

# Health Care and Its Financing in Italy: Issues and Reform Options

Franco Reviglio

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# Health Care and Its Financing in Italy: Issues and Reform Options

Prepared by Franco Reviglio<sup>1</sup>

Authorized for distribution by Vito Tanzi

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### Abstract

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In Italy, health care budget ceilings are not effective. The poor control by the central government results in excessive use of expensive inputs, in long waiting lines for medical procedures, and in the emergence of large arrears to suppliers and commercial banks. To fully gain the benefits of its decentralized structure, Italy needs to clarify the rules of the game and strengthen controls on local health authorities.

Full fiscal responsibility should be extended to local governments on both the expenditure and revenue sides. The central government should be involved neither in decisions on the services that local governments should supply, nor in their planning and management.

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Author's E-Mail Address: Reviglio@econ.unito.it

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### I. INTRODUCTION

Italy has a relatively efficient health care system compared with the other OECD countries. This relative efficiency may be due to the high degree of decentralization of the public provision of health services. The system, however, suffers from an agency problem arising from a weak enforcement of unclear rules governing transfers from the central to regional authorities. This poor control by the central government has resulted in some inefficiencies: an excessive use of expensive inputs and the emergence of a large stock of arrears (estimated now to be 1.8 percent of GDP) to suppliers. These inefficiencies have resulted in long waiting lines for medical procedures. To fully benefit from its decentralized structure, Italy needs to clarify the rules of the game and to strengthen controls on local health authorities.

Fiscal decentralization, or federalism, when correctly implemented, helps to control the size of government because it increases voters' fiscal location choices and competition among local governments. If decentralization is not accompanied by fiscal responsibility, however, its benefits may be seriously reduced, and the efficient management of public expenditure may not be achieved.<sup>2</sup>

To achieve efficiency in the provision of health care, full fiscal responsibility should be extended to local governments on both the expenditure and revenue sides. The central government may, however, decide to provide local governments with national resources to equalize their capacity to meet the differences in needs. This central government involvement notwithstanding, local authorities should be held accountable for the health services they provide.

A recent reform of intergovernmental fiscal relations, known as the "Bassanini reform," envisages phasing out the central government involvement in decisions. In the health sector, this reform changes drastically the side of financing, giving a new content to the equalization and fiscal responsibility, maintaining, however, the central government determination of "essential services" to be supplied by regional governments. As we see in this paper, this approach allows regions to be irresponsible on the expenditure side. The central government should not be involved in decisions on which health services local governments must provide or on service planning and management. To avoid mismanagement, an independent national health board should be created to supervise health service standards throughout the country.

### II. HEALTH CARE AND ITS FINANCING IN ITALY

Health care expenditure in OECD countries is growing faster than GDP. Cross-country and time-series studies confirm that the elasticity of health care expenditure to per capita incomes is larger than unity beyond a certain income level (Hsiao, forthcoming;

<sup>&</sup>lt;sup>2</sup> The conditions expected to have a successful devolution are reviewed broadly by Tanzi (1995).

OECD,1999b). This large elasticity may result from either the demand or the supply side. For example, it could be due to such demand-side factors as the increasing use of orthodontics for children, organ transplants, plastic surgery, or, more generally, clinical tests and treatments for the growing number of elderly.<sup>3</sup> It could also be due to such supply-side factors as failures of the health care system and changes in technology. Baumol's disease,<sup>4</sup> which used to be mentioned as a supply-side determinant, is no longer a plausible factor, given the extraordinary productivity increase in the health care sector in the last 2–3 decades.

The ability to control health care expenditure is, therefore, an important issue in OECD countries. Decentralization may be a useful and efficient means of providing public health care services. The management of health care services by local governments (state, regional, and municipal authorities) is a natural example of service-sharing among different levels of government because they benefit individuals living in different areas.

The Italian experience supports this view. In Italy, health services meet the subsidiarity principle, <sup>5</sup> given the wide regional variation in the structure of the demand for health care. Some indicators of different regional needs, such as aging indexes, mortality rates, number of beds per 1,000 inhabitants, and hospitalization rates, confirm the wide spectrum of demand for health services (Table 1). Therefore, Italy has implemented a nationwide devolution of the provision of health services from the central to local governments, with some limitations that will be considered later.

Although decentralization is attractive, there are dangers if it is not properly designed or implemented. Recent evidence drawn from a large sample of countries (20 Latin American and 17 OECD countries) confirms that decentralization, measured by intergovernmental

<sup>&</sup>lt;sup>3</sup> Why do the rich consume more drugs than they need? And why do they stay in hospitals longer than necessary? Studies suggest that health care is a necessity (with an income elasticity of demand approximately equal to 0.75); this is confirmed by OECD (1995) and is supported by microstudies based on housing survey data. But the income elasticity of health expenditure depends also on explanatory variables other than those mentioned above.

<sup>&</sup>lt;sup>4</sup> Baumol argued that health services are labor intensive, and, therefore, their costs would increase more rapidly through time vis-à-vis other products, because they cannot benefit from productivity gains comparable with those in other private sectors.

<sup>&</sup>lt;sup>5</sup> Subsidiarity suggests locating services as close to the user as possible without losing gains from economies of scale. Economies of scale suggest that defense has to be national (or even supranational, as with NATO and the proposed European Force), whereas much social spending should be at the lowest levels of government in view of the absence of such economies of scale (although the procurement of inputs could often be undertaken at a higher level to benefit from scale economies).

