THE RESOURCES AND CONFIGURATION OF FISCAL SPACE FOR HEALTH

ZDROJE A KONFIGURACE FISKÁLNÍHO PROSTORU PRO ZDRAVOTNICTVÍ

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Abstract

This article deals with the fiscal space for healthcare and the resources we can use to create it in its universal and optional part. The aim is to map the possibilities of building fiscal space for healthcare, to grasp it in theory and to use a triangular graph tool to perform basic quantifications. Findings are supported by the analysis of fiscal dimension of the configuration of health systems including the use of an innovative concept of fiscal space for healthcare. It works with the OECD's classification of financing consisting of government schemes (based on general taxation), compulsory health insurance schemes (earmarked taxation, social and nominal health insurance, or compulsory private insurance) and voluntary private expenditure (private insurance, savings, or direct out-of-pocket payments).

Keywords

fiscal space, health insurance, earmarked taxation, health systems JEL Classification: I18, I13, H20

INTRODUCTION

This article deals with the fiscal space for healthcare and the resources we can use to build it. The aim is to map the possibilities of creating the fiscal space for healthcare, to grasp it in theory and to use a triangular graph to perform basic quantifications. To achieve this, we shall also classify the sources of health care financing in the universal and optional

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part so that we know their basic typology and socioeconomic properties. Obviously, this is an important research topic since health financing is one of the major social and fiscal challenges today.

It is essential to define the concept of fiscal space for healthcare (Heller, 2006) and its importance from the point of view of health policy. The concept of fiscal space is a general concept of fiscal policy in the sense of the ability to do budgetary financing for a given purpose while maintaining fiscal stability (Nerlich & Reuter, 2016; Cheng & Pitterle, 2018). When we reënter this concept at the healthcare level, it is understood as the government's ability to mobilise and allocate resources for healthcare without compromising the balance and sustainability of public budgets (Cashin & Tandon, 2010; Wolfe & Powell-Jackson, 2013). It is quantitatively related to the overall economic level, the tax quota, and the share of public expenditure in GDP. In developing countries undergoing the process of building the fiscal space, the mechanisms of its creation are essential (Meheus & McIntyre, 2017; PAHO, 2018); in developed countries, it is mainly about the optimisation and evolution of the existing fiscal space in relation to needed healthcare performance (OECD, 2015).

There are two basic ways to provide and pay for healthcare. The first works with the link between the need for health care (given that people cannot choose getting their diseases usually and even if they influence it by their lifestyle, they still ought to receive treatment) and the objectively recognised entitlement of the patient, financed using the principle of solidarity. The second is based on the client's decision-making in relation to the health care provider and the subjective utility financed with private money on the principle of equivalency. In terms of reimbursement, the state, public or private insurers can come between the patient and the doctor; this creates triangulated, indirect schemes for financing care, which currently prevail.

These arrangements form the basis of two basic parts of contemporary health systems: universal and optional. The boundary between the two is clearly definable in theory, but not entirely sharp in practice, and above all their *specific content evolves over time and space*. Nevertheless, from a theoretical point of view, this general division is crucial. It makes it possible to identify the two components, their content and the financing methods used in each health system in developed countries. Therefore, I argue that this categorization is essential for health economics and policy (Mertl, 2018, 2021). At the same time, the dynamics of change and the heterogeneity of health care are increasing, and the frequency of new methods, treatments or optimised financing schemes is unlikely to decrease in the future. This allows for an unprecedented expansion of supply to the optional component, but at the same time creates pressure for rational definition and cost-effectiveness of the universal component.

The use of these terms (categories) tends to gravitate towards their teleological understanding *of their purpose* (Engliš, 1930) and normative definitions *of their content*, because when discussing a particular system, we project our ideas and intentions (postulates) onto them about how they should look like and then we create norms through public choice to establish that. However, it is important to remember that *they also make sense on their own* – as a basic *general categories* of advanced health systems that

allow health policymakers in a particular country to rationally and systematically provide and finance healthcare with predictable effects, defined by a desirable level of solidarity, in a universal part by controlling the costs at the macro level, as well as adequate space for patient's/customer's choice in optional part.
The universal part in European health systems (in Czech legislation, too) *ideally* corresponds to the health care that the patient must receive because it demonstrably improves or maintains his/her health or reduces his/her suffering. However, *in practice* this principle may not be adequately implemented, leading to poorer health and unmet health needs of patients. The de facto unavailability of such care, while formally guaranteed by law, can also be a problem. The analytical advantage of healthcare is that most health effects in this part can be objectively demonstrated using evidence-based medicine, double-blind studies, and statistically conclusive methods, even in international comparisons.
The optional part *ideally* corresponds to the health care and services that the client demands because he wants or can have them, and the health care facility offers them. Thus, he or she increases his or her individual subjective utility from the consumption of health care over and above what the universal part provides. *In practice*, the optional part may also include the part of health care with an objectively necessary indication if the universal system in a given country is not sufficiently developed or solidarity based. We need not objectify or legally define the consumption of care and services in the optional part; the main criterion here is the client's utility and effective demand in relation to his budgetary constraints. At the same time, optional healthcare can have rational medical indication and offered as a professionally valid treatment option beyond the universally available, publicly determined standard (Mertl, 2021).

