Discussions about health care policy and reform in Croatia usually start from the assumption that access to health care is universal, equal and basically free to every individual. However, many policymakers and members of the public seem to confuse the ethical norms about health care as an essential service with the basic economic laws that operate even in the healthcare sector. Health is not a free resource and cannot be maintained without costs being incurred. The health care sector consists of more than a dozen markets – for different types of health care and medical treatment; health insurance; pharmaceuticals, medical equipment; labour market for medical personnel and so on. If one of these markets operates on the basis of distorted price signals – e.g. if basic health care for a large segment of the population is completely free – then these distortions will spill over to other markets and the whole health care system will become financially unsustainable.

Current situation
The Croatian healthcare sector has been in a state of more or less permanent change since the early 1990s. These changes have transformed a once highly decentralised and overstaffed system into a more centralised, better funded and overall more efficient system of mixed public and private health care delivery. The system nonetheless continues to face major problems. Reforms in recent years have mostly dealt with various aspects of healthcare financing. This has resulted in the shifting of an increasing portion of healthcare costs to households and in constant shuffling of “fire-fighting” efforts from one segment of the healthcare sector to another.

During 2000-02, for instance, reforms were aimed at containing spending from public sources by reducing the payroll contribution rate, limiting benefits and increasing the share of private costs. The latest round of reforms, launched in 2006, is trying to contain the growth of spending on specialised care and pharmaceuticals, which expanded by over 50% between 2002 and 2005. The key measure taken was the introduction of a more restricted list of medicines that can be obtained without co-payment, and the inclusion of a larger number of generic drugs on this list. The parlia-
Health care policy and reform in Croatia: How to start dealing with the causes rather than the symptoms of problems

ment also passed five new health care laws. However, regulations necessary for the implementation of these laws have yet to be elaborated. Most of the stakeholders in health care reform are dissatisfied with the current situation, as reflected in an increasingly acrimonious public debate. However, since no one is willing to lose even more benefits, implementing more fundamental reforms has become a political non-starter.

Against this background, in a recent paper I analysed the current situation and possible solutions to problems in the health care sector, so that different stakeholders in healthcare reform could perhaps start discussing the real long-term issues more dispassionately. Another aim of my paper was to encourage Croatian economists to do more research into the economics of the health care sector. This area has been rather neglected in domestic research programmes, which has contributed to the problems facing the health care sector.

One of the most obvious examples of a systemic failure of government bureaucracies to operate the health care system in the interests of the citizens is the spread of corruption. According to a Transparency International report from 2005, 32% of Croatian citizens think that corruption in the health care sector is “widespread”, and 48% think that it is “very widespread”. Sometimes the dominance of physicians’ interests is more or less officially sanctioned. Physicians employed by the state were for many years allowed to use, for symbolic payments, state-owned facilities for their private practices after regular working hours. That such a practice, otherwise unimaginable in other public-sector professions, was legal is a testimony to the political clout that the medical profession has secured in Croatian society.

Another indication of the current state of the health care sector is the large gap between Croatia and members of EU (both old and new) in terms of indicators of major causes of death. According to the World Health Organisation (WHO), Croatia has a higher age-standardised mortality rate than the EU-15 for virtually all major non-communicable diseases: cardio-vascular diseases, cancer, injuries, chronic respiratory diseases, diabetes and other chronic diseases. These developments are probably closely related to the spread of an unhealthy lifestyle, as can be seen from a number of health risk indicators (Box 1).

Box 1. Obesity, smoking, alcohol consumption and physical inactivity in Croatia

Major preventable health risks are highly present in Croatia. First, Croatia has an extremely high proportion of obese people – almost a quarter of the adult population is overweight, which is almost double the average in the EU-15 and 50% higher than in the EU-10 (Table 1). Second, the prevalence of tobacco use is very high, especially for Croatian women (23% of adult women consume tobacco products regularly) and school-age children (17% of boys and girls aged 15 smoke cigarettes). Third, alcohol consumption in Croatia is 25% above the EU-15 average and almost 50% above the EU-10 average. Not surprisingly, mortality rates from alcohol-related diseases are very high. Fourth, the prevalence of physical inactivity is very high: WHO data indicate that in 2003, 47% of Croatian men and 51% of Croatian women were physically inadequately active.

Table 1. Selected health risk indicators

<table>
<thead>
<tr>
<th>Adults (≥15 years)</th>
<th>Prevalence of current tobacco use</th>
<th>Alcohol consumption (per capita per year, in litres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Croatia</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>EU-15</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>EU-10</td>
<td>14</td>
<td>17</td>
</tr>
</tbody>
</table>

a Percent of total population.
b Total recorded and unrecorded consumption per adult (15 years and older), in litres of pure alcohol.

