Comparative Analysis of the Way of Financing of Greek and Romanian Heathcare System

Ph.D. Student Dimitrios Kanellopoulos

Academy of Economic Studies, Bucharest, Romania
E-mail: kanellopoulos_dimitrios@yahoo.com

Abstract: *The purpose of this review is to study the way of financing of the Romanian and Greek health system .For that purpose we are doing a general reference to the way of financing of health systems, and then a reference on ways of funding of Health Care system in Greece and Romania. The concept of financing can be identified as the need to find resources and sharing them. In the case of health systems, the concept includes the origin of sources, methods of financing, the management of sources and finally the criteria of their allocation. The scope of this paper is to analyze the way of financing of both health systems.*

Key words: *Health system, methods of financing, sources of financing , comparative analysis.*

1. Introduction

The way a health system works is determined essentially by the way it is financed and organized, including the collection and use of funds. Theoretically, financial support can be improved by several measures: limiting access to services, reduce service quality or increase the share of private financing. None of this however is not desirable from a social perspective.
(Cristina Dobos,2008)

Sources of financing are divided into public and private. Public sources are the state budget (direct, indirect, special tax) and compulsory social insurance (contributions of employees,) . Private sources of funding are as follows: the private insurance, donations and charity (World Health Organization, Organization for Economic Cooperation and Development OECD, European Union, EU, World Bank) and family income in the form of direct, informal payment. The methods of financing of hospital services in both countries , in general, are as follows : 1. the daily hospital fee (closed, open or flexible),2. payment per transaction (fee for services), 3. global budgets 4. the homogeneous diagnostic groups (diagnostic related groups, DRGs) and 5.the compensation per case of hospitalization. Some common problems of the financing of the health system of both countries are as follows: 1. the inequitable distribution of funds, 2. Insufficient coordination between different sources of funding 3. the efficiency

2. Research methodology

The Greek and international bibliography has been reviewed, and in particular papers on the swot analysis of health systems published during the last ten years via PubMed and Science Direct. The keywords that were used are: Health system, methods of financing, sources of financing, comparative analysis.

3. Financing of Healthcare System

3.1. Results obtained

Financing a health care system refers to the way in which the funds necessary to the development of the sanitary field activities are being collected. In literature there are seven forms of health sector funding mechanisms. They are through tax revenue in government budgets; social insurance; medical saving account (MSA); private-financing or out-of-pocket payments; private insurance; external (aid) assistance through bilateral or multilateral agreements; and philanthrop.

Greek health system can be characterized as a mixed health system. The supply sight is organized on the the model Beveridge, on the demand system is organized according to Bismarck model.

Bismarck Model or “Sickness Funds” .Employers and employees fund national health insurance through compulsory payroll taxes. Insurance companies are private entities but are required to be non-profit and are heavily regulated especially with respect to fees and medical services. They are not allowed to exclude people for pre-existing conditions nor drop anyone if they develop an illness. Health providers and hospitals are largely private. Patients pay small co-pays

for their health care. Patients can buy secondary insurance coverage for services not provided by through the national health system such as a private hospital room. In this model, there are many private insurance companies therefore it is referred to as a multi-payer system. Germany and Switzerland use this model.

Beveridge Model or "Socialized Medicine Model" In this system, the health care is provided and financed by the government through taxes. There are no medical bills for patients. Medical care is treated as a public service like public education or the fire department. Hospitals are owned by the government and many doctors who are specialists are employees of the government. Most primary care doctors are private practitioners who are paid by the government and receive bonuses for keeping their patients as healthy as possible. England and Spain use this model. In the United States the Veterans Administration is an example of this socialized medicine model.

There are generally five primary methods of funding health care system(Sherry A,2008)

1. general taxation to the state, county or municipality
2. social health insurance
3. voluntary or private health insurance
4. out-of-pocket payments
5. donations to charities

1. General Taxation .General taxation refers to both direct and indirect tax receipts collected by government to fund among other things healthcare.