1. METHODS

A valuable mathematical tool for the analysis of fiscal space is the triangular graph, which shows the relationship of the ratio of three variables providing a sum. It appeared in the literature years ago (Doorslayer & Wagstaff, 1999); it was used to illustrate the ratio of funding from taxes, social security, and private spending. For the purposes of this research, I have updated and supplemented it with new knowledge so that it can be used for financing from general taxes, earmarked payments for healthcare and private expenditure, including specific data for OECD countries for 2019.
An important theoretical source is the theory of public finance (Rosen & Gayer, 2008; Tresch, 2015; Ulbrich, 2013; Auerbach, 2010), which is also reflected in national monographs (Hamerníková & Maaytová, 2010; Peková, 2011; Kubátová, 2018). These findings are complemented and put in concrete terms by the fiscal dimension of the configuration of health systems (OECD, 2015; McCoy, Chigudu, & Tillmann, 2017), including the use of an innovative concept of fiscal space for healthcare (Cashin & Tandon, 2010; Meheus & McIntyre, 2017).
As a source of data, I use the OECD Health Data database (OECD, 2021) for year 2019 (the last reliably statistically processed one available at the time of research for

the wide spectrum of countries). The reflection on the development of health systems in international statistics is sometimes complicated or delayed, as shown, for example, by the OECD's approach to considering the reforms of the US health system. At the same time, it must be noted that in recent years, the OECD methodology for health funding sources and schemes has been modified. In this article, I use the innovated approach, as contained in the description of the current methodology of data tables and in the current OECD Policy Brief (OECD, 2020). It works with the classification of financing into government schemes (based of general taxation), compulsory health insurance schemes (earmarked taxation, social and nominal health insurance that are compulsory by nature or compulsory private insurance) and voluntary private expenditure (private insurance, savings, or out-of-pocket payments). This methodology is consistent with the sources of financing that are analysed further in this article.

1 ANALYSIS AND DISCUSSION

1.1 Sources of financing the universal part of the system

1.1.1 General taxation

The financing of healthcare from general taxes corresponds to the principles of public economics in the financing of public goods with a possible overloading effect in health care (Hamerníková & Maaytová, 2010), or non-market and impurely market goods with state intervention according to institutional criteria (Bénard, 1985). Other parts of the public sector, such as defence, police, justice, or transport infrastructure, can be funded similarly. The basic principle here is the non-earmarked and general collection of taxes based on the principles of tax theory and policy, which form a unique tax mix in each country. The necessary volume of funds is thus concentrated in public budgets, which is decided by public choice, and individual budget chapters are generated annually within the budget process, one of which is also healthcare. From the taxpayers' point of view, the principle of tax-bearing capacity and fair distribution of the tax burden according to the taxpayers' solvency is applied (Engliš, 1932). For the taxpayer, there is no dependence between the tax paid and the level of healthcare consumption, nor is there a signalling function in terms of the visibility of healthcare expenditures in tax rates or types of taxes.

1.1.2 Earmarked (hypothecated) health tax

This source of financing consists in the purposeful allocation of a certain tax or part of the tax rate to healthcare. It is clear to the taxpayer how much of the amount or what rate is paid for this purpose (signalling function). The principle differs slightly from tax assignations, where a taxpayer may decide to allocate part of the taxes paid to a chosen area (e.g., church tax in Germany or Italy); in health tax's case, the payment is mandatory,

and the purpose is set by law in advance. In the English literature, the terms hypothecated tax or earmarked health tax are used (Buchanan, 1963; Bloom, Cashin, & Sparkes, 2017); the Czech translations are "účelová zdravotní daň" (purpose-based or special-purpose health tax) or "omašličkovaná zdravotní daň" (earmarked health tax), as the relevant tax income receives a "mark", "bow" or "label" (gets earmarked) at the time of payment, which accompanies it on its way through the public budgets until its final allocation to healthcare. This creates a fiscally autonomous financing scheme with a specific, visible health tax setting.

In practice, the most common allocation is a certain percentage of earnings (earmarked payroll tax) or a certain percentage of income (earmarked income tax). Additionally, some countries also use a share of excise duties (tobacco, alcohol, etc.) (Hellowell, Smith, & Wright, 2017), or rarely even a share of VAT (WHO, 2020). Sometimes mild (soft) forms of earmarking are also used, such as the allocation of resources to healthcare through the budgetary determination of taxes or other fiscal rules, but there is no longer a signalling effect of a separate rate or health tax for the taxpayer.