Sources: WHO; author’s calculations.

In spite of these very unfavourable indicators, one gets the impression that the health authorities do not make particular efforts to educate the population about the seriousness of these risks for health. For instance, the 2006 Health care development strategy of the Ministry of Health fails to stress sufficiently the links between health risks and health outcomes, leaving the impression that the state of health of the Croatian population is mostly good. The only health risks mentioned in this strategic document (more or less incidentally, partly in the context of increased immigration into Croatia in the second half of the 1990s) are smoking and alcohol.

1 See “Health care policy and reform in Croatia: how to see the forest for the trees”, in Katarina Ott (ed.), Croatian accession to the European Union, Vol. 4, Zagreb: Institute of Public Finance and Friedrich Ebert Stiftung, 2007; www.ijf.hr.
2 An analogous practice would be, for instance, to allow policemen to use policing facilities and equipment for private security services after regular working hours.
3 For instance, in Croatia there were 356 deaths from cardio-vascular diseases per 100,000 people in 2002, almost double the average in EU-15 (185 deaths).
consumption, while obesity and physical inactivity are not even mentioned.

The health authorities have in particular adopted a cavalier attitude vis-à-vis smoking. The Croatian Medical Association (Hrvatski liječnički zbor) estimates that about 12,000 people die in Croatia annually from diseases caused by smoking (Vjesnik, 8 June 2007), and the Andrija Štampar Public Health School estimates the annual health care costs of smoking-related diseases at about 2 billion kuna. Notwithstanding these estimates, the official position of the Ministry of Health is that “we have a good law on the restricted use of tobacco products, but the law is not being implemented”, and that “one should not hurry with the total prohibition of smoking before evaluating the experiences of other countries” (Večernji list, 29 January 2007). Smokers in Croatia do not pay higher health contribution fees, so that non-smokers are punished twice: first, by being exposed to the health risks of passive smoking; and second, by sharing in the increased costs of health care caused by smokers.

Viewed from the supply side, Croatia has significantly fewer physicians, nurses, midwives and pharmacists per 1,000 inhabitants than either the EU-15 or EU-10 on average. When comparing these data with health outcomes one could conclude that the healthcare sector in Croatia is fairly efficient in terms of utilisation of human resources: with 25-50% fewer healthcare professionals it helps “produce” basic outcomes such as healthy life expectancy that are not significantly lower than EU averages. Dentists are the only health professionals whose numbers compare favourably with European averages. This is surprising because the dentists are also the only health profession where private practice predominates and most expenses are out-of-pocket. Moreover, few complaints tend to be heard about the quality of services and corruption in dental care. What this case demonstrates is that market mechanisms can be relied upon to produce efficient outcomes for some health services and reduce – perhaps even eliminate – government failure.

Finally, it is worth mentioning rapid population ageing as one of the greatest challenges facing the healthcare sector in the world today, one that the authorities in Croatia have yet to start considering. According to the latest projections of the State Statistical Bureau, by 2050 the proportion of the elderly in the total population might rise to 27%, and the share of the working age population might decline to 59% (Table 2). The old-age dependency ratio – population aged 65+ as a share of population aged 15-64 – would thus increase from about 23% in 2001 to 46% in 2050, and the total dependency ratio (the elderly plus children as a percentage of the working-age population) from 49 to 69%.

But this is only part of the demographic picture with negative implications for the healthcare sector. The ratio of the population not paying health insurance contributions to employed persons is already extremely unfavourable, about 2:1 (Table 2). This in itself is quite enough to show that Croatia’s health insurance system faces major long-term sustainability problems. Only one-third of the population is paying for health insurance, while the remaining two-thirds – retirees, family members of insured persons, the unemployed and other non-active persons – are paying no health insurance contributions at all, even though they account for well over two-thirds of health care costs. With population-ageing this ratio will inevitably deteriorate. The high proportion of retirees is a particular concern because they have accounted for about 43% of total health care expenditure since 2000, according to Croatian Health Insurance Institute (HZZO).