Table 1. Italy: Indicators of Regional Health Needs, 1996

		g Index	Mortality	Hospital	Disabled	
Regions	(Persons	over age 65)	Rate	Beds	Persons 1/	Hospitalizations
	Males	Females				(Per 1,000
· · ·	(Per 100	inhabitants)	(Pe	r 1,000 inhab	itants)	Inhabitants)
Piemonte	16.3	22,5	11.3	5.5	18.9	200.7
Valle d'Aosta	14.6	21.2	11.1	4.7	18.2	181.1
Lombardia	13.2	19.7	9.7	5.8	17.3	219.4
Bolzano	11.9	17.7	8.1	5.7	10.3	n.a.
Trento	14.0	21.1	9.6	7.9	12.7	223.5
Veneto	13.8	20.2	9.3	6,6	14.7	170.4
Friuli-Venezia Giulia	16.4	24.6	12.5	6.9	17.5	209,3
Liguria	19.7	27.2	13,4	7.9	22.3	235,2
Emilia-Romagna	18.3	24.5	11.5	6.6	19.0	243.0
Toscana	18.4	24.0	11.6	5.9	21.1	207.8
Umbria	18.8	23.8	11.1	6.0	24.8	242.5
Marche	18.1	23.0	10.4	7.0	21.0	239.2
Lazio	14.0	18.2	8.8	7.8	20,3	185.5
Abruzzo	16.4	20.8	10.1	8.2	21.7	232.2
Molise	17.0	21.5	10.2	6.7	23.1	197.5
Campania	10.9	14.4	8.1	4.7	16.1	198.1
Puglia	12.5	15.7	7.8	7.0	14.5	216.9
Basilicata	14.8	18.0	9.2	5.3	18.8	217.5
Calabria	13.3	17.0	8.4	5,8	21.7	211.8
Sicilia	13.5	16.6	9.1	4.9	17.4	n.a.
Sardegna	12.5	15.8	8.1	6.4	18.4	n.a.
Avcrage	14.5	19.6	9.7	6.1	18.1	209.4

Source: Italy, Ministero del Tesoro, 1999.

1/ Figure for 1994.

transfers to local governments as a percentage of total revenues, can reduce the size of government only if the degrees of vertical fiscal imbalance and borrowing autonomy are small. It can increase the size of government if the degrees of vertical imbalance and borrowing autonomy are large (Stein, 1998).

Crucial tools for controlling the size of government and enhancing its efficiency are to bring fiscal decisions closer to voter preferences, and to make the fiscal authorities more accountable. Soft budget constraints are associated with a large government size and inefficiencies. Although Italy, on the whole, has been successful, its failure to make the local health authorities accountable has resulted in problems that require reforms, as discussed below.

# A. Decentralization Without Fiscal Responsibility

In 1998, current public health expenditure reached Lit 113.7 trillion (over \$61 billion), or about 5.5 percent of GDP, whereas central government financing for the National Health Fund (NHF) was limited to Lit 104.5 trillion, with a consequent deficit of Lit 8.8 trillion. Total health spending, including private expenses, amounted to 8.1 percent of GDP (Tables 2 and 3). According to the OECD, in 1997, health expenditure in Italy was 7.6 percent of GDP, broadly similar to the OECD average, but lower than in the United States (13.9 percent), Germany (10.7 percent), and France (9.6 percent) (Table 4). The share of the public component of total health expenditure in Italy was the lowest among industrial countries (5.3 percent of GDP).

The Italian National Health Service (NHS), similar to the British National Health Service, provides every citizen free access subject to copayments covering about three percent of total expenditure to health care, financed by general taxation. Twenty-one regional authorities provide the health services through 228 local health units, each covering an average of 252,000 citizens. The NHS owns about two-thirds of the hospitals and 80 percent of the beds (297,000 of a national total of 355,000 beds). The central government finances the NHS by distributing to the regional authorities an annual national health fund. The regions allocate the funds to the local health units according to their budgets.

Egalitarian goals are pursued by mandating that the same essential services must be provided for all regions in the country and by providing an ex ante allocation of additional resources to less prosperous regions to enable them to meet these standards. Thus, in addition to the general per capita allocation (in 1999, a little over Lit 1.8 million, or about \$1,000) provided to all regions, poorer regions benefit from an additional transfer of about 3 percent of the general allocation. Redistribution through the NHF aims to help the most backward regions of the country (mainly in the south). However, as discussed later, ex post health deficit financing leads to perverse results.

The annual Finance Law determines the amount of funds available for regional health expenditure (financed by the NHF) and its equitable distribution among regions. The National Health Plan (NHP) defines what it considers to be essential health services that

Table 2. Italy: Total Health Care Expenditure, 1992–98 (As percent of GDP)

	1992	1995	1996	1997	1998
Public expenditure	6.4	5.2	5.3	5.5	5.5
Private expenditure		2.5	2.5	2.5	2.6 1/
Total	8.5	7.7	7.8	8.0	8.1

Source: Italy, Ministero della Sanità, 1999.

1/ Author's estimate.

Table 3. Italy: Committed Public Health Expenditures and Overruns, 1997–2000 (In trillions of lire)

	1997	1998	1999	2000
Public Health Expenditure	109.5	113.7	120,4	125.0 1/
Overruns	10.4	9.2	7.4	8.0 2/

Source: Italy, Ministero del Tesoro, 2000, "Rapporto sanità," Relazione generale sulla situazione economica del paese, Vol. 2, (Rome).

1/ Author's estimate, reached by raising 1999 health expenditure with the expected rate of increase of GDP, revised to take into account the salary increase granted to doctors by the new health reform.

2/ Author's estimate, reached by deducting revenues from the expected expenditure of the National Health Fund (Lit 117.1 trillion). This deficit could be almost fully covered by the central government (regions have officially asked for an increase of Lit 2 trillion on their financing) and by regions themselves (they have promised the central government to cover about Lit 5 trillion with their own funds.)

