Chapter Three

HEALTH SYSTEM FINANCING

Health financing in Lebanon is characterized, on one hand by a mixture of funding sources involving the Treasury, employers and employees' contributions and households out of pocket; and on the other, by a multiplicity of financing intermediaries including public agencies, private insurance, mutuality funds and the Ministry of Public Health. This financing fragmentation is further marked by the diversity of supervising authorities, making regulation and coordination very complicated.

There are six employment-based social insurance funds publicly managed in Lebanon. The largest one, the National Social Security Fund (NSSF) is a mandatory insurance for the formal sector employees, except civil servants and uniformed forces, who are covered respectively by the Civil Servants Cooperative (CSC) and four military schemes. The CSC is under the tutelage of the Presidency of the Council of Ministers and the other funds are overseen by three separate ministries other than MOPH, whereas two additional ministries supervise private insurances and privately-held mutuality funds.

1- THE NATIONAL SOCIAL SECURITY FUND NSSF

The NSSF was created in September 1963[1], under the tutelage of the Ministry of Labor and Social Affairs, to constitute the foundation of a Bismarckian social security system financed mainly by employers' and employees' contributions with state subsidies. The final aim was to establish a universal mandatory insurance following the French model that starts by enrolling the workers in the formal private sector as a first step.

The NSSF includes three separate branches: the maternity and sickness fund, the family allowances fund and the end-of-service indemnities fund. All these branches are under the management of one Director General and overseen by a 26-member Board of Directors: 10 representing the employers, 10 the employees, and the remaining 6 are appointed by the Government.

The NSSF is considered a public institution although most of its financing is private and comes from employers and employees participations. NSSF contributions are related to the salary, up to a monthly revenue of 1,500,000 LBP, except for end-of-service indemnities which have no deductible ceiling. The employer's share is equivalent to 21.5% of the salary and is attributed as follows: 7% for sickness and maternity, 6% for family allowances and 8.5% for end-of-service indemnities. The employee contributes only to the medical scheme with 2% of the salary. Government subsidies amount to 25% of the total expenditures of the sickness and maternity fund.

Currently, the NSSF covers in addition to employees of the private formal sector, other categories such as: contractual and wage earners of the public sector, employees of autonomous public establishments not subject to civil service protection, teachers in private schools, taxi drivers, newspaper sellers, university students, elected mayors and physicians. The NSSF coverage expands to the adherents' dependents that include the spouse, children up to 25 years if single and still in formal education, and parents over 60 years living in the same household who cannot support themselves. Upon retirement or when the adherents lose their job for any reason, they get

[1] Social Security Law enacted by Decree # 13955, September 1963.

end-of-service indemnities and afterwards, neither they nor their dependents can benefit anymore from the medical coverage.

In August 2000, Law 248 was issued, establishing a "voluntary" health insurance plan for the elderly. Eligible persons were those above 64 years of age and their dependents, provided they had no other form of insurance. The contribution was set at 6% of the official minimum salary which was 200 USD at that time. It was to be paid by one spouse to cover both spouses. No Executive Decrees were ever promulgated, and this law remains unenforced.

Based on article 11 of the 1963 NSSF original law, stating that a voluntary enrollment scheme is to be established in each of the three branches, a decree No. 7352 was issued in February 2002, creating a "voluntary" section in the sickness and maternity branch. This scheme targets former adherents who lost their eligibility after retirement, employers and their relatives employees excluded from the mandatory scheme, liberal professions and self-employed persons. The elderly are not eligible unless they had been previously enrolled in the NSSF. This voluntary scheme covers also family members living with the adherent including children till 18 years. However the spouse of a female adherent is not entitled to coverage unless he is handicapped or unemployed. The contribution is set at 90,000 LBP (60 USD) per month for employees and self-employed and 135,000 LBP (90 USD) for employers. Revenues and expenses are managed in a special account with the legal requirement to remain financially balanced.

As it should have been expected, the voluntary scheme attracted self-selected high risk adherents. This is an ideal arrangement for a rapid bankruptcy. The number of voluntary adherents has reached more than 30,000 in 2005, 27,613 in 2006, and 24,756 in 2007. The budget deficit resulting from the influx of low-paying high-demanding adherents has worsened the previously existing administrative delays in hospital reimbursement. Consequent growing arrears had direct negative impact on admissions, quality of care, patient satisfaction, and client's trust. This explains the decreasing number of "voluntary" adherents after 2005.

Table III-1: Distribution of NSSF beneficiaries, 2008

	Adherent		Dependents			Total
Beneficiaries	**Workers**	**Students**	**Spouses**	**Children**	**Parents**	
n	444,212	55,675	179,586	388,962	50,825	1,119,260
%	39.69	4.97	16.05	34. 75	4.54	100
	499887			**619373**		DR= 1.24*

* DR: Dependency Ratio (Dependents/Adherents) = 1.24, DR excluding students = 1.394

Table III-2: NSSF variations in utilization and spending (1998-2005)

	NSSF		
	1998	**2005**	**% increase**
Number of beneficiaries*	905,434	1,077,683**	19
Number of adherents	378,843	492,085	29.9
Number of hospital admissions	110,397	211,533	91.6
Cost of hospital admissions (1000 LBP)	107,708,000	278,927,987	159.0
Cost of ambulatory care (1000 LBP)	89,700,000	200,987,933	124.1
Total cost (1000 LBP)	197,408,000	479,915,920	143.1

* Number of beneficiaries = number of adherents + number of dependents

** Including 30,084 voluntary adherents and 51,350 university students, excluding 11,307 non-Lebanese.

According to the 2004/5 Household Survey[2], 23.4% of interviewees declared benefiting from the NSSF which makes a total number of beneficiaries of 878,670 compared to 712,890 found by the 1998 NHHEUS. The NSSF, however, has never declared a number below 1,200,000 for the past 15 years. Considering the MOPH database on public funds beneficiaries, the number of enrollees was probably under estimated by the households surveys. This "under estimation" may be explained by the fact that a number of NSSF enrollees do not actually benefit from health coverage, either because they are not considered eligible for the medical scheme, as in the case of double coverage or in the case of non-Lebanese, or they lack knowledge about their eligibility.

Workers in the formal private sector represent 63% of the NSSF adherents, those who joined the voluntary scheme never exceeded 6.5% of the total in any given year, and represented only 5% of the total in 2007.