Advantages:

- General taxation is regarded as being highly efficient, delivering strong cost containment
- It forces prioritisation through what are typically overall cash-limited health care budgets set by the government and allows trade off of spend on health care with other public health priorities such as education or reducing poverty
- Ensures universal access to services irrespective of ability to pay.
- Low administrative costs
- Tax financing can help individuals in difficult times when they are less able to afford out-of-pocket payments or private insurance.
- Because it draws revenue from a wide base, it helps to minimize distortions in particular sectors of the economy.

Disadvantages:

- The government has both a strong incentive and the capacity to control costs which could result in poor services
- Because the service is free at the point of use it can encourage overuse and high expectations
- Reliance on general tax financing can leave a health system vulnerable in times of economic and fiscal difficulties.
- The degree of individual choice tends to be relatively limited, although this is being remedied under Choose and Book.

2. Social Insurance Definition: social insurance is a system where employers and employees make contributions which are compulsory, and premiums are underwritten by the state for high risk and non-employed groups.

National Insurance is a form of social insurance, although in practice is part of general taxation. People generally have to pay for services then make a claim afterwards, and re-imbursement may not be complete.

Advantages:

- Funding of health services tends to be removed from the political arena
- A system of payment and retrospective claim may limit demand
- Payment by employers may act as incentive to health and safety if they are penalised for ill health
- Non-profit making so all money paid in goes on either administration or health care.
- As with tax-financed systems, access to health services is typically universal or near universal and not based on ability to pay.

Disadvantages:

- May not limit demand as there is an element of getting value for the contribution paid
- There is generally little scope for expression of individual choice.
- May deter employers from taking on sick or disabled employees
- A high proportion of demand is not covered (elderly, unemployed, chronically sick, children) and therefore substantial amount of state underwriting remains

- Claims scheme may be complicated and deter genuinely sick from seeking help, particularly in conditions such as HIV, psychotic mental illness
- Social insurance contributions are raised from a narrower base than general taxation, with the costs falling mainly on employers and employees rather than the wider group of taxpayers. This may lead to economic distortions and disincentives as the revenue base is more concentrated on employment.
- Social insurance systems can also be vulnerable to periods of economic downturn which can result in reduced revenues into the sickness funds
- Social insurance is not as progressive as general taxation and may be regressive if the sickest groups have to pay highest premiums.
- Responsibility for funding preventive and public health services is unclear
- High earners may be allowed to opt out in favour of private schemes which depletes the social insurance scheme of funds
- Patients may shop around and see several doctors until they get what they want, increasing demand without increasing benefit.

3. Private Medical Insurance, Definition: private insurance is run by companies, usually for profit, and contributions are paid by individuals.

Advantages:

- Weighting of premiums according to use means that there is a deterrent effect on demand.
- Countries offering this system spend a high proportion of GDP on health care
- The costs of every aspect of care are made more explicit
- Insurance companies may manage care to ensure only effective forms of treatment are used

Disadvantages:

- Those who need insurance most often cannot afford it e.g. poor, chronic sick
- Employers often offer this as a benefit, leading to double disadvantage for unemployed
- May increase demand as people seek to get what they pay for
- Preventive services may lose out in funding terms to acute/curative services
- There still needs to be a system to cover those who cannot afford insurance
- There still needs to be a system to cover public health and preventive programmes
- Not all the money that is paid in goes on health care - profit motive.
- People have to seek prior approval for spending, even in emergency situations
- People will shop around until they get what they want - demand may increase among some sectors.

4.User 'pays out-of pocket' Definition: there are two forms of user charges:

a) those that top up funding from other sources (general taxation or various insurance schemes) e.g. prescription charges, or charges for dental treatment and eye examinations.

b) those that cover the entire cost of treatment.

Advantages:

- Can help to encourage a more responsible use of resources by limiting wasteful and unnecessary activity because people think before spending their own money on health care
- People do not spend money on food or heating while in hospital, so charges do not penalise people if they are used as top-up.