Table 4. Public and Private Health Care Expenditure in Selected OECD Countries, 1997 (As percent of GDP)

	Public Expenditure	Private Expenditure	Total
OECD	5.7	2.1	7,8
France	7.1	2.4	9.6
Germany	8,3	2.4	10.7
Italy	5,3	2.3	7.6
Japan	5.7	1.5	7.2
United Kingdom	5.8	1.0	6.8
United States	6,5	7,4	13.9

Source: OECD, 1999a.

regions must provide—those that are effective, according to available medical evidence. Service standards, such as the numbers of beds and employees per capita, are also fixed by the central government under the NHP.

This involvement of the central government is justified by equity objectives: ensuring all citizens equal access to essential health services regardless of where they live. However, as discussed below, the determination of essential services and control by the central government make the Internal Stability Pact (ISP) inefficient and regional authorities irresponsible.<sup>6</sup>

### B. Inefficiencies

Overall, Italy enjoys the benefits of a heavily decentralized health service. Although Italy has the lowest ratio of health expenditure to GDP among industrial countries, its health indicators are at or above average. In 1996, infant mortality was at the OECD average of 6 per 1,000, and life expectancy at birth was 78.0 years (81.3 years for females, 74.9 years for males), compared with an OECD average of 77.3 years (79.9 years for females, 73.4 years for males). Infant mortality reached 5.8 per 1,000 live births, compared with an OECD average of 6.4. Cancer incidence rates among males and females, respectively, were 272 and 187 per 100,000 inhabitants compared with 267 and 208 for the OECD averages (in the United States, these rates were 407 and 290, respectively).

<sup>&</sup>lt;sup>6</sup> The ISP, introduced in 1999, aims at reducing local governments' deficits by at least 0.1 percent of GDP per year. In the health sector, it established an agency, with contributions from the Ministry of Health and the regions, charged with monitoring the accounts of the regions, in order to scrutinize the amounts and determinants of their overruns and to suggest the best ways to eliminate them.

Italy's health indicators cannot be attributed entirely to the impact of the health service: it may also be a result of Italian lifestyles, the Mediterranean diet, and the decentralized system—decentralized systems tend to perform better.

There is still, however, a reason to be concerned about Italy's health care system. The central government's willingness to pay for overruns encourages local health units to overconsume expensive inputs, which are poorly distributed regionally. Table 5 compares Italy's health indicators with those of other OECD countries, showing, for example, that Italy has more doctors per 1,000 inhabitants than other industrial countries (4.7, compared with the OECD average of 2.5), but one of the lowest number of nurses per doctor (0.6, compared with the average of 2.4). Similarly, more than 300 of Italy's 939 hospitals have fewer than the minimum number of beds considered necessary for efficiency.

Another sign of inefficiency is the excessive cost of medical supplies. Compared with the national average, hospitals in the North pay different prices for materials required for diagnostic procedures, and have different utilization rates for certain diagnostic appliances (Mediobanca, 1997) (Table 6).

Inefficiencies are also seen in the increasing delays in payments to suppliers and in the long waiting lines for medical procedures. Long waits for diagnostic tests and hospitalization are a weakness of the NHS and a source of widespread criticism. For example, waiting times in Italy average 23 days for a liver sonogram, 74 days for an endoscopy, and 70 days for a mammogram. To avoid long delays, the wealthy sometimes seek NHS doctors' suggestions for treatment in private clinics. Long waits are not found only in Italy, however; they are common in other industrial countries. They are, to some extent, an unavoidable byproduct of the public provision of health care and its failure to provide timely high-quality care. It is nevertheless true that improved resource allocation can alleviate these problems.

The average payment-to-supplier delay is long and is increasing. In 1998, the average delay for the purchase of hospital supplies was 251 days, an increase of 30 percent from the previous year. Delays vary among regions, with longer delays in the central and southern regions (Table 7). In Emilia-Romagna and in Lazio, delays were, respectively, 343 and 449 days, due to central government underfunding and regional inefficiencies.

Delays in payments are themselves a source of inefficiency. They lead to higher health costs because suppliers have to cover themselves from the risk of being paid late by increasing their prices. Moreover, delays do not allow efficient competition among suppliers

<sup>&</sup>lt;sup>7</sup> This is the conclusion of a classic paper by Buchanan (1965). For a review of waiting times in different countries and an analysis of their determinants, see OECD (1999b).

Table 5. OECD Countries: Supply of Doctors and Nurses, 1988-92

	Doctors (Per 1,000 inhabitants)	Nurses (Per doctor)
Belgium	3.2	0,1
Canada	n.a.	4.7
Denmark	n.a.	5.6
France	2.9	1.6
Germany	2.7	1.7
Greece	n,a.	1.6
<b>Italy</b>	4.7	0.6
Netherlands	2.4	3.4
Portugal	2.6	0.8
Sweden	n.a.	3.4
United Kingdom	1.4	2.0
United States	2.4	2.8
Average	2.5	2.4

Source: World Bank, World Development Report, 1993.

Table 6. Italy: Cost and Utilization of Diagnostic Procedures in Northern Hospitals, 1995

	Low	High	
Costs (In 1,000 lire)			
Analysis	2.1	6.0	
Radiograph	25.7	79.2	
Anatomy and histology	16.0	105.1	
Immunology test	7.8	28.8	
Utilization rates (As patients per prod	cedure)		
Tac	1,560	4,351	
Ecography	1,190	5,264	
		•	

Source: Mediobanca, 1997.

