⁴⁶, despite the reduction of direct taxes. A more pronounced reduction without reforms of so-called spending sectors, however, would result in further increase of indebtedness. The shift of State Budget revenues to indirect taxes (excise taxes, VAT) may be viewed positively. In the framework of the accession process, Slovakia will have to continue the gradual harmonization of the tax system by raising excise taxes (on mineral oils, tobacco, alcohol, wine and beer). In addition, multiple tax rates of the value added tax will have to be unified and/or abolished. Attempts to simplify the complex tax legislation (such as introduction of a flat

⁴⁴ According to EU methodology, which provides a more realistic view of the standing of public finances, the deficit of the general government approaches 6 percent GDP, the convergence criterion for EU accession being 3 percent GDP.

⁴⁵ Source: Chren, M.: Analysis of Public Expenditures and of the Contributions-related Burden in Slovakia; Establishing the Tax Break-even Point. ZDPS, Bratislava (2002)

⁴⁶ See, e.g. World Bank (2001), p. 49.

rate tax for small trade licensees) met with general support on the part of the business community; tax legislation includes too many exceptions and has been subject to frequent changes, thus representing a significant hindrance to economic growth.

Financial Sector

The restructuring and the subsequent privatization of state-owned banks (Slovenská sporiteľňa, Všeobecná úverová banka, Investičná a rozvojová banka) represented the principal prerequisite for the recovery and consolidation of the banking sector in Slovakia. The process of the sale of the banks was transparent; however, it was criticized for the high restructuring costs and the method used to transfer classified loans to Slovenská konsolidačná (Slovak consolidation bank). The privatization proceeds corresponded to the quality of the banks to be sold as well as to the interest in comparable bank institutions in neighboring countries. Apart from establishing a sound competitive environment, privatization also brought into the Slovak banking sector foreign know-how of the parent banks. Making credit more accessible and eliminating previous political pressures provided for stability to develop business activities. The nearly completed process of restructuring and privatization of the banking sector can be considered one of the greatest successes undertaken by the government in the area of economic policy in the past four years.

Box 2.5

One Percent Tax Assignment

A novelty in the Slovak legislation is the so-called tax assignment option, which enables physical persons (since 2002) and legal entities (since 2004) to decide to assign 1 percent of the paid tax on income to support specific activities of public benefit according to one's own choice. Even though the current 1 percent tax assignment is but symbolic, it represents a positive precedent and a psychologically important shift from state paternalism towards civil society. The citizens will start to be aware of their responsibility for public affairs, of their powers in managing a portion of public funds, and will show more interest in tax redistribution issues. Out of the total volume of the tax assigned in 2002 (more than SKK 100 million), almost one third flew into non-for-profit organizations in the health sector, and almost 20 percent to the education sector. During the first year of its existence this option to assign one percent of the tax was taken advantage of by more than 325,000 individuals (Source: <http://www.changenet.sk>).

Privatization

In addition to the successful privatization of the financial sector, space was gradually created for private capital to enter sectors previously considered as the exclusive sphere of influence of the State (gas and power sector, water management, transport, telecommunications). In the majority of cases, privatization of the forty-nine percent stake in state enterprises meant the creation of conditions for improved management, improved efficiency, faster development, as well as elimination of corruption. New owners took over Transpetrol, power distribution companies, Slovak Bus Transport companies, and Slovak Telecommunications. The sale of the forty-nine percent stake in the Slovak Gas Industry (SPP) was of special importance; it represented the most significant privatization decision of the first government of M. Dzurinda. In view of the negative experiences with state influence upon the management of this company as well as of the macro-economic impacts of this historically largest privatization deal (USD 2.7 bn) and/or of the use of the proceeds to pay off state debt and to finance the pension reform, the privatization of SPP was a positive step. It is expected the next government will continue the privatization process for the remaining state companies. Those include the following: water and sewer authorities, Slovak Electric Company, railways and, possibly, the Slovak Postal Service.

The establishment of the regulatory framework for privatized companies of network industries operating in former monopolistic markets represented an important change. The devolution of the competencies with respect to the regulation of natural monopolies and the associated assessment of eligible costs and adequate profits within these utilities to the newly created independent, multi-sectoral authority, Network Industries Regulatory Authority, was assessed positively by experts.

Business and Investment Environment

In the opinion of the business community, the greatest barrier to business in Slovakia includes the poor condition of the judiciary, instability, ambiguity of legal regulations, widespread corruption, significant contributions-related burden, and political uncertainty.⁴⁷ Measures which favored a certain partial group and restricted competition were also viewed as hindrances for the development of a good quality business environment (e.g., tax and other concessions granted to foreign investors, the government Program of Support of Slovak Products, draft Act on Trade Chains, the Packaging Act). Negatively perceived were not only the various forms of aid provided to private or semi-private entities

⁴⁷ Source: *Report on the Status of the Business Environment – Slovak Republic 2002*. Business Alliance of Slovakia, CPHR, Bratislava (2002).

but also similar initiatives in the form of state guarantees for loans for state-controlled enterprises (such as the railways, the water management construction company). All these represented non-systemic solutions, as they softened the responsibility of managers to take care of efficient management. Enterprises will get accustomed to receiving assistance from the State, and will request it on a regular basis.

Any market-conform measures that attempted to resolve problems of the business and investment environment were met with public approval. The systemic steps contributing to the recovery of the enterprise sector included the draft amendment to the Bankruptcy and Settlement Act, which changed the nature of bankruptcy proceedings from a liquidation-oriented process to a recovery procedure; this strengthened the position of creditors and sped up and simplified the bankruptcy process.

In addition, the extensive conceptual document entitled Improvement of the Legal, Regulatory and Tax Frameworks to Support Business and Investments, brought in systemic measures to improve the business and investment environment; it suggested principal changes to be implemented in several areas (commercial law, secured transactions law, the judiciary, labor law, investment promotion, etc.). The suggested measures were aimed at simplifying the conditions of establishing and operating companies, and concerned, for example, speeding up of the register court proceedings, facilitation of residency permit awarding procedure for foreigners, speeding up of Cadastre Authorities' procedures, or extension of out-of-court settlement of disputes through extending the powers of arbitration courts. The measures directed towards improved transparency, such as publishing the Commercial Register of the SR, Small Trade Register of the SR, and a list of bankruptcies (entities in bankruptcy) on the Internet, as well as steps that created preconditions for improved enforceability of law (expedient court proceedings as a result of the amendment to the Rules of Civil Court Proceedings) were all in the spirit of recommendations made by the aforementioned document.

Acts on industrial parks and investment incentives were aimed at attracting foreign investments. The abolishing of the 100 percent tax holidays for investors may be assessed positively. In a market economy it is vital to establish an environment of equality for all entities. Namely, exceptions worsen the business environment and restrict the prospects of economic growth. Rather than granting a variety of benefits, it is therefore better to improve law enforcement, to eliminate corruption, administrative barriers, faults of the tax and contributions system, and to establish a stable political stage; all this would result in higher attractiveness of Slovakia as the right place to do business and to invest.

Transparency and Fighting Corruption

To a significant extent, the transparency of public administration will depend on the legal standards adopted and on opportunities for public control. This has improved through the adoption of the Free Access to Information Act, which allows citizens to acquire any information about the activities of state authorities, local government authorities, and entities financed from or managing public funds, with the exception of strictly specified confidential information. Available information has to be provided within ten days of the request, free of charge. The "Info-Act" may be considered as one of the few legal standards that Slovakia may boast about internationally.

Transparency of political party financing represents one key area of fighting corruption; the recent amendment to the Act on the Association in Political Parties brought no principal change in this respect. Improved efficiency and quality of state administration was the objective of State Administration Audit, which was labeled as a so far lonely positive attempt to change the current inefficient and expensive state administration system. It brought in some specific rationalization outcomes (were the measures suggested by the audit taken, savings amounting to SKK 4-7 bn yearly could be achieved)⁴⁸, not all the sectors however agreed.

Transparency of privatization as well as of public procurement was perceived rather sensitively by the public, and faults of those processes were exposed to strong criticism in the media in some cases (such as sale of the Slovak shipping and ports company, tender for State Treasury). The public perceives corruption in Slovakia as being rather widespread. The value of the Corruption Perception Index (CPI) for the public sector of Slovakia reached 3.7 in 2002, which made Slovakia to rank, together with the Czech Republic, at position 52 among 102 countries monitored.⁴⁹ Corruption and clientelism are the major hindrances of a more efficient functioning of the state apparatus as well as of the private sector. Even if the government is committed to aggressively fighting corruption (National Program of Fight Against Corruption), some refusing attitudes by the judges, MPs and civil servants concerning extended property declarations, adherence to ethical standards, zero tolerance of corruption, limitation of immunity of MPs,

⁴⁸ Source: Report on the Progress of Works on the Fulfillment of the Slovak Government Resolution No. 694/2000 on the Audit of the Correspondence of Activities and Financing of Central State Administration Bodies and Organizations Reporting to them, June 2001

⁴⁹ CPI value 10 = "clean" public sector. Source: <http://www.transparency.sk/index-cpi.htm>

or refusal to adopt the Conflict of Interest Act suggested a strong resistance within the public sector directed against such efforts.

The introduction of the institution of the Ombudsman into the Slovak legal system may be considered as standardization of democratic institutions in the country. It will contribute towards better protection of citizen rights and business entities from being violated by public service bodies.

Public Administration Reform

One of the top priorities of the government has also been public administration reform. Its aim was to decentralize the competencies and finances from state administration to local self-governments, to cut expenditures, and to establish a new organization of the public administration through establishing the second tier of territorial self-government, represented by 12 new higher-tier self-governments (regional self-governments, VÚC). The later political disagreement concerning the structure of Slovakia's self-governments caused public administration reform to become delayed; this was considered as one of the greatest losses of the previous government coalition. The corresponding legislation for the reform was eventually adopted (VÚC Act and Act on the Devolution of Some Competencies from State Administration Bodies to Regional Self-governments, so-called Small Competency Act), whose content however substantially differed from the initially adopted concept. The number of the administrative territorial units remained unchanged; eight VÚCs were created. On the plus side, there was the fact that the long-postponed reform of the public administration was launched at all, even if incomplete devolution of competencies to self-governments, incomplete fiscal decentralization, as well as the lack of will to dissolve district offices evoked justified doubts concerning one of the key objectives of the reform, making public administration activities cheaper and more rationalized.

Integration

The integration-related ambitions of the SR could be partly fulfilled by joining OECD. Membership in the Organization for Economic Cooperation and Development contributed to an improved credibility and reduced risk of Slovakia in the eyes of foreign investors. This had a real positive economic impact upon the price of foreign loans and the growth of foreign investments. The membership was a matter of prestige, but the requirements on the part of the OECD, also forced Slovakia to speed up the implementation of the liberalization measures that moved the country closer to a fully operational market economy. Military reform represents one precondition of Slovakia's membership in NATO. The Ministry of Defense developed a concept of building up the armed forces of the SR, which is based on collective defense by NATO. It envisages the abolishment of mandatory military service, troop reduction, and a smaller volume of military technologies which will account for the economic potential of the country. Experts claim that the concept of military reform represented one of the very few strategic visions, which Slovakia needs in also other areas (including, e.g., the health sector, education, social sector, the judiciary, state administration management). Concerning the European Union accession process, Mikuláš Dzurinda's government succeeded in catching up with what Mečiar's government failed to achieve; Dzurinda's government overtook other countries which had started negotiations with the EU much earlier.

2.4.2 Measures in Social Policy

Social Security

Long-term demographic development, mainly the aging of the population and the associated unsustainability of the pay-as-you-go (PAYG) financing of pensions, suggests the need for principal reform of the whole system of social security, in particular pension insurance.

In August 2000, the government adopted the Concept of the Social Insurance System Reform in the Slovak Republic. The aim of the reform was to set up a system of participation in the financing of social insurance, based on a combination of the PAYG and capitalization approach to the financing, and a combination of an obligatory with a voluntary system of contributions to the insurance funds. The first pillar should consist of the previously practiced PAYG financing of the basic obligatory insurance, with the contributions in the target scheme accounting for two-thirds of the current contributions towards pension insurance. The second pillar should consist of capitalized basic obligatory insurance, with one-third of the current insurance premium deposited to personal accounts of the citizen providing for as many as fifty percent of the pensions in the target scheme in about twenty years. The third pillar should consist of voluntary supplementary pension insurance, subject to tax concessions, where employers and employees would pay contributions to personal accounts of employees kept with supplementary insurance fund,

based on mutual agreements. In addition to the aforementioned system, voluntary individual supplementary insurance scheme with a commercial insurance fund was also envisaged. The new system was expected to enhance the personal involvement of every insured over the long-range concerning the amount of the pension, to minimize numbers of citizens who will be dependent on social assistance or components of state social support.

The concept of social insurance reform also accounted for the elimination of the difference in the retirement age of males and females through 2027. In Slovakia, the retirement age is lower compared with EU Member States and with candidate countries. Currently, the retirement age is 60 and between 54 and 57 (in dependence on the number of children raised) for men and women, respectively. The government justified the need to raise the retirement age for women by the principle of equality of men and women, by the unfavorable demographic development of the Slovak population (reducing natality combined with the increasing average life expectancy, with higher values for women than men), and by the unsustainability of the current pension system, in which contributions paid by increasingly smaller group of those who work will not be sufficient to cover the benefits paid to increasingly larger mass of pensioners in the future.

In May 2002, the Parliament adopted the long awaited Social Insurance Act. The Act is intended to enable gradual transition from the social security system to social insurance system. This is expected to strengthen the application of the merits-based principle, with the obligatory contributions and the parallel social solidarity principle being maintained. According to the new method, the amount of the old-age pension shall be determined by accounting for the life-long income of the contribution payer. This Act, however, fails to establish conditions for a transition to a multi-pillar social insurance financing system as it does not address the issue of the second pillar – capitalization of sources through establishing personal accounts for every insured person. The new Act only defines the first pillar of the pension insurance, keeping the PAYG system of financing. In the opinion of critics, the degree of social solidarity with respect to the redistribution of the funds collected remains at a high level. One of the most serious comments on the draft law concerned the absence of universality of the social insurance system for all employees as some so-called power sectors (e.g., police corps and military) will have their own insurance schemes, and this raises the question of equality before law and transferability of insurance schemes upon employees going over to work from the public into the private sector or vice versa.

The Ministry of Labor did not meet the time schedule of the preparation of the social insurance reform, and it will therefore be the second government of Mikuláš Dzurinda that will have to launch the pension insurance reform. The leaving cabinet managed to review, in August 2002, the legislative intention concerning draft law on the capitalization pillar of the pension insurance; eventually, the draft was adopted with two mutually contradictory alternatives of the implementation of the reform concerning the institutional arrangement of the administration of assets within the capitalization pillar. The suggestion presented by the Ministry of Labor, Social Affairs and Family (a similar system is operational in Sweden and Canada) envisaged selection of asset administrators, private administration companies, by a public authority established to that effect (Investment Board). In the opinion of the drafters, such a variant would guarantee the safety of investment of citizens' funds entrusted. On the other hand, it would establish a corruptive environment and space for political and other types of interference with the investment process. Contrary to that, the model suggested by the Ministry of Economy (as practiced in Chile, and applied in a certain modification in also Hungary and Poland), aimed at decentralizing the administration of the capitalization pillar, providing the citizen with free choice as to the selection of the administrator of the assets. Private pension funds would be responsible for the administration and investments of the pension fund assets, and competition would force the funds to achieve the best appreciation of the pension savings of their insurers possible.

The new government, however, has already expressed the intention to postpone the date it becomes effective to January 1st, 2004.

State Social Support and Social Assistance

Among the aims of the November 2000 amendment to the Act on Social Assistance was to save SKK 1 bn on budgetary expenditures into the social sector, and to reform the payments of social benefits. For an individual in material distress (e.g., with an income not reaching the minimum subsistence level and/or a set amount) to be eligible to receive social benefits from objective reasons, he/she must have paid unemployment insurance premiums for at least three consecutive months. Individuals meeting the criteria of objective material need are eligible to receive full amounts of social benefits. On the contrary, individuals who get into the condition of material distress for subjective reasons, thus because of spending inadequate efforts to find a job, will only receive half of that amount. The aim of the measure was to restrict abuse of the social system and to motivate people to find jobs for longer periods of time. Pursuant to the previously applicable legal regulation namely, it was enough to have but formal employment, for a very short period of time, and this was deemed a condition for being recognized as

being in material distress for objective reasons. The restriction of the exercise of personal assistance by relatives and the cut of compensation paid by the State to individuals with health handicaps met with criticism. The new government set the objective to make social aid more targeted and to strengthen active incentives of the social system.

In May 2002, the Parliament adopted the amendment to the Child Allowances and Supplement to Child Allowances Act, introducing flat payments of child allowances since June 2002, i.e., without testing family income.

The essence of the Substitute Alimonies Act from April 2002 was the establishment of Substitute Alimonies Fund (so-called Alimonies Fund), used to pay parents taking care of children alimonies determined by courts instead of payments by the parent who fails to meet his/her duty to support. In the opinion of many experts, this provision already exceeds any reasonable measure of state paternalism. As a matter of fact, substitute alimonies represent so-called soft budgetary restriction for parents failing to pay alimonies. Misuse of the institution of state-paid alimonies cannot be ruled out. The new government envisages a prompt repeal of the Substitute Alimonies Act.

Employment Policy

As stated in the chapter on economic development and the labor market, unemployment rates ranged tightly under the twenty percent level in 2000-2002. More than forty percent of the unemployed had no job for periods exceeding two years.

The government-presented amendment to the Employment Act enabled towns, municipalities, civil associations, foundations, health care facilities, churches, but also budgetary and contributory organizations, to establish, after 1 August 2000, job positions of public benefit to be filled by the long-term unemployed. Public beneficiary works were financed from the State Budget (SKK 1.3 bn in 2000), using funds initially allocated for social benefits. The unemployed, who refused to participate in public works, were deregistered by the labor offices, thus losing eligibility for receiving the full amount of social assistance. The positive aspects of the measure included the fact that long-term unemployed started to get accustomed to working habits again, and that shadow labor could be easier disclosed. The critics, on the other hand, stressed that the artificial creation of temporary jobs is a non-systemic step to reduce unemployment, making some of the concerned misuse it just to re-gain eligibility for full amount of social benefits.

Amendments to the Employment Act presented by the MPs in November 2001 also attempted to resolve the problem of long-term unemployment in Slovakia, through introducing concessions for those who employ long-term unemployed (such as compensation of travel costs, so-called agreed job positions for graduates). Those measures could, for a transitory period of time, increase labor mobility and give the long-term unemployment a chance to find a job. At the same time, however, they represent but partial and selective attempts to reduce unemployment in Slovakia.

The new Labor Code (of July 2001) represented the second stage of the labor law reform, intended to provide for an optimum functioning of the market economy. This goal, however, failed. To the contrary, the new Labor Code made the business environment and the labor market even less flexible as it brought in excessive legal regulation, leaving but minimum space for arrangements of the relationships by the parties of the labor relationship. The rigid nature of the law shows above all in the provisions regulating the establishment and termination of the employment relationship, working time and collective relations. The negative impacts of the new Labor Code could become manifested in increases of the overall production costs of enterprises, in a worsening of their competitiveness, unwillingness of employers to sign new employment contracts, spreading of shadow labor and unemployment, as well as in a subsequent reduction of the quality of life in Slovakia. Some few faults of the new code could be temporarily resolved by small amendment to the Labor Code adopted by MPs in March 2002.

The new Civil Service Act (of July 2001), which became part of an extensive reform of the labor law, determined that clerks would not be assigned to civil service automatically; rather, they would need to pass qualification exams after attending training courses. The performance of civil servants will be appraised at regular yearly intervals. The appraisal will be the basis for further career development. Able and gifted officers will have opportunities to speed up their salary promotion and careers. Many experts agreed that the government-presented Civil Service Act did not achieve its goal to make civil service more flexible and efficient. Some provisions overly "reinforced" some job positions in civil service again, as they made impossible to lay off low quality staff quickly and cheaply. The new government showed commitment to amend the Civil Service Act.

2.4.3 Measures in the Education Sector

In 2002, Slovakia's education and science sector will have approximately SKK 40 bn available. The overall public expenditures on education represented SKK 38.27 bn in 2000, i.e., 4.31 percent of GDP. Just for the sake of comparison, their volume was SKK 14.15 bn in 1990, i.e., 5.49 percent of GDP. In recent years, some SKK 3.5 bn become usually allocated in the National Budget annually to finance science and technology in Slovakia, representing about 0.35 percent of GDP in 2001 (the total expenditures on research and development expressed in terms of GDP within 1996-2000 were: Slovak Republic 0.8 percent, Czech Republic 1.2 percent, EU 15 average 1.8 percent, USA 2.7 percent, Japan 3.1 percent, Sweden 3.8 percent). Universities were allocated SKK 7.4 bn for their activities under the 2002 State Budget, being SKK 1.2 bn more than the year before. In this way, the level of 0.71 percent of GDP was reached (1999 – SKK 5.45 bn, i.e. 0.7 percent on GDP; 1992 – SKK 3.25 bn, i.e., 0.98 percent on GDP).⁵⁰

The majority of the measures concerning universities and colleges (U&C) is expected to be based on the Concept of the Development of Tertiary Education for the 21st Century, approved by the government in September 2000 (see also chapter 2.3). The conceptual document defined the objective of the reform of the Slovak tertiary education sector as establishing of conditions enabling the universities in Slovakia to face international competition. Every year, volumes of funds should be allocated under the State Budget to achieve, within three years, an increase of the GDP proportion from approximately 0.6-0.7 percent in 2000 to 1 percent in 2003, thus pushing the SR closer to the average of the OECD Member States – 1.33 percent of GDP. The concept suggested that the numbers of students be increased, a differentiated system of remuneration of university teachers to be introduced, and the universities to become transformed from budgetary organizations to so-called public schools financed from multiple sources rather than from the State Budget alone; as a consequence, administrators of state property would become the owners. The authors of the concept also presented two variants of tuition fees; none of them was however accepted. The issue of tuition fees at universities has remained open.

In November 2001, the government decided to approve the suggestion to pay tuition fees for distance studies at universities. The intention was to legalize and legally regulate the status quo; universities collect fees through a variety of firms and foundations, receiving but a small portion of the funds the students pay. Tuition fees should range between ten percent and seventy percent of the current costs per student spent during the preceding year, representing SKK 5,500-38,500.

The new Universities Act adopted by the National Council of the Slovak Republic in February 2002 was drafted to, a.o., confirm the form of the payment of tuition fees for distance university studies or to leave them "free of charge". Eventually, the MPs turned down (by the majority of one vote) the suggestion to introduce payments of tuition fees for distance studies as suggested by the government. Thus, students will pay fees only for exceeding the scheduled regular duration of studies. Many universities considered discontinuing their distance programs, which threatened to concern about 30,000 students. The prevailing opinion voiced by the professional public was that a certain form of payments for university studies should have been adopted, not only to raise the necessary additional resources for the tertiary education sector, but also to underline the aspect of education as being a form of investment. The fact is to be considered as socially unjust that the current model of financing tertiary education in Slovakia, which only benefits a narrow group of people, burdens all the taxpayers. Slovakia's universities need competition among the schools to be introduced, to become directed towards provision of market services, which in the future will require direct involvement on the part of students who will have to pay for being trained and educated. Many experts stated that the reform of Slovakia's tertiary education sector has stopped halfway.

Pursuant to the Act, U&C will no longer be state-run entities, turning into public law institutions (so-called public U&C). Instead of administering state property, they will now become owners of it and will start to manage themselves independently. The new law envisages several methods of how to audit the use of funds; this will be done through the Ministry of Education, academic senate of the university and faculty, as well as through a newly established body, the U&C Administrative Board. The establishment of this new institution has been met with criticism since it was given the right of veto concerning issues of management property received from State, and because some of its members should be appointed by Minister of Education, i.e., a representative of political power.

The new U&C Act restricted the autonomy of faculties and transferred some competencies taken from them to the rector and the university, which was negatively perceived by a significant portion of the academic community. Objections were also voiced against the year on year increase of the numbers of students restricted by the State (because of contributing funds to U&C), against the overall system of

⁵⁰ Source: *National Report on Education Policy*. SGI, INEKO, Bratislava 2001; *National Report on Science and Technology Policy*. SGI, Bratislava 2002; Dado, M.: *Wanting to Become a Partner to Economically Developed Countries*. SME 31 Oct. 2001; „*Education: More Funds, Reform Changes, and Higher Salaries in 2002*“, SITA, 3 January 2002

checking the management of universities by self-governing bodies on the part of Ministry of Education, against awarding university rights to institutions of non-university nature. In addition, the absence of a link between Slovakia's tertiary education sector and the labor market and between science and research has been criticized; this absence is certainly not to the benefit of the competitiveness of the economy.

For years, interest in university studies has exceeded capacity and the financial potential of the schools (the numbers of students enrolling at universities have almost doubled between 1990-2000: there were 63,784 and 124,336 students in 1990 and 2000, respectively). Consequently, the government decided to allocate sufficient funds for 2000 to allow a ten percent increase in the number of university students, envisaged to bring the Slovak Republic closer to the European average number of students and university graduates. In Slovakia, about eighteen percent of the population aged 18-24 years is enrolled at universities; the corresponding ratio for the EU is approximately 23 percent. The principal problem of the current tertiary education sector in Slovakia, however, is its low quality rather than a lack of students.

To raise the attractiveness of the teacher's profession and thus to restrict the drain of good quality teachers, salaries were raised in the education sector. The tariff salaries of teachers were increased by thirty percent since April 2002; at the same time, the variable portion of remuneration (based on personal performance appraisal) was reduced from nine percent to six percent of the overall volume of wages. Reduction of the variable portion of the salary preserves the system of compensations in the education system without incentives, thus creating ample space for corruption.

The reform steps in the primary and secondary education sector should be based on the Concept of the Development of Education and Training and the National Education and Training Program for the Next 20 Years, so-called Millennium Project (December 2001). The document deals with changes to be introduced into the various elements of life-long learning (from maternity schools up to tertiary and post-graduate education). The Ministry of Education presented in October 2001 draft of an extensive new law for public discussion regulating education and training at schools and school establishments, so-called Education Act, which is intended to regulate the conditions and the contents of the learning process, rights and responsibilities of the stakeholders and institutions, as well as the mechanisms and tools to be used to shape them.

In 1999, Project Infovek (Info-age) was launched to improve the level of informatization of teaching institutions. Its principal aim is to set up, within the time frame of four to five years, information classrooms at all elementary and secondary schools, equipped with ten computers on average, with Internet connectivity, which would be used in the education process.

The amendment to the Act on the Financing of Elementary and Secondary Schools enabled (since 2002) church and private schools to receive one hundred percent state grants paid to state schools for regular operations; this created conditions to make various types of schools partly equal. Free choice of schools will have a positive effect on the competition among the schools, enabling an improvement of their quality and development of alternative education. Any church or private school, however, collecting regular tuition fees will receive grants reduced by thirty percent, and additional ten percent will be cut if curricula and study plans comparable with those applicable at state schools are not applied. This aspect became subject of criticism. As before, non-state schools will not be eligible to receive capital investments covered; however, the State will lease to them textbooks, computers and other movable assets free of charge.

2.4.4 Measures in the Health Care Sector

According to the data provided by Ministry of Health (MH SR), the total expenditures on the health care system of the SR represented SKK 59.3 bn in 2000 (net of privatization proceeds worth SKK 3.5 bn), corresponding to 6.7 percent of GDP. The Slovak health sector had SKK 65.6 bn available in 2001 (apart from privatization proceeds amounting to about SKK 6 bn), representing more than 6.8 percent of GDP. Slovakia spends a similar percentage of GDP on health care, as do several developed European countries; however, if expressed in terms of purchasing power parity, the overall expenditures fall behind. Health sector debt reached SKK 15 bn in 2000; some experts, however, claimed it to be substantially higher, in excess of SKK 20 bn, continuously increasing SKK 700 million a month. The current external debt (vis-à-vis external creditors) reaches almost SKK 30 bn, whereas the internal debt (moral wear of the equipment) exceeds SKK 50 bn. The public perceives the health sector as one characterized by the highest extent of corruption in the society (the volume of informal payments has

been estimated at SKK 12 bn). The professional public continues to point out the huge reserves in the management of the sector and the need to undertake a principal reform.⁵¹

After the scandalous treatment of the President of the SR in the summer of 2000, the Minister of Health was replaced. The new Minister intended to speed up the transformation of the health care system. This required to complete the rationalization (reduction) of the network of health-service institutions and to change the method of their management. Hospitals were envisaged to be denationalized and transformed into non-profit public benefit institutions. The central method of control was bound to be changed into a self-governed system, with competencies devolved to health professionals. Development of multi-source financing of health care was envisaged, requiring the adoption of new laws on health insurance and supplementary health insurance. These steps also required some unpopular cuts in the consumption of medicines, health-service institutions and headcount in the health sector.

One outcome of the protest events undertaken by health professionals, who requested the adoption of a realistic concept of transformation of the health sector by the end of 2000, was the drafting of a comprehensive document entitled *Analysis of the Management within the Health Care System* and suggestions for measures to improve the management and the financial standing of the health care system. The documents were drafted by the Ministry of Health. Apart from an analysis of the status quo, the document also contained the principal objectives of the reform, measures and conditions of their implementation. Among the principal objectives of the health sector's reform, the concept included balanced management of the system, increase in public funds (in 2001, public funds accounted for 92.3 percent in Slovakia, those within the EU for 75%-80% percent of the cost coverage), raising the active economic participation of citizens on health care (HC), increasing the share of private resources on expenditures (the document however failed to suggest a specific figure, and this prevents the defining of the specific scope of services of basic HC financed under the principal obligatory health insurance scheme, which is an issue of principal significance for the reform), reduction of the scope of health care provided under the obligatory health insurance scheme (covering almost the whole range of HC interventions), and rationalization measures. Health insurance was intended to be split into basic obligatory insurance covering the basic HC standard, voluntary supplementary insurance covering HC not covered under the basic insurance scheme, and supplementary insurance to cover above-standard services (such as the standard of the hospital room). As of 2002, there should have been a state benefit to cover uninsurable risks (organ transplantation, oncological diseases, emergency aid); the calculation base for the insurance premium should have been increased (the base according to which State pays health insurance premium from State Budget for economically inactive individuals). It was further envisaged to reduce the mandatory rate for state payments from fourteen percent to ten percent, thus to the same level as employers pay. The system was expected to become rationalized through the provision of HC in the form of daily diagnosis and therapy, which was expected to shorten the average time of attendance; through reducing the numbers of acute care beds in stationary health-service institutions to the European average (5 per 1,000 individuals; in the SR there are 6 acute care beds per 1,000, Bratislava has even 11.2); devolution of competencies in the area of health services and goods price regulation to MH SR; reduction of consumption of medicines through guiding doctors to make more efficient decisions on drug expenditures.

Although welcoming the draft concept of health sector reform, experts kept stressing that all previous governments had declared the intention of reforming the health sector but did not start acting by adopting specific steps leading to recovery. As also evidenced by the developments during the last four years, transformation of the health sector remains an intention that cannot be achieved unless there is real political will to pursue this agenda. Partial non-systemic measures were adopted instead of reforms, which were expected to mitigate problems in the health sector temporarily, but postponing the real solution to them. Consequences rather than reasons for the bad condition of the health sector were addressed. Such attitudes intensified the indebtedness of the sector or simply shifted the burden to other health care providers. As examples may be mentioned the inadequate payment by State on behalf of its insured, inadequate coverage of price measures concerning maximum and minimum prices for health-service institutions, ban on execution of health insurance funds, as well as inadequate coverage of salary raises of health professionals.

Minister of Health suggested that there be a sole, state determined health insurance company (HIC) to collect basic obligatory insurance premium as soon as the current health insurance system is changed; when it comes to additional insurance covering some higher standard, the insured would pay to a non-state HIC at their own choice. Minister claims that the registration of the insured with a single HIC would enable more efficient management of expenditures, and provision of all information needed for analytical and control processes. Experts viewed the suggestion to monopolize basic health insurance as a measure

⁵¹ Source: Ministry of Health of the SR; WHO; Pažitný, P. - Zajac, R.: Strategy of the Health Sector Reform – a Real Reform for the Citizen, M.E.S.A. 10, Bratislava 2001; Zajac, R. - Pažitný, P.: The Health Sector, in: Slovakia 2001 – Summary Report on the Status of the Society, IVO, Bratislava 2001; Pažitný, P.: Health Sector Reform for the Citizen, SME 11 Oct. 2002

that will not help resolve problems of the health care system. By abolishing plurality, stability of the health insurance system could be undermined. What is needed is to eliminate State as monopolistic purchaser that dictates the scope of health care services and the prices it pays as this – under the current conditions – causes a permanent growth of the HC system deficit. Health insurance companies should be instead transformed from mere redistributors of state funds into business entities providing standard coverage of health risks to the population. The system of the single HIF to organize basic insurance was envisaged to start towards the end of 2001, but did not occur and was rejected.

The price decree for the health sector of December 2001 prompted dissatisfaction of private doctors who requested an improved compensation of their work; the decree enabled per capita payments (regular payments per every patient recorded) could be both increased and decreased (because of non-rational prescription of medicines). In the opinion of the observers, the price measure suggested the desirable direction towards performance-based compensation of health professionals, being however but a cosmetic ad hoc regulation.

Another measure that aimed at transiently stop the outflow of funds intended for regular operation of health-service institutions was ban on execution of health insurance companies and health care facilities. The measures eliminated consequences while not attempting to resolve the reasons for the bad condition of Slovakia's health system. The aim of the first amendment to the Rules of Execution of July 2001 was to exclude, for a period of six months, assets of health-service institutions and health insurance companies from execution, thus gain time to raise SKK 9.5 bn from privatization for the health sector. Another amendment followed in December, 2001 which extended the ban on execution in the health sector through the end of 2002, thus preventing creditors of health insurance companies and health care providers to collect their receivables through court executors. The amendment to the Executors Act was born mainly because of the state-owned Všeobecná zdravotná poisťovňa (General Health Insurance Company, VŠZP), which owed pharmacies in excess of SKK 6 bn for medicines, and the volume of its liabilities vis-à-vis doctors and hospitals exceeded SKK 1 billion. The measure disfavored one group of creditors, thus establishing inequality of contracting parties. The inability of creditors to collect their receivables represents a distortion of the economic environment and does not provide any incentives to debtors to manage rationally and efficiently (so-called moral hazard). Extension of the ban on execution of health insurance funds will result in intensified corruption.

A new price measure issued by Ministry of Health introduced a new system of payments for health care provided, effective April 2002; payments will be based on interventions contracted between health insurance companies and hospitals. Health insurance companies will be ordering with hospitals interventions for a period of three months in advance, which the funds are able and willing to finance in the given health-service institution. If the hospital exceeds the contracted limits for specific services, it will receive no payment for them from the health insurance fund. In the opinion of experts, the problem of contracts resides in the fact that such contracts arose virtually without any economic calculations and contractual freedom, as the majority of the hospitals still remain in state hands and their existence is directly dependent on financial transfers of the largest health insurance company, Všeobecná zdravotná poisťovňa (VŠZP), whose solvency is being guaranteed by State. Hospital expenditures should rather be controlled by private insurance funds operating in a competitive environment. The change of the payment mechanism was just a way out of troubles of Slovakia's health sector, which lives beyond its means, failing to account for the current performance of the economy. As a result, only numbers of patients should be attended, which can be covered by public resources; this is expected to exert pressure upon hospitals to make their activities more efficient. The measure can be perceived as a suggestion to resolve problems of Slovakia's health sector, but it still remains an isolated attempt to cut the costs of health care. Partial steps will not resolve the essence of the problem, which is the so-called free-of-charge health system; they merely delay the bankruptcy of the system.

One method how to contribute to a more significant elimination of State's influence on the health sector is to privatize health-service institutions. This is one of the prerequisites for an actual transformation of the health sector. Medical centers and outpatient departments now have real owners who will be responsible to manage their resources and their own property. As a disadvantage of the process, everything was running in a non-functional and non-reformed environment. Overall, 169 health-service institutions had to be released from state hands. Another form of denationalization of health-service institutions was their free-of-charge transfer to towns and villages. According to the initial idea, State should have transferred health-service institutions to local governments free of debt, the government however subsequently decided that they are to be transferred together with their liabilities. Under the public service decentralization program, some independent offices, nursing homes for the chronically ill, hospices, psychiatric institutions, outpatient departments and stationary establishments, type I and II hospitals should go over under the administration of local municipalities and higher-tier territorial units (VÚCs) as of January 2003. Ministry of Health reserves the right to audit the denationalized health-service institutions. Probably, it is the new government that will complete the privatization in the health sector.