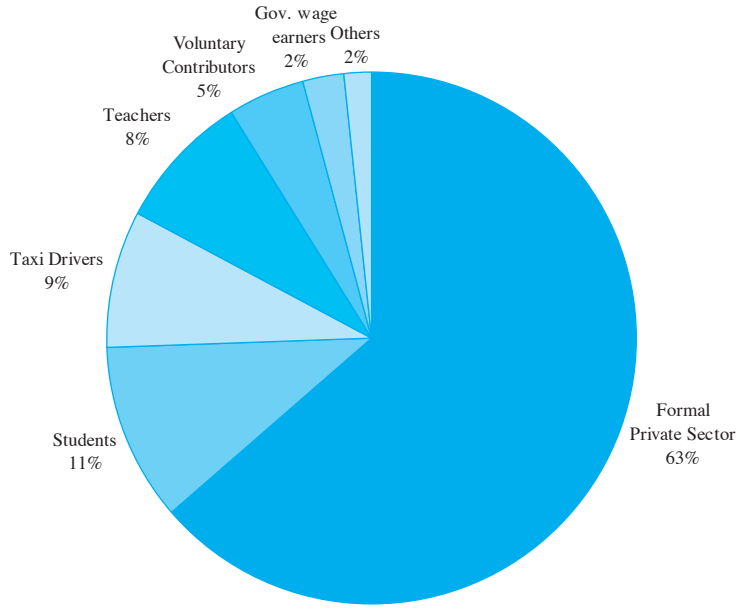


Fig III-1: Distribution of NSSF adherents by category

[2] Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

The NSSF pays directly 90% of hospital bills, and reimburses the patient 85% of fees paid for ambulatory care including medications, except for cancer drugs that are reimbursed at 95%. Dental care is still not covered despite its inclusion in the benefits package by virtue of the Decree 5104 that should have come into force in July 2001. NSSF adherents are neither covered for occupational health nor for workplace injuries.

From 1998 to 2005, the NSSF accrual spending on hospital care increased by 159% and on ambulatory care by 124%, making expenditures grow by 2.4 times, for an increase of only 19% in number of beneficiaries in the same period (table III-1). No significant change in the NSSF tarification occurred during this period. The share of voluntary adherents coverage counted for less than 7% of the total expenditure in 2005, and therefore had only a minimal contribution to spending inflation.

The budget deficit for 2005 based on accrual accounting has exceeded 22 billion LBP.

2- THE CIVIL SERVANTS COOPERATIVE

The CSC was established as a public institution with administrative and financial autonomy by virtue of the Decree no. 14273 issued in October 1963, one month after the issuing of the NSSF law and by the same cabinet. It covers the regular staff of the public sector and their dependents.

The CSC medical scheme was set originally for a transitional period, the time needed by the NSSF to cover the civil servants by virtue of Article 4 of the aforementioned Decree. Most of the CSC financing comes from the government budget (the employer), while civil servants contribute 3% of their salaries, amounting for almost 13% of the total budget. In addition to medical coverage, the CSC provides educational and family allowances and marriage and birth assistance.

Unlike the NSSF, the CSC covers male spouses, female children as long as they are single, the adherent's parents, irrespective of their age, as well as brothers and sisters in certain conditions, and

most importantly, eligibility extends after retirement. These differences may explain the high CSC dependency ratio of 2.15 compared to 1.24 for the NSSF (2008).

CSC adherent benefits are set at 90% of hospitalization costs and 75% for out patient services including dental care. For dependent family members, hospital and ambulatory care are only covered to the rates of 75% and 50% respectively. The CSC is the only public fund that imposes a fixed deductible payment upon admission and a progressive copayment ceiling for hospital care. As of February 2008, the number of CSC adherents reached 61,460 civil servants with a total number of 193,860 beneficiaries.

CSC expenditures on hospital and ambulatory care have almost doubled over a 7-year span (1998-2005) for an almost constant number of beneficiaries in that period. The increase in hospital cost (72.4%) was double that of admissions (35%). Ambulatory care witnessed however the highest cost increase rate. Since 2005 its costs have become bigger than those of hospital care.

Table III-3: CSC variations in utilization and spending (1998-2005)

	CSC		
	1998	**2005**	**% increase**
Number of Beneficiaries	198,450	197,392	-0.5
Number of Adherents	63,000	62,664	-0.5
Number of Hospital Admissions	18,341	24,762	35.0
Cost of Hospital Admissions (1000 LBP)	24,200,000	41,713,443	72.4
Cost of Ambulatory Care (1000 LBP)	19,800,000	45,808,209	131.4
Total Cost (1000 LBP)	44,000,000	87,521,652	98.9

* CSC enrollees not benefiting from the medical scheme are excluded.

3- MILITARY SCHEMES

Uniformed staff members and their dependents are covered by four military schemes. The most important one is managed by the Army Medical Brigade, and hence is under the supervision of the Ministry of Defense. It currently covers 236,100 beneficiaries including retirees (2008). The other three military schemes are under the jurisdiction of the Ministry of Interior, and cover Internal Security Forces (ISF), General Security Forces (GSF) and State Security Forces (SSF). These cover respectively 126,677; 16,285 and 5,645

beneficiaries (as of May 2008). It is worth mentioning that the ISF scheme includes also 5201 prisoners.

All military schemes are financed through the Government budget and have the same coverage rules for hospital and ambulatory care, with 100% reimbursement for the uniformed members, 75% for the spouse and children, and 50% for dependent parents. From 1998 to 2005, for an almost constant number of adherents, the cost increase of the military schemes altogether was less than 16%, parallel to a similar increase in the hospitalization rate.

Hospitalization rates are relatively high for all military schemes, especially the ISF fund that remains an outlier in this respect. However, the average ISF cost per beneficiary has decreased from 554,722 LBP in 1998 to 476,381 LBP in 2005.

Table III-4a: Military schemes: Hospitalization rates and costs per beneficiary (2005)

	Hospitalization rate %	Cost per beneficiary (1000 LBP)		
		Hospital care	Ambulatory care	Total
Army	23	253	57	310
ISF	34	318	158	476
SSF	22	286	419	705
GSF	13	283	370	653
Total	25	270	102	372

High costs per beneficiary for the SSF and GSF are not worth a particular attention in light of their volume. Such small funds cannot allow for efficient risk pooling and cost sharing. In all cases military schemes should at least be pooled altogether if we are keen on preserving military specificities. It is quite interesting to compare the ambulatory share of total costs among the public funds. It amounts to an average of 27% for all military schemes compared to 42% for NSSF and 52% for CSC. This indicates a cost shifting from ambulatory towards hospital care and explains the high hospitalization rates averaging 25 admissions per hundred beneficiaries for all military funds.

Table III-4b: Military schemes: Utilization and cost of hospital and ambulatory services (1998-2005)

		Number of beneficiaries	Number of adherents	Number of hospital admissions	Cost of hospital admissions (1000 LBP)	Cost of ambulatory care (1000 LBP)	Total cost (1000 LBP)
	1998	234,000	90,000	44,253	50,094,000	8,373,000	58,467,000
Army	**2005**	225,250	85,000	51,663	56,920,752	12,909,356	69,830,108
	Increase (%)	-3.7	-5.6	16.7	13.6	54.2	19.4
	1998	66,700	23,000	23,000	24,000,000	13,000,000	37,000,000
ISF	**2005**	77,609	26,762	26,718	24,675,000	12,296,434	36,971,434
	Increase (%)	16.3	16.4	16.2	2.8	-5.4	-0.1
	1998	5,700	1,463	1,200	1,450,000	950,000	2,400,000
SSF	**2005**	5,645	1,447	1,219	1,614,141	2,368,451	3,982,520
	Increase (%)	-1.0	-1.1	1.6	11.3	149.3	65.9
	1998	10,526	3,800	1,700	3,500,000	2,500,000	6,000,000
GSF	**2005**	14,310	5,300	1,800	4,046,134	5,299,790	9,345,924
	Increase (%)	36.0	39.4	5.9	15.6	112.0	55.8
	1998	316,926	118,263	70,153	79,044,000	24,823,000	103,867,000
Total	**2005**	322,814	118,509	81,400	87,256,027	32,874,031	120,129,986
	Increase (%)	1.9	0.2	16	10.4	32.4	15.6