1/Lit 1,000. 2/For appliance.

Table 7. Italy: Regional Delays in Payments to NHS Suppliers, 1998

Region	Number of Days
Northwest	
Liguria	223
Lombardia	231
Piemonte	120
Valle d'Aosta	78
Northeast	
Emilia-Romagn	a 343
Friuli-Venezia (	
Trento	85
Veneto	202
Center	
Lazio	449
Marche	290
Toscana	206
Umbria	236
South	
Abruzzo	186
Basilicata	170
Calabria	177
Campania	235
Molise	329
Puglia	231
Sardegna	160
Sicilia	250
Average	251

Source: Perotti, 1999.

because some of them withdraw when they cannot finance their supplies. Moreover, large payment delays make it difficult to monitor and control suppliers' bids.

Accountability is weak. Many local health units do not follow central government regulations for hiring, clinical trials, protocols, and surgical treatments. Some local units also fail to implement the government-required balanced budget, standardized diagnosis tariffs, and budgets for medical practitioners.

In general, regional enforcement of central government regulations has been poor. Planning by the central government has largely failed to achieve its goals, as a result of the inadequate enforcement of central government guidelines in renewing personnel contracts; in selecting effective clinical trials, protocols, and surgical treatments; and in making medical practitioners responsible for budgets that apply limits to their spending. These guidelines, general by nature, have not been supported by an adequate follow-up.

The weak emphasis on the health care system's efficiency is illustrated by the inadequate implementation of required changes. The management of local health units needs to be improved, and market-type operations need to be strengthened, based on balanced budgets and on the adoption of the diagnosis related groups (DRG) tariffs that all hospitals were supposed to adopt. The DRG tariffs are considered to be very useful for cost accounting and cost reduction. Several regions, however, failed to enforce the required changes set out in guidelines issued by the central government.

The lack of focus on the system's efficiency encourages political patronage and malpractice. Strong public criticism has followed revelations that some hospital managers were selected because of their links to politicians, not their professional abilities; that some doctors put private interest above patient needs, and that producers of pharmaceutical and medical appliances bribed politicians and doctors to buy their products.

# C. Expenditure Overruns and Arrears

Italy's health expenditure overruns, expenditure commitments beyond the approved ceilings, are caused by inefficient health care, and the regional authorities' lack of responsibility for and control of this expenditure. As discussed below, health expenditure has been increasing since 1995, reaching 5.5 percent of GDP in 1998.

Over the years, health expenditure overruns have caused Italy's regions to accumulate large health expenditure arrears (Lit 36 trillion, i.e., 1.8 percent of GDP). The regions expect the central government to pay Lit 30 trillion, or about 83 percent, of these arrears. The central government, however, acknowledges responsibility for about 75 percent. The funds appropriated by the Finance Law have fallen short by about 6-7 percent each year, since the central government has underestimated the resources required to provide the essential services that it mandates the regions to provide.

Why don't the regional authorities finance these overruns by increasing existing tax rates or asking patients to pay for part of the health services? They could do this; indeed, they are expected to do so, according to the regulations of the Finance Law. They do not, however, because the political cost would be too high. Sanctions for violating the Finance Law need to be enacted and enforced.

The regional authorities blame these overruns on the central government's underestimation of the cost of essential services, and on the Finance Law's annual transfers being based on the previous year's expenditure, ignoring the regions' claims.

The hand of regional authorities has been strengthened by several recent (albeit controversial) court rulings that have obliged the central government to pay the cost of the essential services it mandates. The central government has found it difficult to resist political pressure from regional authorities to cover these expenditure overruns.

Central government underestimation is not the only cause of these overruns; as stated above, another cause is the regions' lack of expenditure control. Because regional authorities know that their overruns will be covered ex post by the central government, they have little incentive to control expenditure.

According to the Finance Law, the regions must run balanced health budgets and cover overruns by raising/adding local taxes. But because no credible sanctions exist, these regulations have never been complied with. The central government, on the other hand, does not want to fund a higher level of health expenditure ex ante under the Finance Law because it would increase the general government deficit, making it more difficult to comply with the Stability and Growth Pact (SGP), because this central government expenditure covering previous years' overruns is correctly excluded from computed general government accrual expenditure. Covering health sector deficits ex post allows the government to comply with ESP.

The current ex post coverage of the regions' overruns causes distortions in the inputs used to produce services, and works against redistribution goals. This is a good example of how devolution should not be implemented.

Urging cuts in Italy's health expenditure would be difficult, given that it has the lowest among OECD countries. Instead, the central government should (1) budget more realistically; (2) improve regions' expenditure control by allowing them to increase health service efficiency within the same financing envelope; (3) improve health indicators by using a more rational mix of inputs and higher service delivery standards; and (4) consider no longer mandating the level of essential health services for the regions.

Although recent budgets have appropriated funds to pay the arrears, new arrears have accumulated. During the last two decades, regional health sector deficits have been persistent, though they have fluctuated. During 1980–97, they averaged over Lit 8.0 trillion (0.4 percent of GDP) per year, and totaled Lit 147.0 trillion (equivalent to about 7 percent of

the 1997 GDP). During 1990-97, overruns totaled Lit 62.7 trillion (equivalent to about 3 percent of the 1997 GDP) (Table 8) requiring the central government operations aimed at covering the arrears at least partially (Ministero del Tesoro, 1999). These operations were not scheduled on a regular basis and were delayed for a few years and distributed unevenly vis-àvis previous accumulated health sector deficits.