2.5 HUMAN DEVELOPMENT AND HEALTH

Previous National Reports attempted to clarify the issues and the importance of measuring human development. The authors analyzed the principal indices of human development through equality of opportunities for females and males, regional differences; they compared them with other life quality parameters. A stable component of the Report was the calculation of the human development index (HDI), the most important worldwide comparable indicator of human development.

Conclusions of the preceding Reports confirmed the growing importance of measuring human development to enable the adoption of appropriate development strategies. This edition of the National Report addresses human health and anything that may affect it. Health and protection thereof is an issue rather sensitive with respect to the monitoring of the relevant parameters. The scope of the available statistical parameters relating to health is rather broad, although mostly focusing on so-called negative health parameters, including morbidity and mortality. In recent times, however, it was mainly the World Health Organization (WHO) that has introduced improvements of parameters that more adequately describe health as an opportunity to live a long and healthy life.

The correlation between health and human development is quite evident; the more sound the health of a human is, the more opportunities and chances for development he or she enjoys. In other words, the prospects of reaching a higher quality of life grow with one's health. In general terms, the same applies vice versa. For example, life quality improvements are due to improved education and income; these are usually accompanied by improvements in health. The objective of this chapter is to point to the importance of a variety of health-related factors for the health condition and quality of human life. The first part deals with an analysis of the actual development of major human development parameters.

2.5.1 Basic Human Development Indicators

The Human development index (HDI) serves as a comprehensive measure of the achieved level of human development in a given country. It is used mainly for international comparisons, thus the calculation of the index is narrowed to four generally available and comparable indicators of the three most important dimensions of life.

1. Long and Healthy Life - *Life expectancy at birth*
2. Education - *Adult literacy rate (2/3 weight)*
- *Combined primary, secondary and tertiary gross enrolment ratio (1/3 weight)*
3. Standard of Living - *Gross domestic product adjusted for purchasing power parity*

For the construction of the index, fixed minimum and maximum values have been established for each indicators. Table 2.9 includes values from 2000 and 2001.

- | | |
|---|----------------------------|
| 1. Life Expectancy at Birth ⁵² : | 25 years and 85 years; |
| 2. Adult Literacy Rate ⁵³ : | 0 percent and 100 percent; |
| 3. Combined Gross Enrolment Ratio ⁵⁴ : | 0 percent and 100 percent; |
| 4. Real GDP Per Capita (PPP\$) ⁵⁵ : | 100 and \$40,000. |

Table 2.9

Basic Parameters for HDI Calculation for the Slovak Republic (2000-2001)

Indicators	2000	2001 ^a
Life expectancy at birth (years)	73.18	73.40
Adult literacy rate (%)	99.50	99.90
Combined primary, secondary and tertiary enrolment ratio (%)	74.91	74.91
Real per capita gross domestic product (PPP\$)	10,270	12,380

Note: a. Data for the preceding year were used if more recent data were not available.

Source: Statistical Office of the Slovak Republic.

⁵² The number of years a new-born infant would live if prevailing patterns of mortality at the time of birth were to stay the same throughout the child's life.

⁵³ The percentage of people aged 15 and above who can, with understanding, both read and write a short, simple statement on their everyday life.

⁵⁴ The number of students enrolled in a level of education, regardless of age, as a percentage of the population of official school age for that level. The combined gross primary, secondary and tertiary enrolment ratio refers to the number of students at all these levels as a percentage of the population of official school age for these levels.

⁵⁵ For this purpose, the GDP per capita in local currency is divided by the purchasing power parity (PPP), defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States. PPP allows a standard comparison of real price levels between countries. Normal exchange rates may over- or undervalue purchasing power.

Three partial indices (life expectancy index, education index, and GDP index) are calculated as the actual less minimal value to limit value difference ratio. Education index is comprised of two-thirds literacy index and one-third school enrolment index. The resulting HDI is a simple arithmetic mean of the partial indices (Table 2.10).

The final value of the index ranges between 0 and 1, enabling comparisons with other countries. The difference between the achieved and maximum value shows how much the country in question remains behind the maximum value of 1 and/or how much improvement is desired. It remains a challenge for every country to find ways how to reduce this difference.

Table 2.10

Partial Indices and Final HDI for the Slovak Republic (2000-2001)

Indices	2000	2001
Life expectancy index	0.803	0.807
Educational attainment index	0.913	0.916
Adult literacy index	0.995	0.999
Gross enrolment index	0.749	0.749
Adjusted real GDP index	0.773	0.804
Human Development Index HDI	0.830	0.842

Source: Author's calculation.

Tables 2.9 and 2.10 are based on domestic statistical sources. For the international HDI ranking, standardized data from several organizations are used (UN, UNICEF, WHO, World Bank), which use their own surveys or national data sources. Due to the harmonization of data, slight deviations may occur between domestic and international sources.

By its human development, the Slovak Republic ranked 35th among 162 countries of the world in 2001.⁵⁶ The 2002 international HDI comparison included 173 countries, and Slovakia dropped to thirty-six. By its ranking in both years, Slovakia confirmed its long-term position among countries with a high degree of human development. Compared to preceding surveys, Slovakia could overtake the South American countries of Uruguay and Chile, as well as Kuwait. Slovakia could maintain its third position, after Slovenia and the Czech Republic, among the former Communist block countries, although Hungary and Poland tend to grow at a faster rate. This is suggested by GDP development as well as by higher proportions of youth attending schools in neighboring countries. The higher incomes were the reason why Slovakia had to give up its ranking of thirty-five to Hungary in 2002.⁵⁷

One of the basic principles of the human development concept concerns equality of chances regardless of external features of the human. The Gender-related Development Index (GDI) was established by UNDP in 1995. GDI measures the quality of life using the same indicators as HDI, but adjusts the result for gender inequality between men and women.

The calculation of the index is slightly more complex than of the Human Development Index.⁵⁸ It may be stated that the partial indices get adjusted, based on the proportions of the genders in the population and according to the ratio of average wages of women and men. According to statistical figures, equality of chances for human development with respect to women and men would mean equality of the values of HDI and GDI. Based on international investigations, GDI has lower values than HDI in all countries. This means that there is not full equality of women and men anywhere in the world.⁵⁹ It should be pointed out at the same time that inequality need not necessarily mean more favorable conditions for men as discussions on gender issues are usually interpreted. Slovakia's position with respect to gender comparison is rather similar to the situation that prevails in a majority of developed countries; women present with the biological advantage of longer lives (women live approximately 11 percent longer than men), they show a slight prevalence in proportions of studying youth (there are approximately 3 studying women more than men in every 100 men and women aged between 6 and 22 years), and their share on the generation of domestic product is about two thirds (average wages of women reach three quarters of the average wages of men).

The Slovak Republic achieves a slightly better ranking by GDI than by HDI. Table 2.11 shows the basic indicators of human development by genders.

⁵⁶ Source: UNDP: *Human Development Report 2001*. New York (2001).

⁵⁷ See the international comparison of HDI in the Statistical annex.

⁵⁸ For detailed methodology of GDI calculation, see e.g., UNDP: *Human Development Report 2002*. New York (2002).

⁵⁹ See international comparison of GDI in the Statistical annex.

Table 2.11*Basic Parameters for GDI Calculation for the Slovak Republic (2000-2001)*

Indicators	2000		2001 ^a	
	Women	Men	Women	Men
Life expectancy at birth (years)	77.22	69.14	77.60	69.54
Adult literacy rate (%)	99.50	99.50	99.90	99.90
Combined primary, secondary and tertiary enrolment ratio (%)	76.33	73.55	76.33	73.55
Real GDP per capita ^b (PPP\$)	7,925	12,750	9,545	15,383

Note: a. Data from preceding year were used if more recent data were unavailable. b. Author's calculation using the UNDP methodology. For details, see e.g.: UNDP: Human Development Report 2002.

Source: Statistical Office of the Slovak Republic.

The calculation of the gender-related index is along the same lines as that of the human development index, with partial indices – life expectancy, education and income – being adjusted based on the proportions of men and women in the population. The calculation of the income index is based on the women-to-men wages ratio and their shares on the economically active population (see Table 2.12).

Table 2.12*Partial Indices and Final GDI for the Slovak Republic (2000-2001)*

Indices	2000	2001
Equally distributed life expectancy index	0.802	0.809
Equally distributed educational attainment index	0.913	0.916
Equally distributes income index	0.766	0.798
Gender-related Development Index GDI	0.827	0.841

Source: Author's calculation.

2.5.2 Health and Human Development

Longevity, a parameter of health, constitutes one-third the weight of both basic human development indicators. Changes in the patterns of mortality in a given country are displayed in the final indices. This is confirmed by HDI trends in most countries of the world, which have recorded significant HDI increases due to remarkable prolongation of life during the past twenty-five years. Except for Hungary, all countries ranked by a higher HDI than Slovakia in 2002, achieved a greater extension of the life span in the past three decades than did Slovakia. Many countries with a similar baseline position, including Malta, Cyprus or even Slovenia, achieved longevity increments two to three times that achieved by Slovakia. Similarly as in Hungary, Poland or Romania, life expectancy also tended to stagnate in Slovakia; several of the former Soviet Union countries even recorded a decrease.

Table 2.13*Development of Life Expectancy in the Past 30 years*

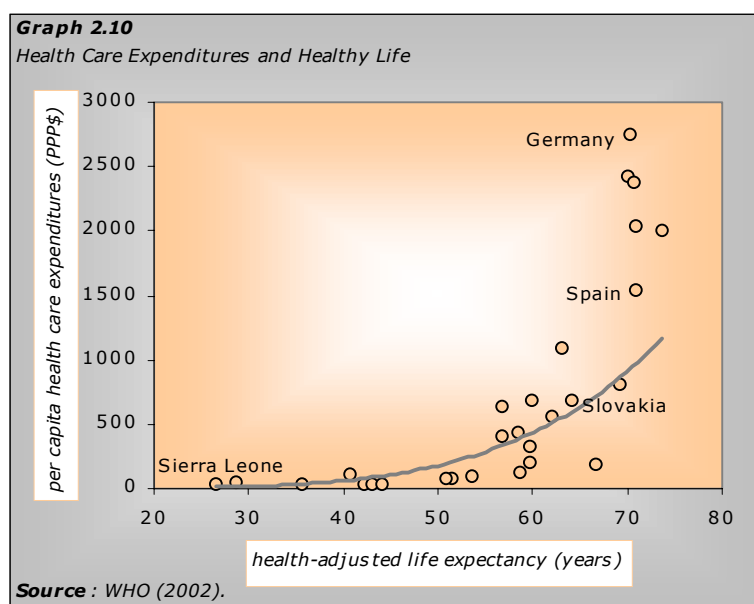
HDI rank in 2002	Life expectancy (years)			Human Development Index	
	1970-1975	1995-2000	change(%)	1975	2000
4. Belgium	71,4	77,9	+9,1	0,844	0,939
5. Australia	71,7	78,7	+9,8	0,844	0,939
10. Finland	70,7	77,2	+9,2	0,836	0,930
15. Austria	70,6	77,7	+10,1	0,840	0,926
16. Luxembourg	70,7	77,0	+8,9	0,831	0,925
25. Singapore	69,5	77,1	+10,9	0,722	0,885
29. Slovenia	69,8	75,0	+7,4	0,843 ^c	0,879
30. Malta	70,6	77,6	+9,9	0,731	0,875
33. Czech Republic	70,1	74,3	+6,0	0,835 ^c	0,849
35. Hungary	69,3	70,7	+2,0	0,775	0,835
36. Slovakia	70,0	72,8	+4,0	0,813 ^b	0,835
37. Poland	70,4	72,8	+3,4	0,792 ^c	0,833
49. Lithuania	71,3	71,4	+0,1	0,816 ^c	0,808
53. Latvia	70,1	69,6	-0,7	0,790 ^a	0,800
60. Russian Fed.	69,7	66,1	-5,2	0,809 ^a	0,781
62. Bulgaria	71,0	70,8	-0,3	0,763 ^a	0,779
63. Romania	69,2	69,8	+0,9	0,755	0,775
80. Ukraine	70,1	68,1	-2,9	0,795 ^c	0,748

Note: a. 1990 figure. b. 1985 figure. c. 1980 figure.

Source: UNDP: Human Development Report 2002, Author's calculations.

Table 2.13 illustrates the different development of life span in countries with approximately identical baseline situation a quarter of a century ago. During the same period of time, several countries classified by economists among developing countries achieved an extension of life expectancy by more than ten years and markedly overtook Slovakia (e.g., Chile 63.4-74.9; United Arab Emirates 62.5-74.6; but also South Korea 62.6-74.3). Both preventive measures (e.g., reduction of smoking rates) and progress in medical treatment (e.g., open-heart surgeries, early treatment of hypertension, etc.) contributed to a successful prolongation of life expectancy. The data in Table 2.13 confirms the positive correlation between health and human development.

An adequate, quality health care has a significant effect on the health condition of the population. Data from developing countries provide evidence that per capita expenditures below sixty US dollars per year cannot secure the provision of adequate health care. Inverse limits exist as well; increasing expenditures on the public health system beyond USD 1,000-1,500 per capita per year is not associated with increases of healthy life expectancy.⁶⁰ The significant relationship between expenditures on health services and health condition is illustrated by Graph 2.10. The expectancy of a longer life in adequate health is higher in countries that invest higher amounts to the public health system. Efficiency of the public health system, i.e., the ratio of invested resources and quality of services, remains an important, although hardly measurable precondition.



In recent years, the World Health Organization introduced new health parameters such as health-adjusted life expectancy or simply healthy life expectancy (HALE)⁶¹ or disability-adjusted life years, DALYs. Compared with conventional life expectancy, HALE includes only expected life years in health, i.e., it is adjusted by years lived in a bad health condition (disease, disability, etc.).

Analyses by the World Health Organization have confirmed that tobacco smoking and consumption are among the major risk factors of health. WHO has identified smoking as the main factor of the development and spreading in developed countries of diseases, such as cancer of the respiratory system, chronic bronchitis, and virtually all vascular diseases.⁶² According to WHO, additional significant factors of health, which are relevant for also for Slovakia, include high alcohol consumption, high blood pressure, and high levels of blood lipids (Table 2.14).

⁶⁰ Source: Ginter (2001).

⁶¹ Originally, it was referred to as DALE (disability-adjusted life expectancy), the change occurred in 2002 in connection with an adjustment in the calculation of the parameter. For details, see WHO: World Health Report 2002. Reducing Risks, Promoting Healthy Life (2002).

⁶² For details, see WHO (2002).

Table 2.14

Leading 10 Selected Risk Factors of Health in Developed Countries (in percent of the causes of the development of diseases, as measured through DALYs ^a) and Leading 10 Diseases and Injuries

Risk factor	% DALYs	Disease or injury	% DALYs
Tobacco	12.2	Ischaemic heart disease	9.4
Blood pressure	10.9	Unipolar depressive disorders	7.2
Alcohol	9.2	Cerebrovascular disease	6.0
Cholesterol	7.6	Alcohol use disorders	3.5
Overweight	7.4	Dementia, nervous system disorders	3.0
Low fruit and vegetable intake	3.9	Deafness	2.8
Physical inactivity	3.3	Chronic obstructive pulmonary disease	2.6
Illicit drugs	1.8	Road traffic injury	2.5
Unsafe sex	0.8	Osteoarthritis ^c	2.5
Iron deficiency ^b	0.7	Trachea, bronchus and lung cancers	2.4

Note: a. DALYs – disability-adjusted life years. b. Diseases connected with pregnancy and perinatal period, as well as with direct consequences of anemia. c. Inflammation of bone joints.

Source: WHO (2002).

The aforementioned risk factors reflect the lifestyles of the population. They represent a subset of a larger group of socio-economic health effects that include variables such as the level of education, position in the labor market, and risk of poverty. Unemployment, affecting mainly people with lower levels or no education at all, represents one of the major reasons for the occurrence and overall range of poverty. These phenomena were shown to correlate with the health condition, as evidenced by, for example, the multifactorial analysis of a comparison of Slovakia's districts.⁶³ Life expectancy was shorter in districts with higher proportions of population with only basic levels of education compared to districts showing the lowest proportions of population with basic levels of education.⁶⁴ The preceding National Report pointed out the worsened access to education and information as compared to men makes the biological advantage of women to live longer lives disappear. In countries where women are presented with fewer opportunities to become educated in comparison with men, the life span of both genders becomes equal, and women in such countries live relatively shorter lives than those in other countries.⁶⁵

Box 2.6

Determinants of Health

As mentioned in the other sections of this Report, health is the result of the effects of numerous determinants. Some of these health factors are of a more universal effect (such as health care), while others act, even if being of identical intensity, differently in different parts of the world (such as environmental effects). The weights of the various health determinants are variable and show a number of deviations. There is a certain consensus among experts dealing with human health issues concerning positive and/or negative effects. Assessments of health determinants in isolation and seeking for simple causative relationships is however questionable since almost always there is a whole complex of effects that have to be taken into account in parallel. This has been confirmed by domestic surveys focusing on regional differences in health condition, as well as by international comparisons.

Two simple examples may illustrate the point: 1. Were environment the only significant factor of health condition or life span, the population of the district Velký Krtíš would live significantly longer than the population of Košice. 2. Taking cigarette consumption as the key reason for the shortening of the life span, the population of Greece would die at a substantially younger age than the population of the Ukraine. These assumptions do not hold in any of the cases. According to the available official data, the population of Košice live 2-3 years longer than that of Velký Krtíš, in spite of the significantly worse environmental pollution. Greeks who consume officially three times more cigarettes per capita live almost 10 years longer than Ukrainians (consumption of illegally produced or imported cigarettes not included).

The factors mentioned are part of the overall effects on health, but are not key for the given comparisons. The weights of the individual factors with respect to the overall health condition may be assumed to vary within a relatively narrow space and time.

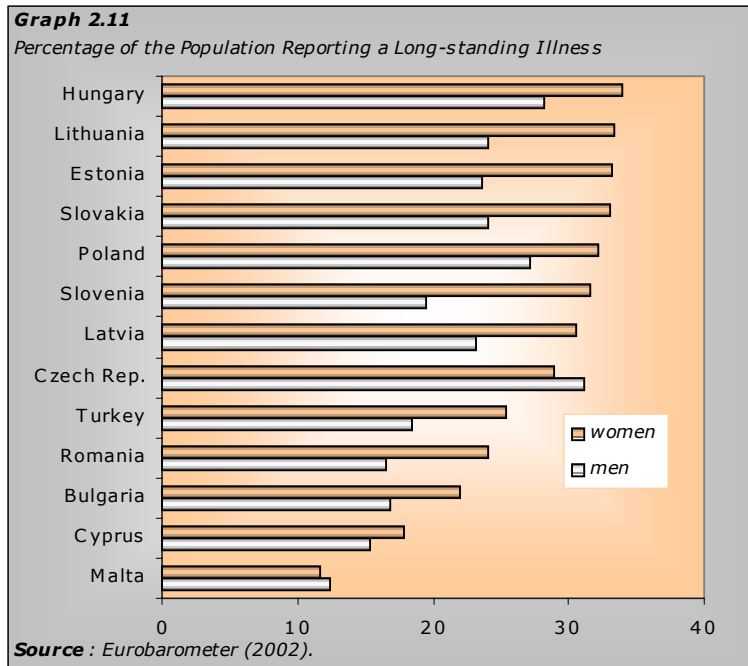
Apart from official morbidity and mortality data surveys of subjective assessment of the health condition by people themselves provide a meaningful basis for the analysis of the effects of health on life quality. Graph 2.11 suggests that proportions of the population in the EU candidate countries that assess themselves as being in a long-term condition of poor health are relatively high. With some simplification we may state that there is a gradient of positive perception of one's own health growing in this part of Europe towards the south. In a majority of the countries in the CEE region, negative assessment of health prevails in women. A comparison with WHO data concerning expectation of lost healthy years at

⁶³ Source: Demeš – Ginter – Kováč (1998).

⁶⁴ For details, see National Human Development Report Slovakia 1998, pp. 143-144, UNDP, CPHR, 1998.

⁶⁵ For details, see National Human Development Report Slovak Republic 2000, pp. 113-114, UNDP, CPHR, 2000.

birth clearly shows that comparable data on disability-adjusted life years correlate with inter-gender differences in subjective health assessment.



It may be added to the generally accepted and globally applicable notion that women as a rule have longer life expectancy than men that, compared to men, women in developed countries spend relatively larger portions of their lives in bad health. In countries with the lowest levels of human development and smaller or minimal differences between males and females in life expectancy, it is men who lose a larger portion of their lives to poor health.

There are new terms being introduced to discussions on the quality of life, such as the already mentioned HALE, but also the term of health-related quality of life (HRQL). Experts believe that when the focus is on the analysis of the impact of diseases upon the health condition and the well-being of human beings – patients, health-related quality of life is the most appropriate parameter. HRQL includes emotional, physical and social feelings that reflect the subjective assessment by the individual and his/her response to disease. Health experts use HRQL to measure the impacts of various disturbances, conditions and diseases upon various population groups. Monitoring of HRQL in various populations helps identify groups with poor physical or mental health and direct measures and policies towards improvement of their health.

Health is a dynamic rather than constant value. Investigations of various health determinants will thus have to be reserved sufficient and regular space. Equally important will be to take the knowledge from scientific institutions, translate them into an intelligible language and present them to the public at large. Informed individuals namely have more chances to make the right decisions with respect to his/her own health.

3. Public Health in Slovakia

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

World Health Organization, 1948

3.1 THE STATE OF HEALTH

The health condition of the country's population is a result of an intricate interaction of numerous factors. Knowledge of the health condition of a country's population is crucial for setting priorities in developing preventive measures. At the end of the day, the right priorities will be important not only with respect to improving the health condition of the population but also the economy. With respect to Slovakia's efforts to become integrated into European structures, it is desirable to achieve a health condition that is not diametrically different from that of the population of the European Union Member States.

3.1.1 Demographic Preconditions

The average population of Slovakia is currently around 5.4 million. The population of the Slovak Republic was 5,378,951 in May 2001, thereof 2,611,921 men (48.6 percent share) and 2,767,030 women (51.4 percent share). There were 944 men for every 1,000 women. In 1990, the population of Slovakia was 5,310,711, thereof 48.9 percent men and 51.1 percent women. There were 956 men for every 1,000 women at that time.

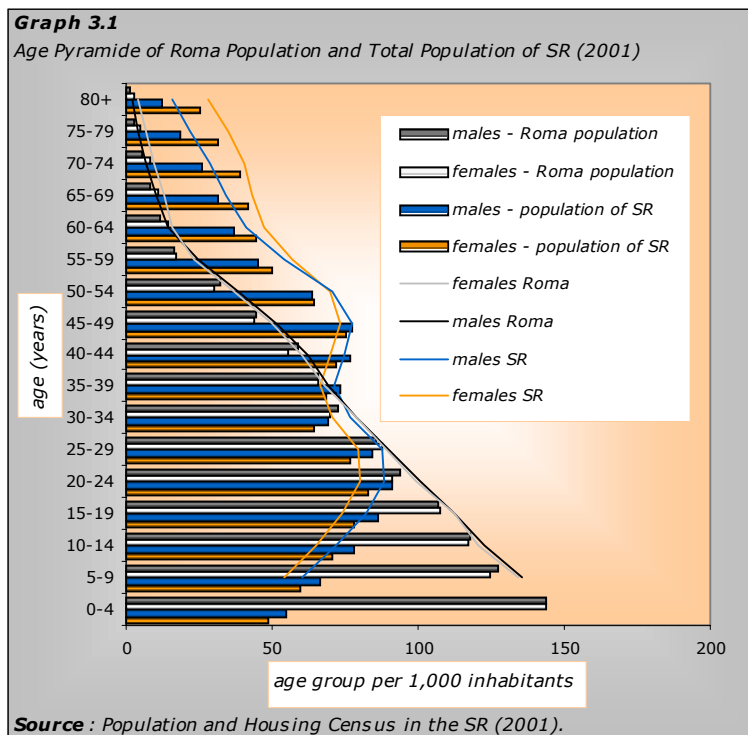
The natural migration of the population witnessed dramatic changes during the last twenty-five years. Natural increments keep decreasing as the overall mortality remains almost constant (being around 10 deaths per 1,000), while birth rates decrease. The numbers of live births reached historically the lowest level in 2001: 9.5 children per 1,000. The corresponding value was three times higher in 1923, being still two times higher in 1975. Therefore, it is not surprising that natural population growth in Slovakia completely stopped at the beginning of the 21st century (-0.2 per 1,000 in 2001). The contribution of women to natural increment has been higher over longer periods of time, and reached as much as 97.2 percent in 2000. This was due to high death rates of men that could not be outweighed by higher numbers of boys either.

Since the numerous population groups born during the post-war period and during the 1970s have now reached productive age, almost the whole growth of the population is concentrated in the groups of 20-29-year-old and 45-54-year-old persons. Due to the reduction of the population of children and to the growth of the numbers of productive and post-productive age individuals, also the average age of the population and the aging index increase. In 2000, the mean age of males and females was 34.4 and 37.5 years, respectively. Compared to 1990, this represents an increase of 2.3 and 1.1 years for males and females, respectively. The aging index defined as the ratio of post-productive population (men over 60 and women over 55 years of age) to pre-production age population (ages 0-14 years) keeps dramatically increasing in Slovakia, and showed an increase from 74.0 to 98.5 within 1993-2000. A similar trend can be observed in other European countries.

The preceding National Report pointed out discrepancies in demographic behavior of different ethnic groups in Slovakia. These differences are determined by several factors that are most pronounced with the Roma minority.⁶⁶ Graph 3.1 shows that the age structure of the Roma population differs rather markedly from that of the total population. Children below the age of 14 make up 38.7 percent of the Roma in Slovakia, compared to 18.9 percent for the entire population. There are 4.2 children per one Roma woman in Slovakia, i.e., more than three times the average for the entire population of women in Slovakia (1.2 child per mother in 2001). As stated by the authors of the previous National Report, the demographic behavior of the Roma population shows similarities with the situation of the non-Roma population several decades ago and/or is comparable with data from developing countries. It is apparent

⁶⁶ The factors include for instance the long-term different development of death rates and birth rates, degree of ethnic identity, the extent of assimilation, etc.

that the demographic structure and behavior correspond to the social, economic, and cultural conditions of the given population group.⁶⁷



The wide base of the Roma population pyramid becomes rapidly narrowed with the increasing age, due to high death rates at a relatively young age. The width of the age pyramid for the whole population of Slovakia, therefore, permanently exceeds the Roma pyramid from the age of thirty-five. The top of the pyramid for Roma virtually ends at the age of seventy-five due to the relatively short life expectancy compared with the majority population.⁶⁸ The lower longevity figures in Roma are associated not merely with socio-economic factors, but also with less frequent access to health care and the insufficient understanding of the importance of prevention; this concerns mainly Roma living in isolated colonies.

3.1.2 Life Expectancy of the Slovak Population

The health condition indicators of the population show a significant correlation with life expectancy parameters. Average life expectancy at birth is an important parameter that shows the number of estimated years to live provided that the current mortality patterns remain preserved. The last data from 2001 show the values of 69.5 and 77.6 years for the whole male and female population of the Slovak Republic, respectively. The life expectancy figures are relatively low in particular for the male population of Slovakia. Compared to the "healthiest" European countries, Iceland and Sweden, Slovak males live 8 years less. For women, the difference in longevity is not as dramatic; still the life expectancy of Slovak women is 6 years less than the case for French women. When compared to other former socialist States, Slovakia's position is slightly better. Slovak women and men live longer than do populations in Hungary, Romania, Bulgaria, the Baltic States, as well as in the Ukraine, Belarus and Russia.

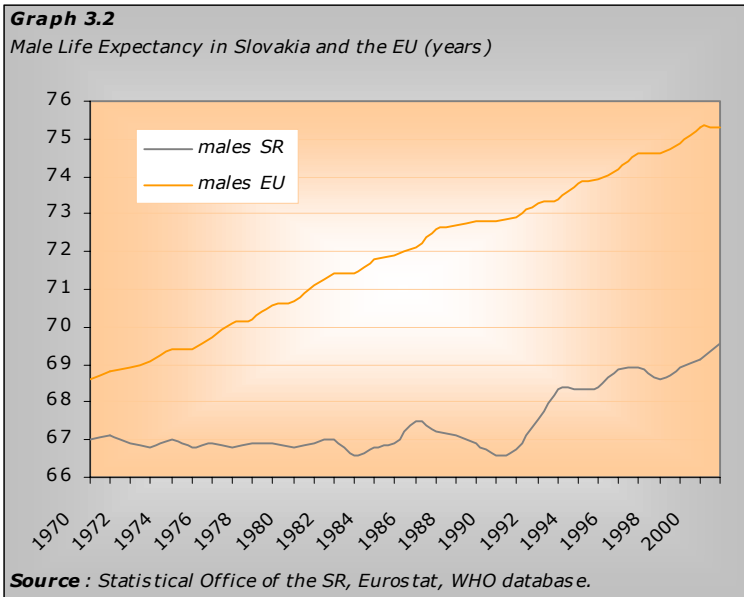
The development of life expectancy in Slovakia may be subdivided into several stages. The biggest increase was noted during the period after the Second World War. The reasons included reduction of overall mortality, reduction of infant mortality, reduction of mortality from infectious and parasitic diseases, and improvement of hygienic standards, etc. Slovakia's population at that time lived approximately as long as populations of developed democratic countries of Europe.

The differences in average life expectancy between Slovakia and Western Europe developed gradually. As far back as in 1960, the differences were minimal, as illustrated by Graph 3.2, two years

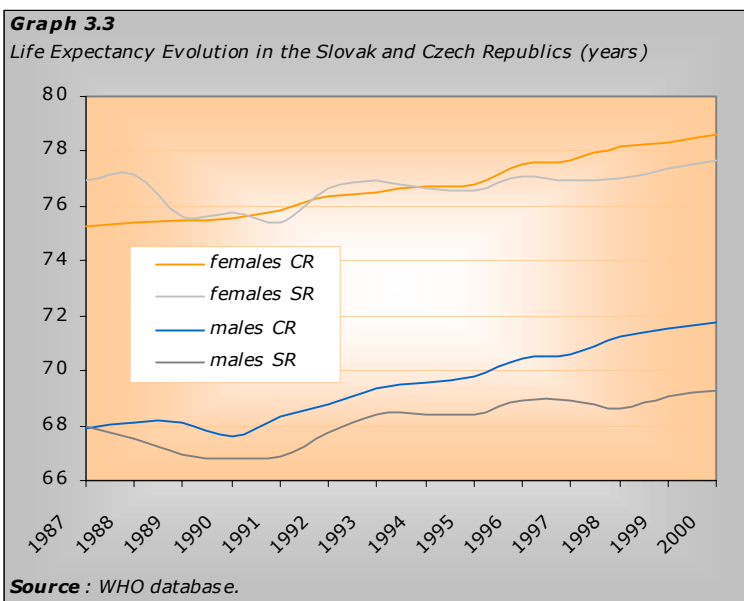
⁶⁷ For details see chapter *Poverty of the Roma* in the National Human Development Report SR 2000.

⁶⁸ Experts' estimates differ: Based on 1979 and 1980 censuses the average life expectancy for Roma men and women was estimated at 55.3 and 59.5 years, respectively (Kalibová, 1989). More recent estimates indicate life expectancy of 62.4 years for Roma men and 71.6 years for Roma women. The difference of 6 years seems to be a more realistic estimate of the current state.

after the occupation of Czechoslovakia, in 1970, the difference between Slovakia and EU was still about one and a half year for males. Further developments were however entirely different. The gradual improvement of the quality of life and of medical care in EU countries resulted in continuous growth whereas in Slovakia (similarly as in the Czech Republic and other countries of the communist block) there was stagnation. As a result and irrespective of the new disclosures in the field of medicine, the average life expectancy for males in the Slovak Republic in 1989 was the same as it had been in 1970. After the democratic changes in 1989, there was hope for improvement, and the average life expectancy actually increased 1.5 to 2 years for both men and women during 1990-1993. Subsequently however, the growth rate reduced, so that life expectancy only slightly increased in recent years for both men and women.



Graph 3.3 shows a surprising difference in the trends of life expectancy for men and women between the Slovak and the Czech Republics. In the Czech Republic, there is a pronounced increase in the life expectancy of men; the Czechs have already caught up with the life expectancy values for the lowest country of the European Union, Portugal, and the difference compared to Slovakia approaches three years. The trend is similar for women as well, with the difference between Slovakia and the Czech Republic being not large.



Looking at Graphs 3.2. and 3.3, the question arises what happened between 1960 and 1990. The baseline value of life expectancy in 1960 were very similar for Western Europe and the former Czechoslovakia, whereas the difference in life expectancy of men in EU countries and those in Slovakia represented more than six years thirty years down the road. What caused the shears characterizing life expectancy to open as wide between the EU and Slovakia?

The invasion of Warsaw Treaty troops in 1968 abolished any hopes for a reform of the communist system. The population of Slovakia was isolated from the developments in Western Europe. Under these circumstances, people mainly focused on the construction of their own homes. A rather widespread was the category of manual workers with low earnings, who tried to increase their income by working in the fields and in gardens, and by keeping animals. This way of life was rather exhausting; they returned home after the official job, started to work in the garden, looked after animals or constructed the new home. Holidays were spent by constructing houses or gardening rather than resting. The relaxation of such overburdened men often consisted of visiting the local pub, drinking alcoholic beverages, and consuming large amounts of cigarettes.

The diet of these people contained large amounts of animal fats, mainly pork. During the winter and spring seasons, the diet contained but a minimum of protective substances because of low intake of fresh vegetables and fruits. Imported southern fruits were rare and also rather expensive. Many families would attempt to save on food in order to afford buying a car. In this way, they created a chronic disbalance. On the one hand, there were favorable conditions for enhanced production of harmful oxygen radicals that play role in the pathogenesis of vascular and neoplastic diseases (frequently polluted working and general environment, large quantities of cigarettes and distilled spirits consumed); on the other hand, men had a low intake of protective substances from vegetables and fruits that help abolish the radicals harmful to health.⁶⁹

The socialist health care system could, to a certain extent, cope with contagious diseases and substantially reduced infant mortality. The shortage of foreign currencies, on the other hand, has prevented imports of modern diagnostic technologies and drugs. In economically developed countries with market mechanisms, the quality of life improved, as did the interest of the individual in one's own health and the quality of food and its structure. In the health sector, scientific progress has shown an improved standard of diagnostics and therapy. All factors mentioned, however, are insufficient to completely explain the gap between the West and the East.

3.1.3 Analysis of Mortality Structure

Infant mortality⁷⁰ significantly influences average life expectancy in developing countries. In economically developed countries, infant mortality ranges around 5 (EU average), being close to the EU average in the Czech Republic (5.9) and being slightly higher in Slovakia (8.6 in 2000). In Slovakia, this factor has but a slight effect on average life expectancy.

There have been no substantial changes in the structure of causes of death in Slovakia during the recent years. The most frequent cause of death is diseases of the circulatory system, followed by tumors, external causes (injuries, poisonings, homicides, etc.), diseases of the digestive system, and diseases of the respiratory system. The five most frequent causes of death accounted for 94 percent of all deaths in Slovakia in 2000; more than three fourths of the deaths were due to disturbances of the cardiovascular system and malignant tumors. It is typical of the Slovak Republic that the above two types of diseases threaten already relatively young parts of the population. Premature mortality is a parameter more significant than total mortality as it is key for overall life expectancy as well as for the economy of the country. The resulting average life expectancy for men and women reflects mainly cardiovascular and oncological mortality at a relatively young age. According to these indices, Slovakia's position compared to that of the Western Europe is rather unfavorable.

Box 3.1

HALE – New Indicator of Healthy Life

A new important parameter has occurred in WHO documents in recent years, so-called DALE (disability-adjusted life expectancy). In the past two years this indicator was converted to HALE (health-adjusted life expectancy). The values of this indicator are lower than those for conventional life expectancy as the former only reflects estimated years of healthy life. For the male population of the Slovak Republic, HALE ranges currently around 61.6 years, which means that Slovak men lose approximately 8 years of life as a result of diseases and/or disability. Several less developed countries (based on HDI) rank higher than Slovakia, e.g. Costa Rica, Jamaica, and Cuba. The value of HALE for Slovak women is substantially higher – 66.6, and they also rank higher within the WHO ranking. Slovak women however spend as much as almost 11 years in ill health, which equals to 14 percent of total life span (11 percent in males). *Source: WHO (2002).*

⁶⁹ Source: Ginter (1996).