Disadvantages:

- People who most need service cannot afford to pay (inverse care law)
- Many people will cover themselves with private insurance leaving those who cannot afford charges doubly disadvantaged
- Where full user charges exist (e.g. US, although the US has Medicare, Medicaid and Veterans Administration) the proportion of GDP spent on health is high, but the public health benefits are questionable.
- There tend to be a large number of exemptions requiring funding from general taxation (e.g. children, elderly, chronic sick, certain conditions).
- People with stigmatising conditions, or those where insight into their health problems (such as HIV, GU infections, psychotic mental illness) may be deterred from seeking help.
- Preventive services may lose out in funding terms to acute/curative services

Public financing in Greece and Romania is based on social insurance and tax. The primary source of revenue for the social insurance funds is the contributions of employees and employers. The state budget, via direct and indirect tax revenues, is responsible for covering administration expenditures, funding health centres and rural surgeries, providing subsidies to public hospitals and insurance funds, investing in capital stock and funding medical education. The third important source of health care financing is private expenses, taking the form mainly of out-of-pocket payments for services not covered by social insurance, payments for services covered by social insurance but bought outside the system for reasons related to time, cost and quality, co-payments and various payment made unethically for reasons such as bypassing waiting lists or ensuring more attention on the part of the doctor. Private expenses also can take the form of private insurance schemes, which are, however, of limited importance.

On the other hand as in most countries, Romania has a mix of compulsory and voluntary elements of finance but the dominant contribution mechanism since 1998 has been social insurance. Health funds derive primarily from the population (, the most part through third party payment mechanisms (social health insurance contributions and taxation) but also by out-of-pocket payments (co-payments and direct payments). Social insurance contributions are collected by the Fiscal Administration National Agency of the Ministry of Finance (or in the case of the self-employed by the DHIFs). Taxes are also collected by the Ministry of Finance and then allocated to Ministry of Public Health, which then funds the DPHAs for public health programmes. Tax funding is also allocated to the NHIF (then to the DHIFs) to cover the social insurance contributions of the non-employed and exempt population groups. The Fiscal Administration National Agency allocates the social insurance revenue to the NHIF, which then distributes to the DHIFs based on a formula of risk-adjusted capitation.(Criatian vladescu,Gabriela scintee, Victor Oslavsky, 2008).Comparing the two Ways of financing we can say that:

1.The public insurance system in both countries, either through general taxation or compulsory social insurance premiums, is a very efficient mechanism to redistribute income from the healthy or high income groups to the unhealthy or low income groups. The economic burden of the health care system is collectively shared according to the ability of the citizens. No one in countries with public insurance system lives in fear of economic ruin following in-patient treatment for a catastrophic illness and more importantly no one needs to depend on charity.(Balasubramaniam,2001).

2.The most important function of the State is regulation. Formulation and implementation of statutory legislation related to financing methods, organisation and functioning of the financing organisations, payment of providers and a global budget have been the central features of a successful health care system.

3. Creece and Romania finances through general taxation but has a mixture of private and public hospitals and its physicians practice as independent entrepreneurs. Most countries with compulsory health insurance have a mixture of public and private providers. The private providers include not-for-profit and for-profit hospitals.

Health expenditure

Health services in Greece are funded almost equally by public and private sources. Public expenditure is financed by taxes (direct and indirect) and compulsory health insurance contributions (by employers and insured persons). Voluntary payments by individuals or employers represent a very high percentage of total health expenditure (more than 42% in 2002), making the Greek health care system one of the most "privatized" of the EU countries.

In 2006, Greece's expenditure on health was 9.5% of gross domestic product (GDP)(table 2,3), with a per capita expenditure in US$ PPP (purchasing power parity in US dollars) accounting for 2547 USD .(Who 2009).