Table 8. Italy: Regional Health Expenditure Overruns, 1980–97 (In trillions of lire)

1990	1991	1992	1993	1994	1995	1996	1997	1980–1997	1990–1997
19.4	7.2	5.3	10.6	7.4	0.3	3.3	9.1	147.0	62.7

Source: Italy, Ministero del Tesoro, 1999.

Prior to 1999, the central government used eight separate allocations to fund about 75 percent of the health arrears (Italy, Ministero del Tesoro, 1999). In 1999, a government debt-accounting problem required that the 1994–99 arrears be paid. The regional authorities claim that these arrears total about Lit 36 trillion (almost 1.8 percent of GDP).

At issue is the portion of arrears for which the central government is responsible. The central government accepts responsibility for only that which is a result of NHF underestimation. The decision tends to be political rather than technical.

The Finance Law for 2000 allocates Lit 20 trillion (0.9 percent of GDP) to cover arrears from previous years—Lit 5.0 trillion (0.2 percent of GDP) for 1999 and Lit 15 trillion (0.6 percent of GDP) for the 1994–97 arrears. Another Lit 3.0 trillion (0.1 percent of GDP) was allocated in November 1999 to cover the 1995–97 arrears. The central government has, therefore, recognized almost 66 percent of the arrears.

The possibility of the central government financing of accumulating deficits almost always results in fiscal irresponsibility. Weak cash ceilings and a lack of incentives for controlling suppliers make it possible to avoid the struggle for cost-effectiveness. Cost-containment requires the authorities to take steps that are socially and politically unpleasant (Fuchs, 1993; Mossialos and Le Grand, 1999). These steps may include firing redundant staff, negotiating tough new contracts with private suppliers, tightly controlling wage increases, enforcing restrictions on mobility and new jobs, making general practitioners accountable for the public expenditure they receive, and evaluating diagnostic and surgical protocols adopted by the NHS. These are all unwelcome tasks that the regional authorities would prefer to avoid.

Efficiency gains could be used to increase the supply of health services and thus better meet patients' needs: for example, by reducing the waiting time for treatment and providing additional services, such as dental care, which in the NHS is in short supply.

### D. Distortions in Geographical Redistribution

In the past, the financing of health expenditure arrears by Italy's central government did not discriminate among regions. The financing was implemented almost automatically: proportionately, and using the same quota every year without checking the behavior of the regional authorities. However, because regional deficits varied greatly, distributive results through deficit financing were largely erratic and generally very different from either the population or income criterion used to allocate the ex ante NHF distribution.

The revenue-sharing scheme, which determines both the size and distribution criteria for resources transferred ex ante from the central to local governments, is tenuously related to regional needs. By financing arrears ex post, the central government has radically changed the redistribution goals pursued ex ante through the NHF in its allocation of health expenditure in the Finance Law. This outcome has created a serious distortion of the desired equity mechanism aimed at equalizing regional needs through the slightly corrected population criterion mentioned above. Regional health sector deficits have been larger in the northeastern and central regions of the country. These regions, therefore, have benefited relatively more than those in the South and the Northwest. The southern regions, which were supposed to be the largest beneficiaries of the ex ante redistribution through the NHF, have not received all the intended benefits.

In the period 1980–97, southern regions accumulated per capita arrears of Lit 2.1 million, against Lit 3.4 million and Lit 3.3 million of the higher-income northeastern and central regions, respectively (Table 9). The regions of Emilia-Romagna (Lit 4.2 million), Valle d'Aosta (Lit 4.2 million), Bolzano Province (Lit 4.0 million), Marche (Lit 3.8 million), and Trento (Lit 3.6 million) recorded the highest deficits. On the other hand, the lower-

<sup>&</sup>lt;sup>8</sup> Italy, Ministero del Tesoro (1999). See also Mapelli (1999). This distortion is assessed by comparing the redistribution together with the redistribution produced by health deficit financing with the ex ante redistribution that produced by the NHF through the per capita parameter. To reduce the distortion caused distributive impact of deficit financing, in 1999, the ex post financing of regional overruns was partially related to the relative size of ex ante financing.

<sup>&</sup>lt;sup>9</sup> This group includes Valle d'Aosta in northwestern Italy, Emilia-Romagna, Bolzano, Marche, and Liguria.

<sup>&</sup>lt;sup>10</sup> Piemonte, in the northwest, is included, along with Molise, Basilicata, and Calabria.

Table 9. Italy: Accumulated Regional Health Expenditure Overruns, 1980–97 (In millions of lire)

Region	Arrears		
Northwest	2.1	,	
Liguria	1.9		
Lombardia	2.1		
Piemonte	1.8		
Valle d'Aosta	4.2		
Northeast	3.4		
Bolzano Province	4.0		
Emilia-Romagna	4.2		
Friuli-Venezia Giulia	2.5		
Trento	3.6		
Veneto	2.7		
Center	3.3		
Lazio	3.2		
Marche	3.8		
Toscana	3.4		
Umbria	2.5		
South	2.1		
Abruzzo	2.1		
Basilicata	1.5		
Calabria	1.5		
Campania	2.0		
Molise	1.4		
Puglia	2.0		
Sardegna	2.1		
Sicilia	2.6		
Italy	2.6		

Source: Italy, Ministero del Tesoro, 1999.

income regions, Molise, Basilicata, and Calabria (Lit 1.4 million, Lit 1.5 million, and Lit 1.5 million, respectively), together with the high-income Piemonte (Lit 1.8 million), were those that accumulated the lowest deficits. On the whole, the actual redistribution was the opposite of the intended redistribution. The deficit financing mechanism rewarded the more lavish regions and penalized those that were thriftier. This distorted distribution in a measure contributes to a relatively large migration of southern patients who are hospitalized in the northern regions.