1.1.3 Social insurance

Social insurance is based on the payment of premiums as a percentage of earnings up to a ceiling and entitlement to insurance benefits when a covered social event occurs (Vostatek, 2000; Holub, Mertl, Šlapák, Vostatek et al, 2019). The premium rate and benefit levels follow social insurance actuarial principles and participation is compulsory for all members of a covered social group (it is possible to segment by social groups with a separate rate for each, which has been used historically in many countries on a sectoral basis, or to have a national-level system with a uniform rate). In the past, it has been used as a source of financing for health care, either in-kind (third-party payment to the provider) or in cash (cash-based system – i.e., reimbursement of part or all the health expenditure incurred) and has been particularly important in some countries as a health security instrument on a performance-based (conservative) basis. However, social insurance (and insurance premiums) has gradually encountered two major problems in health care: the requirement to spread the health risk over the entire population, coupled with a need for reduction in the segmentation of the system, and the universality of health care, where the patient's entitlement cannot be related to the amount of earnings or benefits to which the insured would be entitled according to actuarial principles of social insurance. For these reasons, the design is currently not well suited for financing universal health care in its classic form. For the longest time, certain elements have been preserved in Germany or France, but even in those countries, the basic principles of social insurance are currently being significantly modified. In several other countries using a social health insurance system, too, developments have brought the former social health insurance premium closer to the characteristics of a health tax and national health risk sharing. In some countries, however, the term social health insurance continues to be used for schemes resulting from its evolution (typically a compulsory solidarity payment from earnings up to a ceiling, earmarked for health care). The described process has

distinguished the development in utilizing social insurance in health care from sickness and pension insurance, where equivalency principles remain crucial and the role of compulsory social insurance with benefits in relation to earnings on which premiums have been paid is crucial in compensating for loss of income due to sickness, disability, and old age.

1.1.4 Nominal health insurance

Nominal health insurance or nominal premiums are used as part of the two-component premium in the Netherlands and separately in Switzerland. Economically from the public finance's theory point of view, it is an earmarked poll tax for healthcare; everyone pays a single absolute amount regardless of their income.
This concept concerns the nature of solidarity in healthcare: while tax or social insurance funding employs solidarity in terms of both income and health status, nominal premiums maintain solidarity only in terms of health status: they do not change according to the health risk or the income of the insured. With a simple distribution (averaging) of health expenditure per taxpayer, the amount of insurance premiums is quite high; this is one of the reasons why we can see, for example, in the Netherlands a combination of nominal premiums with a percentage rate.

1.1.5 Fees and surcharges (co-payments)

Fees for the consumption of healthcare are in the form of out-of-pocket payments and correspond to the definition of a fee in the theory of public finance.
Their function in the universal part of the system is regulatory – they should alert the patient to the cost of care and motivate him/her to consider its consumption and to move rationally in the system. In this sense, it differs from private direct payments at the market price of healthcare; the patient does not receive additional benefit for them. Another important item is represented by surcharges for medicines, medical devices, or a certain method of treatment or a doctor's action not fully reimbursed within the universal system. These are determined by the difference between the market price and the payment from public resources; often the market price is subject to specific regulation, as is the case with medicines.
However, it is necessary to analytically distinguish between these two aspects – to make it clear when it is an effort to eliminate some objectively given inefficiencies of the public health system and when it is an effort to reduce the scope of jointly paid healthcare in relation to what the medicine offer to the patient at the specified moment. Such a specification would simplify and clarify the economic analysis of fees and surcharges, but it would also clarify the discussion on the social and medical effects of the implemented measures. The need to differentiate the regulatory effect and the simple sharing of part of the costs (co-financing, co-payments) by patients is also confirmed by comparative studies between the typologically different systems of Germany and Norway (Herrmann, Haarmann, & Baerheim, 2018).

1.2 Sources of financing of the optional part of the system

1.2.1 Private insurance

Private health insurance is based on the payment of a premium corresponding to the health risk identified before the conclusion of the insurance contract by means of an individual (or group) medical underwriting. The premium paid also implies the scope and amount of insurance coverage and it represents the market price of the insurance. Private (commercial) insurance company operates on the risk market and offers insurance plans to potential clients that correspond to their purchasing-power-based demand and health profile, thus creating individual groups of clients (insurance pool for a certain product).
In private insurance, there are two main approaches to determining insurance rates: according to individual risk (risk classes) and community (group) risk – community rating or adjusted community rating. The determination of the premium amount is the result of actuarial calculations (Němec, 2008). The client pays a gross premium, i.e., risk premium + administrative costs + profit of the private insurance company.
In private insurance, various forms of co-payments are used to varying degrees as an element of cost control and product differentiation. The level (amount) of co-payments affects the amount of insurance premiums. The most frequently used forms are deductible (the amount paid by the client before the insurance company begins to pay), coïnsurance (the share of total costs always paid by the client), co-payment (also fee, co-payment for the use of the service).