### Table 2. Demographic trends and health insurance

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Percentage share</th>
<th>Ratio of population not paying health insurance contributions to the number of employed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In total population</td>
<td>In working-age population</td>
</tr>
<tr>
<td>Children (0–14)</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Working age (15–64)</td>
<td>67</td>
<td>59</td>
</tr>
<tr>
<td>Elderly (65+)</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>Children plus elderly</td>
<td>33</td>
<td>41</td>
</tr>
</tbody>
</table>

*Total population not paying contributions also includes some other non-active categories of persons.*

Sources: State Statistical Bureau; HZZO; author’s calculations.
Main causes of problems: distorted incentives at the micro level, disequilibria in financing at the macro level

Unfavourable trends described above are usually explained by the lack of resources devoted to the health care sector. However, in terms of health care expenditure as a proportion of GDP, Croatia (at 8%) does not lag behind EU-15 (8.8%), and on average spends more on health care than the new member states (7.1%). The problems lie elsewhere: the relatively large resources that the society devotes to health care are partly wasted because of the flaws in the system of health care financing, both at the microeconomic level (due to distorted incentives in primary and hospital care) and disequilibria in sources of financing at the macroeconomic level.

One example of the flaws in the system of health care financing at the microeconomic level is primary health care. As the “gatekeepers” of the healthcare system, primary-care physicians play an influential role in determining the costs of health care by prescribing drugs and referring patients for specialist or hospital care. In Croatia, primary-care physicians are paid on the basis of “capitation” payments, i.e., flat fees per patient per year. This system was introduced in the early 1990s, probably for ease of administration and because it prevents over-billing. However, when the authorities introduced this system, they apparently did not take into account that it would provide an incentive to physicians to sign up as many patients as possible. As a result, primary-care providers might end up with too many patients for the limited amount of time they have. This would lead to rationing of services to free up time to see more patients: some preventative care might be cut back; more patients might be referred to specialists than would otherwise be the case; and medicines might be prescribed more liberally.

These trends have indeed been observed in practice. Spending on specialised care and pharmaceuticals expanded by 67 and 57%, respectively, between 2002 and 2005. Although the number of prescriptions per patient per year is limited to five, the per capita number of prescriptions rose steadily from 6.0 in 1998 to 8.1 in 2005. And in the first five months of 2007, primary-care physicians issued 20% more prescriptions than in the same period in the previous year. An additional reason for the shifting of healthcare provision to secondary and tertiary facilities is that capitation payments do not allow most primary care doctors to equip their offices adequately, so they are more or less forced to send patients to clinics and hospitals.

At the macroeconomic level, the main flaw in the system of financing is the excessive reliance on health insurance contributions and insufficient reliance on general tax revenue. About 80% of health care costs in Croatia are financed through mandatory health insurance contributions (Graph 1), which are paid almost entirely by employers and are assessed on a relatively narrow tax base – the salaries of employees. Employed persons, in turn, account for only one-third of the population and their share in total population will shrink as

Graph 1 Structure of health care financing in Croatia and EU, 2003 (as a percentage of total health care expenditure)

Sources: HZZO; HANFA; WHO; author’s calculations.
the process of ageing accelerates over the coming decades. Continued reliance on the payroll tax will thus place an increasingly heavy burden on the productive labour force and on the economy. At the same time, Croatia stands apart from the old and new members of the EU in that the share of the government budget in the financing of total health care costs is disproportionately low, only 3% (Graph 1). Recent trends in health care financing in other countries clearly suggest that it is unrealistic for the Croatian authorities and the public to expect that this model of health care financing can be retained (Box 2).

**Box 2. Models of health care financing**

There are three main models of healthcare financing in developed market economies. Many continental European countries, including Croatia, use the so-called social insurance model, in which funding for health care – but also pensions, unemployment and other social risks – comes mainly from compulsory contributions (payroll taxes) paid by workers and their employers.

In the second, the national health insurance model, used in the United Kingdom, Sweden and Canada, among others, the principal source of funding is general tax revenue rather than specific contributions earmarked for health insurance. As a result, the health authorities have to compete for government funding with other users of public funds (education, transportation, etc.) much more intensively.

The third model, private health insurance, is used mainly in the United States. It is unusual in that most workers and their families are insured privately through their employers, so that private funding accounts for a much larger share of total health spending. But even the United States has two major public health insurance programmes: Medicare (for the elderly) and Medicaid (for the poor), both financed through a mixture of general taxes and payroll contributions.

The three models have been slowly converging. In France, social security contributions are now supplemented by revenues from personal and corporate income taxes; in the United States, a big expansion of government spending on older people to help pay for their medicines will be financed from income tax revenues; and in the United Kingdom, social security contributions were raised significantly in 2002 to collect additional funding for the National Health Service.