Box III-1: Tutelage, entitlement, coverage and sources of financing of funding agencies

Fund	Tutelage	Entitlement	Benefits	Funding
NSSF Maternity and sickness fund	Ministry of Labor	- Employees of the formal private sector - Contractual and wage earners of the public sector - Employees of autonomous public establishments - Teachers in private schools, janitors in public schools, taxi drivers, newspaper sellers, university students, mayors and physicians. - Voluntary enrollees.	- Hospital care (90% direct payment to hospitals) - Ambulatory care (reimbursement to user) 95% for cancer drugs and 85% for all other drugs and services. - Dental care (not reimbursed yet)	- Employer: 7% of salary - Employee: 2% of salary (up to 1.5 million LBP.) - Government: 25% of total expenditures + the employer's share for government contractual and wage-earners + contributions for taxi drivers and mayors.
CSC Health fund	Presidency of the Council of Ministers	Regular staff of the public sector and dependents	- Ambulatory and dental care (75% reimbursement for employee, spouse and children, 50% for parents) - Hospital care (90% direct payment to hospitals for the employee, 75% for family members)	- Government budget (of which less than 15% comes from a 3% payroll deduction)

Army Medical Brigade	Ministry of Defense	Army members and their dependents	- Ambulatory and hospital care (100% for the member, 75% for the spouse and children, 50% for dependent parents)	Government budget
ISF, SSF, GSF Health departments	Ministry of Interior	Other uniformed staff and dependents	Same	Same
MOPH	Ministry of Public Health	Lebanese citizens with no coverage (Upon request)	- Hospital care (85% direct payment to hospitals, 15% co-payment with some exemptions) - Dispensing expensive drugs for catastrophic illnesses - Providing vaccines and essential drugs to public and NGOs health centers	Government budget
Private Insurance	Ministry of Economy and Trade	Voluntary enrollment	Variable	- Households (risk-based premiums) - Employers and employees for complementary insurance
Mutual Funds	Ministry of Agriculture	Voluntary enrollment	Variable	- Households - Government subsidies

Table III-5: Distribution of residents by covering fund according to their eligibility

	Household Survey 2005*		MOPH Estimates 2005	
Agency	**% of residents**	**# beneficiaries**	**# adherents**	**# beneficiaries**
NSSF	23.4	878,670	492,085	1,077,683
CSC	4.3	161,465	62,664	197,392
Military Schemes	9	337,950	118,509	322,814
Private Insurance Total	6.6	247,830	491,042	491,042
(Private Insurance +NSSF)			(175,793)	(175,793)
Mutual Funds Total	0.8	30,040	152,961	152,961
(Mutual Funds as complementary)			(37,744)	(37,744)
Other schemes**	0.9	33,795	33,795	33,795
MOPH***	53.3	2,001,415	1,629,015	1,629,015
Others****	1.7	63,835	63,835	63,835
Total	100	3,755,000		3,775,000

* Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004.

** Includes 0.8% who benefit from UNRWA, and 0.1% from abroad.

*** Are considered MOPH beneficiaries those with no other formal coverage.

**** Includes local arrangements such as municipalities financing.

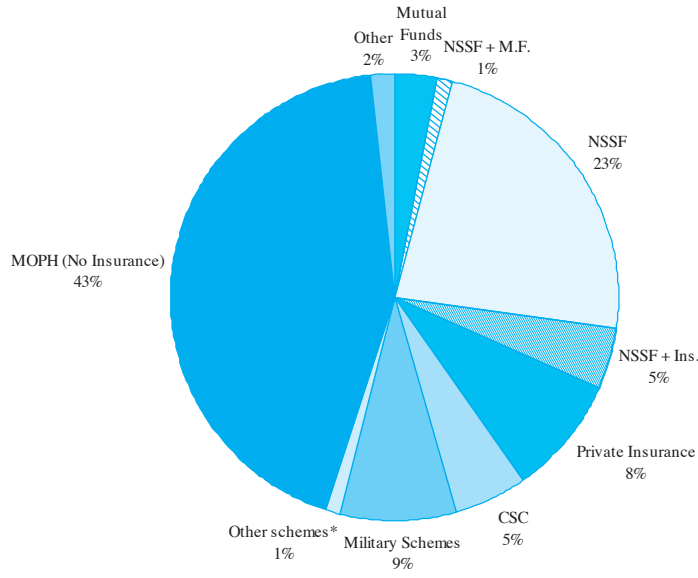
4- THE MOPH COVERAGE

The Government allocates in the budget of the Ministry of Public Health special allotments for covering the uninsured population, with the aim of ensuring universal accessibility to health services. These allotments have been growing over years with the development of the Ministry's financing function, leaving scarce resources to prevention, public health and regulation functions.

According to the 2004/5 National Household Survey, 46.7% of the interviewed population declared being covered by one or more public or private insurance schemes. The declared beneficiaries were distributed as follows: 50.1% covered by the NSSF, 9.2% by the CSC, 19.3% by military schemes altogether, 14.2% by private insurance, 1.7% by Mutuality Funds and municipalities, and 5.6% by various other funds including UNRWA's fund for Palestinian refugees. Accordingly, 53.3% of residents are not formally covered by any public or private agency, and hence, more than two million people are entitled for MOPH coverage, regardless of their ability to pay. Estimates based on the MOPH beneficiaries' database and adjusted by dependency ratios calculated from a representative sampling, indicate that about 1.6 million are eligible for MOPH coverage (table III-5).

The MOPH covers what may be considered a catastrophic payment for households i.e. hospital care and drugs with exorbitant prices. It reimburses contracted hospitals for 85% of the bill, dispenses expensive drugs free-of-charge directly to the uninsured citizens suffering from cancer, mental illness, multiple sclerosis, and other financial duress diseases. It finances the procurement of drugs for chronically ill patients, and provides vaccines and essential drugs to public and NGOs health centers. In return, those centers are required to provide immunization services free of charge, while they are allowed to collect a nominal user fee for consultations and essential drugs.

Fig III-2: Distribution of residents by covering fund according to their eligibility (MOPH estimates 2005)



During the 1990s, after almost two decades of civil unrest resulting in weakened public institutions, the MOPH was working on asserting its authority in the health sector. Among all the ministry's functions, covering the hospital expenses for uninsured was perceived by the population as the most important. In addition to being largely inclusive about coverage eligibility, the MOPH has been consistently expanding its basket of covered services. This led to a growing utilization of hospital services, fueled by a supplier-induced demand in a period where MOPH control capabilities were still weak. As a result, MOPH expenditures on hospital care have been growing sharply from 1994 to 2001, most of the time exceeding the set budgets. During that period, the Ministry had been contracting with almost all private hospitals operating in the country. According to the contract, a predetermined number of beds were reserved for patients referred by MOPH, with prior authorization. The limited number of beds assigned to each contracted hospital was supposed to contain costs under a certain ceiling.