⁷⁰ Persons dying within one year of their life per 1,000 live births.

Table 3.1

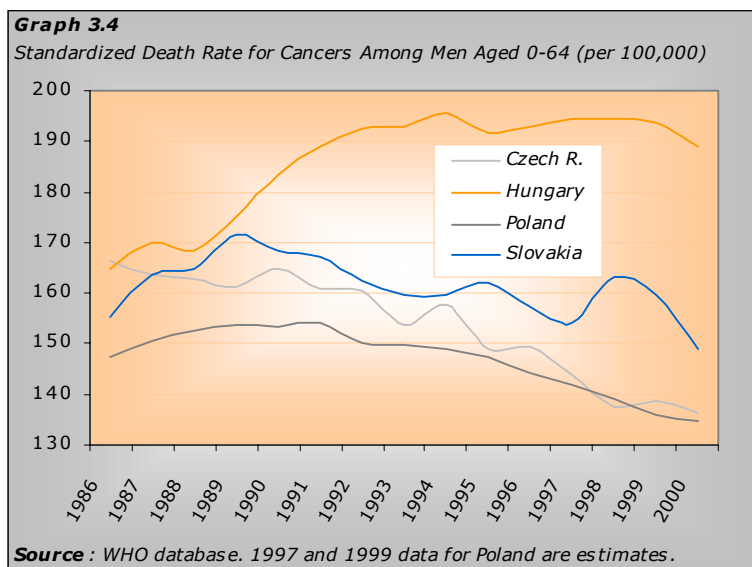
Premature Mortality from Cardiovascular Diseases in Europe (Standardized death rate for the age group 0-64 years/100 000; data mostly from 2000)

Country	Cardiovascular mortality, total		Mortality from coronary heart disease	
	Males	Females	Males	Females
Russian Federation	371	135	224	54
Ukraine	336	122	208	64
Hungary	210	73	108	30
Slovakia	178	57	92	27
Poland	164	53	77	17
Czech Republic	132	43	73	18
Austria	79	28	46	10
Germany	79	28	42	10
Greece	89	30	54	11
France	52	16	22	4

Source: Statistical Yearbook of Health of the SR, Institute of Health Information and Statistics.

Table 3.1 shows the latest data on premature mortality of men and women from cardiovascular diseases in Europe. Slovakia's position is slightly better when compared to countries of the former Soviet Union and Hungary, but markedly worse than EU countries. The overall mortality from cardiovascular diseases in Slovakia for both men and women is twice that compared with neighboring Austria and almost four times higher than France. Mortality from coronary heart disease (myocardial infarction) is four times higher in men and seven times higher in women as compared to France. In comparison with neighboring countries, reduction in early cardiovascular mortality is slower in Slovakia; however, it is promising. The situation is worse compared to the Czech Republic and Poland; this may relate to the high incidence of cardiovascular risk factors in the Roma community.

The most frequent cause of death, under cardiovascular diseases, is coronary heart disease (ICD, I 20-25)⁷¹; deaths of acute myocardial infarction make up one-fifth of the cases. Strokes rank second, representing about twenty percent of the deaths of cardiovascular diseases. About ten percent of individuals die of hypertensive disease.



Graph 3.4 illustrates the rather unfavorable development in Slovakia of premature mortality in men from all types of tumors. Slovak men aged 25-64 take a leading position in Europe's oncological mortality, overtaken by Hungary, the Russian Federation, and Ukraine. Compared to Greece, England, and Switzerland, Slovak men die of oncological diseases almost twice as frequently. For the Slovak male population, this indicator is characterized by stagnation; death rates from cancer for 2000 remained at

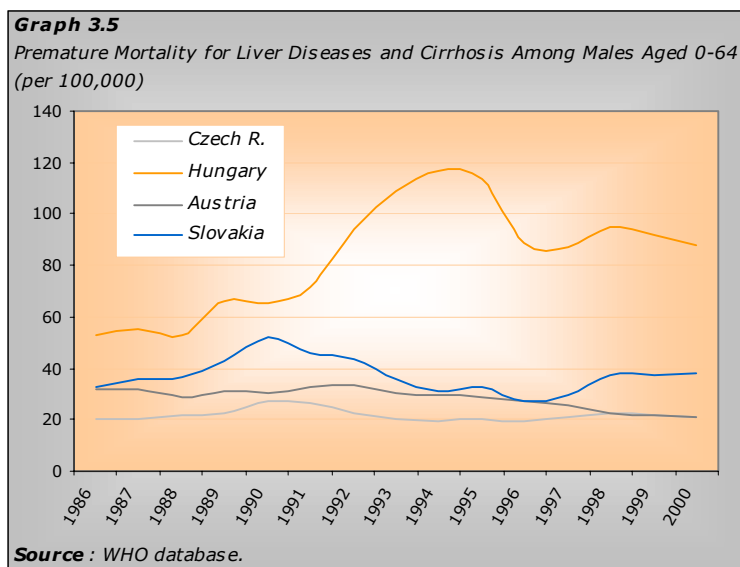
⁷¹ International Classification of Diseases, I 20-25 represents the various forms of coronary heart disease.

the same level as they were in 1986. In neighboring countries (with the exception of Hungary), e.g., the Czech Republic, Austria, Poland, death rates of men from tumors keep decreasing. Slovak women show lower death rates of cancer than women in the neighboring countries. Premature mortality of women from breast cancer has been lower in Slovakia over long periods of time than in the Czech Republic and even lower than the average for the European Union; however, there has been a sudden growth in recent years.

External causes of death most frequently include traffic accidents, intentional self-injuries, and falls. The standardized death rate is slightly higher than for EU countries, but almost exclusively in men. Women have roughly four times lower mortality rates from external causes than men and in many ways more favorable statistics than women in EU countries. In general terms, external causes were behind 5.9 percent of all deaths in 2000 (8.7 percent in males, 2.7 percent in females).

There has been a long-term decreasing trend of mortality from respiratory system diseases in both men and women in Slovakia, approaching the EU average. However, a relatively marked increase occurred in deaths from respiratory system diseases in 2000, when a total of 2,912 individuals died (increase by 11 percent as compared to 1999), i.e., 5.5 percent of the total deaths. This represents 62.5 and 45.8 deaths per 100,000 for men and women respectively, the European average being 85 and 44 deaths for men and women respectively.⁷² Diseases of the respiratory system represent the most frequent cause of short-term work disability. Their contribution toward total morbidity was 46.9 percent in 2000. There were 1,111 reports of tuberculosis, representing a reduction of 111 cases compared to 1999.

Digestive tract diseases ranked fifth as the leading cause of death in Slovakia, accounting for 2,630 deaths, and representing 5 percent of the number of deaths. For men, they represented 66.7 deaths per 100,000; the corresponding figure for women was 31.7 deaths per 100,000, with the European average being 41.1 and 23.7 for men and women, respectively.⁷³ On the other hand, data on premature mortality of women and men from chronic liver diseases and cirrhosis are worrisome. Graph 3.5 shows that men in Slovakia have much higher death rates than do men in the EU. Remarkable is the growth of mortality that occurred around 1990; the same applies to the Czech Republic, and it may reflect political instability of that period. The growing death rates, during recent years, indicate that men die of cirrhosis about 2.5 times more frequently than do men in the EU. This phenomenon undoubtedly has to do with the high consumption of distilled beverages which often contain harmful substances, in particular homemade beverages.



Some data for the Slovak Republic are also positive in nature; mortality from diseases of the nervous system, mental diseases and suicides, as well as from diseases of the urinary and genital system, are decreasing and approaching European Union averages. Mortality from infectious and parasitic diseases is lower in Slovakia than in the EU.

⁷² Source: Statistical Office of the SR, WHO.

⁷³ Ditto.

3.1.4 Morbidity of the Population

The structure of the morbidity has shown no significant changes. Chronic non-infectious diseases, mainly cardiovascular diseases and malignant tumors, usually take the top positions. What follows are injuries, diseases of the respiratory and digestive system and diabetes whose incidence has rapidly increased. In addition, there is an increasing trend of psychiatric diseases, ranking third among the causes of disability. The number of drug addicts and cases of syphilis are on the rise. So far, AIDS has shown substantially lower occurrence in Slovakia than all over the European Union. In addition, incidences of viral hepatitis A and B have decreased; the values are virtually identical with those for the EU, thanks to immunization.

Cardiovascular Morbidity

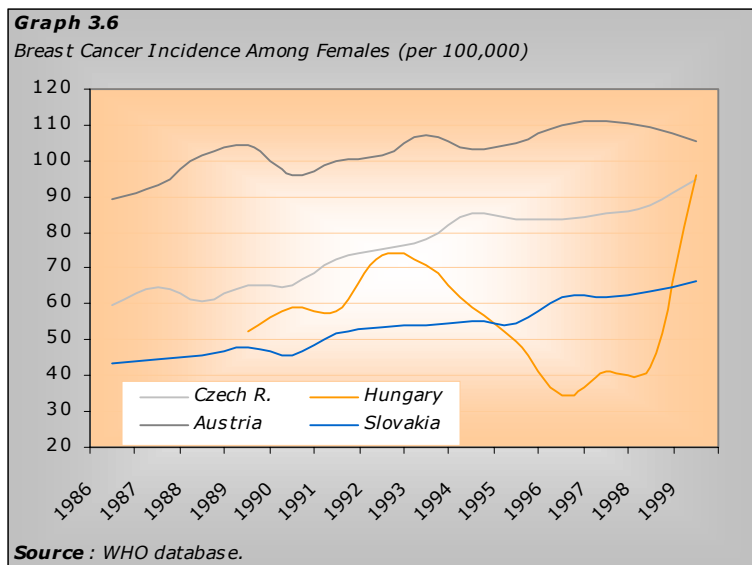
Circulatory system diseases (CSD) represent about 3-4 percent of completed sick leave cases, due to diseases and injuries of all types. In 2000, there were 2,419 cases per 100,000 employees-insured persons recorded of SL because of CSD, including 2,688 cases in males and 2,717 cases in females, representing a significant reduction as compared to 1990. In 1990, there were 3,354 cases in males and 3,582 cases in females per 100,000 insured recorded.

Almost fifty percent of the sick leave cases due CSD concern hypertension. The number of sick leave cases due to diseases of cerebral arteries and coronary heart diseases (including myocardial infarction) have decreased; sick leave for hypertension keeps increasing, more to the disadvantage of females. Women aged 50-59 years represent the most exposed group, with 4,000 cases of sick leave per 100,000 insured in 1999, exceeding the males of the same age group by almost one-third.

Oncological Morbidity

The proportions of individual localization and types of malignancies have gradually changed in recent decades. Stomach tumors were the predominate type of cancer in both genders in 1970, whereas it were malignant lung tumors within 1980-1994, and tumors of the colon and rectum (colon-rectal cancer) have had a leading position in recent years. The incidence and mortality of tumors of the colon showed a sudden growth for men in particular, while showing a tendency toward stabilization in recent years. Malignancies of the rectum also recorded marked growth, in particular in males. It is malignancies of the colon and rectum (both localization are referred to as one since they affect the same organ) can be expected to rapidly grow in the future and prevention should be targeted, in particular through intervention into the dietary habits of the population.

Breast cancer has also recorded rapid growth in recent years, similarly as in other developed countries, though incidence values reported for Western and Northern Europe and North America have not yet been reached. The upward trend is similar all over Central Europe (see Graph 3.6), with Austria and the Czech Republic being worse off than Slovakia in this respect. Further increases in the incidence and mortality for such tumors must be expected in the future because of the increasing mean age and a number of negative factors; the number of women smokers (also during pregnancy), higher age of women at first delivery, reducing numbers of births, alcohol consumption, etc. The development of mortality of breast cancer could have been stabilized in recent years, although significant reserves still exist in this respect. Many women (almost half of them) come to consult doctors at advanced stages of their disease, when prospects for successful therapy are rather small. It should be mentioned that many developed countries could not only keep the numbers of the deceased at constant levels but even reduced mortality, despite a rapid growth and large numbers of cases of breast tumors; this was achieved by well targeted and organized secondary prevention.



A majority of developed countries could already have successfully coped with the problem of incidence and mortality of malignancies of uterine neck (this is a disease that can be fully managed at early stages of its development). The development in Slovakia is not satisfactory; when compared to other countries, very low proportions of tumors are being identified by preventive examinations at a very early, so-called "in situ" stage⁷⁴. At the present, there are about 300 in situ tumors per 900 invasive tumors⁷⁵, whereas such early stages predominate in developed countries. Obviously, secondary prevention of this disease is inadequate in our country, and the numbers of examinations does not correlate with the outcome, as the examinations do not cover the whole population equally.

Despite the number of cases of oncological diseases in adult persons, numbers of newly diagnosed cases in children aged 0 – 15 years have not changed very much over the last 30 years. About 170-180 new cases were reported annually; the numbers have dropped to less than 150 during the last few years. The reduction is due to the reduction of children in the population.⁷⁶

An oncological time bomb is generally expected to explode in the 21st century. The sudden growth of oncological diseases will evidently be connected with a reduction in the incidence of cardiovascular diseases and deaths of them, thanks to the success of preventive programs and due to the growth of proportions of older individuals in the population. Also a contribution toward the growth of oncological diseases and deaths of them will be made by the development of AIDS pandemic since persons affected by the disease can be cured of trivial infections but frequently die of malignancies.

External and Other Causes

A total of 287,569 injuries were reported in 1990, including 55,868 (20 percent) occupational related injuries. In 2000, 87,788 injuries were reported for employees. Compared to 1990, this represents a reduction by more than 70 percent. Occupational injuries dropped to 22,116, i.e., by 57 percent. As compared to 1990, the number of fatal accidents in 2000 dropped from 229 to 88 (by 60 percent).

⁷⁴ Findings identified in early stages in the place where originally arising.

⁷⁵ Tumors in advanced stages that grow from the site of the original arise into the adjacent tissues.

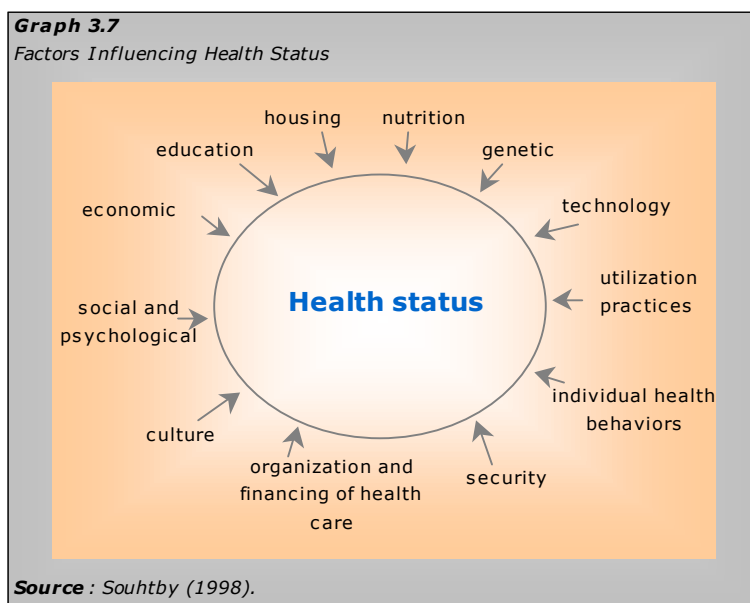
⁷⁶ Source: Institute of Health Information and Statistics (ÚZIS).

3.2 DETERMINANTS OF HEALTH

The differences in life expectancy and early mortality from cardiovascular and oncological diseases between Slovakia and the European Union cannot be explained by only differences in the quality of health care. True, all former communist countries, including the Slovak Republic, have been investing but insufficiently into fund-intensive devices, technologies and drugs needed for early diagnosis and treatment of oncological and cardiovascular diseases. Key for the prevention of these diseases and the overall improvement of the health status is a number of factors. The origin of most diseases is to be found in the disturbed relationship between the human organism and the environment where the human lives.

In holistic terms, health is a result of the action of various factors of social, economic, general and working environment, and the principal precondition for contented life of humans. All diseases are associated with a number of so-called risk factors whose presence and/or absence will decide whether or not a disease develops. Risk factors are specific for every disease, but on the other hand, there may be the same risk factors underlying several diseases. In some cases, a factor may be a risk factor with respect to one disease while being protective with respect to another disease. Common to all the risk factors is that they occur within a defined environment that either supports their presence, thus enabling them to act, or tends to abolish them. The environment becomes one of the major determinants of health. Naturally, environment in this respect is understood broadly, as not only including natural/ecological environment. Thus, determinants of health are characteristics and parameters that affect the presence and development of risk factors for diseases.

The best-known groups of health determinants include demographic and biological determinants (age, sex, nationality, etc.), socio-economic determinants (lifestyles, education, social contacts), environment (both general and working), and health care. Graph 3.7 shows a different view on the most important determinants of health.⁷⁷



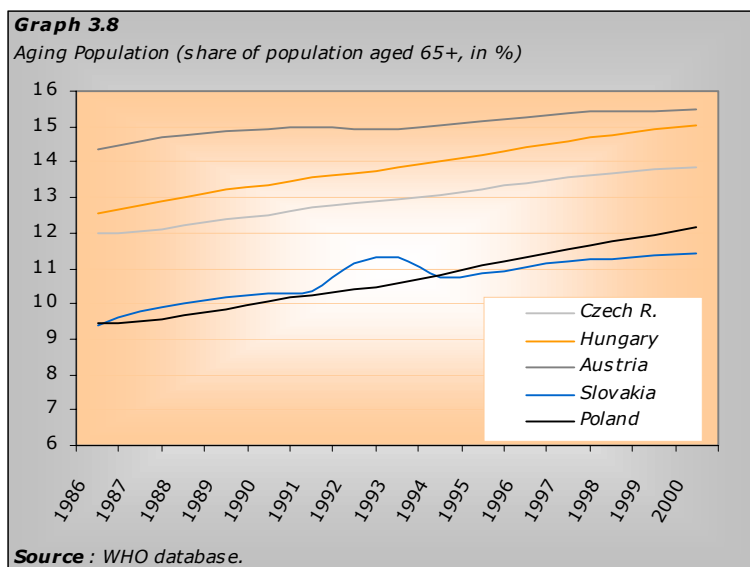
The following text of this chapter examines selected key determinants of health.

3.2.1 Demographic Structure of the Population

Demographic conditions were discussed in the preceding section. Among the demographic parameters, age, aging index, and population increment are the most important ones from the viewpoint of health, the older the population, the higher the risk of diseases, and contrariwise, the healthier the

⁷⁷ Estimates of the weight of the different factors and their effect on human health differ in analyses of both domestic and foreign authors. According to several sources, crucial determinants include lifestyles and behavior, followed by environment, genetic and biological factors and health care services. The estimated share of health care on health ranges between 10-20 percent. See e.g. Aday – Begley – Slater (1993) or Ághová et al. (1993).

population. Graph 3.8 illustrates the trend of the population aging, by showing proportions of the population aged 65+, compared to neighboring countries.



It is evident from the Graph that the proportions of males and females aged 65+ in the Slovak Republic are the lowest of all the neighboring countries. The proportions of those aged 0-14 years in the population are still highest for Poland and the Slovak Republic; the two countries however also show the most rapid decrease among all the countries monitored. This trend suggests a reduction of the younger population and at the same time the low proportions of older population groups in the presence of the generally known high morbidity and death rates during so-called midlife for Slovakia do not present optimistic forecasts for future development.

Table 3.2

Developments of Live Births and Natural Increments in Slovakia

Indicator	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Live births per 1,000 inhabit.	15.1	14.9	14.1	13.8	12.4	11.4	11.2	11.0	10.7	10.4	10.2	9.5
Natural increment	4.8	4.6	4.0	3.9	2.8	1.6	1.7	1.3	0.8	0.7	0.4	-0.2

Source: Statistical Office of the Slovak Republic.

The huge reductions of live births, along with the natural increment values approaching negative values, and the still high mortality of productive-age individuals may affect future development of life expectancy in Slovakia.

3.2.2 Lifestyles and Nutrition

Lifestyle is generally considered as a decisive factor of the health condition; its contribution toward health condition in general has been estimated at 50 percent (some sources state as much as 60-70 percent⁷⁸). Behavioral patterns such as nutritional habits, physical activity and smoking or heavy alcohol consumption together with the prevalence of risk factors such as elevated blood pressure, high serum cholesterol or overweight influence premature mortality, especially from

Box 3.2

Smoking in Slovakia

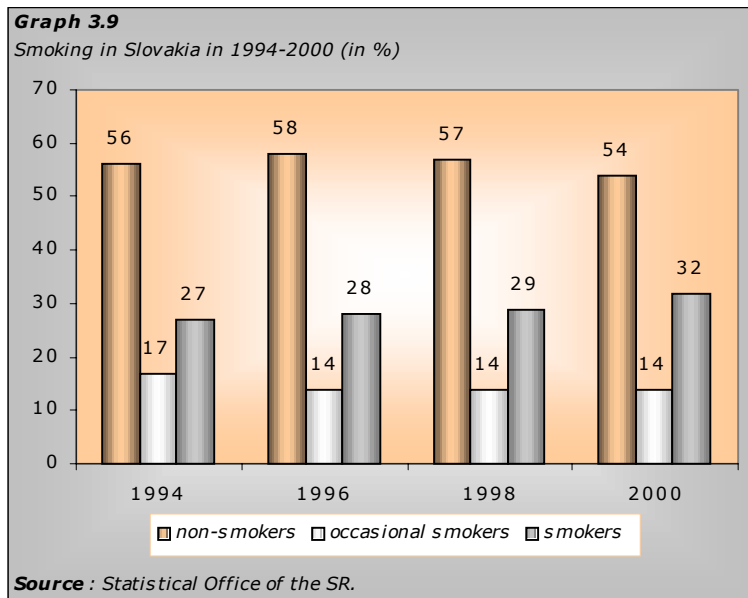
According to a school questionnaire survey performed in 1993-1994, 19 percent of boys and 5 percent of girls aged 15 smoked at least once a week. These prevalence figures were among the lowest in the survey, in which 23 countries or regions participated. However, the study performed four years later reported that the prevalence had reached the average of reference countries, at 26% for boys and 18% for girls. The same survey observed that the median number of cigarettes smoked weekly was higher than in most reference countries: 15 cigarettes for boys and 30 for girls. (Source: WHO: Health Behavior in School-Aged Children)

According to a 2000 survey conducted by the Statistical Office of the SR there were 54 percent non-smokers, 32 percent regular smokers and 14 percent occasional smokers in Slovakia. Smoking prevalence in younger age groups is somewhat higher: 48 percent non-smokers, 29 percent smokers and 23 percent occasional smokers. Data on intensity of smoking indicate that as much as 41 percent smokers consume 11-20 cigarettes daily, while 34 percent smoke 6-10 cigarettes daily. A positive fact is that 73% of the smoking population was trying to quit smoking.

⁷⁸ See e.g. Ághová et al. (1993).

cardiovascular diseases and cancers. Unhealthy behavior also contributes to a wide range of other chronic illnesses and thus affects the quality of life in general.

According to 1998 data, there were 39 percent of men and 19 percent of women classified as regular smokers in Slovakia. The annual consumption of cigarettes per person in Slovakia was stable and below both the EU average and the average of CEE countries in the 1980s. In the following decade, however, Slovak consumption increased from 1,600 cigarettes in 1991 to 2,300 in 1998-1999. This increase was one of the most marked in Europe. Since the share of regular smokers is lower in Slovakia compared with most candidate countries, it may be concluded that the proportion of heavy smokers is high in Slovakia.



According to some authors, tobacco consumption causes 30 percent of malignant diseases.⁷⁹ Mortality for trachea, bronchus and lung cancer can be used as an indicator of the trends and country positions related to the deaths caused by smoking. Compared to the EU rate, the Slovak standardized death rate for trachea, bronchus and lung cancer was 50 percent higher for males, but still 10 percent lower for females in the late 1990s.

The registered alcohol consumption in Slovakia equaled the EU average in the early 1980s. Consumption has since fallen in both Slovakia and the EU, but this decrease has been more marked in Slovakia. Comparisons of alcohol consumption are, however, difficult, as data reliability is variable across Europe and do not include consumption of illegally imported and home produced alcohol. Local studies report large social class differences in alcohol consumption (see Table 3.3). Twelve percent of respondents with university education reported daily consumption of beer, 7 percent daily consumption of wine and less than 2 percent daily consumption of spirits, the corresponding proportions among respondents with elementary education were considerably higher at 35 percent, 20 percent and 18 percent, respectively. According to a school questionnaire survey performed in 1997-1998, 16 percent of girls and 30 percent of boys drank beer, wine or spirits at least once a week. Along with the Czech Republic, this was the highest prevalence among the candidate countries.

Tightly connected with the health condition of the population are also issues of nutrition. Nutritional habits are rooted in cultural traditions and food production. Nevertheless, in recent decades changes have occurred with increasing globalization, as food markets have opened up, transport has become more rapid and more efficient techniques for conserving food have been developed. These factors together with increased mobility and increases in purchasing power are some of the reasons why the historically different nutrition patterns in Europe appear to converge. In this connection, the positive impact of the changed socio-political circumstances becomes evident. An inadequate structure of nutrition was typical of Slovakia's population during the Communist stage (in particular high proportions of fats of animal origin, sugars and alcohol), whereas the economic transition and the change in the overall structure of diet have resulted in an overall improvement in the food structure. An exception to this has been a reduction in the consumption of milk and dairy products. Table 3.3 shows significant differences in eating habits between social classes. Diet of respondents with low levels of education

⁷⁹ Source: Doll - Peto (1981).

usually contains more animal fats, less fruits, vegetable oils and milk products; such a composition of diet cannot be unequivocally ascribed to lower purchasing power.

Table 3.3

Influence of the Level of Education on Eating and Other Habits of Males

Daily/almost daily consumption (v %)	Elementary education	Secondary without GCE ^a	Secondary with GCE ^a	University education
hot breakfast	35.7	47.9	52.4	58.0
hot lunch	61.4	75.6	77.0	81.4
hot dinner	32.7	45.1	49.0	50.3
milk and milk products	38.2	41.6	45.0	52.3
animal fats	51.0	48.7	46.2	40.4
vegetable oils and margarine	29.6	34.2	41.8	47.7
fruits diverse	31.8	42.7	51.6	61.1
tropical fruits	6.1	9.5	10.6	16.6
vegetables	29.6	44.0	45.0	51.8
beer	35.2	33.0	20.6	12.4
wine	19.7	12.4	9.2	6.8
heavy alcohol	17.6	12.0	5.5	1.5
newspaper	24.9	46.6	59.0	66.3

Note: a. General certificate of education. Survey included 1,533 respondents from two Slovak districts, aged 25-55 years.

Source: Demeš – Ginter – Kováč (1998).

Apart of tobacco and alcohol consumption, untimely mortality risk factors include *high blood pressure*,

Box 3.3

Risk Factors of Premature Mortality (CINDI survey in Banská Bystrica, 1998)

High blood pressure (systolic pressure above 160 mmHg – and/or diastolic pressure above 95 mmHg) represents one of the major risk factors of coronary heart disease and stroke, and causes about one-third to one-half of all deaths of diseases of the circulatory system. The survey conducted under the program CINDI¹ in 1998 in a population sample of 2,046 individuals aged 15-64 years using random selection suggested that the prevalence of arterial hypertension with blood pressure values exceeding 160/95 Torr is 22.9% and 13.2% for men and women of the said age group, respectively. The narrower age group of 25-64-year-olds showed prevalence values of high blood pressure of 27.7 percent and 16.2 percent for males and females, respectively. Borderline values of blood pressure between 140-160/90-95 were measured for 21.7 percent and 13.2 percent males and females of the 15-64-year-old group, respectively, the corresponding figures for males and females of the age group 25-64 years were 23.8 percent and 15.3 percent, respectively. Taking stricter criteria of blood pressure values as recommended by cardiologists after 1998, with the standard values of blood pressure being below 120/80, the prevalence of borderline and high blood pressure values would be much higher. A study on a population sample of 24,000 citizens of Slovakia on three generations levels involving responses of voluntary respondents to questions of a targeted questionnaire supported the results of the representative survey of the CINDI program. Previous analyses confirmed that hypertension shows higher incidences in males of younger age groups, whereas it is women that suffer from hypertension that prevail in higher age groups.

High levels of blood fats and glucose. The CINDI program survey from 1998 suggested that the prevalence of high values of total cholesterol (exceeding 6.5mmol/l) for males and females aged 15 - 64 years is 20.3 percent and 21.8 percent, respectively. For the group of 25 - 64-year-old males and females, the corresponding figures are 25.1 percent and 26.1 percent. Risk-level values of total cholesterol (ranging between 5.2-6.5mmol/l) were measured in 36.1 percent and 35.8 percent of the 15 - 64-year-old males and females, respectively. In the group of 25 - 64-year olds, the prevalence for males and females were almost identical (41.2 percent and 40.7 percent, respectively). High levels of triglycerides (exceeding 2.0mmol/l) were measured for 25 percent and 15 percent of 15-64-year old males and females, respectively. In the age group 15 - 64 years, prevalence of persons with high glucose levels (exceeding 6.5mmol/l) were 7.7 percent and 3.9 percent for males and females, respectively. Risk-level values of glucose (ranging between 5.7-6.5mmol/l) were measured for 7.6 percent and 4.3 percent males and females aged 15-64 years. Elevated glucose levels and diabetes mellitus are among secondary risk factors that co-act in the development of atherosclerosis, in particular through affecting cholesterol levels. They are less significant from the viewpoint of primary prevention since they start to increase only after all the other risk parameters – mainly triglycerides and cholesterol – already are quite high, and the atherosclerotic process is already underway.

Excessive body weight and obesity. Obesity as a risk factor for coronary heart disease rather significantly combines with other risk factors, including diabetes, hypercholesterolemia, hypertension and weak physical activity. Influencing the body weight therefore is of importance mainly with respect to persons of younger age groups. Obesity that is connected with the „western“ type of nutrition rich in fats, enhances the so-called central obesity that significantly speeds up processes of atherosclerosis. The table below shows prevalence of excessive body weight (BMI 25-29) and obesity (BMI exceeding 30) in males and females, respectively (CINDI, 1998).

Age group	Obesity (BMI)		Excessive body weight (BMI)	
	Males	Females	Males	Females
15 - 64 years	16.0%	17.6%	40.7%	32.9%
25 - 64 years	19.5%	20.8%	46.7%	37.3%

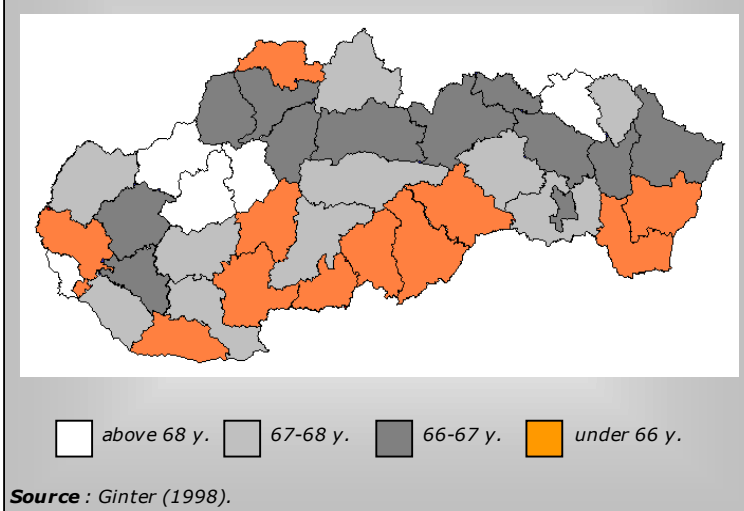
high cholesterol level and obesity, as also suggested by analyses of the World Health Organization (see Box 3.3). Naturally, the indicated factors jeopardize human health all over the world. Prevalence of several of the factors, however, does not explain the whole extent of the growth of cardiovascular and oncological mortality in Slovakia. For instance, Slovaks show twice as high early mortality from lung cancer as do Swiss people, but in the recent past, consumption of cigarettes used to be higher in Switzerland. As incidences of hypertension and high cholesterol levels were also not diametrically different from those in the EU countries⁸⁰, it may well be that some additional, less understood risk factors started to act in Slovakia that may have enhanced the action of the traditional risk factors. Among such "new" risk factors is likely the chronically *low intake of protective factors from vegetables and fruits* that protect the body against the action of free oxygen radicals. Those extremely reactive substances play an important role in the pathogenesis of vascular as well as neoplastic diseases. Their threat is additionally enhanced by a high alcohol consumption, in particular consumption of concentrated distilled spirits, high consumption of cigarettes and the polluted environment, hence factors that have been and still are highly present in the territory of the Slovak Republic.

The chronically *unfavorable mental condition* of the population is a poorly explored factor that may negatively impact upon Slovakia's population and its health condition. Combined with the long-term pressure of totalitarian power, the inability to cope with problems induced by the transition to market economy (e.g., high growth of unemployment) must have been reflected in the mental condition of the population. The prevalence of the chronically stressed, depressed, anxious and frustrated persons most probably increased in Slovakia. Unfulfilled expectations of a rapid raise of the standard of living after 1989 made many individuals to become disillusioned and to lose hopes for a better life. Such a situation results in hostility, aggressiveness, and unfavorable changes of life habits (such as increasing alcohol, cigarette and psychopharmacology consumption).

Slovakia is an attractive country with respect to the study into the reasons for the stagnation of the health condition since its small territory allows to observe significant differences in life expectancy; there are districts in Slovakia, only few dozens of kilometers distant, in which differences in life expectancy in men exceed four years. So far, no data are available from the newly established districts for which relatively low population numbers prevented evaluation on a yearly basis. Of the previous structure of districts, latest averages are available for 1993-95. Graph 3.10 shows that the districts Bratislava-city, Trenčín, Topoľčany, Prievidza, and Bardejov were the leading ones with respect to life expectancy in men in 1993-95. The shortest life expectancy was reported for men in the southern districts of Slovakia and for the district of Čadca.

Graph 3.10

Regional Distribution of Male Life Expectancy (y. 1993-1995)



Similar, although slighter differences applied to women. An almost continuous belt extends along the southern part of Slovakia, from district Dunajská Streda up to Trebišov, with women showing the shortest life expectancy. It is conspicuous that the shortest life expectancy concerns mostly agricultural districts, with life expectancy being longer for industrial centers with more polluted environment (Bratislava, Košice, Upper Nitra). These surprising facts were subject to a multifactor analysis using 1991

⁸⁰ Source: Ginter (1996).

census data. The findings say that key with respect to life expectancy of men in the individual districts are proportions of men with only elementary education. Among the main reasons for short life expectancy in Slovakia therefore is unhealthy lifestyle that a prevailing proportion of the male population has adopted, in particular, population groups with low education level.

The aforementioned sociological survey using Gallup's method conducted on a representative sample of 1,533 men aged 25-55 years in two districts of Slovakia (Trenčín, Levice) demonstrated a significant influence of education on lifestyle and mental condition. Consumption of alcohol and cigarettes increased with the decreasing level of education, and consumption of foods containing protective factors (milk, vegetable oils, fruits, vegetables) decreased in parallel. In addition, more frequent observation found a passive attitude to life and a pessimistic assessment of the future by relatively young men with only elementary education. The differences showed most markedly in the Roma population. Table 3.4 summarizes a portion of the data obtained from a representative sample of men living in the multi-ethnic district, Levice (65 percent Slovaks, 30 percent Hungarians, and 5 percent Roma).

Table 3.4

Lifestyle – Differences Between Slovaks, Hungarians and Roma in the District of Levice

Indicator	Slovaks	Hungarians	Roma
Number of respondents	655	314	47
Average age (age) ± SD	37.9 ± 8.5	38.4 ± 8.3	38.0 ± 8.4
Upper secondary or tertiary education (%)	35.3	31.2	6.4
Share of unemployed (%)	6.0	7.6	38.3
Average number of children ± SD	1.57 ± 1.02	1.59 ± 0.97	2.49 ± 1.50
Positive answer in %			
I am father of more than 2 children	13.9	13.7	51.1
I am a smoker	50.2	53.2	78.7
On daily, or almost daily basis, I consume:			
milk and dairy products	43.6	44.6	25.5
fruits	43.5	48.0	19.2
vegetables	42.8	54.5	31.9
beer	28.8	23.9	49.0
distilled spirits	10.2	9.6	23.4
I have frequent conflicts with other people	13.3	14.0	34.0
I am unable to influence my future	10.7	10.8	27.7
The quality of my sleep is bad	8.1	9.6	17.0
I feel that my health condition is bad	7.8	7.0	21.3

Note: Survey included 1,533 respondents from two Slovak districts, aged 25-55 years.