Table 2 –

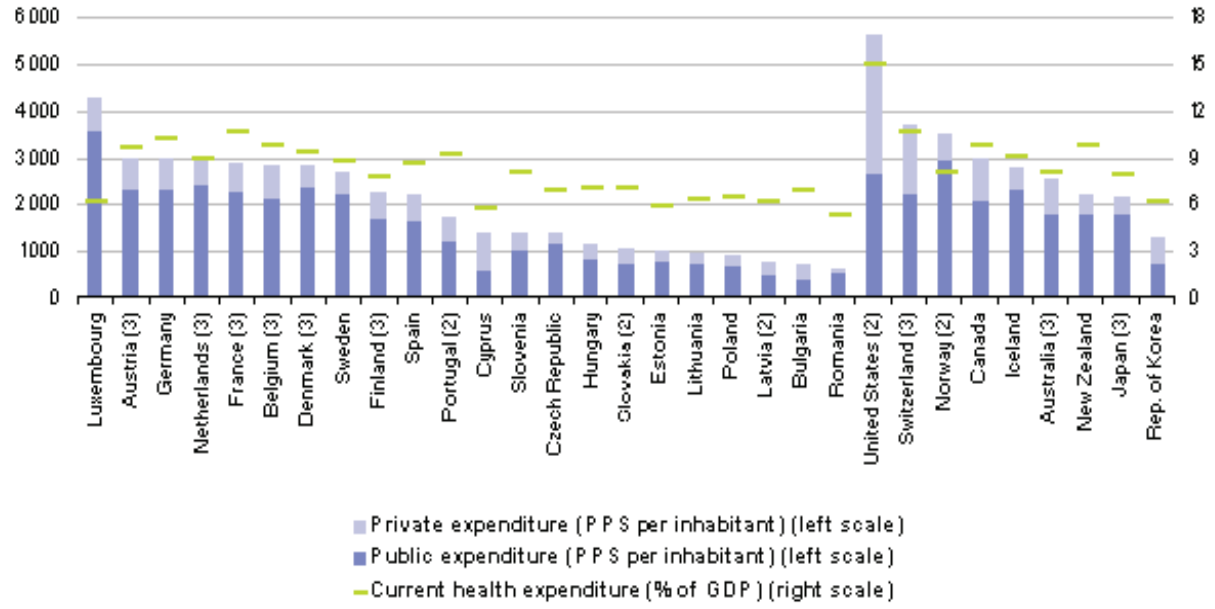
	Total expediture oh health as% of the gross domestic product 2006	General government expenditure on health as % of total expenditures on health
Greece	9,5	62%
Romania	4,5	76,90%

Source: WHO 2009

Table 3 –

	Total expediture oh health as% of the gross domestic product 2006	private expediture
Greece	9,5	38%
Romania	4,5	23,1%

Source: WHO 2009



(1) Countries are ranked on the current health expenditure (PPS per inhabitant); Ireland, Greece, Italy, Malta and the United Kingdom, not available.
(2) 2006.
(3) 2007
Source: Eurostat (hlth_sha_hf)

Figure 1. The mode of funding (public and private) of the health system in European countries.

In Figure no. 1 is shown the mode of funding (public and private) of the health system in European countries. As you we can see, the most economically developed countries allocate appropriate amount of money for the health system. This is absolutely necessary to ensure health services at the highest level. By providing high quality of health services a state has human resources capable of working at the highest level of quality and quantity.

The more the number of people who are not able to work temporarily or permanently (are sick) the higher is the chance to obtain higher efficiency decreases. This is a very good reason for increase expenditures in health services, in order to have a healthier workforce. It is obvious that some of these funds are allocated for the remuneration of doctors and salary increases and to motivate and to encourage activity at the highest level.

We should say that a significant impact has had crisis on the public sector, where a large number of people were dismissed, and some of the additional bonuses were stopped.

Public hospital budgets have been cut by 40%, leaving health services understaffed and short of medical supplies. The private hospital sector has also been affected, with a 25% to 30% decline in admissions since the onset of the economic crisis.

The financial crisis has influenced the morale of doctors (demotivated doctors), nurses, and all other medical staff. In my opinion, this is the most serious consequence. In addition, the general financial predicament the country is facing has a negative impact in hospital finances (Mosialos, 2002).

Concluding remarks

It is needed a reformation of the way of financing of both countries The starting point for any reform should be careful analysis of the existing health (financing) system to identify weaknesses or problem areas, combined with understanding of the contextual factors that may contribute to or impede successful reform. (WHO, 2009) . Policy-makers of both countries should consider the whole range of health financing functions and policies, rather than focusing on collection alone (contribution mechanisms).

References

Addicott, R., Mcgivern, G., Ferlie, E., 2006, "Networks, Organizational Learning and Knowledge Management"*, Public Money&Management,* Oxford, Vol. 26 (2), April 2006, pp. 87-94, 138 pag., ISSN 1467-9302

Albu, C.N., 2005, *O analiză a valorizării învățării organizaționale prin intermediul instrumentelor contabilității manageriale,* Teză de doctorat, Biblioteca ASE, Bucureşti, 2005, pp. 20-31, 296 pag.