1.2.2 Health savings

A health savings account consists of a personal account into which the client pays a selected amount on a regular basis and draws from it as needed for health care consumption. The economic purpose is to weaken the impact of momentary budget constraints on care consumption decisions and to accumulate resources at the individual level. If individual resources are insufficient to pay, the mechanism fails because there is neither national nor group risk sharing. Rarely, health savings can also be used to finance the universal part of the scheme, if we want to include participants without sharing their health risk (Singapore, a small proportion of religious or conscientious objectors "gemoedsbezwaarden" in the Netherlands). In the absence of both a risk and a savings component and paying for a specific period of time or covering a predetermined range of services (a package), pre-paid schemes emerge (Mertl, 2017).

1.2.3 Direct payments (out-of pocket)

Direct out-of-pocket private payments are the oldest source of healthcare financing, where its price is based on market supply and demand for healthcare consumption. By purchasing this care, the client benefits from its consumption, which he/she compares to the price paid and to his/her budget limit. At first glance, the economic logic behind

direct payments is like the purchase of other goods and services; however, healthcare has several characteristics that reduce or prevent the effectiveness of these direct transactions; why this is not such a simple matter has been defined many times in the literature (Arrow, 1963; Culyer & Newhouse, 2000).

1.3 Fiscal space for healthcare

In the introduction we defined the concept of fiscal space being the general framework for analysing the health financing within public budgets and fiscal policy. An important variable influencing the fiscal space is the tendency (propensity) towards public expenditure on healthcare k_h, which can be defined as follows:

$$k_h = \frac{G_h}{G}$$

Where G is the total volume of public expenditure and G_h is the volume of public expenditure on health. The propensity to spend on healthcare is constant as long as government spending priorities do not change, and thus, for example, when government spending G increases, healthcare will also receive correspondingly increased spending G_h. If this is not the case, the k_h coefficient changes, and so do government spending priorities. Reprioritisation of healthcare means an effort to increase k_h, the opposite process is its reduction, which can occur during economic development, if emphasis is not put on healthcare as a development priority.

From the point of view of health policy, this concept is important because while not denying the importance of fiscal adjustment of payments to the system and efficiency of healthcare expenditures, it defines and generates the necessary amount of resources together with public governance procedures that can be available and used to finance universally available healthcare where the state takes over the guarantee for the coverage of the population by the relevant health services.

Finding fiscal space for health is a major topic in health economics and policy (OECD, 2015). It is being addressed, as can be documented for example at the level of the World Health Organisation, by nearly every healthcare system (WHO, 2018).

According to the findings of social medicine (Holčík, 2009), this problem cannot be solved only by setting rational cash flows, the ways to solve it are broader and consist of the following points (Holčík, 2010):

- investing more money into the healthcare system;
- increasing the efficiency of healthcare;
- limiting the universal availability of health services;
- improving human health in general to reduce healthcare costs due to a lower incidence of disease.

These procedures work with the problem of healthcare expenditures not at the level of optimising the market structure or the degree of competition in the healthcare market, but at the material and factual level, trying to influence the need for and consumption of healthcare resulting from the health of the population and people's relationship to their health.

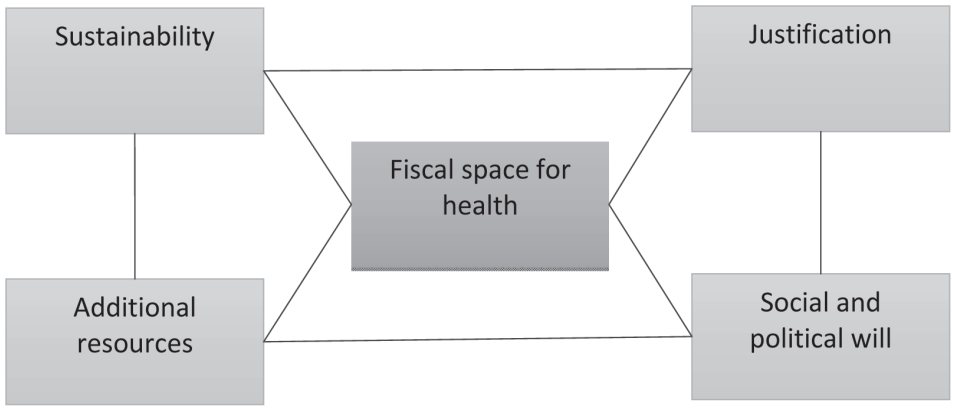
In case of difficulties with the creation of adequate fiscal space, it is recommended supporting it using the following options (Cashin & Tandon, 2010):