Source: Demeš – Ginter – Kováč (1998).

Lifestyle is also influenced by behavioral patterns common to a person's social group and by more general socio-economic conditions. Evidence is growing that, at least in most western European countries, improvements in lifestyles have largely been confined to the socially and economically stronger population groups, who have better prospects to adopt health-promoting changes in behavior.

The way of life is thus determined by the purchasing power of the population that is tightly linked with the real wages level. Real wages, compared with the preceding year, have been decreasing in 1996-2000 and as late as 2001 a positive turn occurred, which will likely not last long, due to necessary deregulation of prices and changes in indirect taxes. The correlation between GDP and longevity is generally acknowledged; higher GDP being usually associated with longer life expectancy. Using 1995 data for countries of the WHO European Region, the correlation coefficient between gross domestic product expressed in purchasing power parity and life expectancy equals to 0.866 and 0.845 for males and females, respectively. The indicators of economic development of Slovakia are not overly favorable from the viewpoint of their impact upon health. Lower purchasing power usually means more negative lifestyles, diet of lower quality and higher incidence of negative habits such as smoking, alcohol consumption, drugs, and passive attitudes. In addition, the economic parameters have a significantly negative impact upon mental health. Increasing psychosomatic stress results in higher incidence of depression and other mental illnesses that frequently also get reflected in cardiovascular morbidity and mortality, as well as in injuries, suicide rates and crime rates.

An important, although insufficiently examined factor of health is the *social contacts* of people with their environment – family, colleagues, community, etc. Several foreign studies have confirmed that people with limited or missing social contacts (loners) have had during their lives higher morbidity rates

Box 3.4*Disparagement of Mental Health*

Prevalence of mental health illness in Slovakia is comparable with that found in EU countries, however, the developments both in treatment of mentally ill and the organization of mental health services is falling behind. This is largely due to the historical legacy of socialism where mental health was not considered to be a priority in terms of funding and organization of the system. The care of mentally ill had a custodial rather than therapeutic character (large psychiatric hospitals and asylums, pharmacological interventions) and was isolated from both domestic and foreign developments. In several socialist countries violation and abuse of human rights in mental institutions has taken place. There is a lack of epidemiological studies that would assess the service needs based on actual levels of disease and also a lack of mental health reform strategies. Mental disorders are still subject to disparagement and often lead to social isolation and exclusion. (Source: Study on the Social Protection Systems, 2002)

than people enjoying close and frequent social ties with their surrounding.⁸¹ Other representative surveys from the US found two to three times higher mortality rates and life expectancy differences of nine years between individuals with the fewest close friends, relatives and social connections and those with high levels of social connectedness.⁸² It is believed that people with poor social connections more often suffer from an accumulation of negative social factors such as unemployment, family problems, exclusion from friends' circles, problems with the law, etc. The mentioned studies have pointed out the fact that feeling connected with other people is extremely important for physical and mental health. Suicide, alcoholism and mental illness rates are much higher among people living alone.

A present-day form of weakening social contacts is the constantly widening "voluntary solitariness" of a growing number of mainly young people who decide for a life without a partner

and/or descendants. Such a choice is often associated with the notion of better economic background and a more carefree life. As long as the lack of immediate family contacts is not balanced with ties to other social groups (friends, workfellows, clubs, etc.), it may be assumed that such an isolation negatively impacts upon the health status of the individual. There is a marked long-term trend of growing numbers of single's households in Slovakia (see Table 3.5). This trend is apparently connected with changes in lifestyles, but also with improving housing conditions and lastly also with demographic changes, mainly the growing numbers of widowed women in old age.

Table 3.5*Households of Singles as Percentage of Total Number of Households*

Year	1950	1970	1980	1991	2001
Monomial households	5.8	11.9	19.8	21.8	30.0

Source: Population and housing census. Statistical Office of the SR.

3.2.3 Education

Education is among the most significant determinants of health. Investments into education are also investments into health. It may be thus assumed that a the drop in expenditures on education and training will prompt, in turn, pressure upon increasing expenditures on health care.

The most important impact upon health is probably given by the borderline between elementary and secondary education. The more learners continue their training in secondary schools, the better the chances for a healthy population. In an epidemiological case study analyzing the relationship between psychosocial risk factors and cardiovascular diseases, experts explored a significantly higher risk of cardiovascular diseases incidence in individuals with elementary education compared to those with secondary and university education.⁸³ From this aspect, it might be of interest to look at the numbers of learners during the recent years who did not continue their studies after completing elementary school. In 1990, they comprised 2.4 percent of all learners finishing elementary school studies, whereas they represented as many as 10 percent in 1999. This negative development is underlined also by data on early school leavers not continuing in education and training after finishing primary education (see Table 3.6).

⁸¹ An example is the study of 972 Johns Hopkins medical students who were classified in personality tests into one of five types. Thirty years later when checking their health status, it was found that students classified as loners had sixteen times more cancer than people who vented their emotions to friends.

⁸² Source: Social Ties and Good Health. <http://www.attitudefactor.com/socialties.htm>

⁸³ Source: Štefanovič – Egnerová et al. (1998).

Table 3.6*Early School Leavers Not in Education or Training (in thousands)*

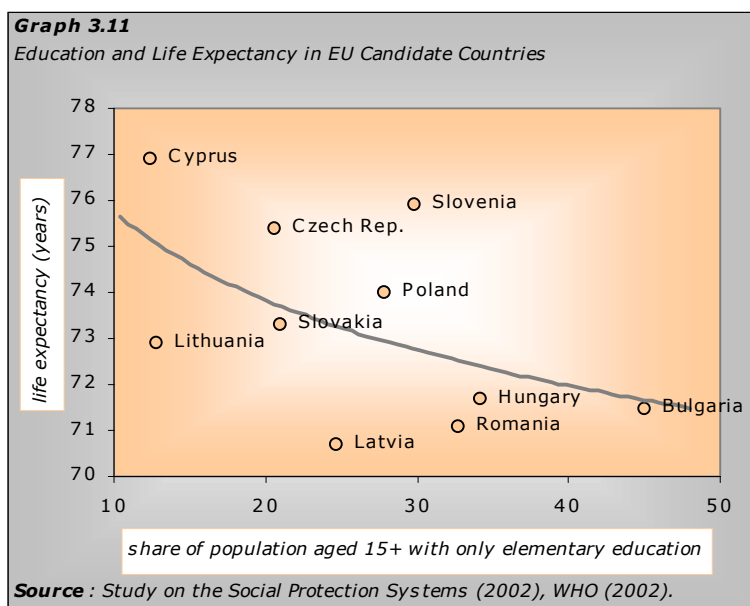
Indicator	Total				Men				Women			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
Population aged 18-24	657.2	660.0	656.7	652.3	334.4	336.1	334.2	332.5	332.8	323.9	322.4	319.8
Persons aged 18-24 with ISCED 0-2 not attending further education ^a	44.1	39.0	32.7	38.8	24.0	20.7	17.8	22.3	20.2	18.6	14.9	16.5
of which												
employed	8.2	7.6	5.7	5.1	5.9	5.0	3.1	2.8	2.3	2.6	2.7	2.2
unemployed	17.5	15.6	14.1	18.9	11.6	10.5	9.8	13.7	5.9	5.0	4.4	5.2
in military service	1.1	0.4	0.9	1.3	1.1	0.4	0.9	1.3	-	-	-	-
economically inactive	17.4	15.5	12.1	13.6	5.4	4.8	4.2	4.5	12.1	11.0	7.9	9.1

Note: a. ISCED 0-2 levels correspond to preschool education, first and second levels of primary education.

Source: Labor Force Survey. In: Report on the Implementation of conclusions and priorities of the document of the Joint Assessment of Employment Priorities in the SR for 2001, Ministry of Labor, Social Affairs and Family of the SR.

Despite the decreasing share of this age group (18-24 years) on the total population during the last three years, no reduction of persons with low levels of education occurred within the respective population. Half of the early school dropouts are unemployed. Insufficient education decreases their opportunities in the labor market, but it also reduces responsible attitudes with respect to life, increases social risks, worsens general living conditions and thereby also the health status.

A comparison of educational structure of the population with health indicators (e.g., life expectancy) suggests – despite different levels and quality of educational systems – a positive correlation (see Graph 3.11).



With respect to education, also interregional differences should be pointed out. The proportions of the population with completed elementary education in Slovakia range between 21.6 percent for the region Bratislava and as many as 36.25 percent for the region Nitra.⁸⁴ The differences and possibly their further intensification will result in differences in the condition of health. Therefore, mortality shows significant correlation with the proportions of the population with elementary education in the regions, being traditionally highest for the region Nitra, followed by regions Banská Bystrica and Košice. On the contrary, lowest mortality rates are reported from Bratislava and Žilina regions which have the lowest shares of population with only elementary education, and, at the same time, high proportion of tertiary educated inhabitants. Similar interregional differences may also be identified with respect to infant

⁸⁴ Source: Labor Force Survey, Statistical Office of the SR. Data from 2000 for population aged 16+.

mortality, with the values showing a West-East gradient. Evidently, the factor of education is intensified also by the factor of ethnic structure, particularly by the low average level of education of the Roma population.

Apart from providing educational activities, schools and other educational facilities impact on the health status also by shaping lifestyle patterns of the young generation. Similarly as the working environment for adults, the school environment has a great influence on the formation of lifestyle habits of the young generation. Among these functions performed by schools is for instance leisure time activities and school catering (see chapter 2.3.1).

3.2.4 Employment

The position in the labor market represents an important socio-economic determinant of health. The consequences of unemployment on health are rather extensive, starting with mental illness up to cardiovascular diseases. The negative effect of unemployment may either be direct manifesting itself in the development of depression, anxiety, loss of self-confidence; or indirectly connected with worsened quality of life, inadequate dietary habits, a variety of negative habits (alcohol consumption, smoking, drugs, crime, etc.). The unemployment trend in Slovakia is generally unfavorable.

High rates of sick leave are among interesting manifestations of unemployment in Slovakia. Table 3.7 shows data on unemployment rates and average length of inability to work per employee per year. Regional comparisons suggest that in districts with high unemployment rates employees are more often on sick leave than they are in districts with low unemployment numbers. Disparity in morbidity between the regions can however not fully explain the marked differences in sick-leave records. It is very likely the effect of shadow sick-leave, which is financially favorable with respect to low average wages, tolerance shown by employees, profitability for doctors of such arrangements, as well as the insufficient control of entitlement for sick-leave payments.

Table 3.7

Unemployment and Short-time Inability to Work

Year	Unemployment rate (%)	Hospitalization per year per 100,000 persons	Visits in dispensaries per person per year	Inability to work per employee per year (in days)
1990	1.5	16.41	13.61	17.1
1991	11.8	16.90	13.11	20.9
1992	10.4	17.44	13.23	23.2
1993	14.4	18.89	12.82	23.2
1994	13.7	18.95	12.38	23.5
1995	13.1	19.10	8.59 ^a	23.3
1996	11.3	19.55	4.4 ^a	24.0
1997	11.8	19.89	13.54	23.3
1998	12.5	20.32	16.43	23.5
1999	16.2	19.35	16.37	23.5
2000	18.6	18.06	16.05	26.6

Note: a. probably incorrect data.

Source: WHO database – Health for All, July 2001, Statistical Office of the Slovak Republic, Institute of Health Information and Statistics.

Since 1996, Slovakia has been ranked first in Europe in the figures concerning inability to work; this concerns the number of days of sick leave per employee as well as the number of medical consultations per person per year during recent years.

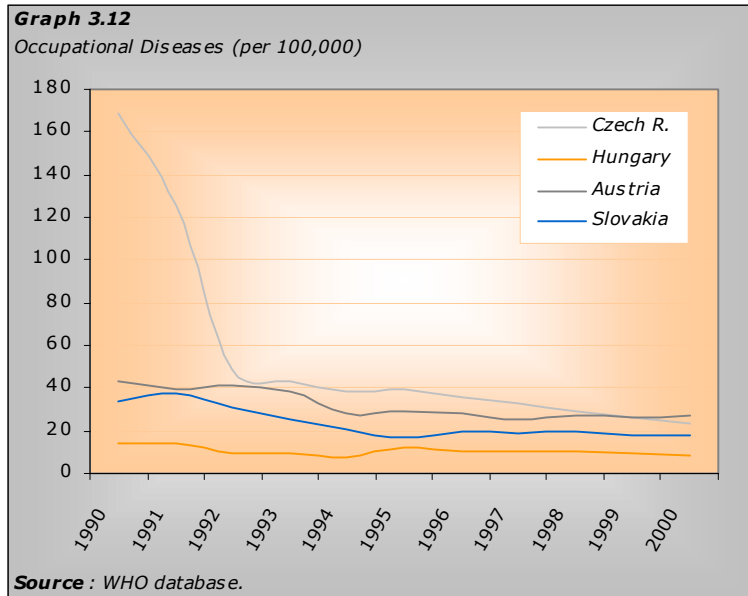
3.2.5 Environment

The environment represents an additional significant health determinant. What is understood under environment is more than just the ecological aspect of environment. The following text deals with the working and general environment.

Working Environment

The role of the working environment is given by the fact that people spend on average at least one-third of their daily time at the workplace. Risks present at workplaces represent an important health determinant. The numbers of hazardous workplaces keep decreasing. The work-related major risk factors include ionizing radiation, noise, chemicals and vibrations.

Graph 3.12 illustrates the trend of the development of the incidence of occupational diseases, as compared to the neighboring countries.



The incidence of occupational diseases and also the number of work-related injuries keep decreasing, which places Slovakia among the countries with lower incidences.

General Environment

The knowledge and evaluation of the effects of environmental factors on human health (mental and physical) is a rather broad topic that requires multidisciplinary approach.⁸⁵ It is based on the knowledge of the quality of the environment, the internal environment (both working and non-working), through external environment in urbanized areas, through natural environment. A good quality of environment that markedly influences human health represents a sum of decent quality of air, water and food. To keep the human organism balanced, the substances taken have to be optimally utilized, and there also must be a harmonic relationship with the environment requiring mental balancing and healthy lifestyle.

Polluting substances derived from industry, agriculture and other sources are foreign to the human body and may threaten or harm human health, depending on their nature and quantities.

As mentioned in the publication *General Environment of the Slovak Republic*⁸⁶, it is the polluted or damaged environment combined with lifestyles, the level of the health care and the physical (genetic) predisposition that clearly influence the worsened condition of health and increased mortality of people in some regions. It, nevertheless, is the environmental aspect that clearly predominates in several localities, contributing – through harmful substances – to carcinogenic, teratogenic,⁸⁷ and other negative influences upon human health and longevity. Exact surveys statistically proved that environmental pollution is the cause of 60-90 percent of cancer diseases.⁸⁸

⁸⁵ Source: Reichrtová (1996).

⁸⁶ Source: Ministry of Environment of the SR (1993).

⁸⁷ Causing abnormal development of the fetus.

⁸⁸ Source: Blumenthal (1995).

Regional Aspects of Environment

The significant regional disparities in Slovakia do also apply to health parameters and parameters of life expectancy.⁸⁹ Differences between regions whose population has a prospect to live longer and those where the prospects are to live but shorter lives, have reached an already high extent, and tend to increase rather than to decrease.

Based on surveys of populations dying untimely it may be stated that there are large interregional differences in mortality indicators. The difference between the district with the lowest proportion of those dying "earlier" and the district with the highest proportions of them is rather pronounced: there are 13 percent of inhabitants dying untimely in the best district in this respect (Turčianske Teplice) whereas the proportions are more than double in the worst district (Kežmarok, 26.6 percent). This means that more than a quarter of the population of that particular district die while still children or during the active stage of life. Apart from the already mentioned Turčianske Teplice in Central Slovakia and Sobrance in Eastern Slovakia, it is the population of districts that are located in the western part of Slovakia that have the best prospects to live to reach retirement age. On the contrary, the districts Kežmarok, Poprad, Sabinov, Spišská Nová Ves and Košice, along with the districts Levoča, Prešov, Gelnica and Trebišov are characterized by high death rates of the pre-productive and productive age population.

Box 3.5

Inadequate Awareness of the Condition of the Environment on the Part of the Population Affected

Among the reasons why attempts to markedly improve the condition of the general environment in Slovakia and thus to also make a contribution towards an improvement of the health condition of the population, have been failing is that the population underestimate environmental pollution (in other words, their sensitivity threshold in this respect is rather low). According to the representative survey conducted by the agency FOCUS in 1996, the respondents perceive their general environment in a more favorable light that does not correspond to the reality. Only 34 percent of respondents aged above 15 years believe to live in an environment harmful to health, although the proportion of the population living in an environment that negatively impacts upon their health is considerably larger (depending on the degree of the destruction of the environment, these figures range between 43 and 55 percent of the Slovak population). On the other hand, as many as 62 percent of the population do not feel threatened by the condition of the general environment in their locality, although less than half of the population live in an environment of high and/or adequate level.

A regional environmental survey of Slovakia conducted in 1997 defined five degrees of environmental quality based on a comprehensive evaluation of the condition of air, groundwater and surface waters, soil, rock and minerals, biota and additional factors with direct or mediated effects on the health condition of the population, and thus five types of regions of the country with different levels of environment (see Table 3.8).

Table 3.8

Regional Quality of Environment

Degree	Environmental level	Share of population	Share on total area of Slovakia
I.	high-level environment	12.2%	31.5%
II.	adequate environment	27.1%	40.5%
III.	slightly disturbed environment	18.0%	16.0%
IV.	disturbed environment	18.2%	6.7%
V.	strongly disturbed environment	24.5%	5.3%

Source: Slovak Environmental Agency.

Environmental Risk Factors and Their Regional Context

Environmental risk factors may be characterized as the major reasons for negative environmental impacts upon the health of the population. Below, we shall present a brief overview of some of them, along with an outline of some regional and local aspects of their action.

Radioactivity

Long-term monitoring of radon radiation suggests that 10-15 percent of the total annual incidence of pulmonary cancer is due to radon irradiation.⁹⁰ Among the other aspects of radioactivity action in the environment, we should mention repeatedly identified contamination of surface and groundwater with tritium. The operation of two nuclear power plants in Slovakia, the not entirely resolved issue of the broken down NPP A1 at Jaslovské Bohunice, and the unresolved issue of handling of radioactive wastes

⁸⁹ Source: Michálek (2001).

⁹⁰ Source: Ministry of Environment of the SR (2001).

and the entire so-called rear fuel cycle all represent a risk of elevated doses of radioactive radiation in Slovakia's territory.

Noise

Measurements performed by State Health Institute of the Slovak Republic suggested that approximately 43 percent of Slovakia's population were exposed to excessive noise [exceeding 55 dB(A)] from road and railway transport in 1999, thereof 9.5 percent were exposed to noise exceeding 65 dB(A) stemming from the above sources, that level being officially recognized as noise levels negatively impacting upon the vegetative nervous system.

Chemical Substances

Point sources of arsenic release into the air and waters are mostly linked with the production and processing of minerals for energy generation and other purposes (Upper Nitra, Žiar nad Hronom, Jelšava – Lubeník, Central Zips, Košice, cement factories, magnesite factories) as well as with some significant industrial plants with chemical production.

Point sources of the release into the air and waters of cyanides and other chemical substances damaging reproduction, in the form of wastes are connected with mainly large residential and industrial agglomerations (Banská Bystrica – Zvolen, Košice, Central Váh river region, Upper Nitra, Žiar nad Hronom, Central Zips, Žilina, Ružomberok, Trnava, Senica). Point sources of the release into the air and waters of chemical substances in the form of wastes classified as "Chemical substances with carcinogenic potential for humans" are most frequent in the districts of Trenčín, Trnava, Nitra, Banská Bystrica a Žilina.

Foreign Substances in the Food Chain

So-called coordinated targeted monitoring whose objective is to identify, under real conditions of agricultural production and consumption of this production in selected localities the interrelationship between the degree of contamination of agricultural land, feeding waters, plant and animal production showed 205 out of 2,820 samples analyzed (i.e., 7.2 percent) to have exceeded the set limits for at least one of the contaminants monitored. Samples contained higher than allowed levels of nitrites (5.3 percent), nitrates (3.2 percent), mercury (5.9 percent), cadmium (1.8 percent), chrome (0.1 percent) and nickel (1.3 percent). Most samples with cadmium levels exceeding admissible ones came from the districts Žiar nad Hronom, Žarnovica and Kežmarok, those with higher than admissible levels of mercury were from the districts Spišská Nová Ves, with lead from the districts Žiar nad Hronom and Žarnovica.

Threat to the Ozone Layer

Measurements performed by the Slovak Hydrometeorological Institute in 1999 showed average annual values of total atmospheric ozone 2.3 percent above the long-term average. From the viewpoint of biosphere effects, most significant was the largest negative deviation (-7.4 percent) measured in June when the Sun stays on the sky over longest periods of time and the path of the sunrays across the ozone layer is the shortest.

Box 3.6

Regional Disparities: Examples of Environmental Impacts on the Health Condition of Children

The relationship between the condition of the general environment and the condition of health, in this case of the population of children, has also been confirmed by the results of a targeted survey of the health condition of children as the most sensitive age-group of the population. The health condition of children living permanently in the worst polluted localities of Slovakia – as compared with children from less polluted region (surroundings of Nitra) suggested a clear disadvantage for children from exposed regions. Selected groups of 7-10-year-old children living for at least 5 years in regions Bratislava, Žiar nad Hronom, Lower Orava, Upper Nitra, Jelšava-Lubeník, Rudňany and Košice were monitored by the hygienic service and pediatricians since 1983, and children from Ružomberok, Strážske and Sereď-Šaľa since 1987. Altogether, approximately 10,000 pupils were monitored.

The highest incidences were recorded for allergies and diseases of the respiratory tract, with the situation with respect to the above diseases being worse in environmentally disturbed regions than in the control region, and the difference persisted over long periods of time. Also, the diseases required longer treatment times. The incidences in pupils were almost three times higher for Rudňany and Strážske than for the reference region.

Similarly, diseases of the digestive system had clearly higher incidences for industrial areas as compared to the reference one (except Sereď and Šaľa). Also, higher incidences were recorded for diseases of the nervous system and sensory organs, with the worst situation concerning Bratislava, Lubeník, Upper Nitra and Rudňany. Ranking fourth were diseases of the skin and subcutaneous tissue, being in Bratislava as high as 5 times the incidence in the reference region in mid-90s.

Overall, morbidity of children from polluted regions is higher. Moreover, the time needed to treat such diseases is longer in these regions, and there are more recurrences. At the same time, unfavorable alterations have been identified in unspecific immune defense as well as alterations in blood hemoglobin.

Waste

Total production of waste has shown stagnating tendencies in recent years. The largest source of waste is agriculture, and the largest producer of hazardous waste are industries. In the 1990s, the quantities of hazardous waste showed decreasing tendencies, whereas quantities of municipal and so-called special waste tended to grow.

Accidents, Natural Disasters and Floods

Slovak Environmental Inspection recorded 98 reports of extreme worsening or threats to waters in 1998; in 24 cases, this followed scenes of dying fish in rivers and streams. The most frequent reason was leakage of petroleum products. Frequencies and intensities of floods, including losses caused (both to property and human life and health) were highly above the standard in recent years. There was a dramatic increase in the amounts of annual losses due to floods in 1998-1999 (by approx. SKK 3.5 billion). The number of individuals affected by floods amounted to 38,523 in 1999. High material and environmental damage was the result of another wave of floods in the summer months of 2002.

Inadequate Quality of Food

Inadequate quality of food may also be considered as a risk factor, although not of merely environmental nature. According to the *Report on Agriculture and Food Industry*⁹¹, as many as 7.6 percent of samples out of 80,999 samples of food products analyzed for quality in 2000 by Food Surveillance Authorities of the Slovak Ministry of Agriculture were found not to meet the requirements of the law, i.e., an increase by 2.1 percent as compared to 1999. Inadequate quality concerned domestic products as well as imported products, with domestic products of inadequate quality making up as many as 9.3 percent of all domestic products tested. There was a slight improvement with respect to products of animal origin as compared to the preceding year, but plant and mixed origin products were found inadequate in as many as 15.6 percent of the cases (a year-to-year worsening by 6.7 percent).

The Report stated that there were some positive changes in the consumption of foods with respect to recommended doses; meat consumption decreased as did that of eggs and animal fats, whereas consumption of fruits and fish increased. On the contrary, negative changes were noted with respect to the consumption of vegetables, potatoes, milk and dairy products, as well as legumes. A marked increase in sugar consumption is an undesirable phenomenon. Overall, there was a reduction of the intake of nutrients in 2000 as compared to the preceding year. Undesirable low was the intake of calcium, vitamin B1, vitamin B2 and vitamin C in the diet. The largest excess concerned consumption of protein (by 35.3 percent) and fats (by 31.8 percent).

3.2.6 Housing

Housing conditions have a direct impact on the mental and physical state of health. The housing stock in Slovakia is relatively new, with two-thirds of the dwellings built after the Second World War; however, its condition is dissatisfactory with respect to its age. About half of the units are family houses of a relatively decent standard, the other half is situated in residential dwellings of uneven quality with a considerable proportion being subject to deterioration due to used construction technologies and neglected maintenance.

Statistical records show that indicators such as average size of dwellings and living space per inhabitant are constantly growing. According to preliminary results of the 2001 population and housing census, indicators of habitation and equipment of households show considerable regional differences (see Table 3.9).

Differences are even more pronounced on the district level. Some districts of the Košice and Prešov regions (e.g., Gelnica, Kežmarok, Stará Ľubovňa) have housing indicators which are substantially worse than their neighboring districts (e.g., regions of Košice). Aggregate data indicate that a part of the housing stock is yet not equipped with flush toilets and almost a tenth of the dwellings lack a bathroom or shower. Many dwellings do not meet basic sanitary standards. This concerns mainly residences in Roma settlements in the eastern and southern districts of Slovakia, which often lack official permits for usage.⁹² A large part of the housing stock, mainly in residential houses built with concrete panel technology, require investment into reconstruction. The costs of reconstructing the eroded housing stock are estimated at several hundreds of billions crowns.

⁹¹ Source Government of the SR (2001).

⁹² See also chapter *Poverty of Roma* in the National Human Development Report Slovak Republic 2000.

Table 3.9*Indicators of Habitation (2001)*

Region	Average number of				Share of occupied dwellings equipped by (%)	
	permanent residents per 1 dwelling	m ² of living floor space per occupied dwelling	rooms per occupied dwelling	m ² of living space floor per person	public water-supply ^a	bathroom or shower
Bratislavský	2.74	51.10	2.95	18.7	95.8	96.8
Trnavský	3.24	59.90	3.35	18.5	89.8	93.5
Trenčiansky	3.16	53.20	3.13	16.8	74.2	93.6
Nitriansky	3.08	59.00	3.29	19.2	82.7	90.6
Žilinský	3.41	55.10	3.22	16.1	85.4	93.1
B.Bystrický	3.04	54.10	3.07	17.8	89.2	90.3
Prešovský	3.73	59.10	3.40	15.9	73.6	92.1
Košický	3.34	57.90	3.31	17.3	77.5	93.0
<i>Slovakia</i>	<i>3.21</i>	<i>56.10</i>	<i>3.21</i>	<i>17.5</i>	<i>83.4</i>	<i>92.8</i>

Note: a. Share of inhabitants supplied with water from public water-supply.

Source: Statistical Office of the Slovak Republic.

However, in comparison with other transition countries, basic sanitary equipment of dwellings is rather positive (Table 3.10).

Table 3.10*Quality of Housing in Selected Transition Countries (% of total housing stock)*

Country	Water-supply	Flush toilet	Bathroom/shower
Bulgaria	83.4	57.7	44.9
Hungary	84.4	75.6	79.6
Poland	90.6	78.6	78.6
Slovakia	92.7	80.0	89.0
Slovenia	97.5	90.1	87.1

Source: UN ECE: Annual Bulletin of Housing and Building Statistics for Europe and Northern America (Geneva, 1996 a 1998).

Housing fulfills an important social function; it is the main precondition for a functioning family and household. The state of housing is a visible indicator of living standards of the population and the economic and social development in general. In this context, it is necessary to remind that the unfavorable condition of the housing stock is mainly a consequence of the socialist concept of housing construction. The more it is noteworthy how most of the households succeeded to create decent and sound living conditions inside of the outwardly unpleasant and uniform buildings.⁹³

3.2.7 Democratic Stability and Health

The long years of the totalitarian regime (1948-1989) created preconditions for negative trends in the condition of health of the population. Stress, inadequate access to information, insufficient awareness of responsibility for one owns health, excessive reliance on care provided by the State, destruction of the environment, presence of foreign substances in the food chain, incorrect dietary habits, excessive consumption of alcohol and tobacco products, all these factors had direct impact on health and life expectancy parameters.

An inverse, although not very pronounced trend can be observed along the liberalization of social conditions during the 90s, with the average-age curve starting to increase again. Improved availability of better medications, a more ready diagnosis of severe diseases using state-of-the-art instrumentation, improvements in a majority of environmental pollution parameters, slight improvement of dietary habits and some other factors show a positive impact.

A stable democratic development represents a precondition favorable for not only economic development in general but also a specific precondition for the necessary reform of the public health system without which efficient spending of public funds is not possible. The standard of meeting the requirements of people in this respect at the same time significantly impacts on the support to the

⁹³ Source: Vagač – Strapec (1997).

democratic establishment as such. It has been empirically confirmed that satisfaction with one's own life, in which health plays a non-negligible role, while being an indicator of subjective quality of life (well-being), represents a significant predictor of the stability of democracy, exceeding indicators such as satisfaction with the political system as such. Explanation may be sought in e.g. an comprehensive international survey conducted in 43 countries that has shown that politics is a marginal phenomenon of the life of most people. Even if health has not been mentioned explicitly, it is obvious that it is included as one of the factors determining subjective physical and mental well-being. Subjective well-being is determined by mainly satisfaction with family life, marriage, job, home, friends, and leisure time. Interest in politics finds itself at the end of the hierarchy of factors "rather important for life." Family has been named as being important by 83 percent, whereas politics has been that important for only 13 percent of respondents.⁹⁴ Domestic surveys have confirmed that these findings also apply to Slovakia.

3.2.8 Health Care Services

Health care services are estimated to participate on the health status of an average human with approximately a 10-20 percent share.⁹⁵ Health care thus has a significant, although probably not the most important influence on human health. At least four fifths of efforts to improve health conditions should be oriented towards prevention of diseases with the use of "non-health care" factors. The development mainly in the second half of the 20th century however has lead to the situation of people becoming aware of the value of health as late as they become patients, i.e. health care clients. Public then has a general inclination to associate health exclusively with public health care, which should be moreover accessible for everybody, of best quality, and cheap. It is but understandable that such a situation is not sustainable and requires a reform of the system, but also a reform of thinking. These reasons contribute to the fact of health care being a specific and sensitive factor of health (see chapter 3.3).

⁹⁴ Source: Inglehart (1997).

⁹⁵ See introduction to chapter 3.2 Determinants of health.

3.3 HEALTH CARE

3.1.1 Patient's Rights

The object of health care is the patient as a client of health care services.⁹⁶ In a democratic world, the relationship between the patient on one hand and the physician, health staff, and the whole system of health care, on the other one, has started to change in recent decades. No more is patient a mere passive object of health care whose role it is to follow decisions of experts and to passively accept the prescribed way of his/her treatment. Patient has increasingly become the physician's partner, a respected client of health services.

Patient's rights have been derived from basic human rights. Respecting of patient's right by health professionals is assumed to enhance the responsibility and the involvement of patients in the health care process. In addition to this, the more the public knows about their right for autonomy, about the right to make decisions and choices, the stronger is the patients' participation in the process of improvement of the quality of health care. Informed citizens also actively assume the responsibility of taking care of their own health.

Patient's rights may be subdivided into individual and social. Individual rights are based on the principle of self-determination. They usually include the principle of informed consent, right for privacy, access to own health records, confidentiality of information, and the right to complain.⁹⁷

Informed consent – represents one of the basic rights. It means a combination of information and consent; patients must be well informed to be able to give his/her consent with a certain examination or intervention. With respect to information, pursuant to the domestic legislation, patients are entitled to receive "adequate instruction/explanation, in particular on the nature of the disease, health interventions required, on the associated risks and on health prognosis".⁹⁸ "Physicians shall be liable to instruct the patient and/or persons close to the patient in an appropriate and demonstrable way with respect to the nature of his/her disease and on health interventions required to enable him/her to actively cooperate in the provision of health care. It is up to the physician to determine the contents of the appropriate instruction/explanation case by case so as to provide it in a tactful and ethical manner and so as to avoid any disturbance of the treatment process."⁹⁹ Compared to the standards of European Union Member States, however, this formulation of informed consent is vague.¹⁰⁰

Access to patient's own health records – pursuant to the domestic legislation, a patient is entitled to inspect health documentation and to make extracts of it on the spot.¹⁰¹ Pursuant to the legislation of several European countries, a patient is entitled to obtain copies of his/her health documentation for a fee.

Confidentiality – pursuant to the domestic legislation, a patient has the right to have all data concerning his/her condition of health and facts connected with his/her condition of health treated as confidential.

Possibility to complain – pursuant to the domestic legislation, a patient may file complaints if assuming his/her rights for the provision of health care have been violated. Complaints may be filed with director of State health care establishment, with State District Physician, State Regional Physician, Ministry of Health, and with professional organizations.

Social rights represent accessibility and quality of health care, accessibility in geographical and financial terms, and elimination of discrimination barriers of inequality. The provision of patient's social rights is determined by the economic potential of the country.

The basic social right in the field of health, the *right for health care*, above all means the right for protection of health. The principal international documents that characterize general social rights include the European Social Charter of the Council of Europe of 1961 (amended in 1996), ratified by the Slovak Republic in 1998. Article 11 of the said Charter is entitled „Right for Health Protection,“ and it binds the contracting countries to provide for the elimination of reasons for morbidity, education and counseling

⁹⁶ In the following text the term patient is used in the sense *client or customer*.

⁹⁷ Source: De Bijl (2000).

⁹⁸ Section 6, NR SR Act No. 277/1994 coll. on Health Care

⁹⁹ Section 15, NR SR Act No. 277/1994 coll. on Health Care

¹⁰⁰ For instance, pursuant to the Dutch Medical Contract Act that is part of the Dutch civil code, patient must be informed about the suggested examination and therapy as well as about his/her condition of health. The information should concern the following aspects: nature and purpose of suggested examination or therapy, necessary interventions, risks and consequences for patient's health, examination and therapy alternatives, patient's condition of health, and forecasts of his/her condition of health in the future. Also, pursuant to German Patient's Charter physician must inform patient about the risks and objectives of examination or therapy, therapy alternatives, patient's condition of health, and expected outcome of therapy.

¹⁰¹ Section 16, NR SR Act No. 277/1994 coll. on Health Care

establishments for health promotion, strengthening of personal responsibility in health issues, and prevention of epidemic, endemic and other diseases and accidents to the extent possible.

Legislative Regulation of Patient's Rights

In Slovakia, the patient's rights-related legislation is based on the Universal Declaration of Human Rights adopted by the UN General Assembly on December 10, 1948, and on the Constitution of the Slovak Republic of September 1, 1992.

Article 40 of the Constitution of the Slovak Republic states that "Every person shall have the right to protect his or her health. Through health insurance, citizens shall have the right to free health care and medical equipment for disabilities under the terms to be provided by law." The right for health care is preceded by the right to have one's health protected. Statutory laws regulate the method of health protection and of the provision of health care to citizens. Act of the National Council of the Slovak Republic (NR SR) No. 277/1994 coll. on Health Care, as amended, regulates the provision of health care, its organization, rights and responsibilities of physical persons and legal entities in providing for this care.

Box 3.7

Legal Awareness of the Public in Slovakia

Under the project supported by the Vienna Institute for Social Sciences, a study was conducted during the second half-year of 2000 whose aim was to measure the legal awareness of Slovakia's citizens with respect to that portion of civil and human rights that concerns individuals upon falling ill, i.e., their rights as patients. A total of 1,874 questionnaires were evaluated, covering all regions of Slovakia.

According to the survey, the basic knowledge about patient's rights is relatively unfavorable – only 66 percent of the respondents knew that such rights exist. A majority of the respondents believed that these rights are not respected. This negative attitude to some extent is also connected with the generally widespread opinion of the citizens concerning Slovakia as a State of rule of law and respecting law by the society as such.