Balasubramanian, K.,2011,Healthcare financing. Organized by consumers International regional office for Asia and the Pacific in collaboration with Cambodia NGO Aliance for corproration.National workshop on food and Health,Cambodia.

Bar-On, R., Elias, M.J., 2007, *Educating People to Be Emotionally Intelligent,* Praeger, London, 2007, pp. 59-78; 89-93, 344 pag., ISBN 978-027-599-363-4

Bourandas ,D and Papadakis,V.,1996,Greek management , international studies of management and Organization,vol 26,issue 3,pp13-32.

Brezinski and M. Redivo Zaglia.,1991, *Extrapolation Methods. Theory and Practice,*, North-Holland.

Carroll, J.S., 2008, "Synthesis of Organizational Learning Themes", MIT Sloan, *Management Review* Nr. 3/2008, New York, ISSN 1532-9194

Chivu, I. (coord.), 2009, *Învățarea organizațională şi dezvoltarea resurselor umane*, Editura ASE, Bucureşti, 2009, pp. 12-29; 38-48; 59-78, 226 pag., ISBN 978-606-505-256-7 - Lucrare apărută sub egida Proiectului de cercetare CNCSIS – PCE – PROIECT IDEI nr. 1844/2008-2011.

Cristina Dobos,2008,Financing of the healthcare systems in EU,calitatea vietii XIX,nr1-2.2008 p 107-123. http://www.revistacalitateavietii.ro/2008/CV-1-2-2008/06.pdf .

Daft, R., Weick, K., 1984, "Toward A Model of Organizations As Interpretations Systems"*, Academy of Management Review,* New York, Vol. 9, Nr.2/1984, pp.284-295, ISSN 0363-7425

Dibella, A., Nevis, E., 1997, *How Organizations Learn: An Integrated Strategy for Building Learning Capability,* Jossey-Bass Publishing, London, 1997, pp. 89-113; 178-257, 240 pag., ISBN 978-078-791-107-2

Elkjaer, B., 2001, *The Learning Organization: An Undelivered Promise, Management Learning,* New York, Vol.32, Nr.4, pp. 437-452, 2001, ISSN 0269-4246

European Union (2011). Population at 1 January. Retrieved on October 15, 2011 from the following World Web Site:http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tps00001

European Union (2011). Population at 1 January. Retrieved on October 15, 2011 from the following World Web Site : http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-71-05-182/EN/KS-71-05-182-EN.PDF

Ferry, G., 2005, *Pedagogia de la Formacion,* Novedades Educativas, Buenos Aires, 2005, pp.59-73, 126 pag., ISBN 978-987-919-114-9

Garratt, B., 1999, *The Learning Organization 15 Years On: Some Personal Reflections,* The Learning Organization EGPL, London, Vol. 6, Nr. 5/1999, pp.202-207, ISSN 0969-6474

Goulas A. *Hospital management.2nd edition. Th. Papazisis Athens2007.*

Harvey, C., Denton, J., 1999, "To Come of Age:The Antecedents of Organizational Learning"*, American Journal of Management Studies,* New York, Vol. 36, Nr. 5/1999, pp. 897-918, ISSN 0022-2380

Hedberg, B., 1999, "How organizations learn and unlearn", in Nystrom, P., Starbuck, W, (Eds), *Handbook of Organizational Design,* Oxford University Press, Oxford, 1981, No. 1, pp.3-27, ISSN 0260-2105

Landau, S., Everitt, B.S., 2004, *A Handbook of Statistical Analyses using SPSS,* Chapman & Hall/CRC Press/CRC, London, 2004, 354 pag., ISBN 978-158-488-369-3

Massey, C., Walker, R., 1999, "Aiming for Organizational Learning: Consultants as Agents of Change", *The Learning Organization EGPL,* London, Vol. 6, Nr. 1/1999, pp. 38-47, ISSN 0969-6474

Moilanen, R., 2005, "Diagnosing and measuring learning organizations", *The Learning Organization EGPL*, London, Vol. 12 (1)/2005, pp. 71-89, ISSN 0969-6474.