- Appropriate macroeconomic conditions, such as economic growth and an increase in overall public revenues, which, given a sufficient propensity for health expenditure, may lead to their increase;
- (Re)prioritisation of healthcare within the state budget / public budgets;
- Increasing the volume of resources going to healthcare, including the use of earmarked taxes;
- Specific grants and development programs improving partial problems in healthcare;
- Increasing the effectiveness of existing spending programs in healthcare;

The last point concerns the efficiency of existing spending - that is, the results we get for the resources available. If we denote by Y_h the total health care output available for a given expenditure G_h (measured, for example, by the actual coverage of health needs in the population, or the amount of care effectively delivered), then increasing the efficiency of the system consists in trying to obtain the highest possible output Y_h for a given G_h (Cashin & Tandon, 2010). We can also increase fiscal space by being able to provide a wider range and volume of health care for a given amount of money, for example by reducing "black holes" in the system or by improving the purchase of health services and medicines. Efforts to improve the efficiency and effectiveness of the health sector may or may not translate into improvements in the parameters of the fiscal space; a principal factor in this regard is whether any gains resulting from these processes are retained in the health sector and used in terms of priority health needs (Barroy et al., 2021).

Summarizing the main characteristics of fiscal space for healthcare and the factors of its successful creation, it can be illustrated on the following figure.

Fig. 1 Features and factors of successful creation of fiscal space for healthcare



Source: (PAHO, 2020)

Fiscal sustainability is related to public budgets and health spending, and the availability of resources for health. The rationale for spending means that fiscal space for health care is created not just because it is possible and achievable, but because it is required by pre-defined specific health policy objectives. Decision-making on public budget priorities, selection, and allocation of resources for health care requires social and political will, resulting in consensus in public choices.

Regarding universally available care, the concept of fiscal space can also be reversed, and healthcare can be understood as an input to the model and the effect of expansion or restriction of its volume on the behaviour of subjects in the system can be addressed. Its need is primarily determined by the health status of the population and the need to address it, but the forms and frequency of care may vary. This healthcare is provided by doctors with the help of medical equipment, medicines, and other medical devices. If there was a model with only one diagnosis that would be treated, then the cost of treatment of one diagnosis would be given by the ratio of available resources and the number of diagnoses that occur in the population in a given period. When there is a constant volume of financing for healthcare, they can increase their income per procedure by reducing the volume of healthcare that they will provide within the framework of public funds. This can be observed, for example, when financing bodies set financial thresholds on the healthcare provided in the form of financial ceilings. Physicians' usual response to this development is to limit the volume of healthcare so that the yield per procedure remains constant. The problem appears when this restriction comes into conflict with the volume of healthcare demanded, i.e., if the overall demand for a certain type of healthcare remains unsatisfied. Then there is the issue of the possible general lack of resources, but also the fact that the price of the performance may not be adequate to the actual demand factor of the performed treatment. Because "objective" pricing by means of an "arbiter" tends to fail in the healthcare sector, a possibility offers itself to use global budgets (budget envelopes) and to monitor developments for several consecutive periods, or to compare efficiency with another healthcare facility and ask why some medical facilities can provide the given healthcare for a certain price and others cannot. A simple comparison of cost-effectiveness between individual healthcare facilities cannot be considered as the only criterion of adequate costs because the complex nature of healthcare facilities practically excludes the possibility of same conditions being achieved and with hard-set economic criteria could lead to rejection of seriously ill patients for fear of losing competitiveness.

We can offer the following general formula, which summarises the links between the volume of healthcare, the cost per procedure and the resources available. Let us assume a model where only one type of healthcare procedure with fixed costs would be implemented in the economy. Then the following relationship applies:

$$G_h = P \cdot Q$$

Where G_h is the available volume of resources for healthcare, P is the price (cost) of one procedure and Q is the number of these procedures (volume of care provided). The movements of the individual variables can manifest themselves differently. For example, if the available resources increase, then with a constant volume of healthcare,

the price of services will also increase, a significant component of which is the income of health workers. If the volume of healthcare increases with resources remaining constant, then the price of one procedure must decrease and vice versa. If the cost of one procedure increases, it means there is pressure on available resources, or also on reducing the volume of procedures. Current healthcare systems often face an increase in the volume of and need for healthcare, which is reflected in the demands on available resources, but in some segments (aftercare, some types of inpatient care) even in relatively low reimbursement per procedure.