Table III-6: Ministry of Public Health Budget (2002-2007) (1000 LBP) [1507.5 LBP=1 USD]

	2002	2003	2004	2005	2006	2007
Salaries and indemnities	28,130,000	25,251,000	23,980,000	24,730,000	24,535,092	24,173,000
Drugs	27,816,000	28,500,000	40,800,000	44,880,000	48,000,000	50,000,000
Contracted hospitals (private + public)	210,000,000	210,000,000	229,864,000	241,357,000	238,875,000	250,000,000
Public hospitals subsidies (± advances)		2,000,000	30,000,000	20,000,000	12,054,000	15,000,000
Contribution & support to NGOs	12,107,000	10,293,000	10,893,000	10,893,000	13,417,770	12,617,770
Others	8,393,000	6,672,000	6,871,000	8,644,000	9,189,638	7,950,800
Central Laboratory (recurrent)	1,268,000	1,148,000	1,157,000	1,198,000	1,145,500	990,100
Part II Ministry + Central lab. (investment)	1,786,000	1,236,000	1,035,000	8,598,000	1,572,000	900,000
Total MOPH budget	289,500,000	285,100,000	344,600,000	360,300,000	348,789,000	361,631,670

A separate budget line was created in 1999 for autonomous public hospitals to provide them in the launching phase with the necessary operational capital. The original plan was to shift MOPH hospitalization funds from contracting private hospitals to public ones progressively, as new public hospitals were becoming functional. This revealed to be unrealistic, largely due to the powerful position of the private hospitals on the political and confessional scene. Payments to public hospitals from the subsidies budget line turned into advances to be deducted when reimbursing hospitalization bills, within the framework of the contractual agreement with the MOPH.

The MOPH budget has increased by 25% over the past five years. Disregarding debt servicing, MOPH budget in 2007 represented, 5.21% of the government budget (3.05% of the total with debt service). Needless to mention that budget increases are almost exclusively related to hospitals' reimbursement and expensive drugs purchasing.

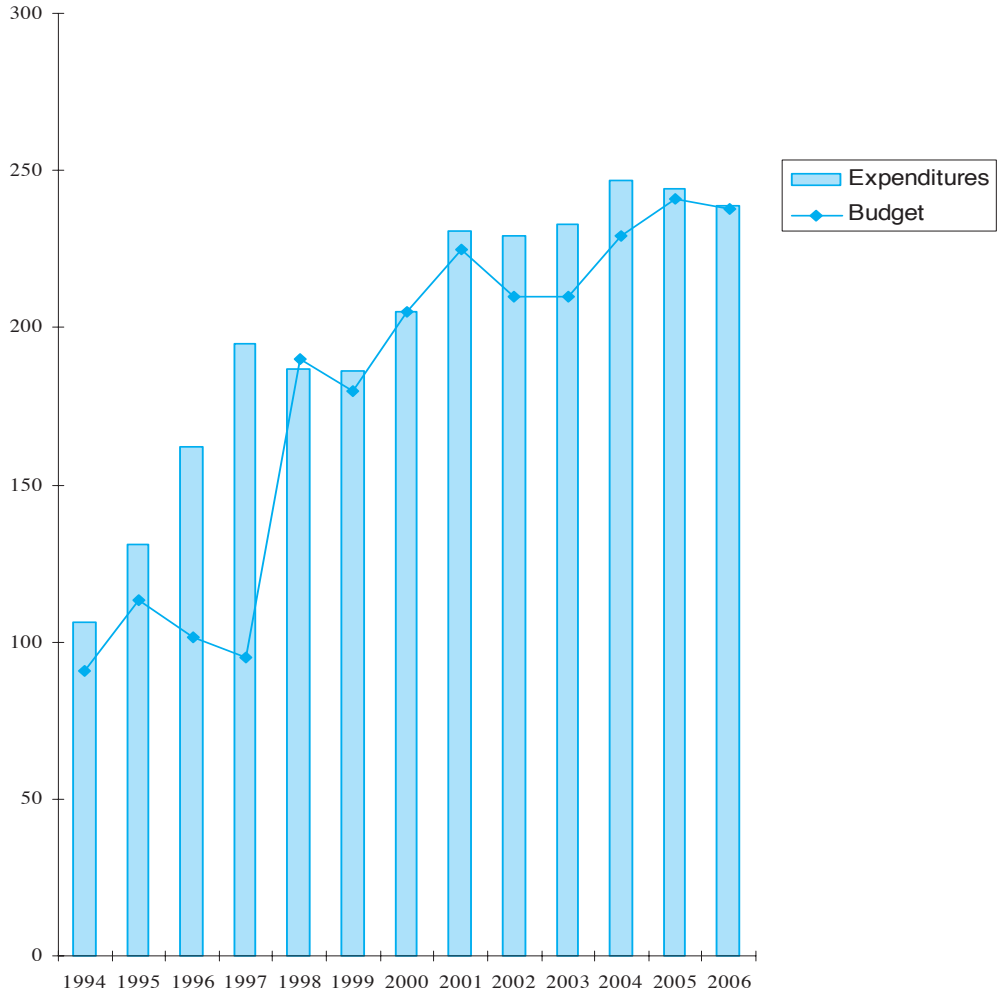
Table III-7: Government budget, Debt servicing and MOPH share 2002-2007 (1000 LBP)

	2002	2003	2004	2005	2006	2007
Total Government Budget	9,375,000,000	8,600,000,000	9,400,000,000	10,000,000,000	11,195,000,000	11,840,000,000
Debt servicing	4,500,000,000	4,000,000,000	4,300,000,000	3,900,000,000	4,653,000,000	4,900,000,000
MOPH share of the total government budget % (excluding debt services)	3.09 (5.94)	3.32 (6.20)	3.67 (6.76)	3.60 (5.91)	3.12 (5.33)	3.05 (5.21)

At the end of 1997, the MOPH introduced a flat rate reimbursement method for surgical procedures, and cancelled the co-payment exemption for open-heart surgery and organ transplantation. The impact of these measures was remarkable on the 1998 and 1999 MOPH expenditures, as shown in figure III-2. Unfortunately, this effort was over-shadowed by a steep increase in the number of contracted beds in 2000 and 2001[3].

[3] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO

Fig III-3: MOPH accrual spending on hospital care and budget allocations 1994-2006



Since 2001, the cost incurred by contracted hospitals has been rather stabilized with slight variations, as a result of a better control of demand and an efficient cost containment policy. The number of admissions showed in fact a slight increase from 174,691 in 2001, to 186,624 in 2006 (6.8%), whereas related expenses have only increased from 229 to 239 billion LBP (4.3%) in the same period. This could only be attributed to serious measures taken by the MOPH to control

admissions and contain the cost of hospital care. This included the setting of a financial ceiling for each provider explicitly stated in the contract, the automation of admissions authorizations and bills auditing, and the activation of staff accountability mechanisms. Hospitals' compliance with contracting rules has been closely monitored, and the MOPH medical controllers were trained and held responsible for any abuse. On the other hand, fig III-3 highlights the impact of the enhanced MOPH capabilities for budget control, revealed by the significant reduction of budget deficits. These did not exceed 4 billion LBP in 2005, to become almost nil in 2006, and probably reversed in 2007.