Mossialos, Elias and Dixon, Anna (2002) *Funding health care in Europe: weighing up the options.* In: Mossialos, Elias and Dixon, Anna and Figueras, J and Kutzin, S, (eds.) Funding health care: Options for Europe. Open University Press, Buckingham, UK, pp. 99-126. ISBN 0335209246.

OECD health data http://www.oecd.org/document/30/0,3746,en_2649_37407_12968734_1_1_1_37407,00.html Accessed November 20th, 2010.

Osborn, A.-F., 1999, *Your Creative Power,* 3rd Ed., Purdue University Press, New York, 1999, pp.113-129, 182 pag., ISBN 978-156-946-055-9

Palmer, J., 1999, "The Human Organization", *Journal of Knowledge Management,* No. 1(4)/1998/1999, pp.294-307, ISBN 978-190-663-846-7

Pedler, M., 1999, "Accessing Local Knowledge: Action Learning and Organizational Learning in Walsall"*, Human Resource Development International Review,* Vol. 5, Nr. 4/Dec. 2002, pp. 523-528; 537-540, ISSN 1469-8374

Pemberton, J. & Stonehouse, G., 2000, "Organizational learning and knowledge assets – an essential partnership", *The Learning Organization EGPL,* London, 2000, Vol. 7, Nr. 4, pp. 184-193, ISSN 0969-6474

Popescu, D., Scarlat, C., Chivu, WE., Ciocârlan-Chitucea, A., Popescu, D.-O., Artenie, C., 2010, "Entreprenership in the Romanian Learning Organization", *Revista Metalurgia Internațional, Bucureşti,* Vol. XV, nr.6/2010, pp.46-50, cotație CNCSIS A - ISI (480), ISSN 1582-2214

Reuchlin, M., 1989, *Individual Differences: An Experience in Human Relations for Children,* Marlene Cummings Publishers, London, 1989,
pp. 19-32, 40 pag., ISBN 978-068-674-912-7

Robinson R- *Economic Evaluation and Health care-cost and cost minimization analysis,BMJ.307:726-728,1993.*

Saltman RB,Ferroussier-DavisO-conceptul de administrare in politica de sanatate, Buletin OMS 2000;78:732-9.

Sherry A. Glied. Health Care Financing, Efficiency, and Equity .National Bureau of Economic Research, March 2008. http://papers.nber.org/papers/w13881 Accessed November 20th, 2010

Simonin, B., 1997, "The importance of collaborative know-how: An empirical test of the learning organization", *The Academy of Management Journal,* New York, Vol. 40, Nr.5/1997, pp. 1150-1174, ISSN 0001-4273

Smith-Easterby, M., Lyles, M. A., 2006, *Handbook of Organizational Learning and Knowledge Management,* Blackwell Publishing Ltd., London, 2006, pp. 11-15; 145-153, 696 pag., ISBN 978-063-122-672-7

Steyer, R., 2001, *Classical (Psychometric) Test Theory, International Encyclopaedia of the Social and Behavioural Sciences,* Oxford - Pergamon, 2001, pp. 1955-1962, ISBN 978-008-043-076-8

Swieringa, J. & Wierdsma, A.F.M., 1992, *Becoming A Learning Organization: Beyond the Learning Curve*, Addison-Wesley, Wokingham, London, 1992, 154 pag., ISBN 0201-6275-31

Torbert, W., 1994, "Managerial Learning, Organizational Learning", *Management Learning Review,* New York, Vol. 25, Nr. 1/1994, pp. 57-70, ISSN 0269-4246

Uit Beijerse, R.-P., 2000, "Questions In Knowledge Management: Defining and Conceptualising a Phenomenon", *Journal of Knowledge Management,* New York, No. 3(2)/1999 /2000, pp. 94-109, ISBN/ ISSN 978-190-663-846-7

Vygotski, L. S., 1998, *Mind in Society: The Development of Higher Psychological Processes,* Harvard University Press, 14th Ed., New York, 1998, pp. 41-43, 159 pag., ISBN 978-067-457-629-2

Who(world health statistics). http://www.who.int/whosis/whostat/2009/en/index.html accesed at 14 january 2011.