Another clear imbalance in sources of financing is that patients pay virtually the entire amount of private health care expenditure (about 16% of total health care costs) out of their own pockets, as the share of private health insurance in health care financing is negligible, only 0.6% of total health care costs, compared with 7% on average in EU-15 and 4% in EU-10 (Graph 1).

**Possible solutions**

The first major recommendation for health care reform that can be derived from the preceding analysis is to increase the share of general tax revenues in the financing of healthcare expenditure. The main requirement would be to determine what proportion of healthcare costs for the two-thirds of the population who are not employed would be covered from general taxes (i.e., from central and local government budgets), and what proportion would be covered from health insurance contributions (i.e., from the HZZO budget). At the moment, this split in the sources of financing is unclear to anyone. Recent experience suggests that the authorities usually wait until debts in the health care system accumulate to the point where there is the threat of the collapse of a part of the system, and only then take some ad hoc measure. The latest example is the financial injection of 1.7 billion kuna to the health care system made in the 2007 Supplementary budget (rebalans), which will be used to pay for unsettled bills, mostly for pharmaceuticals (Vjesnik, 7–8 July 2007).

Instead of such paternalistic measures, the authorities would need to determine transparent and stable rules for financing the healthcare expenditure of the two-thirds of the population who do not pay mandatory health insurance contributions. For instance, many citizens who do not pay contributions – in particular the elderly – are heavy users of health care services and already contribute to general taxes through the value-added tax and excises (and, in some cases, personal income taxes). Therefore, from both equity and efficiency perspectives it makes sense to use more of the tax revenue to finance health care. Moreover, this approach is feasible because the authorities will anyway have to reduce spending on items such as economic subsidies as part of the EU accession process. A comprehensive reform would also need to address the issue of financing of capital spending in the healthcare sector.

The second major recommendation in terms of potential impact on healthcare system finances would be to re-examine the social benefits and costs of the current system of sick leave and maternity leave allowances, which account for 12–14% of total HZZO expenditure.
These allowances are in most other countries financed and administered outside the system of health insurance, usually as part of the system of unemployment insurance. In the evaluation of the World Bank, Croatia provides one of the most generous sick leave and maternity leave compensation schemes by international standards, with the state taking on almost the entire risk of added labour costs due to illness or maternity. As a result, there is little incentive on the part of the employers and employees to be judicious in the use of these benefits.

At the same time, there are indications that disability and some other allowances (e.g., for war veterans) are insufficient to guarantee minimum a socially acceptable living standard to many users of these allowances. This situation has not been conducive to social dialogue and tolerance because it has created the impression that the state is wasting public resources on some groups in the population (given the widespread abuse of sick leave allowances among the employed) while at the same time it has been overly frugal with those who indeed need the help (given that most disabled persons and many recipients of veterans’ allowances do not have other sources of income). However, this issue would have to be addressed outside the narrow scope of health reform, by introducing so-called “zero pillar” of pension insurance, whose aim would be to prevent poverty among the disabled, veterans, the elderly and other persons with insufficient financial means.

The long maternity leave – usually one year in Croatia, compared with 16 weeks on average in most industrial countries – is often defended as necessary to help increase the low birth rate. However, this argument is a classic example of the matching of a wrong instrument with a given target. As elsewhere in the world, the demographic trends observed in Croatia are of a secular nature and the low birth rate cannot be reversed by a single policy measure such as long maternity leave. Recent research indicates that in OECD countries the greatest impact on the fertility rate comes from the female employment rate and availability of affordable child-care facilities, which allows mothers to return to work relatively quickly after giving birth. Against this background, it might be perhaps more beneficial for women and the society as a whole to reduce the length of maternity leave and to invest the funds thus saved in an expansion of subsidised child care facilities and simplified administrative procedures for the part-time work of mothers.

Regarding microeconomic aspects of healthcare financing, the measures introduced by the Ministry of Health at the start of 2007 to help control expenditure on pharmaceuticals are necessary and welcome. However, these measures deal more with the symptoms than the causes of the rapid growth of expenditure on medicines and can therefore be regarded as a temporary stop-gap measure. As noted above, the escalation of costs of pharmaceuticals and specialised care can be traced to inappropriate incentives provided to primary health care under the system of flat fees per patient. What is needed is a system of payments under which primary-care providers would have an incentive to act as true “gatekeepers” of the healthcare system. One possibility could be to replace the flat-fee payments with fee-for-service payments based on the points system, with appropriate monitoring and auditing of bills submitted by primary care providers. This system is widely used in continental European countries and would probably be more effective in checking the rise in expenditure on pharmaceuticals and specialised care than the series of piecemeal cost-containment measures introduced over the years.