A part of the survey concerned the option of free choice of physician and health-service institution. The responses suggest that a majority of the population is aware of the choice. The less unambiguous position on the issue of free choice of health care facility is based on practical experiences, where – contrary to the declared option of choice – some restrictions apply. It follows from the replies that physicians meet their liability to provide patients with explanation on the nature of their diseases and interventions scheduled but rather insufficiently. The confidentiality-related obligation of health professionals seems to be well known, as is the option to refuse required care. One in seven patients is not aware of this option, though. Surprising is the weak legal awareness with respect to cases when therapy may be ordered pursuant to law, not requiring patient's consent. Also surprising is that only 61 percent of the respondents knew that they have the right to refuse their participation in medical training and research.

When asked to rank the values of the individual patient's rights, half of the respondents put the quality of care to the top, ranking self-determination last. Interestingly, free provision of services did not play an important role in the replies. Absence of active interest in one's own health and ignorance of the need to cooperate in preserving one's health has been evident from the evaluation of patient's responsibilities: the interest in adhering to the principle of a healthy regimen ranked last. Prevention was assigned the not very flattering position last but one.

The study suggested that a majority of Slovak citizens are aware of the existence of some patient's rights, but the opinion prevails that such rights are not respected. Citizens have adequate knowledge of the option they have to choose their physician and health care establishment, but the responses suggested that health professionals inadequately respect patient's right to be informed about everything necessary about his/her disease, diagnosis and therapy. Citizens are not aware of their responsibility to actively take care of their health and do not attach sufficient importance to prevention. Similarly, they do not understand the association between due payments of insurance premiums and the capacity of the health system to provide state-of-the-art services. Overall, it may be stated that any activities – governmental as well as non-governmental – directed towards raising the awareness of the public about their rights as well as responsibilities in the process of health care will be welcome and needed.

NR SR Act No. 272/1994 coll. on People's Health Protection, as amended, defines the term of health and the modes of its protection. NR SR Act No. 98/1995 coll., on the Therapeutical Order, as amended, regulates the conditions of the provision of health care and medical devices based on health insurance as well as against partial or full compensation by the insured. NR SR Act No. 273/1994 coll. on Health Insurance, Financing of Health Insurance and on the Establishment of General Health Insurance Company and on the Establishment of Sectoral, Branch, Company and Civil Health Insurance Companies, as amended, regulates the responsibilities and rights of insured persons.

With respect to social rights of patients, Act No. 277 on Health Care provides as follows: "State creates conditions for the provision of health care on a professional level, continuously, and to be accessible."

In the legislation of the Slovak Republic, patient's rights are referred to in a number of laws, making a general overview uneasy. A Task Force established at the Slovak Ministry of Health drafted at the turn of 2000/2001 the Charter of Patient's Rights in the Slovak Republic. The Charter was adopted by the National Council of the Slovak Republic in September 2001. The Charter comprises two parts: the first one is general statements on the backgrounds and general human rights. Part two of the Charter is

rather specific, and directly concerns patient's rights. It contains articles on confidentiality-related rights of patients, on the right for information, on conditions of patient's consent, on the confidentiality of health-related information, on care for incurable and dying patients. The article dealing with the very treatment and care mentions the type of care the citizen may claim. The last two articles concerning complaints and damages will certainly become subject of most intense discussions and interest on the part of patients.¹⁰²

The Charter of Patient's Rights in the Slovak Republic was drafted as a document summarizing the individual rights of patients laid down in legislation. Its purpose was to facilitate the orientation of citizens and health professionals in the field. In comparison with EU Member States, legislation on patients' rights in Slovakia is insufficient. Patient's rights laid down in Slovak laws need supplementation and extension, best by drafting a separate law.

3.3.2 Key Problems of the Slovak Health Sector and the Analysis of Their Causes

Health is perceived as a necessary prerequisite for a meaningful and free choice of individuals to freely decide about their lives.

Indicators of health in the SR fall behind highly developed countries rather markedly. As was outlined in the previous chapters, the health status is a result of numerous factors of health-care-related and particularly of non-health-care nature. The societal developments in the past decades have deeply rooted the belief that the issue of health is more connected with the curing of ill health than with the prevention

Box 3.8

Selected Data on Slovak Health Care

- ❑ The Constitution of the Slovak Republic guarantees the right of every citizen to health protection and to free health care based on health insurance, which is founded on principles of solidarity, non-profitability and plurality. This system includes practically every permanent resident in the SR. Access to health services is provided for by a network of health care providers.
- ❑ Outpatient care comprises primary outpatient care (general physician, pediatrician, gynecologist-obstetrician, dentist), specialized outpatient care (e.g., ophthalmologist, dermatologist), joint examination and therapeutic units (e.g., biochemical laboratories, x-rays), pharmacies, polyclinics, agencies of home care. Majority of physicians in primary and secondary care conduct business as private entities based on license issued by the regional state physician and a contract with health insurance agency.
- ❑ Inpatient care includes hospitals and specialized institutes (e.g., oncological, psychiatric). Hospitals are divided by range of services provided into three categories. In 2000, there 92 hospitals operating in Slovakia, out of which three were private (567 beds). Most of the public hospitals (35,557 beds) were transferred within the public administration reform to towns and municipalities.
- ❑ Community care services include long-term inpatient care, day care centers and social services for the chronically ill, the elderly and other groups with special needs such as the mentally ill, mentally handicapped, and the physically handicapped. Many of these institutes were transferred to municipalities and are under mixed ownership.
- ❑ Ministry of Health maintains a wide scope of competence, which covers development of policy and drafting of legislation on health care and health protection, health care provision in public inpatient facilities, price and wage regulation, supervision, etc.
- ❑ Underlying the competence of the Ministry is also the National Health Protection Center and a network of 37 state health institutes, which provide health and hygienic services in line with State health protection strategy.
- ❑ There are five health insurance companies operating in Slovakia at present, of which two are administered by State. As a result of uneven numbers of active and inactive insured a redistribution of collected insurance premium was introduced.
- ❑ There were 360 doctors per 100,000 inhabitants (representing 272 inhabitants per 1 doctor, estimate of the Statistical Office of the SR); the respective number for EU-15 was 353 doctors. In comparison with EU countries the number of general physicians is lower in Slovakia, whereas the number of specialists is higher than in the EU.
- ❑ In 2000, there were 6.5 hospital beds per 1,000 inhabitants, which is more than the average for OECD countries. Hospitals operate at less than 70 percent of bed capacity (OECD more than 80 percent), the average length of stay represented 8.9 days, which is more than in the Czech Republic (8.7 days), (Hungary (7.0 days) and Austria (6.8 days).
- ❑ less than 70 percent of the bed capacity compared to 80 percent and more in OECD countries. Average length of stay in acute hospitals is 8.9 days (in 2000), which is relatively high compared to other countries of the region, like Hungary (7.0), Czech Republic (8.7), and Austria (6.8).
- ❑ Total expenditures on health care (including informal payments) made up 7.3 percent of GDP in 2001. According to WHO data, public expenditures range as high as 90 percent of total expenditures, which is a substantially higher share than in most EU member and candidate countries (2000). Average per capita expenditures adjusted for purchasing power parity was US\$ 690, which is less than is spent in Slovenia, the Czech Republic, and Hungary, but more than in the remaining candidate countries (except for Cyprus and Malta).

¹⁰² Source: Sedláková, D.: The Government Adopted the Charter of Patient's Rights. In: Magazine Partnerstvo, No. 2/2001,

of this condition. The expectations associated with health care thus go beyond its real impact on public health.

Similarly, as other countries of the region, Slovakia has achieved several strides in health during the socialist era. Progress resulted from mass immunization, lowered child mortality, preventive medical checks, improved access to safe water and better sanitation, overcoming the problems of malnutrition, and efforts to control communicable diseases.¹⁰³ Most developed countries of the region reached parameters of health comparable to developed Western countries during the 1950s and 1960s. Since then, however, the gap has gradually deepened as a consequence of both health care-related and non-health-care factors. Health systems – seemingly offering free, comprehensive and universal health care – were oversized and produced debt similarly as the whole societal establishment, while remaining in isolation from the development in the West.¹⁰⁴

Societal changes after 1989 have also introduced changes in public health. These stem from new trends in lifestyles, broader foodstuffs supply, improved access to information, transfer of know-how in medical science, better accessibility of high-quality medication, and demographic development. The said changes have contributed to the positive trend in the health condition of the population, which is however, according to opinions of both experts and lay public not accompanied by an adequate growth in the quality of health care provision.¹⁰⁵ Health care remains an area with many deformations from the past even after a decade of economic and social reforms. The current crisis of the Slovak health system originates in inherited distortions and a lack of reform measures after 1989.

Negative trends in health care crowd out positive tendencies and positive changes. Recognition of the causes of the crisis of the Slovak health care system is one of the decisive ways out to gradual solutions to the problems. Due to this fact, the following analysis focuses mainly on the problematic issues and possible positive aspects stay rather in the background.

The modern health care system should meet three essential objectives:

1. Improving health status of the population;
2. Improving customer satisfaction with health services;
3. Providing reasonable protection against financial risks associated with health care provision.

When evaluating the health system, it is appropriate to specify more detailed criteria and/or objectives of health care. These have a significant influence on the aforementioned ultimate objectives:

- Access/availability;
- Efficiency;
- Quality;
- Financial burden;
- Costs.

The specification of supporting objectives allows to define the problems faced by the Slovak health care sector (Table 3.11).

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¹⁰³ Source: World Bank (2000a).

¹⁰⁴ Research using the concept of avoidable mortality, has suggested that about 25 percent of the mortality gap between east and west Europe for the age group 0-75 could be attributed to inadequacies in medical care in 1998. Deaths from avoidable causes declined at a slower rate in the east than in the west. (source: Study on the Social Protection Systems, 2002).

¹⁰⁵ Some sources (e.g. World Bank, 2000a) state that changes in health outcomes in transition countries after societal changes (and/or their worsening in the former Soviet Union countries) have not been attributed to a serious worsening of the health systems; rather it was changes in living conditions and behavior such as increased consumption of alcohol and tobacco, spreading of HIV, etc. Research undertaken in transition economies suggested that most vulnerable groups in this respect include those who have experienced the most rapid transition and had poor social contacts (men of middle age, with low levels of education and insufficient social contacts (e.g., singles).

Table 3.11*Main Problems Faced by the Slovak Health Sector*

Problem	Causes	Consequences
Insufficient effective availability	<ol style="list-style-type: none"> 1. Central management of the health sector 2. Unequal chances and soft budgetary restrictions 3. Passivity of health insurance funds 4. Passivity and lasting socialistic attitudes of patients 	<ol style="list-style-type: none"> 1. Corruption 2. Spare capacity resulting from the fact that ineffective providers are not shaken off
Low allocation efficiency and technical inefficiency	<ol style="list-style-type: none"> 1. Health insurance system parameters are set in a way that does not induce motivation 2. Payment mechanism system applied to outpatient departments does not induce motivation 3. State ownership and lasting socialist practice in in-patient facilities 4. Inappropriately set system of risk sharing by the individual entities 	<ol style="list-style-type: none"> 1. Wasting of sources 2. Rent-seeking behavior is preferred to profit-seeking 3. Extremely high debt
Poor quality	<ol style="list-style-type: none"> 1. A relation between what I pay and what I get in turn is not sufficiently strong 2. Competition absence 3. Poor organization of patients 	<ol style="list-style-type: none"> 1. Corruption market
What degree of solidarity is desirable and which level of revenue collection is optimal?	<ol style="list-style-type: none"> 1. Health insurance is not sufficiently separated from the State Budget 2. A relation between what I pay and what I get in turn is not supported 3. Private sources in the health sector are not legally permitted 	<ol style="list-style-type: none"> 1. Combination of insurance and income redistribution elements 2. Default payers (delinquents) 3. Corruption
Unbearable amount and inappropriate structure of costs	<ol style="list-style-type: none"> 1. Inadequate scope of uninsurable risk 2. Ineffective and often useless state regulation 	<ol style="list-style-type: none"> 1. High value of funds for treatment and low for prevention 2. Debt 3. Low proportion of private sources

Source: Pažitný – Zajac (2001).**Problem I – Insufficient Effective Availability**

The universal approach is often referred to as the key achievement and advantage of the Slovak health sector. The notion access has several dimensions. First, it is often understood in terms of the types and number of services offered within a specific region. In such case, access stands for physical availability. Second, access could be interpreted as use (hospitalization or outpatient visits measured per capita in various population groups). Access as effective availability is probably the most important understanding of this notion as it takes into consideration location, costs, travel expenses, waiting time, behavior of providers and business hours.

Among the causes of insufficient availability of health care in Slovakia are:

- *Central Management of the Health Sector.* The health sector is centrally managed by the Ministry of Health, which is exclusively responsible for strategy and management of health care, management of state-owned health facilities, state supervision, decision about financial resources, price and tariff wage setting, drug regulation. Such management is marked by poor flexibility, a high level of regulation, excessive corruption and varying rules of the game. The health care system still has a "socialist" form, in which the State strictly defines and centrally manages the network of health care facilities, distorts price mechanisms, suppresses competition, and makes effective wage differentiation impossible.
- *Unequal Chances and Soft Budgetary Restrictions.* This refers to the fact that risk is not shared equally. The State guarantees the ability to pay in respect of two health insurance funds, managed by the State, and is liable for debt generated by all state hospitals.¹⁰⁶ Unlike other sectors of

¹⁰⁶ The two state-owned health insurance funds (Všeobecná zdravotná poisťovňa, Spoločná zdravotná poisťovňa) insure about 80 percent of the insured. There are only three non-state inpatient facilities; the State is not liable for their debt.

economy, the health sector is subject to soft budgetary restrictions, which is marked by granting exceptions by the State (e.g., exceptions from distraint and bankruptcy proceedings, regular relief of debts produced by hospitals and health insurance funds, etc.).

- *Passivity of Health Insurance Companies.* Besides bearing financial risks of health insurance funds, the State guarantees the funds, an administration fund amounting to 4 percent of premium collected. Missing responsibility results in health insurance companies not performing their fundamental role, which is to actively buy effective health services. As the funds are reluctant about their financial performance (profit/loss), they are not motivated to place sufficient pressure on providers to perform more cost effectively, which would then have a positive effect on the structure of providers corresponding to the real needs of customers. Health insurance companies only have a redistribution function, which means that they allocate funds in line with the terms and conditions set by the Ministry.
- *Passivity and Lasting Socialist Attitude of the Patient.* Free medical care for all citizens guaranteed by the State directly distorts their behavior. There is no link between the incurred costs of medical services provided and the financial burden. This results in unlimited consumption and emphasis put on treatment and not on prevention. Corruption is an accompanying phenomenon, through which patients get access to "free services".

Problem Two – Poor Technical and Allocation Efficiency

Efficiency expresses the relation between costs and desirable outputs. If a health care system is not efficient in technical and allocation terms¹⁰⁷, it does not attain the desirable objectives. An inefficient system means that spare sources are wasted. The main causes of low efficiency of the Slovak health sector include:

- *Existing Health Care System Parameters Do Not Induce Motivation.* The financing of the Slovak health care sector is based on an insurance scheme. The existing insurance system is distorted in several ways:
 1. Despite significant differences in the amounts of health insurance contributions, the system provides every citizen with the same level of health care. The disadvantage of this understanding of solidarity is the fact that it is often misused.
 2. The five health funds finance the same level of health care to all the insured registered with them, which turns the plurality of health insurance into an empty word.
 3. The health insurance funds do not bear any financial risk and a 4 percent administration fund for each of them is guaranteed.
 4. The system inadequately combines the redistribution of funds (the State's payments for inactive insured) and the elements of social security insurance (contributions by economically active).
 5. Funds collected are distributed to the health insurance funds via a special redistribution account. This arrangement was introduced in 1995 as a result of different structures of active and inactive insured and it has been subject to many arguments and discussion. A gradual increase in the amount of re-allocated funds to 100 percent of insurance premium collected resulted in a situation where health funds with disadvantageous portfolios benefit from this subsidy mechanism.¹⁰⁸ Rules of redistribution substantially changed over the past 7 years, and the stability of the system has not been ensured.¹⁰⁹
 6. Health insurance companies lack motivation because poor legislation does not force them to operate and manage funds in a better way. There is also a lack of real finances in the competitive environment of providers that would decrease the prices of services. The health insurance funds are not dependent on profit generation and do not bear any business risk; their operation is reduced to a mere collection of premiums and ensuing complicated redistribution. This often-changing system of health insurance funds lacking any motivation has resulted in the indebtedness of the whole health sector.

¹⁰⁷ Technical efficiency stands for maximization of outputs under a given level of inputs, and/or reaching a given level of outputs while decreasing inputs. Allocative efficiency relates to the decision about a set of services, which will bring highest benefits for the health condition. The notion is prevailing in the Slovak health system that increasing efficiency is an issue of raising inputs while retaining or decreasing outputs.

¹⁰⁸ The redistribution mechanism is based on the redistribution of premium collected from the health insurance companies with a high proportion of active population (which has a low risk index) to insurance funds with inappropriate portfolios (including mainly children up to the age of 3 and elderly people above the age of 60, who have high risk indices and high costs of medical treatment). The introduction of this cross-subsidy system triggered the emergence of "double souls" who are subject of redistribution. Over the period of 1997 to 1999, the number of the insured was by 250,000 (approximately 4.4 percent) higher than the country's population.

¹⁰⁹ The redistribution ratio represented 85 percent of insurance premium collected as of December 2002. In spite of disagreement of a part of the health insurance companies, the Ministry of Health is considering to increase the ratio to 100 percent.

- *Outpatient Care Payment Mechanisms Lack Motivation.* Primary care doctors in outpatient departments (e.g., pediatricians) are paid on a per capita basis. This means that a doctor receives a flat sum from the relevant health insurance fund for each contractually registered patient, irrespectively of actual performance/service delivered. Thus, the doctor is paid for "readiness" to provide health services, which also has weaknesses:
 1. Doctors are not motivated to provide health services. Despite being physically available, they often reduce the real availability of care to patients (for instance by low working hours, etc.).
 2. The quality of services provided has been falling.
 3. The efficiency of services provided has been falling as patients receive fewer outputs (doctors treat less) for the same volume of inputs (funds received by doctors on a per capita basis).
 4. Costs are shifted to other health care providers, for instance to hospitals.
 5. The per capita remuneration system (or simply the capitation) is regulated by the Ministry of Health, which specifies the capitation rate. From the point of view of doctors, the capitation is the best remuneration system (it is not dependent on performance/services delivered). What they mind is the fact that the level of capitation payments is not sufficiently indexed.

Non-state specialists working in outpatient departments (e.g., plastic surgeon) are paid on a fee-for-service basis, whereas each service unit performed is priced by an appropriate number of points. Due to demand induced by doctors and a limited budget of the health insurance funds, an upper limit (cap) of pre-paid points is specified for specialists.¹¹⁰ Although the capped fee-for-service payment system is a modern payment mechanism, it has some weaknesses and specific consequences for every player in the health sector.

1. In line with trying to hold on costs, the Ministry of Health is not motivated to increase the value of point price. At the same time, the Ministry is aware that non-state doctors are exposed to all financial risks and will have to manage their revenues efficiently, which means that they will have to economize. It is a paradox that the Ministry of Health is not requiring the same from state-owned hospitals.
2. Being bound by the Price Regulation of the Ministry of Finance (issued by the Finance Ministry on the basis of recommendations of the Ministry of Health), health insurance funds specify so-called upper limits for the individual non-state providers. Such upper limits are designed to minimize induced demand and prevent costs increases in this group of providers. At the same time, they show their weakest link – their lack of interest in an efficient allocation of funds.
3. For health care providers – specialists, this system means that they have either to work for free for the some proportion of month or to reduce the number of patients treated in order to be in line with the "number of points ordered." Any points exceeding the upper limit are not accepted by the health insurance funds, which unilaterally violate the right to own claims.

In Slovakia, state doctors receive salaries specified by the Ministry of Health in one of its decrees. This decree is binding upon every state-owned facility manager. And thus the management of a state-owned facility can hardly influence this key cost group – the labor costs. The only, limited room for maneuvering left is personal bonuses. Poorly paid doctors offset their low salaries by rent seeking taking the format of bribery and corruption.

- *State Ownership and Lasting Socialist Practices in Inpatient Facilities.* The Slovak health sector suffers from distortions from the past, which are most visible in the operation of in-patient facilities. The inappropriate structure of in-patient facilities entails an excess of acute beds and a lack of chronic beds, an inappropriate territorial distribution of hospitals with acute beds, an excess of doctors, nurses and other medical staff – notably in bigger cities (i.e., Bratislava, Košice, Banská Bystrica). The financing of hospitals and of hospital employees is non-motivating, since it follows a flat allocation of sources and/or salary tables taking into consideration age and education, but not performance.

This arrangement has ultimately resulted in a paradox situation in the Slovak health sector with an excess supply and excess demand.

Problem Three – Poor Quality

Quality of health care may be perceived in different ways. Quality is often rendered as quantity ("the more medical examinations the better quality"). Health care professionals perceive mainly the clinical aspect of quality (e.g., correct diagnosing). Patients frequently assess the quality of services by the comfort, quality of accommodation and diet, respect for them, etc. Quality is thus a multidimensional factor. The causes of insufficient quality of health care include:

¹¹⁰ The price per point at SKK 0.30, set by the Ministry of Health in 1996, has not changed. However, some health insurance funds have slightly increased this rate for specialists (for instance, to SKK 0.31 – 0.34) taking into consideration "competition".

- ❑ *Insufficient Link Between What the Citizen Pays and What He/She Gets in Turn.* The current setup of contributions is virtually a scheme of compulsory taxes imposed on employees, employers and self-employed. In principle, no payments for health services¹¹¹ or voluntary health insurance exist. A large part of the public does not realize that health care is paid for and they think that it is free of charge. The awareness that quality of services depends on invested resources is insufficient. It is necessary to realize that quality is a function of resources. In principle, no marginal costs or voluntary health insurance exist. The quality of health services in Slovakia is reduced as a direct result of a broadly conceived scope of uninsurable risk (the currently applicable legislation forces providers to provide everything and such arrangement is detrimental to quality) and of poor efficiency of the system (limited resources are used to subsidize ineffective providers and not to support quality performance).
- ❑ *Absence of Competition.* Quality largely depends on the degree of competition in the sector. The absence of competition between health service providers is a result of inflexible prices (payment mechanisms) and inflexible supply (number) of providers. This is caused by the fact that the provider network is fixed by the Ministry of Health (see Table 3.12).

Table 3.12*Provider Market Distortion*

Inflexible prices	Inflexible supply
1. A well-performing doctor/hospital is not adequately paid. There is rather a tendency to "equalize" all providers.	1. Monopolistic nature of primary ambulatory and specialist ambulatory doctors.
2. There is not price competition because the Ministry of Health centrally sets prices.	2. State ownership with no effort to restructure the network.
3. There is no equality of chances between state-owned and private providers.	3. Excess supply of physical capacity: doctors, beds.

Source: Pažitný – Zajac (2001).

- ❑ *Poor Organization of Patients.* Poorly organized patients directly influence poor quality, among others. This is a result of a poor legal awareness of citizens and the impossibility to compare the existing system with another alternative system. At the same time, it should be noted that there is still a lack of collective responsibility prevailing in the Slovak health sector and poor law enforcement resulting from a poor institutional framework.

Problem Four – Degree of Solidarity Optimal Revenue Collection

An important aspect of assessing the financial burden is the fact that a person (or institution) paying contributions directly into the system may eventually not be the one who bears also the financial burden. An example is the position of the State as payer and that of the taxpayer as the bearer of the financial burden related to State's payments on behalf of the economically inactive insured. With respect to the allocation of the financial burden, the key issues are:

- ❑ *Health Insurance Is Not Sufficiently Separated from the State Budget.* The existing link is obvious in three areas.
 1. The State (parliament) sets requirements for the operation of health insurance funds and unilaterally specifies the amount of insurance base for "its" insured irrespectively of the real costs incurred in respect of their treatment.
 2. The health insurance funds receive approximately one-fourth of their revenues via the Ministry of Health (from the State Budget).
 3. The health insurance companies receive other funds via several channels from the State Budget, for instance from other ministries or directly by means of financial aid from the general treasury.

The above-specified arrangement results in a complicated and non-transparent system of cash flows, which is a mix of tax revenues and an insurance system. However, the core of criticism is the fact that the parliament too often changes the conditions of health system financing and thus restricts its operation.
- ❑ *The Relation Between What the Citizen Pays and What He/She Gets in Turn is Not Strengthened.* In Europe, the financing of health systems is based on solidarity, notably the solidarity of economically active population with that proportion of the population that does not produce assets yet and a proportion of population that does not produce assets any longer. Furthermore, economically active

¹¹¹ The introduction of payments (fees and charges) is important not that much from the point of view of funds acquisition, but mainly as a tool to attenuate demand. The amount of marginal costs cannot by far cover the actual costs for the health service provided, but its symbolic value can have a significant psychological effect on the citizens-patients in terms of reducing the demand and the awareness that health care is not free of charge.

population must also show solidarity with their unemployed peers. The setup of the system is also one of the causes why the group of "paying" economically active is further reduced by those who evade paying taxes and contributions. In Slovakia, the State contributes 25 percent of the total health funds revenues, but for almost 60 percent of the population (Table 3.13).¹¹²

Table 3.13

Development of the Number of Insured (in thousands of persons, as of December 31 of the respective year)

Indicator	1996	1997	1998	1999	2000	2001
Total number of insured	5,372	5,638	5,613	5,563	5,546	5,526
of which:						
employed (earners)	2,093	2,216	2,321	2,211	2,265	2,286
registered unemployed ^a	80	105	128	147	142	152
State insured ^b	3,200	3,278	3,131	3,195	3,130	3,079

Note: a. National Labor Office pays contributions on behalf of registered unemployed who receive unemployment benefits. b. State pays insurance premium on behalf of children, pensioners, unemployed recipients of social assistance benefits due material distress, persons taking care of children and disabled, soldiers in compulsory military service, prisoners, refugees, and other economically inactive persons.

Source: Statistical Office of the SR.

The Slovak health insurance system is designed to allow all Slovak citizens to benefit from it by means of health care irrespectively of the fact whether they share any financial burden related to the delivery of such care or not. Article 40 of the Slovak Constitution clearly refers to "the right to free health care". However, free health care is only an illusion because all resources of financing come from citizens.¹¹³

- *The Contribution of Private Resources to the Health System Is Impossible.* An economically unstable and non-transparent financial system of the public health care is unable to attract private resources.¹¹⁴ Another reason explaining the absence of private resources is insufficient legislation governing the establishment and operation of private insurance companies in the health sector, notably in respect of voluntary insurance schemes.

Problem Five – Unbearable Amount and Inappropriate Structure of Costs

In a condition of limited sources, health care costs should be viewed as opportunity costs, which could be spent on other values instead of health. The decisive criteria then is whether the benefit of utilizing increased sources in health care exceeds the potential benefit of utilizing these sources in another sector.

Health care costs may also be assessed through the adequacy of expenditures spent. The sum of health sector costs includes all governmental expenditures, health insurance funds (public as well as private) expenditures, household expenditures (formal and informal) and corporate expenditures. However, these expenditures also include opportunity costs related to the search for an optimum ratio between public and private sector expenditures, which would be most beneficial to the whole structure and amount of health sector expenditures. The causes of the current state being far from optimal include:

- *Inadequate Scope of Uninsurable Risk.* Uninsurable risk means the essential package of services, which is granted by law to each citizen regardless of premium paid. This package is currently specified by two pieces of legislation – the Constitution and the Act on the Rules of Medical Treatment.

Article 40 of the Constitution guarantees the right to health protection and free health care. However, a wrong interpretation of the Constitution resulted in a virtually non-existent financial participation of the patient in the delivery of health services and the existence of moral hazard.

The Act on the Rules of Medical Treatment belongs to the key laws as it specifies the scope of free health care. No government so far has been able, probably due to political reasons, to reduce the broad scope of the Rules of Medical Treatment.

- *Inefficient and Often Useless State Regulation.* State regulation comprises mainly the regulation of providers (by specifying the health facility network), control of the market in medicines through the

¹¹² Payments by the State on behalf of an inactive person represented SKK 378 in 2002. In 2003, the payment should amount SKK 405 per inactive individual. On the other hand, an employee receiving average wage pays jointly with his/her employer about SKK 1,800 monthly for health insurance.

¹¹³ Economically active population contributes by health insurance payments to health funds. State budget income comes from direct taxes (income tax and profit tax) and indirect taxes (VAT, concise taxes, customs duties, etc.) as well as various property taxes.

¹¹⁴ According to WHO data, private expenditures made up 10.4 percent of total expenditures on health care in Slovakia (2000).

categorization of drugs, regulation of remuneration by setting prices and payment mechanisms, and fixing of salaries through wage regulation.

The existing scope of uninsurable risk and inefficient state regulation result in an inflexible market of insurers and providers. Excess supply and demand causing an immense increase in debt is common to such market.

3.3.3 Consequences of Not-solving Problems in Health Care

The aforementioned problems of the Slovak health care system, mainly problems concerning quality and accessibility, have a direct negative effect on the health status of the population. Both domestic and foreign experiences confirm that low quality medical care leads to unnecessary deaths, invalidity, inability to work, poor outcomes of medical treatment, etc. The problems of the Slovak health system have, apart of the negative consequences upon the very object of health care services – the human health, also specific consequences. In this respect, corruption and debt are the most serious consequences, completing the critical picture of the entire system.

Consequence One – Corruption Market

According to its communist legislative legacy, the Slovak health system guarantees free health care to every citizen, based on health insurance. Such arrangement undoubtedly causes several deformations of supply as well as demand. One of the sharpest post-communist deformations is excess supply and demand without any chance to find market balance. In the existing, non-functioning system, informal payments that indirectly and unofficially condition the effective availability of health care have become “cleaning” instruments.

Informal payments are not restricted to the patient-doctor contact. They work at all the layers of the system and result in the corrupted market, which replaces non-functioning, or even non-existent market relations, as is the case of Slovakia. Corruption involving the patient and health care staff is mostly discussed, since it concerns virtually everyone. The so-called sophisticated or non-public corruption is much more dangerous; it involves significantly less people, but enormous financial means.

Motivation Behind Corruption and the Subject Matter of Corruption

Health care is an area that concerns a major portion of the population; surveys suggest that during the last two years more than 80 percent of Slovak households have visited a health care facility.¹¹⁵ The health system is at the same time being perceived as a sector with the highest incidence of corruption (Table 3.14).¹¹⁶

Table 3.14

Extent of Perceived Corruption (in % of respondents' replies)

Areas where bribes are needed	1997	1998	1999	2000
Courts	22.51	23.65	26.37	26.18
Privatization	22.59	22.17	12.67	12.46
Banks	8.90	8.27	4.78	4.87
Police	14.45	16.71	14.18	17.18
Health care	66.62	68.93	66.77	66.89
Education sector	28.59	33.72	27.89	32.01
Business	17.95	18.30	16.25	15.78
Customs authorities	5.10	6.32	6.85	6.12
Tax offices	6.69	7.03	7.81	6.64
Labor offices	8.29	8.43	6.69	8.48
RO, DO, TO, MO ^a	14.37	12.57	13.55	12.83
Other	6.24	2.73	5.42	2.58

Note: a. Regional offices, district offices, town offices, municipal offices.

Source: Statistical Office of the SR, www.government.gov.sk

There are three key reasons behind the corruptive behavior of patients. First, the desire to obtain certain additional advantage, for instance to reduce waiting time, to select a surgeon, etc. Second, the

¹¹⁵ Source: World Bank (2000b).

¹¹⁶ Perception of widespread corruption in health care is confirmed also by surveys conducted by the World Bank. For details see *Corruption in Slovakia. Results of a diagnostic survey*. World Bank (2000b).

desire to get access to medical treatment that should be provided as an essential service, however, due to limited resources and the lack of motivation in respect of the payment mechanisms, such treatment is scarce. Since the regular market does not function, as it should, such treatment is offered in the corrupted market. Third, this tradition is a result of the feeling of gratitude.

The consequences of this phenomenon rather severely impact on the quality of life of the population. They reduce the accessibility of a good quality health care; the society starts to polarize into those who are able to provide for it through bribes and those unable to afford it. This evokes feelings of inequality in a sensitive area such as health.

As for health care staff, notably in state-owned facilities, corruption is a result of, among others, their poor financial conditions. Doctors as well as other medical staff improve their financial conditions by

Box 3.9

Negative Effects of Corruption

Foreign surveys suggest that a large extent of corruption worsens the conditions in the health sector and enhances inequality of people:

- ❑ *Gupta, Davoodi and Alonso-Terme (1998) demonstrated based on empirical studies that increasing corruption by one unit reduced expenditure rates in health system by 0.6 to 1.7 points.*
- ❑ *Gupta, Davoodi and Tiongson (2000) reported that increasing corruption by one unit raises child mortality by 1.1 to 2.7 deaths per 1,000 liveborn children.*
- ❑ *Ghura (1998) reported that raising corruption by one unit reduced income of the poor by 2 to 10 percentage points.*
- ❑ *Gupta, Davoodi and Alonso-Terme (1998) reported that raising corruption by one unit increased inequality of income (Gini coefficient) by 0.9 to 2.1 points. (Source: Global Corruption Report, Transparency International, 2001)*

means of additional informal income. In hospitals, the salaries of medical staff are based on the principle of general wages reflecting age and qualifications and not work done. Available service artificially becomes unavailable to "make" the patient stimulate the provider. This category also includes so-called "willingness or lack of willingness" of a doctor, a nurse, a laboratory worker, an ambulance driver, etc. In this specific hospital environment, the whole behavior of medical staff expects some "graft or bribe". This environment makes the patient active and willing to bribe, thinking the staff is passive and left to accept bribes. What is dangerous about this form of corruption is its scale. It is often pretended that this is not corruption, but one of Slovak tradition and habits of so-called "gratitude".

Sophisticated corruption is limited to a small group of people who are either able to use the non-functioning system to their benefit or even have power and competencies to ensure the non-

functioning of the system. This category comprises informal services and payments by:

1. Primary care doctors for making contracts with a health insurance fund or for an earlier payment for their performance;
2. Pharmacies to health insurance funds for giving a priority to their invoices;
3. The suppliers of goods and services to hospitals for the deliveries of goods and subsequent payment of their invoices;
4. The producers and distributors of medicines and special medical material for incorporating their products into category I (fully paid);
5. State-owned hospitals for receiving capital transfers to purchase heavy equipment;
6. The suppliers of heavy equipment for the purchase of their products (financed from the capital transfers from the State);
7. Members of parliament for amendments to legislation;
8. Health insurance funds investing billions of SKK into buildings and IT systems.

The volume of corruption in the health sector depends on three factors: service availability, the number of contacts and urgency of a case. Taking into consideration that health care goods/services are of luxury nature (i.e., the income elasticity of demand is more than 1), it is assumed that corruption in the health sector is above the limit of 15 percent.¹¹⁷ Given these facts, the scope of corruption may be estimated at SKK 12 billion. When calculated on a per capita basis, corruption stands at SKK 2,222 a year, which is SKK 186 a month.¹¹⁸

Consequence Two – Debt

The primary problem in Slovakia's health care financing is the imbalance between revenues and expenditures. In effect, revenues are fixed while expenditures are open-ended (see Graph 3.13).

On the revenues side, the health insurance contribution rate of 14 percent is relatively high, and further increases would impose an intolerable burden on employers/employees. There also exists the

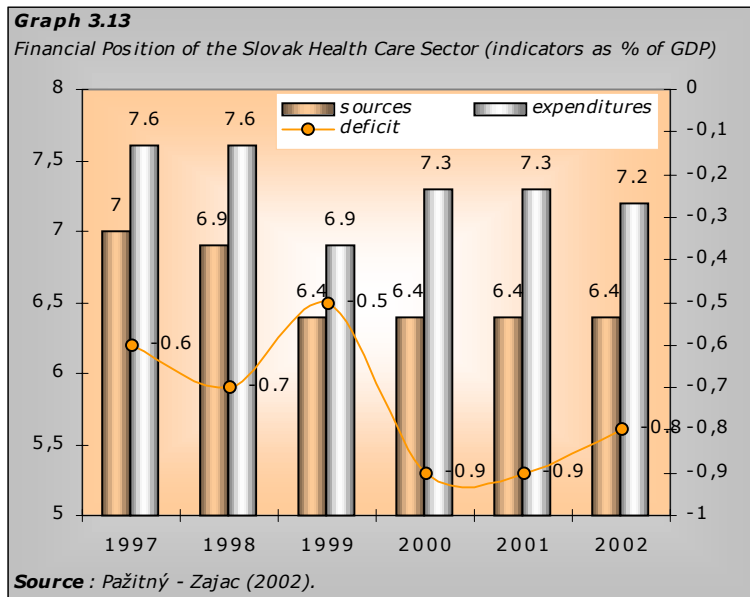
¹¹⁷ According to Eurostat data, the share of shadow economy in Slovakia was 15 percent in 2001.