Table III-8: Breakdown of MOPH accrued expenses on curative care in 2005 (1000 LBP)

	Number of cases	Incurred cost
Medical	93,463 admissions	83,822,020
Surgical (except open heart surgery)	87,148 //	93,110,491
Heart surgery	2,754 //	18,119,044
Burns	34 patients	689,937
Dialysis	1,246 //	19,107,398
MRI	794 //	2,060,911
LDH apheresis	37 //	1,056,000
Long stay	1,385,968 days	26,795,885
Total		**244,761,686**

From the 2005 budget, 244.7 billion LBP were spent on different contracted providers as revealed by table III-8. In addition, subsidies to public hospitals amounted to 11,150 billion LBP that same year, whereas the incurred cost of expensive drugs was 45,257 billion LBP dispensed to 7,284 patients suffering from cancer and other diseases necessitating exorbitant treatment.

In 2007, 87% of the MOPH budget was allocated for curative care and distributed as follows: 15.8% for purchasing expensive drugs, 79.3% to reimburse contracted private and public hospitals, and the remaining 4.9% to subsidize public hospitals.

Among 1.6 million eligible citizens, almost 190,000 seek MOPH authorization yearly for hospital admission and expensive treatment with an average cost of 190 million USD. Among these expenditures, 27.5 millions are spent on some 4,600 patients

undergoing open-heart surgery, renal dialysis, LDL apheresis and linear accelerator radiotherapy. In addition, some other 9,200 patients are receiving expensive drugs for a cost of 33.3 million USD. As a result, 87% of the ministry's budget is spent on 5% of the population, of whom 7% (0.37% of the total population) are benefiting from one third of this budget share.

This is certainly not an effective way of allocating the MOPH resources but is an inevitable result of the Ministry's role as a financing agency. This role originally defined as that of an "insurer of last resort", has evolved to cover more and more sophisticated services, to meet ever growing expectations fed by unrealistic promises and continuously inflated by demagogic political speech. Useless to say that the MOPH cannot be "luxuriant" to every body, everywhere, all the time, which causes necessarily equity and sustainability problems. In the case of providing expensive drugs, for example, it leads sometimes to selective generosity and often to running out of stocks with serious health consequences.

5- PUBLIC FUNDS COORDINATION AND DUPLICATION

All public agencies contract out for hospital care, based on a tarification set by MOPH and the NSSF for 3rd class hospitalization. Military officers and civil servants of the 2nd and 1st categories are entitled for treatment in a higher hospitalization class.

The diversity of benefit packages among public funds leads to shifting eligibility, in particular towards MOPH. Chemotherapy is an example where obtaining expensive drugs for free from the Ministry's drugstore remains an option preferred by the insured patient to purchasing them from a private pharmacy and getting 95% reimbursement by the NSSF, or even less by the CSC, several months later. Some expensive drugs are not even reimbursed at all. A meaningful number of adherents to the NSSF or the CSC used to submit yearly "certificates of ineligibility" signed by both agencies, enabling them to benefit fraudulently from MOPH for some better covered services. This practice has been substantially reduced with the improvement of the electronic database on public funds beneficiaries, even though exceptions are still made at the discretion of the Minister of Public Health. Discussions are taking place to unify benefit

packages and to set mechanisms that enable public funds to procure drugs with prohibitive public prices to be dispensed directly for patients, following the example of the MOPH.

Workplace injuries and occupational health, not included in the NSSF medical plan, are covered by the MOPH. And, in case of health emergencies such as natural disasters, military conflicts or disease outbreak, it is the MOPH who has to call upon hospitals to treat hard shipped citizens, on the full charge of the Ministry, irrespective of their insurance status and without prior authorization.

The population covered by the NSSF is relatively young, mainly due to the fact that upon retirement the adherent is excluded after getting his/her indemnities. Thus, the NSSF relieves itself from its aging beneficiaries when their health needs become greater and more costly. In addition, citizens ineligible to NSSF are in general among the most deprived segments of the population, such as seasonal workers, farmers, retired and unemployed citizens. Consequently, the MOPH welfare fund covers on average an older and poorer population with higher health needs. Higher hospitalization rates and length of stay, and more complicated and expensive interventions are to be expected for the MOPH covered population.

The wide variations in spending averages per beneficiary reflect among others the difference in benefit package where the share of inpatient bills is 84% for MOPH as an example compared to an average of 53% for the other funds.

The NSSF average cost for medical insurance is 295 USD per beneficiary. Should the Government consider a universal prepaid health coverage plan, this could be taken as a reference figure for public insurance. It compares favorably with the 2005 private insurance cost, considering both the average gross premium of 450 USD and the average paid claim of 363 USD per person-year.

The average hospitalization rate of the population covered by public funds including the MOPH welfare fund is 16.4 admissions per hundred populations. The cost per admission is the highest for Civil Servants Cooperative and the lowest for all security forces.

Table III-9: Public expenditures on health services provided by the private sector (2005) [1507.5 LBP = 1 USD]

Financing agency[a]	Number of beneficiaries[b]	Expenditures[c] (1000 LBP)	Expenses per beneficiary[d]	
			LBP	USD
MOPH[e]	1,629,015	301,168,561	184,878	123
NSSF	1,077,683	479,915,920	445,322	295
CSC	197,392	87,521,652	443,390	294
AF	225,250	69,830,108	310,011	205
ISF	77,609	36,971,434	476,380	316
GSF	14,310	9,345,924	653,104	433
SSF	5,645	3,982,592	705,507	468
TOTAL	***3,226,904***	***993,462,191***	***307,868***	***204***

Sources: Financing agencies for expenditures, MOPH estimates for beneficiaries' numbers.

a) Palestinian refugees and other non-Lebanese are excluded as well as adherents to private insurance.

b) Estimates derived from the beneficiairies database: The number of beneficiaries includes adherents and their dependents.

c) Covering hospital and ambulatory services for public funds MOPH expenses include hospitals reimbursement, drugs cost and public hospitals subsidies.

d) Administrative costs excluded.

e) For the MOPH; uncovered Lebanese are considered beneficiaries.

Table III-10: Acute Inpatient Care (2005)

	MOPH	NSSF	CSC	Army	SF*	TOTAL
Admissions	183,365	247,907	24,762	51,663	29,737	537,434
Hospitalization Rate	11.3%	23%	12.5%	22.9%	30.5%	16.6%
Acute inpatient cost (1000 LBP)	214,039,909	278,927,987	41,713,443	56,920,752	30,335,275	621,937,366
Cost per admission (1000 LBP)	1,167	1,125	1,684	1,102	1,020	1,157

*SF: Security Forces including ISF, GSF and SSF

Table III-11: Public expenditures breakdown (2005) [1507.5 LBP = 1 USD]

	MOPH	NSSF	CSC	Army	Security Forces
In-patient care (1000 LBP)	244,761,686 [(a)]	278,927,987	41,713,443	56,920,752[(b)]	30,335,275
Ambulatory services	45,256,875[(c)]	200,987,933	45,808,209	12,909,356	19,964,675
Administrative costs for medical coverage	11,632,479	42,177,766	3,226,116	13,112,568	2,793,032
Total (1000 LBP)	301,651,040	522,093,686	90,747,768	82,942,676	53,092,982
Total (US Dollars)	*200,100,000*	*446,330,800*	*60,198,000*	*550,200,000*	*35,219,225*
Administrative Costs (%)	3.9	8	3.6	15.8	5.3

(a) Hospital care including public hospitals and long stay.
(b) Including military hospital.
(c) Excluding Primary Health Care.