From the point of view of cost control, it should be noted that limiting patient demand has only a limited effect on the macroeconomic efficiency of healthcare, for two reasons. Most healthcare costs (60–70 %) have got a fixed or semi-fixed character and are borne by the network of medical facilities itself (Němec, 2008, p. 139). In connection with the above relationship between costs and the volume of care, providers will tend to compensate for a drop in revenues resulting from the limited use of services with higher prices of individual procedures.

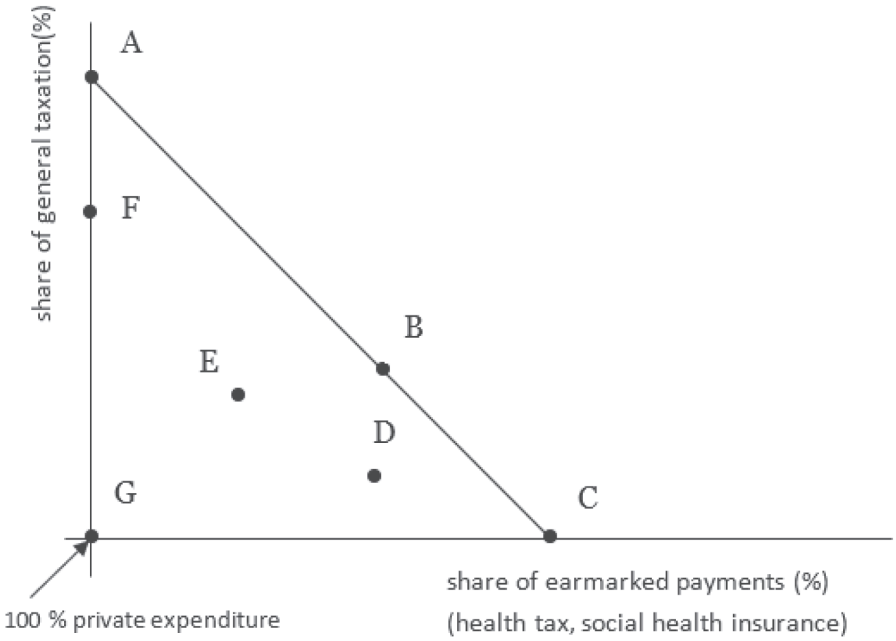
Such considerations affect de facto any universally available health system financed from public (compulsorily collected) resources and are especially useful for understanding the actions of individual entities when there are disparities either on the revenue or expenditure side of the system. At this point, there are restrictions, and the individual subjects in the system are starting to protect their positions. It is logical behaviour, and if we know the macroeconomic dimension of health policy, we should not be surprised by it.

The above considerations can be applied by analogy to the optional part of the system, in the sense of an analysis of private household expenditure on optional healthcare. In this case, we could consider private healthcare expenditure, the coefficient of private healthcare expenditure in relation to total household expenditure, optional care prices in relation to the volume of private expenditure, and the amount of optional care consumed. This analysis would be closer to a standard analysis of the functioning of markets (due to optionality), but it would still maintain the specific characteristics of healthcare.

1.4 Triangular graph of fiscal space

Above we have discussed the fiscal space for health, now we shall focus on what it is created from. In terms of the use of particular types of resources, a simple diagram (Figure 1) can be drawn, which shows the possibilities of their use in creating the fiscal space – general taxes, earmarked payments for healthcare (health tax, social health insurance), private expenditure. It is necessary to see that the picture is simplified, it was created when social health insurance still had a bigger role in healthcare systems, but it can also be applied to health tax as we have defined it, and subsequently generally to earmarked mandatory payments for healthcare on the horizontal axis, as the current OECD methodology supports.

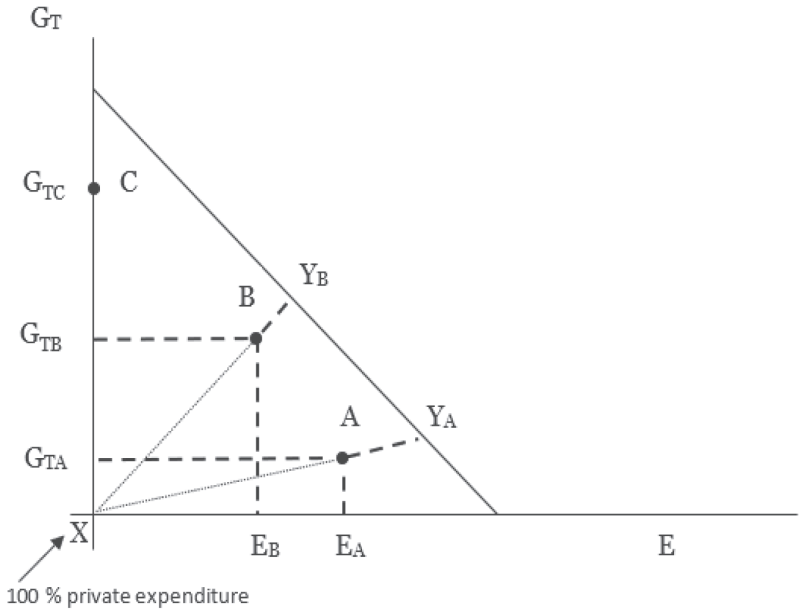
Fig. 2 Use of general taxes, earmarked payments, and private expenditure in creating the fiscal space in healthcare