¹¹⁸ Source: Pažitný – Zajac (2001).

additional risk of negative effects on premium collection and formal employment, while encouraging growth of the shadow economy. The level of premium paid by the State for "its" insured is relatively low.

In fact, it is more a problem of resource utilization and allocation than resource availability. There are several factors that affect the expenditure side. Most importantly, provider payment mechanisms in both outpatient and inpatient care create incentives for rapid growth in the volume of care, which, coupled with a very generous package of health services covered by health insurance, contributes to high health care expenditures. Moreover, the network of health care facilities and providers is large and inefficiently organized, contributing to high costs of health care delivery.

The outcome of a system that provides unconstrained services with a fixed budget is a viscous circle, in which insurance companies do not receive sufficient contributions, at the same time do not pay the providers, and these in turn owe money to suppliers of goods and services.



The external debt in health care reaches at present almost SKK 30 billion.¹¹⁹ The debt grows by roughly SKK 780 mln monthly, of which SKK 600 mln on the part of the health care providers (e.g., hospitals) and the rest on the part of health insurance companies.¹²⁰ During the recent years, one-off sums from privatization revenues were used to reduce the growth of the debt, however not eliminating the causes of indebtedness. The causes lie in the expenditure side of the system, mainly in lasting state ownership, insufficient restructuring, inadequate network and high fixed costs of inpatient facilities, payment mechanisms lacking any motivation and inappropriate risk spreading.

The origin, causes and on-going increase in debts can be divided into two groups. First, external causes that usually cannot be influenced by the Ministry of Health. Second, internal causes that can be directly affected by the Ministry (Table 3.15).

¹¹⁹ External debt expresses the indebtedness of the individual entities in the health sector towards external creditors. It mainly refers to the debt generated by inpatient facilities towards their suppliers and the debt generated by health insurance funds towards pharmacies, state budget and other health care providers.

¹²⁰ Source: <http://www.ineko.sk/reformy2003/zdravotnictvo.htm>

Table 3.15*Causes of the Debt*

External factors	Internal factors
<ol style="list-style-type: none"> 1. The 1993 economic recession. 2. Insufficient payment of health insurance contributions by the State. 3. Article 40 of the Constitution guaranteeing free health care. 	<ol style="list-style-type: none"> 1. Non-transparent financial relations and the failure of the control/audit system. 2. The debt itself. 3. Insufficiently restructured supply side (notably inpatient facilities and their extremely high fixed costs). 4. The application of the income/expenses principle is preferred to the revenues/cost principle and non-existing charges. 5. The organizational structures of the individual entities, the wrong system of remuneration and payment mechanisms. 6. All risk is borne by the State (for the health insurance funds as well as inpatient facilities).

Source: Pažitný – Zajac (2001).

Consequences of the Growing Debt

At present, the external debt amounts to approximately one third of the health sector's annual budget. Such enormous debt has been taking its toll:

1. Margin of the suppliers of drugs and special medical material increases. The margin includes the suppliers' increased costs related to the fact that their bills (invoices) are overdue for 300 and more days. Due to late payments, the suppliers are exposed to a higher foreign exchange risk. This results into increases in prices and costs related to the delivery of health services. In other words, debt generates more debt.
2. Corruption is growing. It is caused by the preferential treatment of those creditors by debtors who bribe them.
3. The debt ties financial means, motivation and efficiency decreases – this results in a decrease in quality and subsequently in the deterioration of health.
4. The internal debt continues to grow (estimates of this debt range around SKK 50 billion¹²¹). It reflects tear and wear and obsolescence of assets in the health sector. Since health care providers have difficulties in covering their operating costs, they can only use subsidies earmarked for capital expenditures to replace fixed assets. Subsidies amount to about SKK 2.2 billion a year, which is not enough to finance investment projects. It was already mentioned that the centrally allocated subsidies attract sophisticated corruption.
5. The high indebtedness has a negative effect on public finances and thus also on the economic stability of the country.

¹²¹ Source: Pažitný – Zajac (2002).

Box 3.10*Expectations Versus Willingness to Pay*

One of the main issues in the ongoing discussion about the health care reform in Slovakia (but also the reform of tertiary education) is the search for an optimal system of financing. In principle, there are two choices: payments by the users (charges for treatment, drugs etc.) or payments by the whole society (employed) in the form of taxes.

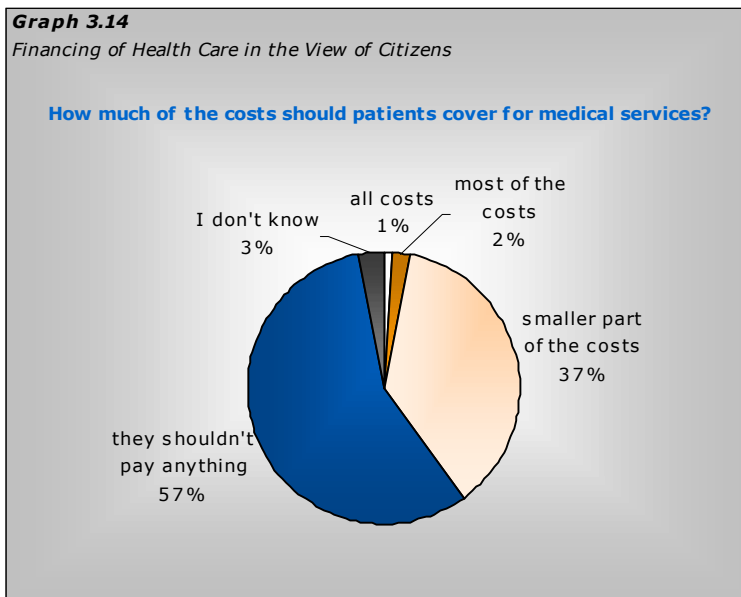
A representative public opinion survey (undertaken by INEKO and MVK agency in October-November 2002) examined which financing scheme is preferred by Slovak citizens. The results of the survey show that 70 percent of inhabitants are not aware of the need to decide for one option. An alternative explanation may rest on the fact that citizens understand the necessity of this compromise, but do not share a realistic notion about costs of health care and education. Another possible answer may lie in the existence of false solidarity ("health care and universities should be free of charge for everyone, however, I don't want to pay for it").

The reason for this perception may be the experience with living on debt, which refers not only to the pre-1989 period but also to the years of transition (foreign loans, budgetary spending of privatization revenues). However, all explanations lead to the same conclusion: there is discrepancy between high expectations and real operation of the health system and universities. Any reforms thus automatically run against a high degree of public resistance.

According to the survey, as many as 95 percent of respondents are of the opinion that people should pay nothing or just a smaller part of the costs of health services and medical care; but only one fourth agree that the active population should pay at least one half of total health care costs through taxes.

An extreme case occurs in 9 percent of the citizens who admit no fees for medical care and university education and at the same time refuse any taxes paid for the two sectors. This opinion is most frequently found among people with primary education, low incomes and also among old-age pensioners. Almost 15 percent of inhabitants refuse both sources of financing in the education sector (no tuition, no taxes), while the corresponding figure is 19 percent in health care (free of charge care, no taxes).

Who is in favor of charges for services? Full coverage of costs for health care through payments is supported by the "healthier" segments – young people, university students, men, people with higher income, entrepreneurs, specialists. On the other hand, in favor of coverage of costs through taxes are students, university educated people, but also manual workers. (Source: http://www.ineko.sk/projekt_verejna_mienka.htm)



4. A Vision of Health for Slovakia

4.1 CONCLUSIONS

HHealth is generally perceived as the essential value of human development and human life. The health status of an individual is formed by factors of social, economic, and general environment. The health determinants discussed in the previous chapters allow for a better understanding of the current condition and also for a brief outline of further development of public health in Slovakia.

The development of the health condition of Slovakia's population over the last 50 years has been affected by dramatic historical events that resulted in sudden changes of economic, demographic, and psychosocial factors. The long-lasting totalitarian system created a specific situation in which risk factors came to the foreground that were not prevalent in democratic societies. The unfavorable effects on the health of the population has been the result of a number of psycho-social factors, such as chronic stress, mental tensions, frustration, depression, hopelessness, and apathy that induce the emergence of cardiovascular and neoplastic diseases and further weaken the performance of the immune system. An important role in increasing cardiovascular and oncological mortality may stem from oxidation stress due to overproduction of free oxygen radicals in the population that lived in a degraded working and general environment, with high consumption of cigarettes and distilled spirits, and low intake of substances with antioxidant activity from a diet deficient in fruits and vegetables.

Political turbulence has been unusually intensive since the political changes of 1989. The less educated portion of Slovakia's society has more problems adjusting to the conditions of a market economy. Because of emergence of new phenomena such as high unemployment rates, income inequality and political instability, the number of frustrated, hopeless, and hostile individuals in Slovakia have grown. Educated and democratically oriented citizens have better preconditions to understand opportunities to influence their health condition by their own actions. On the other hand, poorly educated citizens succumb more easily to the pressure of totalitarian power and become passive even with respect to their own health.

The situation in education is contradictory. The number of university students is increasing, which should be considered positive from the viewpoint of health; however, there is also a marked growth of those who finish their studies after having completed elementary school. Education on one's own health, including healthy nutrition, exercise, refusal of smoking, alcoholism, drugs, coping with stress, etc., is not sufficiently incorporated into the curricula of schools.

A high number of individuals with elementary education are also of concern due to unemployment rates. It is generally acknowledged that most unemployed are among individuals with only elementary education. The negative impact of unemployment upon health is apparent; Slovakia's top position in unemployment ranking of transition countries can certainly not be regarded as satisfactory from the viewpoint of employment or health impact. Inevitable restrictive measures in the economy will affect the purchasing power of the population; hence, in terms of socio-economic determinants, no excess of positive impulses should be expected.

The level of education and training co-determines lifestyle patterns. International comparisons reveal relatively high consumption of concentrated alcoholic beverages and cigarettes in Slovakia, notably among individuals with lower levels of education. Changes in the price structure of foods improved the structure of the population's diet, with the exception of a drop in milk consumption; consumption of butter has dropped and consumption of vegetable oils with high vitamin E contents, of vegetables, fruits and mainly southern fruits have increased.

The environment, considered as the most negatively impacting health determinant in the early 1990s, is gradually becoming one of the determinants showing a positive trend. The availability of safe drinking water and the quality of air keeps increasing. The most important problem concerns insufficient proportions of wastewater treatment and growing levels of noise due to traffic. Indicators of the working environment are mostly positive. It is difficult to estimate to what extent this may be due to high unemployment rates and the disappearance of several, high-risk workplaces.

The demographic determinants are dominated by rapidly decreasing natural increments, moderately growing life expectancy, and gradual population aging. It is highly probable that such development will imply higher health care costs.

The Slovak health care system is in a crisis that has several dimensions (financing, quality, management, human resources). The system cumulates debt and financial injections using privatization revenues, which is not the solution to its financial problems. The generated debt and its monthly growing

value could result in the collapse of the whole system; the patient does not play a substantial role in the system. The system is a burden because it provides unbearable financial protection to participants of the system. This applies to health insurance funds, state-owned inpatient facilities, and patients. However, money for such financial protection is not available.

The fully reinsured patient does not even receive services, for which funds are available, because such funds are allocated in an inefficient way. The extensive Rules of Medical Procedures and missing financial participation by the patient often result in abuse of the system by patients and health care providers. Although there is an excess of supply, demand is still growing, which is an economic paradox. The existing arrangement nurtures daily mass-scale corruption as well as very dangerous "sophisticated corruption," which involves relatively few people.

Preventive influence has a low share, although prevention represents the most efficient investment into health in economical terms. Health is perceived as a key component of life, however, people's approach to their own health does not always respond to this fact.

Improvements in the health condition of the population will not only be dependent on positive changes in the organization of health care provision, but also on the overall development of the society, which shall give citizens the hope of gradual improvement of their social and economic situation.

4.2 VISION OF HEALTH

The basic idea of the human development concept refers to broadening of opportunities and chances to live a long and healthy life, to become educated, and to enjoy a decent standard of material assets. Health condition improvement as a prerequisite of a longer and fulfilled life thus represents an ultimate goal of the concept. It is based on the interaction between health and other dimensions of life, such as education and standard of living.

What can be done in favor of this goal in a country at a developmental stage such as Slovakia has achieved? It was emphasized in the preceding chapters that health is not a constant value – it is a value that changes over time and space. In countries at a lower level of development health is mainly an issue of inadequate or non-existing choice, whereas in developed countries it is rather an issue of correct or incorrect choice. Despite a number of deficiencies, Slovakia belongs to countries at a level of human development where health is determined by choice rather than by its absence.¹²²

There are relatively marked regional differences in health condition. The existence of such disparities confirms that health is the end result of a number of determinants rather than solely a result of public health care, which is virtually the same for all. In addition, other factors are part of the “game,” and they may most likely be of more significance than the medical services. This awareness is still absent in Slovakia and/or it is not being sufficiently emphasized. Reliance on public institutions and the weak willingness to assume responsibility for one’s own health are deep-rooted features among Slovakia’s population.¹²³ As a matter of fact, it is more costly, overall, to treat diseases than to prevent them by health-promoting behaviors. One of the greatest challenges with respect to the improvement of public health in Slovakia is to become aware of this relationship.

The formulation of steps that have potentially positive effects on health improvement is based on the knowledge of the status quo and of the effects of various determinants and risk factors. There are no simple guides; on the contrary, the comprehensive nature of the measures comes as the basic prerequisite of any positive change. Any successful change requires an optimal mix of changes in the behaviors of individuals, mechanisms, and institutions. The following recommendations suggest the complexity of the issue and the principal components that a change has to combine in itself. Certainly, this is not an exhaustive or unique list, but it offers space for further discussions concerning the widening of opportunities for a healthy and fulfilling life.¹²⁴

4.2.1 “Non-Health Care” Measures

- *Identification of Risk Factors.* The main causes of morbidity and mortality are generally known. Much more attention has to be focused on the study of risk factors that prompt the development of diseases. Identification of key factors requires a flexible utilization of the morbidity and mortality data, which enables a better assessment of the mutual relationships between health determinants, risk factors, and the health condition. Results of sophisticated epidemiological studies will be unavoidable for the formulation of priorities, to acquire information about lifestyles, diets, and health parameters of the various social groups of the population. To be able to assess the relationships in more detail, it would be useful to broaden the analyses to include also the regional level, to introduce and regularly monitor both the existing and the new parameters (e.g., concerning education, lifestyles). Since spontaneous demand for such activities and their outcomes cannot be expected on the part of the private sector, the initial initiative directed towards the identification, research and monitoring of influences harmful to health should come from public and non-governmental institutions.
- *Setting Priorities.* The economic reality determines the potential of the government, as well as that of the non-governmental and private sector, to focus their activities on the various opportunities and methods of health protection. Identification of risks with the strongest effects on human health may represent a good starting point for effective orientation on the measures. Discussions concerning the direction of the public health protection should be preceded by a consensus on the extent to which health promotion and protection are a societal priority, also with the account being taken of the use of public funds. One of the principles of the human development concept is based on the fact that whenever limited public resources are used (it should be understood that there will never be enough

¹²² Naturally, the basic determinants also include those which cannot be directly influenced by choice (e.g., genetic conditions).

¹²³ See chapter 2.1.1.

¹²⁴ The reason why suggestions were split into those connected with health in a broader context and such which have direct connection with changes in the health care sector was above all promotion of health perception through not only health services. This does not mean that the issues of health are understood separately; on the contrary, integrated approach rather than partial measures represents a precondition for positive changes.

of them) areas should be considered where investments are able to bring benefits to the largest number of people possible. Naturally, in many cases, individual health factors concern but a specific population group (such as tobacco and smokers), measures directed towards such a group may nevertheless have a significant effect upon the whole population – in particular when combined with other measures (such as nicotine-containing chewing gums and ban on smoking in public spaces). The World Health Organization recommends comparing costs and effects of interventions to identify priorities (see also box 4.1).

- *Prevention of Risk Factors.* Prevention of harmful effects to health is associated with changes in attitudes and habits, i.e., in behaviors in the broadest sense. According to domestic and international analyses, the fight against smoking and changes in dietary habits remain among the primary prevention priorities. Independent experts agree that inadequate quantities of fresh fruits and vegetables, dairy products, fish are consumed by Slovakia's population as part of the structure of their diet, whereas excessive amounts of animal fats, sugar and alcoholic products are consumed.¹²⁵ Opportunities to influence changes in dietary habits reside in a combination of health education, enlightenment, advertisement, as well as restrictive measures, such as raising the excise taxes on selected types of foods. Smoking and tobacco consumption is not only associated with deep-rooted traditions but also with a strong industrial sector and interest groups. In many countries, legislative measures that restrict or prohibit smoking in public spaces and buildings, so-called negative advertisement, and above all high excise taxes on tobacco products have proven as successful interventions. Some countries have completely banned advertising of tobacco products. With respect to smoking prevention, the function of education and enlightenment (family, school, media, etc.) appears to be unsatisfactory. Healthy regimens include additional interventions such as fighting excessive alcohol consumption, drug addiction, and other dependencies, improvement of personal hygiene, physical activities, protection against excessive sun radiation, etc. The financial responsibilities of those who behave in ways that result in health distortions, thus increasing the costs of health care, but being tolerated by the society, will have to be enhanced. The risk of unprotected sex, which still remains the major reason for the pandemic of AIDS, should not be underestimated as well. The presently low rates of the infection in the country may not be sustainable, in particular because of the expected free movement of persons within the enlarged European Union, as well as in the view of the recent explosion of HIV/AIDS in the Ukraine and Russia.

Preventive measures may build on numerous existing programs and projects directed towards health protection (such as the WHO projects Health Promoting Schools, Healthy Towns, Healthy Workplaces, CINDI, MONICA, Global AIDS Prevention Program).

- *Increased Availability of Information to the Public.* Tightly connected with prevention is the understanding of the effects of risk factors. People need more intelligible information concerning the pros and cons of behaviors that have direct impact upon their health, morbidity, and mortality. Such information should reflect recent knowledge of science and research, as well as experiences from successful and failed measures – and should be adequately communicated to all age and social groups. Information includes a wide range of activities, including health education, counseling, community programs, research projects, advertisement and promotion, etc.
- *Development of Health Determinants.* This concerns a package of measures termed health determinants.¹²⁶ The explicit objective of a majority of them is not improved health; they nevertheless account for a significant portion of the resulting health condition of an individual. Investments into health which the determinants bring in – be it a direct or indirect effects – represent in turn a stimulus for the development of these areas (improved health condition of the population has a positive effect upon, e.g., economic growth and reduction of poverty). Areas such as economic development, education, labor market, social system, poverty reduction and social inclusion, environment, housing, genetics, the public health system are all among the priorities with

Box 4.1

Recommendations of the World Health Organization

The authors of the World Health Report (WHO, 2002) state that focusing on prevention means focusing on risk factors of health. WHO invites to lay stronger emphasis on identification of problems, formulation of priorities and improved access to information about health risks. Connected to this is strengthening of the research of risk factors, defining key risks, formulation of strategies and measures to prevent such risks, with account being taken of their cost-efficiency. The management and reduction of the major risk factors – tobacco, alcohol, high cholesterol levels, high blood pressure and obesity – and thus also of diseases they cause, will have a positive effect upon reduction of premature mortality and extension of healthy life expectancy. Such measures have undoubtedly effects on the economy of the country and equality of chances, and support sustainable development. (Source: *World Health Report 2002. Reducing Risks, Promoting Healthy Life. WHO, 2002*)

¹²⁵ The ambition of this publication is not to defend a certain method or content of nutrition. The opinions on the structure of the diet shown frequently appear in professional discussions on dietary habits.

¹²⁶ See also chapter 3.2 Determinants of health.

respect to health. Positive developments in several of the areas mentioned in Slovakia are dependent upon inevitable reform steps (in particular, the pension system, the social system and the public health system).

4.2.2 Health Care Reform

Challenges of the Health Sector Reform

The success of the health sector reform is conditional upon factors, which may also be referred to as the driving force or reform challenges. In terms of the Slovak health sector, challenges connected with the expectations by the people, costs of health care, and the ability of individuals and the society to pay for the latter appear as the key ones. To be able to successfully manage the reform, adequate responses to the aforementioned challenges will have to be sought (see Table 4.1).

Table 4.1

Major Challenges of the Reform

Challenges	Responses
Growing expectations	Reduction of expectations
Increasing costs	Improved efficiency
Limited ability to pay	Mobilization of resources

Source: Pažitný – Zajac (2002).

From the economic point of view, health care is a luxury asset; the demand grows more rapidly than revenues. Economic growth in several countries raises the pressure upon the provision for the functioning of health systems. The growing expectations not only influence the demand for health care but also its structure. Naturally, patients request the best health care, the most recent technologies, and the most recent drugs possible. Such expectations have a special influence in a climate in which the standard of health care is inadequate with respect to the relatively high tax and payroll burden and the high degree of redistribution of resources, and where reform steps are missing over many years. This influence is further reinforced by the fact that people attribute an importance to medical care beyond its real influence on their health condition.

The increasing costs of the health sector are influenced by growing expectations as well as by factors connected with demographic development (population aging), changes in the structure of diseases (increasing proportions of epidemic, chronic and civilization diseases), as well as by the introduction of new technologies.

The ability to cover the increasing costs of the health sector is limited on the part of both the public and the private sector. This ability to pay decreases in an environment of unsustainable deficit financing of the system. International financial institutions make assistance to governments in the restructuring of health systems conditional upon stopping the growth of debt and upon control of government spending. Private sector entities are naturally reluctant to pay higher taxes and contributions to health care. When it comes to the citizen, the issue concerns the discrepancy between the growing expectations and the willingness to participate in the growing costs by direct payments or higher taxes (see also box 3.10).

Chapter 3.3 pointed out the main reasons and consequences of the health sector crisis in Slovakia. The majority of what has been said is notoriously known; other aspects have appeared in recent years. The text below contains, in a concise form, the draft reform of the health sector¹²⁷, which the new Minister of Health also relies upon¹²⁸. The draft presents the opinions of the authors on the solutions to problems in the health sector in Slovakia. This is not a binding document, which would be reflected in the legislation of the country. Specific reform measures may thus partly differ from the suggestions. The authors of the suggestions take a significant part in the drafting and the implementation of the reform.

The draft reform is based on the respect of three critical relations:

1. Strengthening the relationship between what the citizens contribute to the system and what they receive in return;
2. Strengthening the motivation of providers by remunerating the service, and by remunerating better service higher than worse service;
3. Reinforcing the responsibility of every entity within the system to individually assume their risks.

¹²⁷ Pažitný, P. – Zajac, R.: Strategy of the Health Sector Reform – A Real Reform for the Citizen. MESA 10, Bratislava (2001).

¹²⁸ Rudolf Zajac, Minister of Health of the SR (since October 2002).

Defining the Statutory Entitlement to a Defined Standard

The critical element of health care system reform is a clear definition of the scope of uninsurable risks. The uninsurable risks mean the basic benefit package (BBP), to which each citizen of the SR shall be entitled and which shall be covered from public funds, according to the solidarity principle. The rest will be other services, which shall be subject to fees, additional charges, and voluntary insurance.

□ *Change in the Rules of Medical Treatment.* The Rules of Medical Treatment are the most discussed cause of the crisis in health care. The reform envisages the division of the Rules of Medical Treatment into services within the basic benefit package (also referred to as the so-called uninsurable risk) and services within various packages of voluntary services. The basic package shall include those diagnoses and the related preventive, diagnostic and treatment activities, which shall be fully covered for the patient from statutory insurance. The package shall include:

1. All preventive activities, such as vaccinations, mandatory preventive examinations and screening methods leading to prevention or early diagnostics of serious illnesses;
2. All diagnostic activities leading to a proper diagnostics of illnesses listed in the BBP category;
3. All treatment for the set diagnoses.

The voluntary services package shall include expediting of planned surgery, additional fee for a more expensive drug than the one included in the basic package, additional fee for higher quality board and accommodation and services at sick-bed, cosmetic surgery, contraceptives and abortions, voluntary prevention, and other.

It is assumed that the regions shall have the right to modify its legislation with some stipulations of the Rules of Medical Treatment, mainly through "betterment" for their citizens or in such cases where the local situation shows the need of a more flexible approach to the national legal standard.

□ *Prevention.* This is an important part of funding services, while the thesis "prevention is always cheaper than cure" applies to its maximum extent. The method of funding prevention has to be redesigned and it needs to be defined, which part and what scope of prevention shall be included in the basic package. In general, we can divide prevention into three components:

1. Primary prevention – the effort to prevent the occurrence of a disease;
2. Secondary prevention – the effort to early detect the occurring disease;
3. Tertiary prevention – treatment and rehabilitation, reducing the suffering.

Primary prevention has long been identified with vaccination. In fact, it should contain at least vaccination, state health supervision, and promotion of health. A list of mandatory and recommended vaccinations shall be drafted, and the vaccination provided by the primary ambulatory care on the basis of inviting clients. Mandatory vaccinations shall be covered within the basic benefit package. The current scheme of state health institutes should be transformed to a new system of public health institutes, supplemented by a Health Promotion Fund, which would cover activities of state health care policy and the National Health Promotion Program. This systemic change is expected to introduce higher flexibility, transparency, and competitiveness into state participation in preventive measures.

Secondary prevention is already a full component of the treatment-prevention process. Its most important component should be screening. A list of screening examinations according to age and sex will be a part of the basic package, and these examinations shall be fully covered by the purchasers (e.g., health insurance companies).

□ *Urgent Medical Service (UMS).* In case of need of urgent medical service, such as accidents, injuries, sudden life threatening conditions, urgent medical service has to be ensured within the provision of health services. In general, it can be concluded that this service is actually a function of time and quality of the service provided. It is necessary to get the patient as soon as possible and provide the best quality of service. This is a typical uninsurable risk, which is fully covered within the basic benefit package. The organization and funding of UMS has to take account of particularities such as diverse organization of providers on the Slovak territory, diverse structure of the terrain, priority of time over regional set-up (as the patient has to be transported as fast as possible and as close as possible), and cooperation with other branches, such as fire department, police, mountain rescue, water rescue has to be ensured. The service must operate on a "stand by" principle. It should be organized as an independent provider, who will be financed centrally from a special fund, with respect to the said particularities.

Financing of Health Care

Financing corresponds with all processes and institutions by which the funds to cover all activities related to the provision of health care are ensured. This includes taxes, contributions into health insurance funds, commercial insurance or direct payments and fees from patients.

The main aim with respect to financing health care is to ensure an appropriate financial protection to each citizen, meaning that when an individual needs and requests health care, he/she would not have to incur disastrous financial costs. The setup of the system will have to allow socially weaker groups that are not contributing to the creation of funds to benefit. At the same time, the system should not be discouraging due to a high level of redistribution. This means to strengthen the relation between contributions and benefits. From the point of view of mobilizing funds, it is therefore critical to define how many funds from which social groups shall be collected and for what use. This is possible only if the system of financing will be:

1. Stable in the long run in terms of stipulating the "rules of the game" for the collection of funds, which the State adjust frequently to its own possibilities;
 2. Independent from the State in financial terms, mainly from the taxation system (currently it is a mix of redistribution and social insurance);
 3. Adjusted to attract private funds.
- *Role of the State.* The draft reform envisages the role of the State in the funding of health care to be significantly restricted in future. Through redirecting the current financial flows (directed from the State Budget to the Ministry of Health and the health insurance fund), one of the significant corruption points shall be eliminated and the transparency of financing substantially enhanced. In particular, the State shall be relieved of the obligation to pay for the economically inactive insured persons, the capital expenditures will be abolished and the budget of the Ministry of Health shall be significantly restricted. At the same time, the State shall be relieved of its obligation to pay to the National Labor Office for the registered unemployed. Thus, the State will lose control over changing the rules of the game "on the way". The entire system of financing shall become autonomous, while the State shall fulfill these basic functions:
1. It shall stipulate in the Rules of Medical Treatment the principles of solidarity by stipulating the contents of the basic entitlement;
 2. It shall stipulate the percentage of contributions for mandatory health insurance;
 3. It shall take over the function of financial reinsurance in case of extraordinary events;
 4. It may on precisely defined conditions for a defined period of time intervene in case of failure of the system in the region (institute of temporary mandatory administration);
 5. It shall pay insurance dues only for its employees, just like any other entity.
- *Reduction in the Rules of Medical Treatment.* When reducing the current scope of the Rules of Medical Treatment, two necessary conditions should be considered; the total volume of funds for health care shall not be increased while focus should be primarily on changes in the structure of financial flows, and, secondly, the tax burden and insurance contributions shall not increase.
- *Introduction of Financial Involvement of Patients with Appropriate Protection of Vulnerable Groups.* The main effect of the introduction of symbolic payments shall be the reduction of demand and awareness that health care is not free of charge. Payments will include payment for hospital diet, payment for accommodation in hospital, payment per prescription of drug, extra fee for transport service, and others.
- Payments shall relate to services provided within the basic benefit package. It is, therefore, possible that there will be situations where the patient (e.g., in material distress) will not be able to pay for these services. The system will have to include targeted assistance to those who are in real need of it. The extent of this type of solidarity shall be subject to ongoing discussion. Activities of charity organizations and foundations shall supplement this scheme.
- *Pluralism and Competition of Purchasers of Health Care Services.* Sound competition is an inevitable precondition of an efficient provision of services. The current pluralistic system of health insurance funds should be transformed into a pluralistic system of purchasers of health care services. Three areas influencing the competition of purchasers appear as decisive:

Box 4.2

Distribution of Financial Risk

There are basically two different health insurance systems applied throughout the world. The first is based on net health risk and is applied e.g. in the USA. The premium amount is set individually according to the health condition, age and other factors of health. This system faces two main problems: risk selection and adverse selection. Such a setup results in high efficiency and quality, however, with 20 percent of the population being not insured. Solidarity is rather low.

The second system, which is being applied also in Europe, is based on the level of the wage. Instead of the health risk, premium amount is set by the wage (with both lower and upper limit). This system is typically less efficient, with a high degree of solidarity, which leads often to the problem of moral hazard.

Since financial protection is one of the main aspects of health care reform in Slovakia, the system will remain based on the wage level.

1. *Collection of Funds.* The collection of funds will be decentralized, which means that every purchaser of services shall collect insurance contributions from citizens and business entities independently. The term written premium shall be introduced.

2. *Redistribution of Funds.* This means a more efficient redistribution mechanism and the even distribution of public funds to the regions. In order to meet this precondition the following approach shall be applied:

- the redistribution of funds will be based on the volume of written premium;
- the internal structure of the purchaser can consist of one headquarters responsible for the collection of funds and regional branches responsible for the allocation of funds;
- the redistribution mechanism within the SR (according to the risk index) among various central purchasers of services shall set off the differences between individual age (risk) groups within the SR (in case of a purchaser operating only in one region, then redistribution within the region);
- the central purchaser shall allocate to its regional branches – regional purchasers, funds according to the structure of clients (insured persons) in the region, depending on the risk index;
- the regional purchaser shall purchase services from providers for his clients on the territory of the entire Slovak Republic without limitations.

In this manner, it will be ensured that within the solidarity in financing of BBP there will be the same amount of funds available for each citizen with the same risk index in the entire SR. This will eliminate the current negative effect of capital transfers from the State Budget related to the non-standard operation of health insurance funds, which caused a significantly uneven and often discriminatory regional redistribution of funds.

3. *Use of Funds.* The pluralism of purchasers is meaningful only if there is real competition among them. Competition can be achieved only if the purchasers will bear financial responsibility and risk.

- ❑ *Reinsurance.* When defining the tasks of the State, the function of reinsurance was mentioned. This would be a quasi insurance of purchasers in case of covering extreme costs related to the outbreak of certain disasters or epidemics, which would significantly, and, in short term, affect a substantial part of the client portfolio of the purchaser without his fault.
- ❑ *Private Funds.* Private funds play an important role in the system we propose. Without them it is impossible to ensure efficiency and quality. Attracting private funds is possible in several ways:
 1. Developing a functional system of voluntary health insurance, where independent purchasers of services will be allowed to operate;
 2. Granting tax relief to entities providing funds or donations to charity organizations;
 3. Introducing financial involvement of patients.

Box 4.3

Proposal of a Funding System

A precondition for the introduction of this system is that each citizen of the SR had a personal account. The proposal rests on a two-pillar system of funding health care services. The first, mandatory pillar of the new funding system should be the so-called public funds of the citizens (health insurance). These funds will cover the costs of providing the legal entitlement to all citizens, which is guaranteed by the Constitution in the system of mandatory health insurance and they shall be available to the purchasers of services.

The second pillar will be the so-called private funds from the citizens. The citizens will decide to pay extra beyond the framework of the basic statutory entitlement through commercial health insurance companies, providing voluntary health insurance or through direct legal payments to the providers. The border between mandatory and voluntary health insurance will be given by the amount of the statutory entitlement to the defined standard.

Payment Mechanisms and the Distribution of Risk

Payment mechanisms include all processes and institutions through which individual providers of health care are remunerated. The payment mechanisms create important incentives, to which the providers react sensitively. A critical element of an economically viable system of providing health care services is an appropriate system of payment, based on the incentive factors ensuring sound competition.

A first precondition of developing such a system is the guarantee that the profits from such better remuneration can be kept; on the other hand, the risk of loss has to be borne by themselves. The second precondition is the guarantee that higher performance and service quality ensure the provider a better remuneration and vice versa. This is a very strong motivating element that would lead to a significant increase in efficiency.

- ❑ *Distribution of Financial Risk in the Funding of Health Services.* The proposal is based on the introduction of the institute of a purchaser with an active purchasing policy and on the transfer of a part of the risk to the provider. The success of the purchaser depends on several factors:

1. The possibility of free choice of the health care provider (setting prices, quantities, and qualities) for their clients;
2. Transparent relations with the insured or the State ("how much will I receive and for what");
3. Clear assumption of financial risk (profit and loss);
4. Equal opportunities with other purchasers (applies mainly to the emerging purchasers).

The current health insurance funds do not by far resemble active purchasers of health care services. Given the various possibilities that are usual in the world, (purchaser is e.g., ministry, state insurance fund, local self-administration, regional insurance company, or even provider), an optimal option for Slovakia would be the transformation of the purchasers from the current health insurance funds, to be joined by new ones later. The purchasers will have to observe principles such as solidarity in the portfolio of insured, pressure on providers of services, ensuring solvency and control over the finances.

- ❑ *Basic Rules of the Payment Mechanisms.* Finances have to be considered one of the critical tools to achieve efficiency of the services provided on condition of applying the general economic rules that will be favorable for the patient. The principal factors necessary to achieve efficiency in the provision of health care service include:
 1. The statutory entitlement shall be clearly defined for the defined standards (basic benefit package). From the point of view of the purchaser then the legal standard is the lowest possible price at which he shall agree to the provision of service on the providers' market, and it shall be applicable to all contractual providers of the given purchaser. This does not mean that the provider must not surpass this price, but he shall cover it from his own funds.
 2. The providers shall cover the agreed services to each other, i.e., the supplier-customer relation shall apply.
 3. All providers will be equally subject without any exception to the law of the SR, applied in the business sector, such as the Commercial Code, the Civil Code, the Bankruptcy and Settlement Act, the Labor Code, the Accounting Act, tax legislation, etc.
 4. Providers shall be autonomous and independent of the state sector of management and equal opportunities for all entities, as guaranteed by the Constitution, shall be respected.
 5. The profit generated by the providers shall be subject to tax according to the same rules as apply in the business sector. Tax exemptions shall be possible only on condition of investing profits into the scope of business – i.e., the provision of health care services and for a limited period when using the profits to repay debt from previous periods.
- ❑ *Remuneration of Providers and Payments for Services Provided.* A change in the entire system of the payment mechanisms lies in the respect of the principle that the activity has to be measurable and that better service has to be paid better. Forms of payments for the individual segments of the provider network shall be related to their efficiency and performance, and at the same time take into account their specific conditions.
- ❑ *Profit as the Main Motivation Function.* Providers even today behave in a way allowing profit generation, however the profit appears in another form. It is mainly the generation of personal profit, through personal rent or informal payments. Similarly, the providers reduce their cost in an undesirable way, by not providing services, which is reasoned to be consequence of the lack of funds.
- ❑ *Contractual Relations Between the Purchasers and Providers.* The purchasers will conclude contracts with their clients – the citizens on precisely defined conditions, and, at the same time, they shall conclude contracts with the providers.

Organization of Health Care

Providers mean all the participants in the process of providing health services. They can be divided into two basic groups:

- a) Outpatient care (outpatient treatment, or day sanatoria);
- b) Inpatient care (facilities of all kinds).