Being the insurer of last resort for the most disadvantaged, the MOPH contributes to some extent to solving accessibility and equity problems. This was confirmed by the 1999 NHHEUS, and more recently the Households Living Conditions Survey done by CAS in 2004-2005.

In 2005, the MOPH spent 301.6 billion LBP on private and public hospital care and ambulatory services including administrative costs. This sum went for medical coverage of 1,629,015 uninsured, which represents an average of 123 USD per eligible citizen. It is worth noting that although the uninsured are eligible for MOPH coverage irrespective of their ability to pay, they do not all seek MOPH services for a variety of reasons. In addition, the MOPH spent around 50.6 billion LBP on public health activities and general services, to the benefit of all the 3,755,000 Lebanese citizens. This represents an additional 9 USD per citizen.

6- PRIVATE INSURANCE

The 2004/5 National Survey on Households Living Conditions revealed that 6.5% of residents hold a private health insurance policy. Of those 2.6% declared paying directly the total amount of premiums, whereas 3.9% declared being enrolled into a private plan through an institution, a syndicate or an employer. This indicates that 60% of the privately insured are probably not bearing the whole premiums.

Analysis of data provided by selected private insurance companies especially those of the MedNet Liban group, indicates that 35.8% of the privately insured are at the same time NSSF adherents and are divided into 26.1% covered for hospitalization only and 9.7% covered for additional ambulatory care, with an average premium of 228 USD. Those adhering to private insurance alone are in majority covered for hospital care and varying packages of out-patient services, with an average premium of 464 USD.

Table III-12: Private Insurance adherents by type of coverage (in USD)

	Private Insurance alone		Private Insurance complementary to NSSF		TOTAL	
Hospitalization only (%)	30,445	(6.2)	128,162	(26.1)	**158,607**	**(32.3)**
Hospital and ambulatory care (%)	284,804	(58.0)	47,631	(9.7)	**332,435**	**(67.7)**
TOTAL	**315,249**	**(64.2)**	**175,793**	**(35.8)**	**491,042**	**(100)**

Table III-13: Private Insurance premiums and claims 2005 (in USD)

	Private Insurance alone		Private Insurance complementary to NSSF		
	Premiums	**Claims**	**Premiums**	**Claims**	
Hospitalization only	18,066,972 (9.7)	6,689,648 [5.8]	13,783,051 (7.4)	5,766,938 [5.0]	(100%)
Hospital and ambulatory care	128,145,121 (68.8)	85,927,368 [74.5]	26,262,299 (14.1)	16,954,710 [14.7]	[100%]

Considering the total premiums of 186,257,443 USD published by the Association of Private Insurance (ACAL) for 2005[4], and assuming that the study sample is representative; the total number of private insurance policy holders would be 491,042 with the characteristics represented in table III-12.

According to the Ministry of Economy and Trade (MOET), the total declared premiums for medical insurance in 2005 was 166 million USD. This does not include car accidents mandatory insurance estimated at 40 million USD premiums per year, composed of medical coverage and accidents' indemnities.

Private insurance companies are taking full advantage of the system for selecting younger, healthier, and better-off clientele. The chronically ill patients suffering from diabetes, heart disease, renal failure, cancer, among others, are discouraged by prohibitive premiums to join the insurance. In addition to cream skimming, expensive interventions such as open-heart surgery, chemo- and radiotherapy, organ transplantation and dialysis are most often excluded, and their burden ends up being shifted on the MOPH. Ill regulation of the private insurance becomes a serious concern regarding the protection of adherents' rights as well as the future development of the sector. Abuse is particularly noxious in car accidents insurance where settling contentions at the door of the emergency room is not an easy job for the MOET or the MOPH. Mandatory insurance for car accidents has shown to be particularly inefficient and should be revisited at both the legislative and the administrative levels.

Total claims declared by private insurance amounted to 115,34 million USD in 2005 representing 62% of the same year premiums published by ACAL. This provides enough room for improving both premiums and benefits, which in return will probably have a positive impact on the expansion of the insurance business. Hence, improving regulation capabilities of the supervising ministry together with consumer's protection and empowerment, remain critical factors to promote constructive competition and better efficiency in the insurance industry.

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[4]Associations des Compagnies d'Assurances au Liban. 2006. Annual Report, available at: www.acal.org.lb

Table III-14: Mutualities adherents and contributions by type of coverage (2005)

	No other coverage (%)		Complementary to NSSF or MOPH (%)		Total	(%)
Adherents	115,065	(75.3)	34,744	(24.7)	152,809	(100)
Contributions (1000 LP)	43,739,642	(77.4)	12,771,523	(22.6)	56,511,165	(100)

Table III-15: Government subsidies for Mutual Funds (1000 LBP) (2005)

Source of Financing	Mutual Fund for Members of Parliament	Mutual Fund for Parliament employees	Mutual Fund for judges	Mutual Fund for the Lebanese University professors
Government Budget[1]	9,200,000	1,600,000	8,500,000	17,438,000
Contributions [2]	—	—	5,502,000	5,900,000

[1] *Ministry of Finance*
[2] *Mutual Funds Association*

7- MUTUAL SOCIETIES AND SELF-FUNDED SCHEMES

Only 0.8% of interviewed households declared adhering to a mutual society (2004/5 survey). However, data derived from the Association of Mutual Funds (AMF) revealed a number of adherents that exceeded 170,000 for 2004, and 150,000 for 2005. Following the private insurance example, some funds are contracting-out patients' management to a Third Party Administrator (TPA). The consequent increase in administrative cost may be worth the TPA professional added value, considering that non-profit organizations are lacking the needed expertise in actuary and insurance management. Data from TPA sources confirm the AMF figures about adherents and contributions that are estimated at 40.13 and 35.33 million USD for 2004 and 2005 respectively.

Based on TPA-managed mutuality data related to adherents with no other form of insurance, the average disbursement is about 133 USD per person per year for an average premium of 184 USD (72%).

Some funds define their mission as complementary to NSSF or MOPH by covering only the co-payment. This type of coverage concerns less than 25% of the total number of adherents. Some others receive government subsidies that amounted to a total of 24.37 million USD in 2005, with more than 50% devoted to cover health services (table III-15). In 2005, contributions and paid claims amounted to 37,674,110 USD and 35,287,992 USD respectively. Considering administrative fees, these figures confirm the non-profit nature of these mutual societies. Average paid claims per adherent are 231 USD for self-managed mutual societies compared to 133 USD for those having a TPA. However, those figures should be considered with caution as benefits are not standardized and the benefits mix may differ between the two categories.

In addition to mutual societies, there exist self-funded schemes that are either self-managed or contracted-out to a TPA. The total number of their adherents is believed not to exceed 20,000 beneficiaries with an average cost of 272 USD per person per year for in and out-patient services.