A – full financing from general taxes; B – partial financing from general taxes and earmarked payments; C – full financing from earmarked payments; D – financing mainly from earmarked payments, supplemented by general taxes and private sources; E – similar share of all three sources; F – financing from general taxes supplemented by private expenditure; G – full financing by private expenditure
Source: according to (Doorslayer & Wagstaff, 1999; Murray, Knaul, Xu, Musgrove, & Kawabata, 2012), modified, updated for earmarking by author

The concept of fiscal space for health outcomes from the settings of the universal part of the system. Figure 2 shows (or can be drawn for) the universal part of the system separately if we include in private expenditure only the regulatory fees and surcharges. By analogy, it could be applied to the total healthcare expenditure. In this case, the entire system (all healthcare expenditures) can be drawn into the triangle, if we also include private sources of financing of the optional part of the system in private expenditure. Mathematically, it must always be true that the shares of three analysed variables together give 100 percent of the total indicator that we want to analyse on the triangular graph (in this case total health expenditure).
Figure 3 then shows three model situations with a combination of sources, including the delimitation on the axes and the connection to the apex of the triangle (with full funding from private sources – theoretical case). In this figure, the specific values of the share of financing from general taxes (GT) and earmarked payments (E) can be deducted on the axes.

Fig. 3 Shares of general taxes, earmarked payments, and private sources in creating the fiscal space in model situations