It is clear at first sight that this very broad division will not be sufficient, because there is an entire complex of participants in the system of providing health services, who are somehow involved (referring mainly to the public pharmacies, suppliers of drugs, special medical materials for health care facilities, suppliers of energies, food, etc.).

- ❑ *Equal Autonomy, Equal Responsibility and Equal Opportunities for the Providers.* Providers of health care have to be autonomous just like other business entities, and they have to act at their own responsibility and risk. This condition is prevented by the heritage of socialism, mainly the high involvement of the State in the ownership structures and management. Equal rights and obligations

of providers mean that all entities shall have the same conditions and same chances. The draft reform rests on the following steps:

1. *Deetatization of Property*. This will be performed by transferring all current state-owned property used to provide services to the ownership of self-governing regions.

2. *Transfers of Competencies and Development of an Elastic Network*. The regions have to have the right to establish their own facilities. The regional services shall be co-developed by regional purchasers of services based on efficient availability. The region shall be responsible for the provision of health services to the extent to which it retains the ownership of the providers. There will definitely be differences in the structure of the network throughout the regions.

□ *Legal Capacity of Individual Entities*. One of the first preconditions of a change in health care – shift from hierarchical structures to a contractual system – is a clear definition of the competencies of the providers. The term competency includes the rights and obligations of individual segments in the network. In order to achieve the desired state, it is necessary to:

a) make providers independent – provide exactly the same extent of autonomy as is offered to other business entities;

b) make the purchasers of services independent;

c) allow the citizen a real free choice of doctor, facility and purchaser.

The autonomy of providers, clearly defined rights and obligations, the elimination of various protection mechanisms – these are the means to force the provider to assume that part of the risk which is related to his activity.

□ *Reduction of Inpatient Facilities*. The Slovak Republic has a surplus of beds and entire facilities. In order to achieve efficiency, it will be necessary to downsize entire units. The only criterion of the required optimization of the number and size of facilities has to be the economy. Regional purchasers and the region as the first owner of all formerly state-owned facilities on its territory will become an important component able to manage this task. The region shall have the responsibility for respecting legal standards applicable on the entire territory of the Slovak Republic.

Regulation, Powers and Responsibilities of the Individual Entities Involved

Responsibilities and competencies are one of the most powerful instruments available to the State in its efforts to influence and control the behavior of financial intermediaries and to set the rules of the game for providers.

According to the draft reform, solvency and cash flows (including redistribution) of purchasers will be checked by the Financial Market Office. This authority will be financed from the mandated fees of purchasers.

The Office of Supervisory over Health Care will carry out ex-lege medical control of providers. The owners will check how the respective providers manage assets. The purchasers will check the legitimacy and delivery of services requested by patients. The Supervisory Office will also monitor human health (hygiene and epidemiological conditions, etc.).

Box 4.4

Health Care in the Program Declaration of the Government (November 2002)

With respect to social policy, the government promises to undertake an extensive and principal reform of the pension system, health care sector, and partially also of the education sector.

The main aims of the health sector reform include introduction of contractual relationship between health care facilities and health insurance funds, shifting the focus from inpatient treatment to outpatient care, one-day surgery, introduction of voluntary health insurance, change in the categorization of medicines, stopping the growth of indebtedness commencing 2004.

Table 4.2*The Roles and Competencies of the Individual Entities Involved*

Entity	Role and Competencies
State	<ul style="list-style-type: none"> - Legislation - Methodology - Introduction of a control/audit system - Accession processes and accession funds - Provision for the establishment of grant agencies - Payments on behalf of its employees - Reinsurance of purchaser against "vis major" and the competencies of "forced receivership" under pre-defined circumstances
Regional state administration / Regional authorities	<ul style="list-style-type: none"> - Responsibility for the ownership of state-owned providers as part of the transfer of assets from the State to regions - Contribution to the set-up of a regional network - Financing of regional health development programs as above-the-standard service offered to its citizens
Purchasers	<ul style="list-style-type: none"> - Collection of revenues from economically active population within the scope of financial solidarity - Allocation of funds on the principles of solidarity and risk indexes - Placement of financial pressure on the network of providers - Making contracts with citizens and providers - Price negotiation - Contribution to and involvement in the preparation of payment and remuneration mechanisms - Specification and clarification of redistribution on the principle of risk indices
Providers	<ul style="list-style-type: none"> - Provision of health services - Price negotiation and pricing
Professional organizations	<ul style="list-style-type: none"> - Legislation drafting in co-operation with the central government and regional authorities - Regulation of the profession, mainly through obligatory registration and control of service delivery - Review of basic training programs - Preparation of programs for further education - Monitoring of the compliance with the training programs - Involvement in and presence at tests - Involvement in price negotiations with the purchasers of services - Representation on scientific boards and accreditation committees

Source: Pažitný – Zajac (2001).

Reform for the Citizen

Health care systems must serve citizens. The citizen – patient is the real customer of a health care system and the only real source of finances for providers, purchasers as well as state administration. The crucial overlapping principle of the submitted draft reform is the shift of responsibility from the State to all three areas of the healthcare system (patients, providers, purchasers). The priority role of the State is not to provide health services to citizens, as it is the case at present, but to guarantee statutory rights and their enforcement.

The essential long-term objective is to establish a health care system that would guarantee the provision of essential health care to every citizen not as the ultimate objective, but as a prerequisite of a meaningful and free choice. Health is a necessary prerequisite for a good-quality life.

The system, at the same time, establishes elements that raise individual's own responsibility. Thus, citizens get the option of free choice along with the responsibility for their choice. Increasing personal responsibility, the relationships between the means contributed and the benefits, of generation of resources rather than of their redistribution – all these constitute the necessary features of reforms, which Slovakia will have to manage within the shortest time possible to bring its social protection system to correspond better to the economic, social, and demographic reality. The social dimension of some of the measures cannot be overlooked; in combination with the reform steps in other areas (social support and assistance, labor market, pension system), they may enhance the worsening of the social situation in a portion of the population and the inability of those portions to adjust to the changes.¹²⁹ The actual

¹²⁹ This mainly concerns the vulnerable population groups including the poor (although this term has not yet been specified in the legislation of Slovakia), children, the homeless, lonely people, people with congenital health conditions, etc.

form of solidarity with those who will be dependent on some kind of assistance from the public or non-governmental sector has not yet been clearly defined. Several suggested measures may require corrections and adjustments to external conditions during their implementation (in particular to economic and social, less political conditions). The ongoing discussions on health care sector reform must not ignore this aspect. Vulnerable groups of the population are more likely to suffer from health disturbances and experience poor access to health services.

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Statistical Annex

HUMAN DEVELOPMENT INDICATORS

Note: Data provided by the Statistical Office of the Slovak Republic if not indicated other.

Basic indicators for HDI calculation for the Slovak Republic (2001)

Indicator	Measure	2001
Life expectancy at birth	years	73.4
Adult literacy rate	%	99.9
Combined primary, secondary and tertiary enrolment ratio ^a	%	74.91
Real GDP per capita	PPP\$ ^b	12,380

Note: a. Data for 2000. b. US\$ adjusted for purchasing power parity.

Partial indices and final HDI for the Slovak Republic (2001)

Indices	2001
Life expectancy index	0.807
Educational attainment index	0.916
Adult literacy index	0.999
Gross enrolment index	0.749
Adjusted real GDP (PPP\$) index	0.804
Human development index HDI	0.842

Source: Author's calculation.

Basic indicators for GDI calculation for the Slovak Republic (2001)

Indicator	Measure	Females	Males
Life expectancy at birth	years	77.60	69.54
Adult literacy rate	%	99.9	99.9
Combined primary, secondary and tertiary enrolment ratio ^a	%	76.33	73.55
Real GDP per capita	PPP\$ ^b	9,545	15,383

Note: a. Data for 2000. b. US\$ adjusted for purchasing power parity.

Partial indices and final GDI for the Slovak Republic (2001)

Indices	2001
Equally distributed life expectancy index	0,809
Equally distributed educational attainment index	0,916
Equally distributes income index	0,798
Gender-related development index GDI	0,841

Source: Author's calculation.

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Profile of human development

Indicator	Year	Value
Life expectancy at birth (years)	2001	73.4
Maternal mortality rate (per 100,000 live births)	2001	15.6
Population per doctor ^a	2001	272
R&D scientists and technicians (per 10,000 inhabitants)	2001	40.9
Tertiary full-time equivalent gross enrolment ratio (%)		
Total	2000	74.91
Female	2000	76.33
Daily newspapers (copies per 100 inhabitants)	2001	3,404
GDP per capita (in USD at current prices)	2001	3,790

Source: a. Expert estimate of the Statistical Office of the SR.

Profile of human distress

Indicator	Year	Value
Unemployment rate (%) ^a	2001	19.2
Youth unemployment rate (% , 15-24 years) ^a	2001	37.3
Adults with only primary education completed (as % of age 15-54 females / 15-59 males)	2001	20.8
Income ratio of highest decile to lowest decile of households	2001	4.65
Annual rate of inflation (%) ^c	2001	7.7
Injuries from road accidents (per 100,000 inhabitants)	2001	213
Reported homicides (per 100,000 inhabitants)	2001	2.4
Reported rapes (per 100,000 females aged 15-59)	2001	7.1
Sulfur dioxide emissions (kg of SO ₂ per capita) ^c	2000	22.2
Nitrogen oxides emissions (kg of NO _x per capita) ^c	2000	19.6

Note: a. Labor force surveys, annual average. b. Last month of the given period compared to the same month of the previous year (December). c. Data include stationary sources only.

Human development trends

Indicator	1995	1996	1997	1998	1999	2000	2001
Life expectancy at birth (years)							
Total	72.37	72.84	72.81	72.66	72.99	73.18	73.40
Female	76.33	76.81	76.72	76.71	77.03	77.22	77.60
Male	68.40	68.88	68.90	68.62	68.95	69.14	69.54
Maternal mortality rate (per 100,000 live births)	8	5	3	9	11	2	15.6
Population per doctor	315	320	294	286	283	265 ^a	272 ^a
Tertiary full-time equivalent gross enrolment ratio (%)	19.4	20.8	22.5	23.6	25.10	26.72	...
Real GDP per capita (PPP\$)	...	8,530	9,387	10,615	9,843	10,270	12,380
Public expenditures on education (as % of GDP)	5.10	4.97	4.53	4.28	4.35	...	4.17
Total expenditures on health care (as % of GDP) ^b	6.2	7.2	7.6	7.6	6.9	7.3	7.3

Note: a. Expert estimate of the Statistical Office of the SR. b. Source: Pažitný, P. – Zajac, R.: Health care. In: Marcinčin, A. (ed.): Economic policy in Slovakia 2000-2001. SFPA, Prešov (2002).

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Female - male gaps

Females as percentage of males	Year	Value
Life expectancy	2001	111.6
Population	2001	105.9
Duration of school attendance (full-time study)	2001	99.8
Secondary full-time enrolment ratio	2000	103.8
Upper secondary full-time graduates	2000	129.9
Tertiary enrolment ratio	2000	108.6
University enrolment ratio of all forms	2000	189.1
University natural and applied science full-time enrolment ratio	2000	64.9
Labor force	2001	83.2
Employment	2001	84.7
Unemployment	2001	82.6
Wages	2001	75.0

Status of women

Indicator	Year	Value
Life expectancy at birth (years)	2001	77.6
Average age at first marriage (years)	2001	23.8
Maternal mortality rate (per 100,000 live births)	2001	15.6
Secondary enrolment ratio of women (%)	2000	83.5
Upper secondary full-time study graduates (as % of females of normal graduate age)	2000	74.6
University enrolment ratio of women (%)	2000	22.4
University full-time enrolment ratio of women (%)	2000	18.6
University natural and applied science full-time education (as % of females of normal graduate age)	2000	49.5
Women in labor force (as % of total labor force)	2001	45.4
Administrators and managers (% females)	2000	31 ^a
Parliament (% of seats occupied by women) ^b	2001	19.3

Note: a. Source: UNDP: Human Development Report 2002. New York (2002). b. Data represents 29 female MPs (September 2002 parliamentary elections).

Demographic profile I

Population as of December 31	1960	1998	1999	2000	2001^a
Total	4,018,405	5,393,382	5,398,657	5,402,547	5,379,455
Women	2,052,126	2,769,690	2,773,531	2,776,486	2,766,940
Men	1,966,279	2,623,692	2,625,126	2,626,061	2,612,515

Source: a. Data from the Population and housing census, May 2001.

Demographic profile II

Indicator	1960 - 1996	1960 - 1999	2000	2001
Annual population growth (%)	0.96	0.88	0.07	0.00

Source: a. Expert estimate of the Statistical Office of the SR.

Demographic profile III

Indicator	2001
Dependency ratio (ratio of pre-productive and post-productive populations to productive population, in %)	58.45

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Demographic profile IV

Indicator	1996	1997	1998	1999	2000	2001
Total fertility rate	1.471	1.430	1.378	1.329	1.278 ^a	1.200
Number of women using contraception	189,449	231,666	282,281	305,824	324,149	351,500 ^a
Share of women using contraception at fertile age (%)	13.27	16.13	19.57	21.11	22.33	24.21 ^a
Population aged 60 and over (%)	15.21	15.24	15.30	15.39	15.52	15.69
Life expectancy at age 60 (years)						
Total	18.08	18.14	18.02	18.16	18.16	...
Female	20.35	20.34	20.29	20.48	20.44	21.17
Male	15.81	15.93	15.76	15.84	15.90	16.51

Source: a. Expert estimate of the Statistical Office of the SR.

Health profile I

Indicator	1995	1996	1997	1998	1999	2000	2001
Deaths from circulatory system diseases (as % of all causes)	55.09	54.45	54.72	55.93	54.71	54.97	55.20
Deaths from malignant cancers (as % of all causes)	21.55	21.74	21.67	23.02	22.78	22.63	22.84
AIDS cases (per 100,000 inhabitants)	0.20	0.20	0.35	0.35	0.44	0.52	0.56 ^b
Regular smokers (%)							
Males	...	40	...	39 ^a	38 ^a	38 ^a	37 ^a
Females		17		19 ^a	20 ^a	21 ^a	22 ^a
Public expenditure on health (as % of total public expenditure)							92.3

Source: a. Expert estimate of the Statistical Office of the SR.

Health profile II

Consumption of selected foodstuffs and tobacco (per capita/year)	1970	1980	1990	1997	1998	1999	2000	2001
Alcohol (liters of pure alcohol per adult)	13.9	15.6	14.9	12.0	10.7	10.7	8.9	8.7
Tobacco (pieces of cigarettes per adult)	2,193	2,580	2,329	2,193	1,951	1,987	1,972	1,981
Coffee (kg)	0.7	1.5	2.2	1.9	1.8	2.5	2.7	2.5
Meat and meat products (kg)	60.3	75.8	84.0	66.1	65.9	65.0	60.9	58.7
Milk and milk products (kg)	194.4	211.3	226.3	161.8	162.5	161.4	160.2	161.8
Butter (kg)	4.3	6.1	6.4	2.9	3.1	3.0	2.7	3.0
Vegetable fats and oils (liters)	6.5	8.4	11.9	17.0	16.6	16.9	18.3	18.4

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Education profile

Indicator	1996	1997	1998	1999	2000	2001
Enrolment ratio for all levels FTS (% age 6-22)	72.26	72.56	73.58	73.75	73.87	...
Upper secondary full-time enrolment ratio (%)	91.83	89.94	88.67	78.59	76.30	...
Upper secondary technical enrolment ratio FTS (as % of total upper-secondary)	40.27	39.18	37.98	38.40	36.18	...
Tertiary full-time enrolment ratio (%)	16.43	17.31	18.54	18.84	19.61	...
Tertiary natural and applied science enrolment FTS (as % of total tertiary)	65.72	64.82	65.09	63.27	64.13	...
Expenditures on tertiary education (as % of all levels)	12.28	...	13.97	14.10 ^a	...	...
Expenditures on higher education (as % of GDP)	0.59	...	0.60	0.61 ^a	...	...
Public expenditures per tertiary student (USD)	1,331 ^a	...	1,345 ^a	1,350 ^a	...	1,238
Total expenditures on education (as % of GDP)	5.07	4.75	4.50	4.52 ^a	...	4.17

Source: a. Expert estimate of the Statistical Office of the SR. FTS – full-time study.

Human capital formation I

Indicator	Year	Value
Scientists and technicians (per 1,000 inhabitants)	2001	2.96
R&D scientists and technicians (per 10,000 inhabitants)	2001	40.90
Expenditures on research and development (as % of GDP)	2001	0.65

Human capital formation II

Indicator	1996	1997	1998	1999	2000	2001
Upper secondary graduates FTS (as % of population of normal graduate age: 17 years)	55.97	60.14	62.31	61.60	64.36	54.55
Tertiary graduates FTS (as % of population of normal graduate age: 22 years)	10.88	13.58	13.32	14.51	14.92	17.03
Science graduates (as % of all tertiary graduates) ^a						
Total	4.46	1.52	2.45	2.27	2.14	2.21
Female	3.09	0.96	1.61	1.58	1.63	1.70
Male	5.98	2.84	3.46	3.07	2.74	2.81

Note: a. Including part-time studies.

Employment I

Indicator	1998	1999	2000	2001
Labor force (as % of total population)	46.2	47.7	48.3	49.1
Percentage of labor force in				
Agriculture	8.2	7.3	6.7	6.1
Industry (including construction)	36.2	37.0	37.2	37.6
Services	51.5	52.5	55.9	56.2
Not defined	4.1	3.2	0.2	0.1

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Employment II

Indicator	1997	1998	1999	2000	2001
Future labor force replacement ratio (%) ^a	104	99	95	92	88
Real earnings per employee annual growth rate (%)	6.6	2.7	- 3.1	-4.9	0.8
Percentage of labor force unionized	43.1	35.9	32.3	28.9	21.5
Weekly hours of work (per employee in manufacturing)	32.3	33.0	33.1	33.3	32.4
Expenditures on labor market programs (as % of GDP) of which:	1.03	1.04	0.95	0.88	0.73
passive labor market policy measures	0.58	0.73	0.90	0.70	0.50
active labor market policy measures	0.45	0.31	0.06	0.18	0.23

Note: a. Number of population under 15 divided by one third of population aged 15-54 females (15-59 males).

Unemployment

Indicator	1998	1999	2000	2001
Unemployed persons (thousands)	317.1	416.8	485.2	533.7
Unemployment rate (%)				
Total	12.5	16.2	18.6	19.2
Female	13.2	16.4	18.6	18.8
Youth (15-24)	23.6	32.1	35.2	37.3
Male youth (15-19)	39.3	54.5	56.6	59.3
Incidence of long-term unemployment (as % of total)				
More than 6 months	67.1	68.0	73.5	75.3
More than 12 months	50.7	46.9	53.9	55.7
Unemployment benefits expenditure for registered unemployed (as % total public expenditures)	50.5	68.7	56.9	49.1
Ratio of unemployment rate of those with only primary education to those with tertiary education				
Males	12.4	8.7	7.7	10.5
Females	5.1	5.9	7.4	8.3

Natural resources

Indicator	1996	1997	1998	1999	2000	2001
Land area (thousands of km ²)	49,030	49,030	49,030	49,035	49,035	49,035
as % of land area:						
Agricultural land	49.8	49.8	49.8	49.8	49.8	49.8
Arable land	30.1	30.0	30.0	29.8	29.6	29.6
Permanent grassland	17.2	17.2	17.3	17.5	17.7	17.7
Non-agricultural land	50.2	50.1	50.2	50.2	50.2	50.2
Forest land	40.6	40.7	40.8	40.8	40.8	40.8
Agricultural land (km ²)	24,456	24,444	24,415	24,422	24,407	24,407
Irrigated land (as % of agricultural land)	1.5	1.2	2.2	1.8	3.8	4.5

Trends in economic performance

Indicator	1997	1998	1999	2000	2001
Real GDP change (%)	5.6	4.0	1.3	2.2	3.3
Foreign trade balance (as % of GDP)	- 10.2	- 11.0	- 5.5	- 4.6	- 10.4
Annual rate of inflation (%)	6.1	6.7	10.6	12.0	7.3
Consumer price index (%) ^a	109.0	116.3	128.6	144.0	154.6
State budget deficit (as % of GDP)	- 2.5	- 2.6	- 1.8	- 3.1	- 4.6
Gross foreign debt (as % of GDP, cumulative)	48.5	55.9	53.4	56.3	55.0
Absolute (in USD million)	9,896	11,902	10,518	10,804	11,220
Inflow of foreign direct investment (as % of GDP)	1.1	1.8	1.6	1.6	19.1

Note: a. Previous year = 100. b. December 1995 = 100.

Source: Statistical Office of the SR, National Bank of Slovakia, Ministry of Finance of the SR.

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National accounts

Indicator	1997	1998	1999	2000	2001
GDP (SKK billion, current prices)	708.6	775.0	835.7	930.2	989.3
GDP (SKK billion, constant prices of 1995)	636.1	661.3	670.0	700.8	707.3
GDP (USD billions, calculated by the average exchange rate of the given period)	21.080	21.991	20.178	20.134	20.462
GDP per capita (USD)	3,916	4,079	3,740	3,728	3,804
Agricultural production (as % of GDP)	5.2	4.9	4.2	4.3	4.1
Industrial production (as % of GDP)	25.4	24.7	26.4	25.1	24.4
Services (as % of GDP)	53.3	53.6	53.6	56.4	57.2
Share of private sector in GDP (%)	80.1	81.0	83.3	83.6	83.7
Consumption (as % of GDP)					
Private (Households)	52.2	53.1	53.9	51.8	52.2
Government	20.7	22.2	20.3	20.1	20.4
Gross domestic investment (as % of GDP)	33.6	35.9	28.9	28.6	30.4
Gross domestic savings (as % of GDP)	7.7	7.9	6.7	7.2	5.8
Tax revenues (as % of GDP) ^a	35.5	34.3	32.8	33.5	30.2
State Budget expenditures (as % of GDP)	45.5	44.1	40.9	41.1	38.9
Exports of goods and services (as % of GDP)	56.1	59.2	65.4	74.2	74.0
Imports of goods and services (as % of GDP)	65.6	69.9	65.6	74.2	82.5

Note: a. Source: Tóth, J.: Fiscal policy. In: Marcinčin, A. (ed.): Economic policy in Slovakia 2000-2001. SFPA, Prešov (2002). Tax revenues on GDP according to the IMF methodology.

Environment

Indicator	1995	1996	1997	1998	1999	2000	2001
Municipal waste (tons per 1,000 inhabitants)	454	589	672	715	690	702	...
Emissions of sulfur dioxide (kg of SO ₂ per capita)	44.0	41.7	37.4	33.2	31.7	22.2	...
Emissions of nitrogen oxides (kg of No _x per capita)	33.7	25.9	22.9	24.1	21.8	19.6	...
Emissions of carbon monoxide (kg of CO per capita)	75.2	69.4	64.3	58.1	57.5	52.6	...
Population supplied with water from public water-supply systems (% of total population)	79.4	79.8	80.9	82.1	82.4	82.9 ^b	83.4
Population living in dwellings connected to public drainage (% of total population)	52.6	53.1	53.7	54.5	54.7	51.1 ^b	55.2
Treated waste water discharged into water courses (as % from total waste water)	69.9	72.1	77.2	69.8	69.6	95.1	96.3

Source: a. Data include stationary sources of pollution only. b. Expert estimate of the Statistical Office of the SR.

Crime

Indicator	1995	1996	1997	1998	1999	2000	2001
Registered crimes (per 1,000 inhabitants)	21.3	18.1	17.1	17.4	17.4	16.4	17.3
Convicted individuals (%)							
Women	4.1	3.7	3.7	6.8	6.8	7.1	9.1
Juveniles	15.8	11.2	16.3	13.5	12.3	12.1	10.9
Habitual offenders	12.4	14.4	12.4	14.4	13.9	13.4	11.2

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Selected demographic indicators

Indicator	1995	1996	1997	1998	1999	2000	2001 ^a
Population (thousands)	5,368	5,379	5,388	5,393	5,399	5,403	5,379
Females (%)	51.3	51.3	51.3	51.4	51.4	51.4	51.4
Age structure (%)							
0-14	22.27	21.66	21.05	20.43	19.81	19.18	18.58
15-54 Females	29.00	29.22	29.44	29.67	29.87	30.10	30.27
15-59 Males	31.19	31.50	31.81	32.11	32.39	32.65	32.85
55 and more - Females	11.43	11.52	11.60	11.70	11.83	11.93	12.10
60 and more - Males	6.11	6.10	6.10	6.09	6.10	6.14	6.20
Marital status (%)							
Females							
Single	38.47	38.47	38.47	38.46	38.45	38.46	37.98
Married	45.66	45.41	45.19	45.08	44.96	45.34	43.87
Divorced	4.07	4.28	4.47	4.66	4.86	5.06	4.95
Widowed	11.80	11.84	11.87	11.80	11.73	11.14	11.92
Not specified							1.28
Males							
Single	46.71	46.77	46.80	46.83	46.85	46.90	46.81
Married	48.04	47.80	47.59	47.52	47.44	47.52	45.96
Divorced	3.05	3.24	3.41	3.55	3.70	3.84	3.69
Widowed	2.20	2.19	2.20	2.10	2.01	1.74	2.24
Not specified							1.29
Live births (per 1,000 inhabitants)	11.4	11.2	11.0	10.7	10.4	10.2	9.5
Deaths (per 1,000 inhabitants)	9.8	9.5	9.7	9.9	9.7	9.8	9.7
Natural increase (per 1,000 inhabitants)	1.6	1.7	1.3	0.8	0.7	0.4	-0.2
Total fertility rate (%)	1.520	1.471	1.430	1.378	1.329	1.278	1.200
Births outside marriage (percentage from total live births)	12.6	14.0	15.1	15.3	16.9	18.4	19.8
Marriages (per 1,000 inhabitants)	5.1	5.1	5.2	5.1	5.1	4.8	4.4
Divorces (per 1,000 inhabitants)	1.67	1.75	1.70	1.73	1.79	1.72	1.82
Divorces (per 100 marriages)	32.7	34.2	32.7	33.9	35.3	35.8	41.26
Reported abortions (per 100 live births)	58.2	51.4	46.8	46.1	45.4	42.8	44.6
Total births under 2,500 gr.	4,142	4,079	3,764	3,897	3,867	3,814	3,664
Live births under 2,500 gr.	3,995	3,939	3,635	3,733	3,725	3,689	3,566
New-born mortality rate (under 28 days)	7.9	6.9	5.4	5.4	5.1	5.4	4.1
Deaths of mothers by XV. Class ICD-10	5	3	2	5	6	1	8
Maternal mortality per 100,000 live births	8.13	4.98	3.38	8.68	10.67	1.81	15.59
Child mortality (under 5 years, per 1,000 inhabitants)	2.2	2.1	1.9	2.1	1.9	2.0	1.52

Note: a. Data on population, age structure and marital status derived from the Population and housing census in the SR (May 2001).

EVALUATION OF ECONOMIC AND SOCIAL MEASURES (HESO)*Selected proposed and passed economic and social measures (April 2000 – September 2002).*

Evaluated measures	Rating	Passed in
	[-300;300]	quarter/year
Slovakia joins the OECD	281.1	3/2000
Amendment to Bankruptcy and Settlement Act	228.6	2/2000
Free Access to information Act	219.7	2/2000
Improvements in Legal and Regulatory Framework to Support Businesses and Investments	193.6	3/2000
Commercial Register available on the Internet	184.7	3/2000
State Administration Audit	178.7	3/2000
Amendment to the Commercial Code	176.5	4/2001
Privatization of Slovenský plynárenský priemysel (Slovak Gas Company, SPP)	173.1	1/2002
Refinancing of VÚB and SLSP (major state-owned banks)	172.6	2/2000
Privatization of VÚB	171.9	2/2001
Privatization of SLSP (Slovak Savings Bank)	167.2	4/2000
Act on Judges and Assessors (Judicial Code)	160.9	4/2000
Project "Judicial Management"	160.6	3/2001
Act on Electronic Signature	159.9	1/2002
Concept of Social Insurance Reform	159.9	3/2000
Informatization of judiciary	152.0	1/2002
New Act on Accounting (adjustment to International Accounting Standards – IAS)	142.0	2/2002
National Program of Fight Against Corruption	141.8	2/2000
Privatization of Slovenská poisťovňa (Slovak Insurance Company)	138.4	1/2002
Amendment to the Act on Banks	136.3	4/2001
Concept of Army Reform	136.0	4/2001
State Budget Reform	136.0	1/2001
Amendment to the Slovak Constitution – concerning public finance control	134.1	1/2001
Amendment to the Slovak Constitution – concerning higher territorial units	133.5	1/2001
Act on Higher Judiciary Officials	133.0	2/2002
New Law on Payment Systems (reduction of time limits for cashless orders)	130.9	3/2002
Amendment to Anti-Money Laundering Act	129.2	4/2000
Privatization of Slovak Telecom	127.2	3/2000
Lien upon movable assets (amendment to the Civic Code)	125.9	3/2002
Amendment to the Foreign Exchange Act (liberalization of capital flows)	125.3	2/2002
Draft Amendment to the Telecommunications Act (opening-up of tel. lines for competition)	122.4	-
Amendment to the Slovak Constitution – concerning judiciary and Constitutional Court	122.2	1/2001
Communist-era State Security (ŠTB) files opened to the public, founding of the "Nations Memory Institute"	121.9	3/2002
Draft Constitutional Act on Conflict of Interests	121.2	-
New model of active release of information regarding the process of allocation of grants	120.9	2/2002
Amendment to Civil Judicial Code	119.2	4/2001
Privatization of distributing energy companies	118.8	2/2002
Abolishment of State funds	117.8	4/2001
1 percent Tax Assignment of Income Tax for Non-profit Purposes	116.9	4/2001
Draft concept of Public Administration Reform	116.7	2/2000
Act on Genetic Technology and Genetically Modified Organism	108.6	1/2002
Draft concept of Restructuring and Transformation of Gas Industry	105.9	2/2000
Opening the Electricity Market (Imports) for Large Customers	104.6	3/2002
Act on Waste	104.6	2/2001
Draft of Financial Supervision Act	99.4	4/2001
Act on Industrial Parks	99.4	2/2001
Arbitration Act	99.2	2/2002
Devolution Act (Transfer of State Powers to Local Authorities)	99.1	3/2001
Disclosure of tax dodgers	98.3	4/2000
Transformation of Water- and Drainage- Works	96.5	1/2001
Judicial Council Act	94.3	2/2002
Raising a set of administered prices	94.2	4/2000
Governmental Draft of Tax Laws	93.6	4/2001
State Treasury Act	90.2	2/2002
Amendment to Act on Supplementary Pension Insurance	89.3	4/2000
Amendment to Business License Code	88.6	2/2001
Transformation and Restructuring Project of ŽSR (Slovak Railways)	88.6	4/2000
Tax holidays for investors abolished	84.2	3/2002
Privatization of Slovak Bus and Coach Transportation (SAD) companies	83.8	2/2002
Privatization of IRB (Investment and Development Bank)	83.6	4/2001
Proposal of Zero Tolerance of Corruption for Attorneys	83.4	-
Public procurement draft strategy	80.4	1/2001
Securities Act	80.0	4/2001
Draft model of Transformation of Slovak Energy Industry	80.0	3/2000

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Evaluated measures	Rating	Passed in
	[-300;300]	quarter/year
Act on Financial Market Authority	79.7	3/2000
Draft Constitutional Act on Use of Privatization Revenues for pension reform and amortization of FNM obligations	78.4	-
Privatization of health care facilities	77.2	3/2002
Amendment to the Public Procurement Act	76.7	4/2001
Tax Administration Reform	75.6	2/2001
Rise of minimal retirement age of women	74.9	4/2001
Law on Higher Territorial Units (Public Administration Reform)	74.1	3/2001
Amendment to the Bank Deposit Insurance Act	72.3	4/2001
Amendment Income Tax Act (lump sum tax for small entrepreneurs)	71.6	3/2000
Ombudsman Act	71.3	4/2001
Science and Technology Act	70.7	1/2002
Foreign Direct Investment Incentives Act	67.6	4/2001
Legislative Intention of the Act on Funded Pension Pillar: Administrators to be chosen by citizens (proposal by the Ministry of Economy)	67.3	3/2002
Proposal of introduction of tuition for external university studies	66.8	-
Draft of Law on public access to legislative process	65.7	-
Mandatory Car Insurance Act	65.6	3/2001
SR not becoming party to the European Code of Social Security	64.0	2/2002
Support of new jobs for long-term unemployed	61.7	4/2001
Draft of Tax Reform	61.1	2/2001
Amendment to the Inheritance Tax Act	57.3	2/2001
Draft of Health Care System Reform	57.2	1/2001
Proposal to create Tax Police and Tax Office for special subjects (large corporations)	54.5	1/2002
Act on Utilities Regulation Authority	54.4	2/2001
Plan to increase the number of university students by 10 percent	51.7	3/2000
Development Strategy of Slovak University System for the 21st Century	46.6	3/2000
Draft of Civil Service Act	45.5	3/2001
Amendment to Employment Act (introducing public works)	45.0	3/2000
Act on Social Insurance	42.9	2/2002
New Labor Code	41.8	3/2001
Use of privatization revenues (from SPP and distributive energy enterprises)	39.3	2/2002
New University Act	34.5	1/2002
Privatization of Transpetrol (oil pipeline company)	31.8	4/2001
Wage Increase in Health Care and Education Sectors	30.7	2/2001
Claiming of the Russian debt repayments	30.0	2/2001
Act on Financing Primary and Secondary Schools	29.7	4/2001
Amendment to Act on Social Assistance	29.2	4/2000
Indexation of pensions by 10 percent (year 2000)	25.6	2/2000
Change of support package for foreign investors	25.4	2/2000
State Budget for 2002	20.2	4/2001
Packaging Act	11.5	3/2002
Amendment to the Health Insurance Act	6.9	2/2001
Minimum wage increase to SKK 5,570 (by SKK 650)	6.1	3/2002
Ordering of medical services: contracts between VŠZP health insurance fund and hospitals	-1.3	2/2002
Proposal of monopolization of basic health insurance	-1.5	-
Draft Act on Declaration of Property Origin	-3.5	-
State guarantees to the Slovak Electricity Company (SKK 6 billion)	-7.6	-
Amendment to Political Parties Act (funding of political parties)	-8.2	4/2000
Protection of domestic sugar market	-9.4	2/2001
Proposal to establish the Slovak Venture Capital Fund	-10.5	-
Flat rate Family Allowances (abolishing means testing)	-10.9	2/2002
Act on State Budget for 2001 (planned deficit 4% of GDP)	-21.9	4/2000
Act on Substitutive Alimony (Alimony Fund Establishment)	-26.1	2/2002
Handling of the Devín Bank bail-out by the government and the central bank	-31.6	3/2001
State guarantee of SKK 11.7 billion to the Slovak Railways	-41.1	2/2002
Prolongation of the Execution Restriction of Health Insurance Companies	-45.7	4/2001
Legislative Intention of the Act on Funded Pension Pillar: Administrators to be appointed by the Investment Committee (proposal by the Ministry of Labor)	-47.0	3/2002
Draft Law on Trade Chains (greater regulation of hypermarkets)	-47.4	-
Tender for Light Trains called for by the Railway Company (Železničná spoločnosť, a.s.)	-55.2	2/2002
Adjustment of the planned deficit of public finances for 2002 (from 3.5% to 4.5% of GDP)	-60.3	2/2002
Proposal to abolish temporary work contracts	-60.4	-
Government loan to the town of Košice	-69.0	1/2002
Security of tenure for top experts without qualification exam	-81.7	3/2002
Increase in payroll taxes (contributions to social funds)	-89.4	4/2000
Proposal to compensate clients of bankrupted non-bank money houses	-124.1	-
Postponement of the Public Administration Reform	-147.0	3/2000

Source: INEKO

HUMAN DEVELOPMENT INDEX HDI (2002 ranking)