### III. REFORM OPTIONS

### A. Relating Transfers to Regional Needs

In the past two decades, Italy's equalization policies sought to have the regions with an above-average income finance the expenditure needs of the regions with a below-average expenditure. The northern regions were supposed to finance the expenditure needs of the southern regions. As seen before, if one considers total regional resources received in the last two decades, the realized redistribution was radically different from that intended.

This system should be changed. Waste in the provision of services should be eliminated, supply technology and demand satisfaction improved, and service/treatment rationing by waiting lists reduced. Incentives for pursuing these goals should be introduced by giving expenditure and tax responsibilities to regional authorities.

Reforms are needed on both the financing and expenditure sides. The decentralization of the provision of health services may be linked to central government grants to cover regional needs, such as required by the elderly inhabitants or by a higher incidence of certain medical problems. The aim of equalization should be pursued by using a closer link to regional needs through objective quantitative indicators. The allocation formula should be worked to link allocations to indicators of the needs based on epidemiological and other medical information. The government's new reform (introduced on March 5, 2000) includes measures aimed at achieving these changes.

The needs could be estimated ex ante, and the present subjective system should be abandoned. The redistribution from the regions with a lower per capita spending to the regions with a higher per capita spending should not be based on ex post spending, but rather on ex ante spending needs, estimated through an econometric analysis from epidemiological indicators, as is the case in the Scandinavian countries. A spending criterion is likely to be perverse, as higher-income regions are likely to be inclined to spend more per capita than lower-income regions because total per capita resources are higher.

<sup>&</sup>lt;sup>11</sup> For different approaches in assessing needs among countries, see Peacock and Smith (1995); United Kingdom, NHS Executive (1997); and Lotz (1998). For proposals for Italy, see Bordignon (1998), and Italy, Ministero del Tesoro (1999).

The mechanism adopted for determining the NHF takes into account the historical trend of government grants more than their real ex ante needs. Moreover, it is not transparent and is distorted by the ex post financing of regional health sector deficits. To promote an efficient behavior and inspire regional responsibility, it would be desirable to cover not the full amount of regional needs but only a large proportion. Allocations from the central government should be fixed, and regions should bear the full marginal cost of their actions. No central government funding should be allowed ex post to compensate for regional shortfalls.

In this framework, it seems necessary to give the regional authorities a wider capacity for raising tax rates. Sufficient autonomous tax financing by the regions is crucially important to allow regional politicians to provide health services of the quantity and quality their citizens prefer. Incentives for raising local tax receipts should, therefore, be increased, relating the size of transfers also to differences in the size of the tax base. Regions should be given not only the right but also the incentives to raise tax rates, relating the size of central government transfers to the tax base. Regional value-added should be used as an indicator of the capacity to determine indirectly the size of central government transfers.

The reform passed on March 15, 2000 (Federalismo fiscale) introduced changes in line with those listed above on the revenue side. However, it maintained regional irresponsibility on the expenditure side and did not eliminate future ex post compensation for regional shortfalls.

# B. Including New Annual Overruns in Deficit Accounting

The assessed amount of committed expenditure was utilized by the treasury in general government accounting prepared for international institutions only in 2000. From this year on, the accrual system is required under the ESA. It is a useful innovation for reducing, if not eliminating, new arrears.

However, in 2000, the government's accrual health expenditures and overruns are underestimated vis-à-vis committed expenditures. ISTAT utilizes accrual accounting prepared and assessed by the Ministry for Health, modified on the basis of the National Accounts SEC 95 Convention. Accrual accounting assessed by the Ministry of Health does not take into account expenditures financed by suppliers and the banking system. Moreover, certified 1999 accounts have not yet been taken into account to forecast 2000 general government accounts. In spite of Italy's compliance with the ESA rules for health expenditure, the country's practice of government accounts is inadequate.

In 1999, purchases of goods and services and pharmaceutical products reached over Lit 34 trillion (1.6 percent of GDP). Assuming a 250-day average delay of payments, health institution arrears for delays in payments may be estimated to be over 1 percent of GDP. This debt should be included in general government debt, while its annual increase should be

taken into account in accrual calculations prepared by health institutions for the Ministry of Health. Neither is practiced.

Moreover, 1999 accrual expenditures and overruns recorded and certified by the Ministry of Health are not yet taken into account in general government accounting. In 1999, in an effort to eliminate expenditure undervaluation and recorded overruns, more government funding was provided. But in spite of this change, accrual health expenditure assessed by the Ministry of Health reached Lit 120.4 trillion (compared with Lit 114.6 in 1998), the assessed overrun reached Lit 7.4 billion (compared with Lit 9.1 in 1998) (Table 3).

When 1999 government accounts are revised, both expenditure and the deficit will increase, even if both increases will be less than those recorded by the Ministry of Health accounts, thanks to the treatment required by the National Accounts SEC 95 Convention (only about one half of the overrun certified by the Ministry of Health will appear in general government accounts). After this revision, 2000 accounts should be corrected, showing larger accrual expenditure and overrun vis-à-vis those now recorded.

In 2000, a new overrun of Lit 8 trillion may be estimated. This could be almost fully covered by the central government (regions have officially asked for an increase of Lit 2 trillion on their financing) and by regions themselves (they have promised the central government to cover about Lit 5 trillion with their own funds). But general government accounts for 2000 still underestimate committed health care expenditure and do not take into account the likely increases in overrun.

As shown before, the Italian government is attempting to eliminate health overruns by more adequately funding the NHF and enforcing the IGSP. Enforcement of the IGSP requires the central government and the regional authorities to work together to respect cash ceilings established by the Finance Law. The control mechanism is, however, too complex to function efficiently and does not include effective sanctions. Although it requires cash ceilings consistent with the essential services to be supplied, experience clearly shows that the link between the two is very weak.