Table III-16: Distribution of health expenditures by households and intermediaries 1998 and 2005 (1000 LBP)

	1998	%	2005	%	Increase (decrease)	% (%)
MOPH	310,919,302	10	364,081,361	14	53,162,059	17
NSSF	315,524,000	10	522,093,686	19	206,569,686	65
Other Public Funds	188,215,522	6	226,783,426	8	38,567,904	20
Private Insurance	376,013,035	13	280,786,953	10	(95,226,082)	(25)
Others	42,222,926	1	129,412,465	5	87,189,539	206
Households OOP*	1,780,623,000	60	1,157,672,000	44	(622,951,000)	(35)
TOTAL	**3,013,517,785**	**100**	**2,680,829,891**	**100**	(332,687,894)	(11)

* Out-of-pocket

Table III-17: Average expenditures per household and share of health spending: 1998 and 2004 (LBP)

	1998	2004[(1)]	Increase (decrease)
Total household expenditures	18,551,000	19,294,559	4%
Health spending including insurance	2,609,000	1,780,110	(32%)
OOP on Health (without prepayment)	2,230,695	1,312,030	(41%)
Prepayment (contributions & premiums)	378,305	468,080	24%
Share of health spending[(2)]	14.06%	9.23%	(4.83%)

(1) Source: Households Survey 2004/5, except for insurance premiums calculated from other sources.
(2) In % of total household spendings

8- NATIONAL HEALTH ACCOUNTS

Having examined so far how the money flows through financing intermediaries, we will in this section have a look on where does the money come from (sources of financing) and how is it distributed among providers. Sources of funds are generally analyzed by focusing on the public-private mix. For the sake of strategic analysis we will consider an approach that emphasizes rather the prepaid modalities versus out-of-pocket (OOP) direct payments.

8.1 Sources of Funds

Total health expenditures have decreased by 221 million USD (11%) between 1998 and 2005[5]. This was achieved mainly through an important reduction of households OOP payments reaching 413 million (35%), and would not have been possible without an increase in spendings from treasury source by 119 million (33%).

Most of the treasury funds increase was demand driven rather than preplanned reallocation of resources. As a result of miscalculated budget allocation, both MOPH and NSSF experienced accrual deficits in their 2005 budgets amounting to 3.78 and 22.7 billion LBP respectively. That of NSSF was mitigated by a treasury transfer in 2005 which included arrears and exceeded the government contribution incurred for that particular year.

Nevertheless, based on 1998 NHA[6] results, the MOPH adopted a clear strategic plan for rationalization of health expenditures, targeting specifically the households OOP payments. The 2005 NHA provided evidence on the pertinence and success of the MOPH strategy in lowering the households' financial burden as shall be explained in chapter six. However,

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[5] National Health Accounts for 2005 are based on financing intermediaries' data for 2005, and that of the 2004/5 Households Living Conditions Survey. This survey was launched in February 2004 and the data collection was achieved in April 2005.

[6] Ammar, W., et al. Lebanon National Health Accounts 1998. WB-WHO: Beirut. December 2000.

efficiency of public financing remains an issue to be addressed, mainly at the allocative level.

Households direct spending on health, amounted to 1,157,676,230,650 LBP in 2004 with an average of 1,312,000 LBP per household, the equivalent of about 200 USD per capita per year.

While total households expenditures have increased by 4% between 1998[7] and 2004, those related to health have decreased by 32%, and the OOP share decreased by 41% in the same period (table III-17). The 1998 survey focused on health and emphasized health related expenditures while perhaps, underestimating the rest of households' spendings[8]. It is worth mentioning that prepayment share of households spending on health that represented 14.5% in 1998, was estimated at 26.3% in 2004 (table III-20).

It would be particularly informative to compare the results of two Households Living Conditions Surveys, conducted in 1997 and 2004/5. Since insurance premiums were included in 1997 results, but not in those of 2004, they were deducted from the 1997 households spendings for the sake of comparability, and in order to focus on OOP i.e payment made at the point of getting the service. On the other hand, in the absence of complete National Health Accounts (NHA) for 1997, no plausible estimation of Total Health Expenditures (THE) exits for that year. Hence, no comparison could be made in terms of OOP share in THE nor THE share in GDP. Therefore comparing the 1997 OOP share in GDP to that of 2004, is considered instead, for having the same relevance.

Table III-18 shows that household's OOP health spending has significantly decreased in 2004 compared to 1997, both in absolute figures and in % of GDP. During that period, OOP health spending has decreased by more than 10%, from 1,469,588 to 1,312,000 LBP per household, representing a

[7] Kasparian C; Ammar, W.; Mechbal, A.; Nandakumar, A.K.; National Household Health Expenditures and Utilization Survey 1999. MOPH in collaboration with: CAS, WHO, WB. October 2001

[8] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO

decrease in its GDP share by more than 34% (3.56 compared to 5.47%).

Table III-18: Households health (HH) out-of-pocket (OOP) spending, 1997 and 2004 (in LBP)

	1997*	2004**
HH OOP	1,469,588***	1,312,000
Number of households	834,375	879,855
Total OOP health spending	1,226,187,487,500	1,154,369,760,000
Total GDP**	22,412,003,000,000	32,411,000,000,000
Total HH OOP health spending as % of total GDP	5.47	3.56

* Household Living Conditions Survey 1997
** Household Living Conditions Survey 2004/5
*** HH spending 1,724,000 – insurance premiums 254,412
**** Ministry of Finance

From a household's budget perspective, 2004 OOP direct payment for health represented on average 6.8% of the total households expenditures. This percentage is however more important for the poorest ones, reaching 14.1 percent for the lowest income category. Households were spending less in 2004 on health than in 1998 both in absolute figures and in percentage of their total expenditures. However, discrepancies between households income categories, in terms of proportions of their budget devoted to health, were wider in 2004/5 compared to 1998. This may be explained to a large extent, by the exclusion of private insurance premiums that would have weighed more on the highest income categories shares, if taken into account in the 2004/5 survey.

Table III-19: Health share in households spending (in%) by income category 1998-1999 and 2004-2005

Monthly household income	1998-1999*	2004-2005**
< 300	19.9	14.1
300-499	18	9.8
500-799	16.1	7.26
800-1199	14.8	6.85
1200-1599	14	6.3
1600-2399	14.1	5
2400-3199	11.4	
3200-4999	10.7	4.2
>5000	8.1	
Total	**14.1**	**6.8**

* Insurance premiums included ** Insurance premiums excluded

Table III-20: Distribution of financing by sources and intermediaries (1000 LBP) (2005)

FINANCING	FUNDING SOURCES					EXPENDITURES
INTERMEDIAIRIES	Households		Employer	Treasury	Extra budgetary	Disbursement (Fund balance)[1]
	Fees for Services (out of pocket)	Contributions/ Premiums	Contributions/ Premiums		Donations / Loans	
MOPH				360,300,000		293,799,922[2] (66,500,078)[3]
NSSF		169,309,291	199,564,115	145,000,000		479,915,920[2] (33,957,486)[4]
CSC				90,747,768		87,521,652 (3,226,116)
Army				83,000,907		69,887,340 (13,113,567)
SF				53,092,982		50,299,950 (2,793,032)

Private Insurance		187,192,305	93,594,645			173,873,165 (106,913,785)
Mutual Funds		56,511,165		28,884,000		85,395,165
International Organizations					700,000	700,000
Households	1,157,672,048					1,157,672,048
						2,399,065,162 **(226,504,064)**
TOTAL	**1,157,672,048**	**413,012,761**	**293,158,760**	**761,025,657**	**700,000**	**2, 625,569,226**

(1) Including Administrative cost, investments, surplus or deficit.