Similarly, the direction in which the authorities are moving with regard to hospital and specialised care – implementing more widely the system of prospective payments based on therapeutic treatment groups, and introducing a system of payments based on diagnosis-related groups – is necessary and welcome. However, the loophole in this system that allows hospitals to choose the billing options that are most advantageous to them (and, hence, more costly to HZZO) would need to be closed. Another widely recognised weakness of the Croatian hospital system that would need to be addressed over the medium term is lack of appropriate management skills. Virtually the entire secondary and tertiary health care sectors are managed by physicians, who often lack an adequate training in strategic management, financial planning and other skills necessary for hospital management in a market economy.

In addition, the functions of monitoring and auditing financial operations of healthcare institutions are apparently neglected and would need to be significantly strengthened. The authorities worldwide are working harder at getting better value for the money they provide to hospitals and specialised care institutions. Healthcare expenditure is rising not just because of new technologies and rising demand, but also because the healthcare sector is dominated by powerful providers – pharmaceutical and medical technology companies, hospitals and influential doctors – who find it fairly easy to pass on the costs from new medical technologies to the state. The overriding goal of recent healthcare reforms in developed market economies is therefore to ensure more effective use of public funds.
One approach to this goal is to **introduce more competition into healthcare markets**, for instance, by allowing hospitals to keep financial surpluses and reinvest them in services.

A complementary approach is to **turn to the private sector to provide more healthcare services**. In particular, it is important to recognise that public financing does not have to mean public provision of health care. In most European countries, the healthcare sector functions as a mixture of public and private providers. In Croatia, aside from dental and partly primary care, the role of the private sector as a provider remains limited. One reason for this state of affairs is that HZZO does not seem to have the administrative capacity to process and monitor reimbursement of medical bills submitted by individuals and private providers for treatment in private medical facilities.

A more fundamental reason is that the authorities in Croatia have still not elaborated a consistent framework for private sector involvement in the healthcare sector. What measures were taken in the past were taken randomly – for instance, the leasing of public-owned facilities for use as doctors’ private offices, or the recent proposal to lease unused hospital capacity to private health insurance companies. Such partial measures have not made the system more efficient nor have they provided much benefit to health care users. The same conclusion applies to the development of private health insurance: a consistent institutional, regulatory and market framework in which private health insurance companies are expected to function and incentives for their development have yet to be elaborated.

This brings us to the next major area that has seen little progress over the years: reform of the co-payments system. Co-payments contribute little to the overall health budget; they are difficult to administer because of many exemptions; and are disliked by the public. Yet having people participate in bearing the costs of health care is the first step toward a true health care reform. Health is not a free resource and cannot be maintained without costs being incurred. The society does not benefit from unused medicines and unnecessary visits to the doctor. If people understand that each time they visit a doctor someone – including themselves – has to pay to cover the costs, such waste can be reduced. Co-payments should thus be understood as user fees – the cost of accessing the system of health care, similar to road tolls as the cost of accessing the system of highways.

As argued above, the current state of affairs is untenable: only 16% of healthcare spending in Croatia is covered from private sources, compared with the average of 26% for EU members. Within the private sources of funding, there is a further imbalance between out-of-pocket expenditure, which is close to the EU average, and costs covered by private health insurance companies, which are way below the EU average.

The experience of Slovakia shows that people are willing to accept the notion that good health is primarily their own responsibility and that every individual has to participate in healthcare financing. Moreover, the Slovak experience shows that the introduction of a well designed co-payment system does not reduce access to health care. For their part, the authorities should contribute to this understanding by making much more serious, frequent and visible efforts targeted at the prevention of major health risks related to unhealthy lifestyles.

In summary, problems facing the healthcare sector in Croatia are not new or unique. Solid economic analysis and judicious use of other countries’ experiences lead to many well-tried solutions and allow us to avoid many mistakes. A key factor for the success of health care reform is the authorities’ ability to manage political economy aspects of the reform. The effects of health care reform are felt immediately by the entire population, unlike the effects of pension reform, which are delayed and are felt by only one segment of the population at a time. The authorities therefore need to manage expectations of different stakeholders in health care reform much more carefully and actively. For a reform to succeed, the public needs in particular to be able to see the forest for the trees: the authorities need to elaborate a clear vision of health care reform at the centre of which stands good health for all Croatian citizens, rather than constantly shift the responsibility for existing problems to previous governments. Finally, one should emphasise that the technical complexity of healthcare policy and reform should not be underestimated. Economists and healthcare experts in Croatia should therefore make a much more substantive contribution to health care reform than has been the case so far.