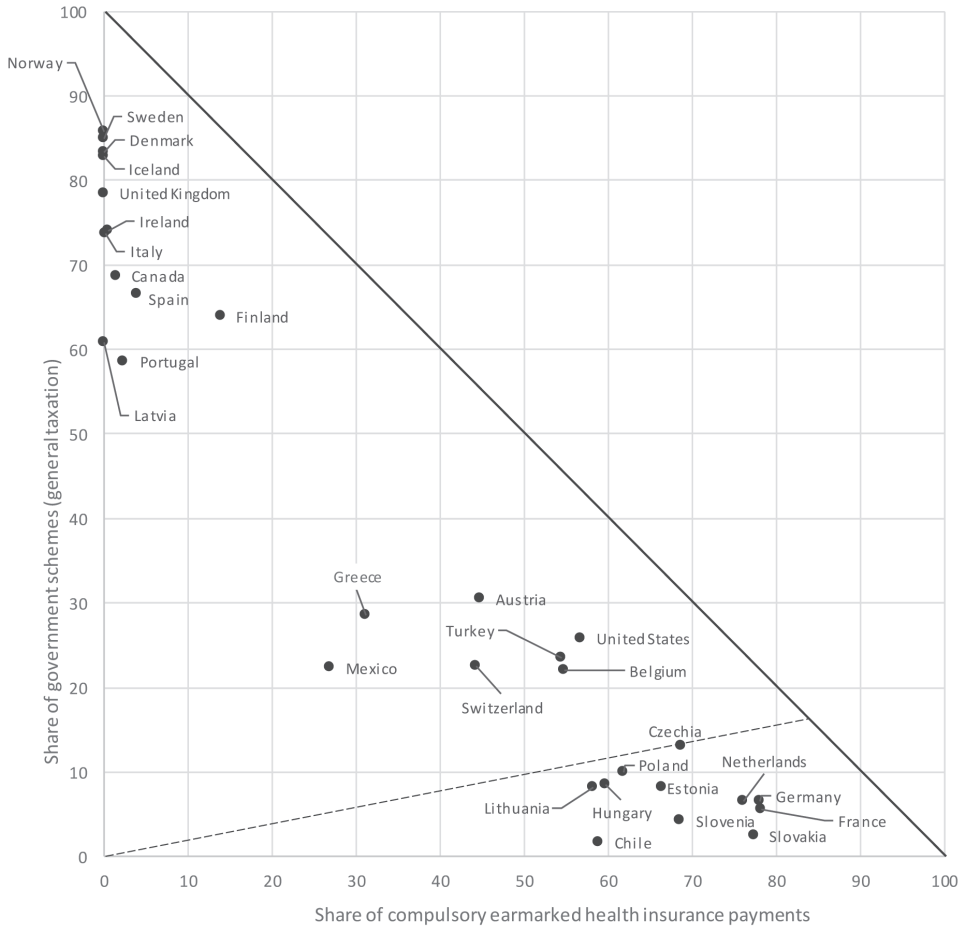


Axes: Horizontal axis variable E – percentage (share) paid from earmarked payments for healthcare (health tax, social health insurance ...); vertical axis variable GT – percentage (share) of resources paid from general taxes
Points: A – higher share of earmarked payments (E_A), lower from general taxes (G_{TA}), lower from private sources; B – the same share of E_B and G_{TB}, a small share from private sources; C – high share of general taxes (G_{TC}), zero from earmarked payments, lower from private sources (100 – G_{TC}). It can be proven mathematically that the ratio of the distance $d(AY_A)/d(XY_A)$, or $d(BY_B)/d(XY_B)$ corresponds to the share of private resources, the length of the line AY_A or BY_B indicates the size of private resources.
Source: author, original scheme (Doorslayer & Wagstaff, 1999)

We can utilize this theoretical concept for empirical analysis, concerning government schemes, and compulsory contributory health insurance schemes, the third variable in this case being the share of voluntary private expenditure, which is indicated for the Czechia by dividing the line from the zero point to the hypotenuse of the triangle by the relevant data point (Figure 4). The dashed line is thus divided by this point for Czechia's case according to the share of voluntary private expenditure on health and can be drawn for other countries too. It includes also many other significant OECD countries. The author has got available also data and graph for other OECD countries and years by request.
As a supplementary information to the countries on the graph, we ought to note that USA, Netherlands, and Switzerland are the main OECD countries that rely primarily on neoliberal principle of compulsorily (or quasi-compulsorily) bought private health

insurance (with absolute premium amount) that is heavily regulated; the other countries collect the earmarked resources mainly on solidarity principle (usually proportional to earnings – percentage rate). Therefore, their earmarked share consists primarily of these compulsory private resources, which was one of the reasons for revision of OECD's methodology when those schemes (like USA's Affordable Care Act – Obamacare or Enthoven's reform in the Netherlands) were established (OECD, 2020). USA's case is even more complicated because of the plurality of resources and huge disputes during last decade whether the insurance plans are compulsory to buy or not for American citizens.

Fig. 4 Triangular diagram of government, compulsory earmarked and voluntary health expenditures, OECD 2019, %



Source: author, data (OECD, 2021)

CONCLUSION

The resources for financing health care can be divided according to the character of health care they finance and the earmarking at the time of collection. *While private resources and social health insurance are earmarked by nature, financing from taxation can be general or earmarked based on public choice and the health and tax policy goals.* The design of fiscal space for health for particular country corresponds to the resources used. We have provided a general overview of possible financing resources and pointed out their principal socioeconomic characteristics. We recognize if the resources are obligatorily or voluntarily allocated, used for universal or optional part of care, utilize primarily principle of solidarity or equivalency, are earmarked or not. Then we moved into the concept of fiscal space for health where these sources are mixed into financing schemes that together create the annual health budgets.

The application of a triangular graph clearly shows the share of the three variables (government expenditure, compulsory earmarked payments, voluntary private expenditure) in the creation of the fiscal space in healthcare has shown that the share of individual sources of financing differs fundamentally between countries. Three basic variants of dominant sources of healthcare financing can be traced: from general taxes, from compulsory solidarity-based payments (earmarked taxes, social health insurance) and from compulsory private payments (private insurance); in all cases supplemented by an appropriate share of optional private expenditure. The specific nature of compulsorily collected resources is important for building the fiscal space, from general taxes through health tax and variations of social insurance premiums collected as a percentage of income to nominal insurance premiums in the form of an absolute amount. Utilizing the general taxation, various health financing schemes can be directly or indirectly subsidized from government budget, or in case of private schemes, tax exemptions and special regimes can exist.

The triangular graph tells us that considering earmarking resources for health, we can observe three main groups of countries. The first one, including e.g. Canada, Great Britain, Scandinavian countries, which relies mainly or solely on general taxation as a resource for healthcare and do not utilize earmarking. And the second group, including e.g. Slovakia, Germany, France, the Netherlands, Slovenia and also Czechia, that relies mainly on earmarked payments. Fewer countries fall into the third group (like USA, Switzerland or Austria) that combines resources with no major preference.

We can say that this article's aim has been achieved, we enlightened the construction of fiscal space on both theoretical and empirical level. Given the nature of health expenditure, we also know how the health care financing behaves in the macroeconomic environment and which option we have got for the configuration of fiscal space's resources. This has created further research opportunities to optimize Czech fiscal space in the future and better manage its configuration, knowing the elements it consists of.

Acknowledgements

The result was created in solving the junior project "Possibilities of supporting cross-generational cooperation in the workplace" using institutional support for long-term conceptual development of research of the University of Finance and Administration.

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