(2) Accrual

(3) The result of +70,281,439 public health functions + administrative cost + investment – 3,781,361 deficits.

(4) The result of +42,177,766 administrative cost – 8,220,280 deficit and reconciliation of government arrears.

8.2 Distribution of Health Expenditures

Almost half of households health expenditures go to purchasing drugs! Medical and dental consultations represent less than 20%, and hospital services account only for 15.15% of households OOP expenses[9]. Unfortunately the 2004/5 survey results do not provide information on insurance premiums as part of households health spending items.

Table III-21: Households annual health expenditures by spending item (LBP) (2004-2005)

	Average per household	%	Total
Drugs	632,020	48.17	557,666,007,100
Other pharmaceutical products	7,310	0.56	6,450,015,050
Eye glasses and contact lenses	26,630	2.03	23,497,113,650
Denture and appliances	63,760	4.86	56,258,954,800
Other appliances + maintenance	5,540	0.42	4,888,246,700
Physicians consultations & services	154,600	11.79	136,412,083,000
Dentists consultations & services	96,200	7.33	84,953,139,400
Medical lab. Analysis	78,270	5.96	69,061,925,850
Imaging	40,110	3.06	35,391,259,050
Paramedical services	8,730	0.67	7,702,959,150
Hospital services	198,780	15.15	175,394,526,900
Total	**1,312,030**	**100**	**1,157,676,230,650**

***Source**: Central Administration for Statistics, unpublished data.*

In 2005, national total expenditures on hospital care, spent by all financing agencies as well as by households, amounted to 1006.56 billion LBP including the price of in–hospital used drugs. Out hospital costs of drugs and other pharmaceuticals have reached respectively 831 and 89 billion LBP. Aggregated data from IMS, the Syndicate of Drugs Importers and the Syndicate of Private Hospitals, reveal that in-hospital consumption of drugs and other pharmaceuticals (medical supplies and consumables) amounted to 145.95 and 65.43 billion LBP respectively. This indicates that pharmaceuticals represent on average 21% of the hospital bill divided into 14.5% drugs, and 6.5% medical supplies and consumables.

[9] Central Administration for Statistics, Ministry of Social Affairs, United Nation Development Fund. The National Survey of Household Living Conditions 2004/5.

Table III-22: Spending on hospitals and pharmaceuticals by households and intermediaries in 2005 (1000 LBP)

	Total Hospitals (including Pharmaceuticals)	Hospitals (excluding pharmaceuticals)	Pharmaceuticals (outside hospitals)	Total pharmaceuticals
Intermediaries	831,166,818	656,621,786	271,601,836	446,146,868
Households	175,390,341	138,558,369	648,760,826	685,592,798
Total	1,006,557,159	795,180,155	920,362,662	1,131,739,666
% of total health expenditures	37.55	29.66	34.34	42.22

Table III-22 shows that pharmaceuticals purchased through pharmacies, public bids and hospitals, including drugs, medical supplies and consumables, totaled to 1131.74 billion LBP in 2005 representing 42.2% of total health expenditures! Whereas expenditures on hospitals excluding pharmaceuticals accounted for 29.6% only. This indicates clearly the priority of actions for the coming years.

Table III-23: National Health Accounts summary statistics (LBP)

	1998		2005	
Total population estimate	4,005,000		3,870,000	
Total health expenditure	3,013,517,785,000		2,625,569,226,000	
Per capita expenditure	752,438		678,442	
Total GDP	24,300,000,000,000		32,411,000,000,000	
Health expenditure as % GDP	12.4		8.1	
Percent GOL budget allocated to MOPH	6.6		5.9	
Sources of funds (%)				
Public	18.22		28.98	
Private	79.84		70.99	
Households		70.65		59.82
Employers		9.19		11.17
NGO	1.94		0.03	
Distribution of health care expenditures (%)				
Hospitals including drugs &medical supplies	*24.5*		*38.0*	
Private non-institutional providers	*41.0*		*21.0*	
Pharmaceuticals	*25.4*		*32.0*	
Others	*9.1*		*9.0*	

9- CONCLUSION

The 2005 National Health Accounts (NHA) reveals that 460 USD were spent on health per capita, representing 8.2% of the GDP estimated at 5,555 USD per capita. This brings Lebanon to the norms of the Eastern Mediterranean Region after being within the European range for years.

Although funds from private sources have been reduced by almost 10 points in 2005 (70.99%) compared to 1998 (79.84%), health expenditures from private sources in percent of GDP remain the highest in the region. This would have not been at all a concern if it had reflected only institutionalized private contributions. The problem lies in the fact that private funding still comes mainly from households' direct payment at the purchasing point.

Efforts made by the MOPH have been contributing to lower significantly OOP spending. However, in light of NHA results, and in order to be conclusive, efforts should be more oriented towards containing the cost of pharmaceuticals.

Nevertheless, better regulation and cost control would not provide alone enough protection from impoverishment induced by health spendings. Reforming the health financing system with the aim of ensuring a universal coverage based on prepayment modalities, through one fund or more, remains the only envisegeable solution for social protection and equitable accessibility to health care. The NSSF is facing basic problems to enlarge its coverage. It lacks for example the capacity to assess the uninsured ability and willingness to pay, and to set and collect contributions in the absence of employer identification outside the formal economy. The whole health sector is still paying the price of the NSSF voluntary enrollment failed attempt. Repercussions of this failure were unbearable for the providers and most of all by the deceived adherents. Any partial solution would have similar catastrophic consequences and should be discouraged. The government should seriously consider comprehensive reform scenarios[10] although a soft and modular option may be chosen.

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[10] Ammar, W., 2003. Health System and Reform in Lebanon. Beirut: WHO: Health Financing Scenarios pp.133, 139.

Table III-24: International comparison of health expenditures per capita and as a percentage of GDP

Country or Region	GDP per capita (USD)*	Health Expenditure (per capita USD, exchange rate)**	Health Expenditure (per capita USD, PPP)**	Health Expenditures as percentage of GDP**		
				Total	Public Sources	Private Sources
Yemen	880	39	88	5.1	2.1	3.0
UAE	30,881	833	625	2.6	1.9	0.7
Tunisia	3,000	158	477	5.5	2.4	3.1
Qatar	53,125	2186	1283	4.1	3.2	0.9
Egypt	1,449	78	279	6.1	2.3	3.8
Morocco	2,144	89	258	5.3	1.9	3.4
Jordan	2,564	241	649	10.5	4.8	5.7
Iran	3,108	212	677	7.8	4.4	3.4
Lebanon (2005)* **	**5,555**	**460**	**584****	**8.2**	**2.4**	**5.8**
East. Med. Region**	2,184	107	242	4.9	2.5	2.4
France	36,674	3819	3314	11.2	8.9	2.3
Greece	27,784	2580	2955	10.1	4.3	5.8
European Region**	19,200	1652	1649	8.6	6.4	2.2

Source: ** World Bank. 2006. World Development Indicators 2006. [Online] available at: www.worldbank.org*
***WHO.2005. World Health Statistics 2005. Geneva: WHO*
****Ministry of Public Health Lebanon National Health Accounts 2005. (unpublished work)*