In 1997–98, the NHF was insufficient to cover health expenditure by about 6–7 percent. It was "inconsistent" by definition. The regional authorities cannot be considered responsible for expenditure overruns, because they are required by the central government to supply essential services. How is this development possible given the strict budget constraints introduced by the SGP? According to accounting conventions accepted by international institutions, a new government debt issued to cover the arrears of previous years is considered an extraordinary item and a capital operation, because it covers expenditures already made in previous years, and, therefore, is not included in annual deficits.

The logic of the convention is clear. It is helpful to ask, however, whether financing operations that occur every year can be considered "extraordinary." Its enforcement allows the central government to escape rigid budget constraints that come from the SGP, because

politically it is easier to finance public expenditure through extraordinary operations, such as privatization, rather than by cutting public expenditure or raising taxes.

This institutional device creates a lack of effective control of expenditure and wide ranging inefficiencies in the supply of services. It becomes increasingly difficult for the regional authorities to resist the increasing demand for services in a situation where the income elasticity is greater than one over time. The regional authorities are forced to supply required services almost automatically, and, as a result, health expenditure as a percentage of GDP is increasing again after their 1992–95 decline (from 5.2 percent in 1995, to 5.5 percent in 1998).

How could these distortions be eliminated and regional budget ceilings set by the central government effective? Reforms in both financing and expenditure are required. Equalization transfers from the central government should be more closely related to their needs. As seen before, strong equalization requires the need of objective need indicators based on econometric estimates successfully used by other countries. Formula-driven distribution criteria should be defined and adopted. Underfinancing should be avoided. Moreover, as seen above, to enforce fiscal responsibility and motivate the use of regional tax financing, transfers by the central government should not cover the regions' needs in their entirety, and a significant part of expenditure should be financed through local taxes and user charges.

Including all new accruals in government expenditure would compel the central government to enforce effective ceilings. An increase in the reported general government deficit would force the central government to introduce countervailing measures, such as realistic forecasts of new health expenditure as a necessary basis to determine the new NHF and new procedures to make the regional authorities respect ceilings, through effective expenditure control or local taxation that would finance unforeseen payments.

It could be argued that the central government payments for health arrears cover health expenditure made in previous years. Because unpaid arrears coming from the previous 4–5 years are many times larger than these annual payments, it is formally justified to treat them as a financing operation aimed at covering health expenditure already made in previous years. The issue, however, is not to add to general government expenditure the outlays arising from the operations aimed at covering partially regional arrears by incurring new government debt, but to include in government expenditure new commitments for health expenditure.

Expected regional health expenditure, assessed on the basis of previous year's outcomes, should include projected commitments bringing out new arrears. Moreover, reliable cost accounting by health institutions should be enforced in order to promote cost-effectiveness and to control the size of expenditure. Previous years' arrears are a general government obligation, albeit only partially recognized by the central government. As such, they should be monitored and added to government debt. The debate on the size of the debt

to be covered by the central government is not relevant from this perspective, because all regional outstanding arrears are a general government debt.

# C. Letting Regions Choose Their Own Standards of Services

This change should be accompanied by the enforcement of fiscal responsibility through strong equalization and autonomous local taxation. The regional authorities should make all decisions on the services that will be provided. If they want to supply improved services, they should widen their options for raising taxation to finance expenditure above the funds received from the central government.

An institutional alternative that is theoretically very attractive would be to limit the central government's decisions on health services that the regions should provide free of cost, to minimum or basic services. For equity reasons, the parliament and the central government might want to ensure that, throughout the entire country, minimum or basic services and drugs are provided. The regions themselves could supply services beyond the minimum or basic standards, but raising taxes or reducing expenditure should finance them.

The minimum level sets only a floor. Minimum or basic services could be defined in two ways: as those that are too expensive to be financed by families with average incomes, because they could lead to a financial catastrophe if they had to be paid for by families, or those considered effective, ranked by priority on the basis of the budget constraint. The definition of minimum or basic services would have a narrower scope than the essential services now being provided by the NHS. It is obvious that with this approach the regional authorities would lose any possibility of asking the constitutional court to oblige the central government to pay for their overexpenditure beyond NHF appropriations. Financing requests to the constitutional court were supported by the regional needs to finance the same provision required by the central government. The costs of providing minimum services, instead, are largely covered by national funds received.

This approach would, however, involve a very troublesome definition by the central government of what minimum or basic services are. Even if they are defined, it requires acceptance of very difficult political choices. Setting a minimum level of services raises wide political and medical difficulties. These difficulties are clearly shown by the Oregon experiment.

The Oregon plan aims to provide universal health care to uninsured citizens and to control rising health care costs. The adopted mechanisms are aimed at rationing central diagnoses and treatments, and without covering some medical procedures that are widely accepted as beneficial but rank at the lower end of the priority list. Using managed health care as a way of containing costs and preserving coordinated care, the plan defines minimum services to be freely provided on the basis of an approved prioritized list. Those eligible are the elderly, disabled, children in foster care, patients requiring treatment for chemical dependency, and the mentally ill. Services are ranked by priority, from the most important to the least important, representing the comparative benefits of each service to the whole of the

population to be served. The effectiveness of services is carefully scrutinized. Ranking is reviewed every two years and revised in accordance with an established methodology, to take into account changes in medical diagnoses, treatments, and results produced by new data and by advances in medical technology. Changes in social values are also considered

The Oregon plan experience has shown that this approach can reduce the increase in the number of uninsured in America; at the same time, its enforcement has been troublesome because of the large definitional and political obstacles needed to be overcome. The implied choices are difficult to adopt both because they require objective accountable valuations of clinical protocols and because rationing is politically very disturbing.<sup>12</sup>

The Oregon experiment does not appear to have sufficient support to be adopted by other states. However, some variants could be politically acceptable in Italy and other OECD countries. One possible direction would be to mandate minimum standards in some critical areas, but to continue to provide universal free access to all services. However, the level of service provision (for services with no minimum standards or for standards higher than the minimum where defined) would be left to the discretion of the regional health authorities. Such rights would go hand in hand with responsibility to supplement central government funding by mobilizing resources to finance the level of health care services selected by the regional authorities.