HDI rank	Life expectancy at birth (years) 2000	Adult literacy rate (%) 2000	Combined primary, secondary and tertiary gross enrollment ratio (%) 1999	GDP per capita (PPP US\$) 2000	Life expectancy index	Education index	Real GDP index	Human development index (HDI) value 2000	Real GDP per capita rank minus HDI rank
1 Norway	78.5	..	97	29,918	0.89	0.98	0.95	0.942	2
2 Sweden	79.7	..	101	24,277	0.91	0.99	0.92	0.941	15
3 Canada	78.8	..	97	27,840	0.90	0.98	0.94	0.940	4
4 Belgium	78.4	..	109	27,178	0.89	0.99	0.94	0.939	5
5 Australia	78.9	..	116	25,693	0.90	0.99	0.93	0.939	7
6 United States	77.0	..	95	34,142	0.87	0.98	0.97	0.939	-4
7 Iceland	79.2	..	89	29,581	0.90	0.96	0.95	0.936	-2
8 Netherlands	78.1	..	102	25,657	0.89	0.99	0.93	0.935	5
9 Japan	81.0	..	82	26,755	0.93	0.93	0.93	0.933	2
10 Finland	77.6	..	103	24,996	0.88	0.99	0.92	0.930	6
11 Switzerland	78.9	..	84	28,769	0.90	0.94	0.94	0.928	-5
12 France	78.6	..	94	24,223	0.89	0.97	0.92	0.928	6
13 United Kingdom	77.7	..	106	23,509	0.88	0.99	0.91	0.928	7
14 Denmark	76.2	..	97	27,627	0.85	0.98	0.94	0.926	-6
15 Austria	78.1	..	90	26,765	0.89	0.96	0.93	0.926	-5
16 Luxembourg	77.4	..	72	50,061	0.87	0.90	1.00	0.925	-15
17 Germany	77.7	..	94	25,103	0.88	0.97	0.92	0.925	-2
18 Ireland	76.6	..	91	29,866	0.86	0.96	0.95	0.925	-14
19 New Zealand	77.6	..	99	20,070	0.88	0.99	0.88	0.917	5
20 Italy	78.5	98.4	84	23,626	0.89	0.94	0.91	0.913	-1
21 Spain	78.5	97.6	95	19,472	0.89	0.97	0.88	0.913	4
22 Israel	78.7	94.6	83	20,131	0.90	0.91	0.89	0.896	1
23 Hong Kong, China (SAR)	79.5	93.5	63	25,153	0.91	0.83	0.92	0.888	-9
24 Greece	78.2	97.2	81	16,501	0.89	0.92	0.85	0.885	10
25 Singapore	77.6	92.3	75	23,356	0.88	0.87	0.91	0.885	-4
26 Cyprus	78.0	97.1	68	20,824	0.88	0.88	0.89	0.883	-4
27 Korea, Rep. of	74.9	97.8	90	17,380	0.83	0.95	0.86	0.882	1
28 Portugal	75.7	92.2	96	17,290	0.84	0.94	0.86	0.880	2
29 Slovenia	75.5	99.6	83	17,367	0.84	0.94	0.86	0.879	0
30 Malta	78.0	92.0	80	17,273	0.88	0.88	0.86	0.875	1
31 Barbados	76.8	98.0	77	15,494	0.86	0.91	0.84	0.871	5
32 Brunei Darussalam	75.9	91.5	76	16,779	0.85	0.86	0.86	0.856	1
33 Czech Republic	74.9	..	70	13,991	0.83	0.89	0.82	0.849	6
34 Argentina	73.4	96.8	83	12,377	0.81	0.92	0.80	0.844	10
35 Hungary	71.3	99.3	81	12,416	0.77	0.93	0.80	0.835	8
36 Slovakia	73.3	100.0	76	11,243	0.80	0.91	0.79	0.835	10
37 Poland	73.3	99.7	84	9,051	0.81	0.94	0.75	0.833	16
38 Chile	75.3	95.8	78	9,417	0.84	0.90	0.76	0.831	12
39 Bahrain	73.3	87.6	80	15,084	0.81	0.85	0.84	0.831	-2
40 Uruguay	74.4	97.7	79	9,035	0.82	0.92	0.75	0.831	14
41 Bahamas	69.2	95.4	74	17,012	0.74	0.88	0.86	0.826	-9
42 Estonia	70.6	99.8	86	10,066	0.76	0.95	0.77	0.826	6
43 Costa Rica	76.4	95.6	67	8,650	0.86	0.86	0.74	0.820	14
44 Saint Kitts and Nevis	70.0	97.8	70	12,510	0.75	0.89	0.81	0.814	-3
45 Kuwait	76.2	82.0	59	15,799	0.85	0.74	0.84	0.813	-10
46 United Arab Emirates	75.0	76.3	68	17,935	0.83	0.74	0.87	0.812	-19
47 Seychelles	72.7	88.0	..	12,508	0.80	0.83	0.81	0.811	-5
48 Croatia	73.8	98.3	68	8,091	0.81	0.88	0.73	0.809	11
49 Lithuania	72.1	99.6	80	7,106	0.78	0.93	0.71	0.808	16
50 Trinidad and Tobago	74.3	93.8	65	8,964	0.82	0.84	0.75	0.805	6
51 Qatar	69.6	81.2	75	18,789	0.74	0.79	0.87	0.803	-25
52 Antigua and Barbuda	73.9	86.6	69	10,541	0.82	0.81	0.78	0.800	-5
53 Latvia	70.4	99.8	82	7,045	0.76	0.93	0.71	0.800	13
54 Mexico	72.6	91.4	71	9,023	0.79	0.84	0.75	0.796	1
55 Cuba	76.0	96.7	76	..	0.85	0.90	0.64	0.795	35
56 Belarus	68.5	99.6	77	7,544	0.73	0.92	0.72	0.788	7
57 Panama	74.0	91.9	74	6,000	0.82	0.86	0.68	0.787	18
58 Belize	74.0	93.2	73	5,606	0.82	0.86	0.67	0.784	24
59 Malaysia	72.5	87.5	66	9,068	0.79	0.80	0.75	0.782	-7
60 Russian Federation	66.1	99.6	78	8,377	0.68	0.92	0.74	0.781	-2
61 Dominica	72.9	96.4	65	5,880	0.80	0.86	0.68	0.779	16
62 Bulgaria	70.8	98.4	72	5,170	0.76	0.90	0.68	0.779	18
63 Romania	69.8	98.1	69	6,423	0.75	0.88	0.69	0.775	6
64 Libyan Arab Jamahiriya	70.5	80.0	92	7,570	0.76	0.84	0.72	0.773	-2
65 Macedonia, FYR	73.1	94.0	70	5,086	0.80	0.86	0.66	0.772	20
66 Saint Lucia	73.4	90.2	70	5,703	0.81	0.83	0.67	0.772	15
67 Mauritius	71.3	84.5	63	10,017	0.77	0.77	0.77	0.772	-18
68 Colombia	71.2	91.7	73	6,248	0.77	0.85	0.69	0.772	4
69 Venezuela	72.9	92.6	65	5,794	0.80	0.83	0.68	0.770	10
70 Thailand	70.2	95.5	60	6,402	0.75	0.84	0.69	0.762	0
71 Saudi Arabia	71.6	76.3	61	11,367	0.78	0.71	0.79	0.759	-26
72 Fiji	69.1	92.9	83	4,668	0.73	0.90	0.64	0.758	17
73 Brazil	67.7	85.2	80	7,625	0.71	0.83	0.72	0.757	-13
74 Suriname	70.6	94.0	82	3,779	0.76	0.90	0.61	0.756	29
75 Lebanon	73.1	86.0	78	4,308	0.80	0.83	0.63	0.755	20
76 Armenia	72.9	98.4	80	2,559	0.80	0.92	0.54	0.754	41
77 Philippines	69.3	95.3	82	3,971	0.74	0.91	0.61	0.754	20
78 Oman	71.0	71.7	58	13,356	0.77	0.67	0.82	0.751	-38
79 Kazakhstan	64.6	98.0	77	5,871	0.66	0.91	0.68	0.750	-1
80 Ukraine	68.1	99.6	77	3,816	0.72	0.92	0.61	0.748	22
81 Georgia	73.2	100.0	70	2,664	0.80	0.89	0.55	0.748	34
82 Peru	68.8	89.9	80	4,799	0.73	0.87	0.65	0.747	6
83 Grenada	65.3	94.4	65	7,580	0.67	0.85	0.72	0.747	-22
84 Maldives	66.5	96.7	77	4,485	0.69	0.90	0.63	0.743	9
85 Turkey	69.8	85.1	62	6,974	0.75	0.77	0.71	0.742	-18
86 Jamaica	75.3	86.9	62	3,639	0.84	0.79	0.60	0.742	18
87 Turkmenistan	66.2	98.0	81	3,956	0.69	0.92	0.61	0.741	13
88 Azerbaijan	71.6	97.0	71	2,936	0.788	0.88	0.56	0.741	24
89 Sri Lanka	72.1	91.6	70	3,530	0.79	0.84	0.59	0.741	19
90 Paraguay	70.1	93.3	64	4,426	0.75	0.83	0.63	0.740	4
91 Saint Vincent & the Grenadines	69.6	88.9	58	5,555	0.74	0.79	0.67	0.733	-8
92 Albania	73.2	84.7	71	3,506	0.80	0.80	0.59	0.733	17
93 Ecuador	70.0	91.6	77	3,203	0.75	0.87	0.58	0.732	17
94 Dominican Republic	67.1	83.6	72	6,033	0.70	0.80	0.68	0.727	-20
95 Uzbekistan	69.0	99.2	76	2,441	0.73	0.91	0.53	0.727	24

HDI rank	Life expectancy at birth (years) 2000	Adult literacy rate (%) 2000	Combined primary, secondary and tertiary gross enrollment ratio (%) 1999	GDP per capita (PPP US\$) 2000	Life expectancy index	Education index	Real GDP index	Human development index (HDI) value 2000	Real GDP per capita rank minus HDI rank
96 China	70.5	84.1	73	3,976	0.76	0.80	0.61	0.726	0
97 Tunisia	70.2	71.0	74	6,363	0.75	0.72	0.69	0.722	-26
98 Iran, Islamic Rep. of	68.9	76.3	73	5,884	0.73	0.75	0.68	0.721	-22
99 Jordan	70.3	89.7	55	3,966	0.76	0.78	0.61	0.717	-1
100 Cape Verde	69.7	73.8	77	4,863	0.75	0.75	0.65	0.715	-13
101 Samoa (Western)	69.2	80.2	65	5,041	0.74	0.75	0.65	0.715	-15
102 Kyrgyzstan	67.8	97.0	68	2,711	0.71	0.87	0.55	0.712	12
103 Guyana	63.0	98.5	66	3,963	0.63	0.88	0.61	0.708	-4
104 El Salvador	69.7	78.7	63	4,497	0.75	0.74	0.64	0.706	-13
105 Moldova, Rep. of	66.6	98.9	72	2,109	0.69	0.90	0.51	0.701	21
106 Algeria	69.6	66.7	72	5,308	0.74	0.69	0.66	0.697	-22
107 South Africa	52.1	85.3	93	9,401	0.45	0.88	0.76	0.695	-56
108 Syrian Arab Republic	71.2	74.4	63	3,556	0.77	0.71	0.60	0.691	-2
109 Viet Nam	68.2	93.4	67	1,996	0.72	0.84	0.50	0.688	19
110 Indonesia	66.2	86.9	65	3,043	0.69	0.79	0.57	0.684	1
111 Equatorial Guinea	51.0	83.2	64	15,073	0.43	0.77	0.84	0.679	-73
112 Tajikistan	67.6	99.2	67	1,152	0.71	0.88	0.41	0.667	39
113 Mongolia	62.9	98.9	58	1,783	0.63	0.85	0.48	0.655	21
114 Bolivia	62.4	85.5	70	2,424	0.62	0.80	0.53	0.653	6
115 Egypt	67.3	55.3	76	3,635	0.70	0.62	0.60	0.642	-10
116 Honduras	65.7	74.6	61	2,453	0.68	0.70	0.53	0.638	2
117 Gabon	52.7	71.0	86	6,237	0.46	0.76	0.69	0.637	-44
118 Nicaragua	68.4	66.5	63	2,366	0.72	0.65	0.53	0.635	4
119 São Tomé and Príncipe	65.1	83.1	58	1,792	0.67	0.75	0.48	0.632	14
120 Guatemala	64.8	68.6	49	3,821	0.66	0.62	0.61	0.631	-19
121 Solomon Islands	68.3	76.6	50	1,648	0.72	0.68	0.47	0.622	17
122 Namibia	47.7	82.0	78	6,431	0.33	0.81	0.69	0.610	-54
123 Morocco	66.6	48.9	52	3,546	0.71	0.50	0.60	0.602	-16
124 India	63.3	57.2	55	2,358	0.64	0.57	0.53	0.577	-1
125 Swaziland	44.4	79.6	72	4,492	0.32	0.77	0.64	0.577	-33
126 Botswana	40.3	77.2	70	7,184	0.25	0.75	0.71	0.572	-62
127 Myanmar	56.0	84.7	55	1,027	0.52	0.75	0.39	0.552	25
128 Zimbabwe	42.9	88.7	65	2,635	0.30	0.81	0.55	0.551	-12
129 Ghana	56.8	71.5	42	1,964	0.53	0.62	0.50	0.548	1
130 Cambodia	56.4	67.8	62	1,446	0.52	0.66	0.45	0.543	15
131 Vanuatu	68.0	34.0	..	2,082	0.72	0.35	0.56	0.542	-18
132 Lesotho	45.7	83.4	61	2,031	0.34	0.76	0.50	0.535	-5
133 Papua New Guinea	56.7	63.9	38	2,280	0.53	0.55	0.52	0.535	-9
134 Kenya	50.8	82.4	51	1,022	0.43	0.72	0.39	0.513	19
135 Cameroon	50.0	75.8	43	1,703	0.42	0.65	0.47	0.512	0
136 Congo	51.3	80.7	63	825	0.44	0.75	0.35	0.512	27
137 Comoros	59.8	55.9	35	1,588	0.58	0.49	0.46	0.511	4
138 Pakistan	60.0	43.2	40	1,928	0.58	0.42	0.49	0.499	-7
139 Sudan	56.0	57.8	34	1,797	0.52	0.50	0.48	0.499	-7
140 Bhutan	62.2	47.0	33	1,412	0.62	0.42	0.44	0.494	7
141 Togo	51.8	57.1	62	1,442	0.45	0.59	0.45	0.493	5
142 Nepal	58.6	41.8	60	1,327	0.56	0.48	0.43	0.490	6
143 Lao People's Dem. Rep.	53.5	48.7	58	1,575	0.47	0.52	0.46	0.485	-1
144 Yemen	60.6	46.3	51	893	0.59	0.48	0.37	0.479	14
145 Bangladesh	59.4	41.3	37	1,602	0.57	0.40	0.46	0.478	-5
146 Haiti	52.6	49.8	52	1,467	0.46	0.50	0.45	0.471	-2
147 Madagascar	52.6	66.5	44	840	0.46	0.59	0.36	0.469	14
148 Nigeria	51.7	63.9	45	896	0.44	0.58	0.37	0.462	9
149 Djibouti	43.1	64.6	22	2,377	0.30	0.50	0.53	0.445	-28
150 Uganda	44.0	67.1	45	1,208	0.32	0.60	0.42	0.444	-1
151 Tanzania, U. Rep. of	51.1	75.1	32	523	0.43	0.61	0.28	0.440	21
152 Mauritania	51.5	40.2	40	1,677	0.44	0.40	0.47	0.438	-16
153 Zambia	41.4	78.1	49	780	0.27	0.68	0.34	0.433	12
154 Senegal	53.3	37.3	36	1,510	0.47	0.37	0.45	0.431	-11
155 Congo, Dem. Rep. of the	51.3	61.4	31	765	0.44	0.51	0.34	0.431	11
156 Côte d'Ivoire	47.8	46.8	38	1,630	0.38	0.44	0.47	0.428	-17
157 Eritrea	52.0	55.7	26	837	0.45	0.46	0.35	0.421	5
158 Benin	53.8	37.4	45	990	0.48	0.40	0.38	0.420	-4
159 Guinea	47.5	41.0	28	1,982	0.38	0.37	0.50	0.414	-30
160 Gambia	46.2	36.6	45	1,649	0.35	0.39	0.47	0.405	-23
161 Angola	45.2	42.0	23	2,187	0.34	0.36	0.51	0.403	-36
162 Rwanda	40.2	66.8	40	943	0.25	0.52	0.37	0.403	-6
163 Malawi	40.0	60.1	73	615	0.25	0.65	0.30	0.400	7
164 Mali	51.5	41.5	28	797	0.44	0.37	0.35	0.386	0
165 Central African Republic	44.3	46.7	24	1,172	0.32	0.39	0.41	0.375	-15
166 Chad	45.7	42.6	31	871	0.35	0.39	0.36	0.365	-7
167 Guinea-Bissau	44.8	38.5	37	755	0.33	0.38	0.34	0.349	0
168 Ethiopia	43.9	39.1	27	668	0.31	0.35	0.32	0.327	1
169 Burkina Faso	46.7	23.9	23	976	0.36	0.23	0.38	0.325	-14
170 Mozambique	39.3	44.0	23	854	0.24	0.37	0.36	0.322	-10
171 Burundi	40.6	48.0	18	591	0.26	0.38	0.30	0.313	0
172 Niger	45.2	15.9	16	746	0.34	0.16	0.34	0.277	-4
173 Sierra Leone	38.9	36.0	27	490	0.23	0.33	0.27	0.275	0
Developing countries	64.7	73.7	61	3,783	0.66	0.69	0.61	0.654	-
Least developed countries	51.9	52.8	38	1,216	0.45	0.48	0.45	0.445	-
Arab States	66.8	62.0	62	4,793	0.70	0.62	0.64	0.653	-
East Asia and the Pacific	69.5	85.9	71	4,290	0.74	0.81	0.63	0.726	-
Latin America and the Caribbean	70.0	88.3	74	7,234	0.75	0.84	0.72	0.767	-
South Asia	62.9	55.6	53	2,404	0.63	0.55	0.53	0.570	-
Sub-Saharan Africa	48.7	61.5	42	1,690	0.40	0.55	0.47	0.471	-
Central/Eastern Europe and CIS	68.6	99.3	77	6,930	0.73	0.91	0.71	0.783	-
OECD	76.8	..	87	23,569	0.86	0.94	0.91	0.905	-
High-income OECD	78.2	..	94	27,848	0.89	0.97	0.94	0.932	-
High human development	77.4	..	91	24,973	0.87	0.96	0.92	0.918	-
Medium human development	67.1	78.9	67	4,141	0.70	0.75	0.62	0.691	-
Low human development	52.9	49.7	38	1,251	0.46	0.46	0.42	0.448	-
High income	78.2	..	93	27,639	0.89	0.97	0.94	0.930	-
Middle income	69.7	86.0	73	5,734	0.75	0.82	0.68	0.747	-
Low income	59.7	62.4	51	2,002	0.58	0.59	0.50	0.554	-
World	66.9	..	65	7,446	0.70	0.75	0.72	0.722	-

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

GENDER-RELATED DEVELOPMENT INDEX GDI

HDI Rank	Gender-related development index (GDI)		Life expectancy at birth (years) 2000		Adult literacy rate (% age 15 and above) 2000		Combined primary, secondary and tertiary gross enrolment ratio (%) 1999		Estimated earned income (PPP US\$) 2000		HDI rank minus GDI rank
	Rank	Value	Female	Male	Female	Male	Female	Male	Female	Male	
1 Norway	3	0.941	81.5	75.6	..	..	99	95	23,454	36,510	-2
2 Sweden	4	0.940	82.2	77.2	..	..	107	95	19,690	28,961	-2
3 Canada	5	0.938	81.5	76.0	..	..	98	96	21,456	34,349	-2
4 Belgium	2	0.943	81.5	75.2	..	..	111	107	16,784	38,005	2
5 Australia	1	0.956	81.8	76.1	..	..	118	114	20,977	30,449	4
6 United States	6	0.937	79.9	74.1	..	..	99	91	26,259	42,246	0
7 Iceland	7	0.934	81.5	76.8	..	..	91	86	22,361	36,758	0
8 Netherlands	9	0.933	80.8	75.4	..	..	100	104	17,635	33,822	-1
9 Japan	11	0.927	84.4	77.4	..	..	81	83	16,601	37,345	-2
10 Finland	8	0.933	81.1	73.9	..	..	108	99	20,657	29,550	2
11 Switzerland	14	0.923	82.0	75.6	..	..	81	87	19,197	38,550	-3
12 France	12	0.926	82.4	74.7	..	..	96	93	18,715	30,022	0
13 United Kingdom	10	0.932	80.2	75.2	..	..	112	100	17,931	29,364	3
14 Denmark	13	0.925	78.7	73.8	..	..	101	94	22,835	32,518	1
15 Austria	15	0.921	81.1	74.9	..	..	89	90	17,914	36,057	0
16 Luxembourg	19	0.914	80.5	74.1	..	..	74	71	27,396	73,465	-3
17 Germany	16	0.920	80.7	74.5	..	..	93	95	16,904	33,653	1
18 Ireland	17	0.917	79.2	74.0	..	..	93	89	17,078	42,815	1
19 New Zealand	18	0.915	80.2	74.9	..	..	103	95	16,203	24,052	1
20 Italy	20	0.907	81.6	75.2	98	98.9	87	81	14,719	33,084	0
21 Spain	21	0.906	82.0	75.0	96.8	98.6	99	91	11,791	27,503	0
22 Israel	22	0.891	80.6	76.7	92.4	96.8	84	82	13,864	26,565	0
23 Hong Kong, China (SAR)	23	0.886	82.4	76.9	90.2	96.5	66	61	18,635	31,445	0
24 Greece	25	0.879	80.9	75.6	96.0	98.5	81	80	10,185	22,998	-1
25 Singapore	24	0.880	79.8	75.4	88.4	96.3	75	76	15,433	31,167	1
26 Cyprus	26	0.879	80.2	75.8	95.4	98.7	70	67	13,763	27,908	0
27 Korea, Rep. of	29	0.875	78.6	71.2	96.4	99.1	85	95	10,791	23,884	-2
28 Portugal	28	0.876	79.2	72.1	89.9	94.7	99	94	12,134	22,850	0
29 Slovenia	27	0.877	79.1	71.7	99.6	99.7	85	80	13,327	21,642	2
30 Malta	30	0.860	80.6	75.4	92.7	91.3	79	82	7,626	27,104	0
31 Barbados	..	..	79.1	74.1	..	..	77	77	..	..	..
32 Brunei Darussalam	31	0.851	78.5	73.8	88.1	94.6	77	76	10,296	22,613	0
33 Czech Republic	32	0.846	78.2	71.5	..	..	70	69	10,354	17,833	0
34 Argentina	33	0.836	77.2	70.1	96.8	96.8	86	80	6,556	18,424	0
35 Hungary	35	0.833	75.6	67.1	99.2	99.5	83	79	9,243	15,893	-1
36 Slovakia	34	0.833	77.2	69.3	..	..	77	74	8,903	13,715	1
37 Poland	36	0.831	77.5	69.2	99.7	99.7	86	83	6,936	11,288	0
38 Chile	39	0.824	78.6	72.6	95.6	96.0	77	78	5,133	13,786	-2
39 Bahrain	40	0.822	75.8	71.6	82.6	90.9	83	77	7,010	21,059	-2
40 Uruguay	37	0.828	78.5	71.0	98.1	97.3	83	76	6,178	12,068	2
41 Bahamas	38	0.825	73.7	65.0	96.3	94.5	77	72	13,344	20,779	2
42 Estonia	..	..	76.0	65.1	..	..	89	84	..	..	..
43 Costa Rica	41	0.814	79.3	74.6	95.7	95.5	66	67	4,609	12,577	0
44 Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..
45 Kuwait	44	0.804	78.6	74.5	79.7	84.0	61	57	6,895	22,186	-2
46 United Arab Emirates	47	0.798	78.0	73.7	79.3	75.0	71	65	5,320	24,412	-4
47 Seychelles	..	..	..	..	..	..	..	..	..	..	..
48 Croatia	43	0.806	77.7	69.8	97.3	99.3	69	68	5,845	10,485	1
49 Lithuania	42	0.806	77.2	66.8	99.5	99.7	83	77	5,789	8,582	3
50 Trinidad and Tobago	45	0.798	76.7	72.0	92.1	95.5	65	65	5,532	12,432	1
51 Qatar	48	0.794	71.3	68.7	83.1	80.4	75	75	6,864	25,277	-1
52 Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..
53 Latvia	46	0.798	75.8	64.7	99.8	99.8	83	80	5,992	8,276	2
54 Mexico	49	0.789	76.0	70.0	89.5	93.4	70	71	4,978	13,152	0
55 Cuba	..	..	78.4	74.5	96.6	96.8	77	76	..	..	..
56 Belarus	50	0.786	74.4	62.8	99.4	99.7	79	75	5,978	9,340	0
57 Panama	51	0.784	76.8	72.2	91.3	92.5	76	73	3,960	8,004	0
58 Belize	58	0.764	75.4	72.7	93.2	93.3	72	73	2,141	8,975	-6
59 Malaysia	54	0.776	75.0	70.1	83.4	91.4	67	64	5,711	12,338	-1
60 Russian Federation	52	0.780	72.5	60.1	99.4	99.7	82	75	6,611	10,383	2
61 Dominica	..	..	..	..	..	..	..	..	..	..	..
62 Bulgaria	53	0.778	74.8	67.1	97.9	99.0	76	69	4,587	6,898	2
63 Romania	55	0.773	73.3	66.5	97.3	99.0	70	68	4,751	8,169	1
64 Libyan Arab Jamahiriya	61	0.753	72.8	68.8	68.2	90.8	92	92	2,921	11,894	-4
65 Macedonia, TFYR	..	..	75.3	71.0	..	..	70	70	..	..	..
66 Saint Lucia	..	..	76.0	70.7	..	..	..	..	..	..	..
67 Mauritius	59	0.762	75.3	67.6	81.3	87.8	64	62	5,332	14,736	-1
68 Colombia	56	0.767	74.8	68.2	91.7	91.7	73	73	3,996	8,558	3
69 Venezuela	57	0.764	76.2	70.4	92.1	93.1	66	64	3,334	8,223	3
70 Thailand	60	0.760	73.2	67.3	93.9	97.1	61	60	4,907	7,928	1
71 Saudi Arabia	72	0.731	73.0	70.5	66.9	83.1	60	62	3,466	18,252	-10
72 Fiji	65	0.746	70.9	67.4	90.8	94.9	83	84	2,367	6,892	-2
73 Brazil	64	0.751	72.0	64.1	85.4	85.1	80	79	4,557	10,769	0
74 Suriname	..	..	73.2	68.0	..	..	86	80	..	..	..
75 Lebanon	69	0.739	74.6	71.5	80.3	92.1	81	76	2,013	6,704	-4
76 Armenia	62	0.751	75.8	69.8	97.6	99.3	77	82	2,087	3,061	4
77 Philippines	63	0.751	71.3	67.3	95.1	95.5	84	80	2,933	4,994	4
78 Oman	78	0.722	72.6	69.7	61.6	80.1	56	59	3,806	21,804	-10
79 Kazakhstan	..	..	70.3	59.1	..	..	81	73	..	..	..
80 Ukraine	66	0.744	73.5	62.7	99.5	99.7	78	77	2,716	5,085	3
81 Georgia	..	..	72.2	69.0	..	..	71	69	..	..	..
82 Peru	73	0.729	71.6	66.6	85.3	94.7	79	81	1,950	7,695	-3
83 Grenada	..	..	..	..	..	..	..	..	..	..	..
84 Maldives	68	0.739	65.8	67.3	96.8	96.6	77	77	3,329	5,582	3
85 Turkey	71	0.734	72.4	67.3	76.5	93.5	55	68	4,379	9,516	1
86 Jamaica	67	0.739	77.3	73.3	90.7	82.9	62	63	2,900	4,400	6
87 Turkmenistan	..	..	69.6	62.9	..	..	81	81	..	..	..
88 Azerbaijan	..	..	75.0	68.0	..	..	72	70	..	..	..
89 Sri Lanka	70	0.737	75.3	69.5	89.0	94.4	71	68	2,270	4,724	4
90 Paraguay	75	0.727	72.6	68.0	92.2	94.4	64	64	2,155	6,658	0

HDI Rank	Gender-related development index (GDI)		Life expectancy at birth (years) 2000		Adult literacy rate (% age 15 and above) 2000		Combined primary, secondary and tertiary gross enrolment ratio (%) 1999		Estimated earned income (PPP US\$) 2000		HDI rank minus GDI rank
	Rank	Value	Female	Male	Female	Male	Female	Male	Female	Male	
91 Saint Vincent & the Grenadines	..	..	..	..	..	..	..	..	..	..	..
92 Albania	74	0.729	76.2	70.4	77.0	92.1	71	71	2,478	4,488	2
93 Ecuador	80	0.718	73.0	67.8	90.0	93.3	74	80	1,455	4,936	-3
94 Dominican Republic	79	0.718	70.0	64.8	83.6	83.6	75	69	3,125	8,849	-1
95 Uzbekistan	76	0.725	71.9	66.0	98.8	99.6	74	79	1,931	2,958	3
96 China	77	0.724	72.8	68.5	76.3	91.7	73	73	3,132	4,773	3
97 Tunisia	81	0.709	71.4	69.0	60.6	81.4	72	75	3,347	9,320	0
98 Iran, Islamic Rep. of	83	0.703	69.8	68.0	69.3	83.2	69	76	2,524	9,088	-1
99 Jordan	84	0.701	71.8	69.1	83.9	95.1	57	53	1,749	6,014	-1
100 Cape Verde	82	0.704	72.0	66.2	65.7	84.5	76	79	3,043	6,945	2
101 Samoa (Western)	..	..	72.8	66.2	79.0	81.2	67	63	..	..	..
102 Kyrgyzstan	..	..	71.7	63.8	..	..	70	65	..	..	..
103 Guyana	85	0.698	67.3	58.9	98.1	98.9	66	65	2,228	5,806	0
104 El Salvador	87	0.696	73.1	67.1	76.1	81.6	64	63	2,347	6,727	-1
105 Moldova, Rep. of	86	0.698	70.3	62.8	98.3	99.5	75	70	1,680	2,577	1
106 Algeria	90	0.679	71.0	68.1	57.1	76.2	69	75	2,389	8,150	-2
107 South Africa	88	0.689	53.9	50.2	84.6	86.0	96	89	5,888	13,024	1
108 Syrian Arab Republic	92	0.669	72.4	70.0	60.5	88.3	61	65	1,537	5,522	-2
109 Viet Nam	89	0.687	70.6	65.9	91.4	95.5	64	69	1,635	2,360	2
110 Indonesia	91	0.678	68.2	64.3	82.0	91.8	61	68	2,053	4,026	1
111 Equatorial Guinea	93	0.669	52.6	49.4	74.4	92.5	59	68	8,608	21,708	0
112 Tajikistan	94	0.664	70.5	64.7	98.8	99.6	63	72	872	1,434	0
113 Mongolia	95	0.653	64.9	60.9	98.8	99.1	64	51	1,430	2,135	0
114 Bolivia	96	0.645	64.2	60.8	79.3	92.0	67	73	1,499	3,358	0
115 Egypt	99	0.628	68.8	65.7	43.8	66.6	72	80	2,003	5,227	-2
116 Honduras	98	0.628	68.9	63.2	74.5	74.7	63	60	1,295	3,596	0
117 Gabon	..	..	53.9	51.5	..	..	87	85	..	..	..
118 Nicaragua	97	0.629	71.1	66.4	66.8	66.3	65	61	1,431	3,310	2
119 São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..
120 Guatemala	100	0.617	68.0	62.2	61.2	76.1	45	53	1,836	5,772	0
121 Solomon Islands	..	..	69.7	67.2	..	..	..	..	..	..	..
122 Namibia	101	0.604	44.7	44.6	81.2	82.8	80	77	4,413	8,498	0
123 Morocco	102	0.585	69.5	65.8	36.1	61.8	46	58	2,019	5,068	0
124 India	105	0.560	63.8	62.8	45.4	68.4	49	62	1,267	3,383	-2
125 Swaziland	103	0.567	45.1	43.7	78.6	80.8	70	74	2,557	6,479	1
126 Botswana	104	0.566	40.1	40.2	79.8	74.5	70	70	5,418	9,025	1
127 Myanmar	106	0.548	58.5	53.7	80.5	89.0	55	55	747	1,311	0
128 Zimbabwe	107	0.545	42.5	43.2	84.7	92.8	63	67	1,946	3,324	0
129 Ghana	108	0.544	58.1	55.5	62.9	80.3	39	45	1,683	2,248	0
130 Cambodia	109	0.537	58.6	53.9	57.1	79.8	54	71	1,268	1,633	0
131 Vanuatu	..	..	69.8	66.7	..	..	..	..	..	..	..
132 Lesotho	111	0.521	45.6	45.8	93.6	72.5	65	57	1,223	2,856	-1
133 Papua New Guinea	110	0.530	57.7	55.8	56.8	70.6	35	42	1,670	2,840	1
134 Kenya	112	0.511	51.5	50.0	76.0	88.9	51	52	975	1,069	0
135 Cameroon	115	0.500	50.7	49.2	69.5	82.4	39	47	1,047	2,365	-2
136 Congo	113	0.506	53.4	49.2	74.4	87.5	56	69	586	1,074	1
137 Comoros	114	0.505	61.2	58.4	48.7	63.2	33	38	1,136	2,038	1
138 Pakistan	120	0.468	59.8	60.2	27.9	57.5	28	51	916	2,884	-4
139 Sudan	116	0.478	57.4	54.6	46.3	69.5	31	36	847	2,736	1
140 Bhutan	..	..	63.2	60.8	..	..	..	..	..	..	..
141 Togo	117	0.475	53.0	50.6	42.5	72.4	49	76	927	1,964	1
142 Nepal	119	0.470	58.3	58.8	24.0	59.6	52	67	880	1,752	0
143 Lao People's Dem. Rep.	118	0.472	54.8	52.2	33.2	64.1	52	65	1,242	1,909	2
144 Yemen	128	0.426	61.6	59.4	25.2	67.5	29	72	405	1,384	-7
145 Bangladesh	121	0.468	59.5	59.4	29.9	52.3	33	41	1,151	2,023	1
146 Haiti	122	0.467	55.7	49.7	47.8	52.0	51	53	1,049	1,902	1
147 Madagascar	123	0.463	53.8	51.5	59.7	73.6	43	46	624	1,059	1
148 Nigeria	124	0.449	51.9	51.5	55.7	72.4	41	49	532	1,254	1
149 Djibouti	..	..	44.2	41.6	54.4	75.6	18	26	..	..	..
150 Uganda	125	0.437	44.6	43.3	56.8	77.5	41	49	966	1,451	1
151 Tanzania, U. Rep. of	126	0.436	52.1	50.0	66.5	83.9	32	33	436	611	1
152 Mauritania	127	0.429	53.1	49.9	30.1	50.7	37	44	1,212	2,150	1
153 Zambia	129	0.424	40.9	41.8	71.5	85.2	46	52	562	995	0
154 Senegal	130	0.421	55.2	51.5	27.6	47.3	31	40	1,074	1,949	0
155 Congo, Dem. Rep. of the	131	0.420	52.6	50.1	50.2	73.1	26	37	548	986	0
156 Côte d'Ivoire	132	0.411	48.1	47.5	38.6	54.5	30	46	868	2,355	0
157 Eritrea	133	0.410	53.3	50.6	44.5	67.3	24	29	571	1,107	0
158 Benin	134	0.404	55.5	52.1	23.6	52.1	34	57	813	1,172	0
159 Guinea	..	..	48.0	47.0	..	..	..	..	..	..	..
160 Gambia	136	0.397	47.7	44.9	29.4	44.0	37	53	1,230	2,078	-1
161 Angola	..	..	46.6	43.9	..	..	21	25	..	..	..
162 Rwanda	135	0.398	40.9	39.4	60.2	73.7	39	41	760	1,130	1
163 Malawi	137	0.389	39.8	40.2	46.5	74.5	69	78	506	726	0
164 Mali	138	0.378	52.4	50.4	34.4	48.9	22	34	606	992	0
165 Central African Republic	139	0.364	46.0	42.7	34.9	59.7	20	29	894	1,464	0
166 Chad	140	0.353	46.9	44.5	34.0	51.6	20	42	648	1,099	0
167 Guinea-Bissau	141	0.325	46.2	43.4	23.3	54.4	27	47	495	1,023	0
168 Ethiopia	142	0.313	44.6	43.2	30.9	47.2	19	34	454	885	0
169 Burkina Faso	143	0.312	47.6	45.6	14.1	33.9	18	28	801	1,164	0
170 Mozambique	144	0.307	40.2	38.4	28.7	60.1	19	26	705	1,007	0
171 Burundi	145	0.306	41.4	39.6	40.4	56.2	16	21	490	698	0
172 Niger	146	0.263	45.5	44.9	8.4	23.8	12	20	542	947	0
173 Sierra Leone	..	..	40.2	37.6	..	..	21	32	..	..	..

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