### IV. CONCLUSIONS

The devolution of health services to the regional governments may improve cost-effectiveness and fiscal sustainability. It must, however, be accompanied by full fiscal responsibility. Where this happens, as, for example, in Sweden, Finland, and Denmark, cost control seems effective. The Italian case clearly shows how distortions and excessive spending may develop when fiscal responsibility is not enforced. In spite of Italy's recent compliance with the ESA rules, for health expenditure the country's practice of government accounting is inadequate.

Weak cash ceilings and lack of incentive in controlling suppliers produce widespread microinefficiency, large waste, and ineffectiveness. Clinical tests and treatments are largely rationed by waiting lists, and poor hospital management becomes widespread.

The financing of realized deficits by the central government turns equalization goals upside down. Redistribution does not help the regions in southern Italy, where facilities are insufficient and expenditure control is relatively more inefficient. The result of the redistribution is the opposite of the redistributive goals pursued by the parliament in the

<sup>&</sup>lt;sup>12</sup> For critical assessments of the Oregon experiment, see Strosberg and others (1992); Garland (1992); Kaplan (1992); Bodenheimer (1997); Himmelstein and others (1998); and Jacobs, Marmor, and Oberlander (1999).

approved Finance Act. The NHS needs to be reformed and incentives introduced for efficiency.

Moreover, although public health expenditure in Italy relative to GDP are the lowest among industrial countries, and its performance—measured by health indicators such as infant mortality and life expectancy rates—is among the best, there is still much room to increase what might be obtained from the expenditure. Italy will still make progress if long waiting lists are reduced and inefficient services improved. Resources required to improve service provision may come from more efficient management. To increase cost-effectiveness, waste in the production of services should be eliminated, supply technology and demand satisfaction should be improved, and rationing by waiting lists should be reduced.

To pursue these goals, however, the right incentives should be introduced through reforms on both the financing and expenditure sides. The decentralization of health services must be linked to central government grants aimed at covering the needs. Equalization should be pursued with a closer link to needs. Regional needs have to be assessed with quantitative indicators, as is now the case in Scandinavia, and the present biased system should be abandoned.

Up to the 2000 reform, the mechanism adopted for determining the NHS took into account the historical trend of government grants more than actual needs. Moreover, it lacked transparency and was distorted by ex post regional health deficit financing. With the new reform of fiscal federalism, resources to the regions are allocated according to their needs, assessed ex ante on the basis of a formula linked to epidemiological and other medical information. The spending criterion followed in the past will gradually be abandoned. The needs will not be covered in full, to promote regional responsibility.

Moreover, the reform introduced adequate regional tax financing and the right to raise tax rates to allow politicians to provide health services according to the quantity and quality preferred by their citizens. Regions are encouraged to manage efficiently their tax revenues, relating the size of central government transfers to tax bases, such as value added, used as an indicator of the capacity to determine indirectly central government transfers.

This reform, however, is lacking on the expenditure side. It does not give to the regions full responsibility to determine what services would be provided, because the regions are required to provide essential services as defined by the central government. Regions should be left free to decide what services to supply, bearing the full marginal cost of their actions

Budget ceilings may become effective with full accrual accounting. In spite of Italy's compliance with the ESA rules, the country's practice of government accounts for health expenditure is inadequate. If this inadequacy is eliminated, the Treasury will be compelled to enforce mechanisms, such as giving to the regions full responsibility to determine what services would be provided. But they should be left free to decide what services to supply;

otherwise, appropriate funding by the central government will not solve the problem of inefficient services.

The regions should be left free to plan and control health expenditure and organize production and supply, except those imposed by macroeconomic policies, such as general government ceilings consistent with budget appropriations. Regions should be made responsible for delicate issues, such as quasi-market measures aimed at enhancing competition among producers; procurement management; contractual negotiations with the unions of doctors and nurses; and determination of the extent of patients' freedom of choice, based on, inter alia, experiments with vouchers, general or limited opting-out, and indirect assistance options.

Today, Italy's physicians and health program managers do not face hard budget constraints; therefore, their incentives to limit costs are weak. Effective accrual ceilings would prevent excessive spending but would help the government provide better services. If rationing by waiting lists cannot be entirely eliminated, it could be reduced through a more efficient use of resources. The service capacity could be increased and waiting lists reduced.

A devolution of health services with full fiscal responsibility on the expenditure side should be introduced. This reform, however, will have to overcome the strong political opposition to the central government's abandoning its right and duty to pursue the goal of providing equal essential health services throughout the country.

The 2000 reform pursued the equity goal through the enforcement of equity criteria in the revenue-sharing process. Its fulfillment should be completed on the services side through the incentives produced by the political mechanism, rather than through central government paternalism. Citizen-patients will decide at election time if the regional authorities have made good use of the money received from the central government and collected by local taxes, by eliminating inefficient public administrators. Although this result assumes a fully informed citizenship, health care is a sensitive issue, and one that affects people's political choices.

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