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## COVID-19: A PERSPECTIVE FOR THE ITALIAN HEALTH SERVICE

### ABSTRACT

The COVID-19 epidemic has highlighted the structural shortcomings of the national health service, mainly attributable to the gradual reduction of public funding for the sector. An expenditure policy that finds its motivation both in the need to contain public finance aggregates due to EU constraints and in the allocative choices made in recent years between the components of welfare services expenditure. The possibility of accessing the new and greater resources made available by European programs as a result of the COVID-19 epidemic opens up new perspectives both in terms of funding sources and interventions on the service. The choice in the allocation of resources becomes crucial for the future sustainability of the health system where investments must be such as to guarantee an increase in productivity greater than the increase in current resources. To achieve this, the privileged areas of intervention are represented by the hospital network, post-acute residential network and long-term care services as well as territorial and home care services. Prosecution of regulatory interventions on the rules governing the decision-making processes of public investments is also a condition for the feasibility of the expected prospects for the national health service. In the same way, it is necessary to re-establish the balance in terms of accountability in the actions of public administrations bringing the judicial risk (accounting, civil and criminal) to the true pathological behaviour of the actors of the system.

**Keywords:** Public Investments, Health Care System, Public Spending, Fiscal Policies

**JEL Classification:** H51, H60, I18

### RIASSUNTO

#### *COVID 19: una prospettiva per il sistema sanitario italiano*

L'epidemia di Covid 19 ha messo in evidenza le carenze strutturali del sistema sanitario nazionale riconducibili soprattutto alla progressiva riduzione dei finanziamenti pubblici al

settore. Una politica di spesa che trova la sua motivazione sia nelle necessità di contenimento degli aggregati di finanza pubblica in ragione dei vincoli europei che nelle scelte allocative operate nel corso degli ultimi anni tra le componenti della spesa per il welfare. La possibilità di accedere alle nuove e maggiori risorse messe a disposizione dai programmi europei in conseguenza dell'epidemia di Covid 19 apre nuove prospettive tanto sul versante delle fonti di finanziamento che dei conseguenti interventi sul sistema. Tenuto conto della natura delle fonti la scelta nell'allocazione delle risorse diventa cruciale ai fini della sostenibilità futura del sistema sanitario laddove gli investimenti devono essere tali da garantire incrementi nella produttività dei fattori (copertura di servizi sanitari) superiore all'incremento delle risorse correnti stimabili in futuro. Per ottenere ciò le aree di intervento privilegiate sono rappresentate dai segmenti di offerta ospedaliero, residenziale post acuti e long term care nonché territoriale. Accanto alla definizione dei corretti obiettivi allocativi per i nuovi programmi di investimento è condizione di realizzabilità delle prospettive attese per il Sistema Sanitario Nazionale anche la prosecuzione e il consolidamento dei primi interventi normativi effettuati sulle regole che presidiano i processi decisionali degli investimenti pubblici e a quelli tecnici e finanziari legati alla loro attuazione. Allo stesso modo si rende necessario ristabilire a livello normativo l'equilibrio in termini di accountability nell'esercizio dell'azione delle amministrazioni pubbliche, riconducendo il rischio giurisdizionale (contabile, civile e penale) all'ambito dei comportamenti effettivamente patologici degli attori del sistema.

#### 1. THE FRAMEWORK OF EXPENDITURE POLICIES IN HEALTHCARE

There is no doubt that the dramatic episode of the COVID-19 epidemic will induce epochal changes in social and economic behaviours.

However, it must lead to a reflection on the degree of efficiency of the Italian Health Service (IHS).

Before the outbreak of the epidemic, there was a widespread belief in our country that "*the Italian Health Service was one of the best in the world*". Reality is proving that this belief is only partially true: the health workers and researchers (and not only) of the Italian Health Service are the best in the world. The same cannot be said for the structures in which they operate and the means at their disposal.

With each passing day, the insufficiency of hospital availability in terms of beds, emergency services, intensive care units and medical personnel become evident, even in regions valued for the quality of healthcare offered.

The epidemic crisis has evinced the myopia of economic rationalization policies based not on the redesign of production processes, but on the “linear cut” of the number of beds, which fell from 6.2 per thousand inhabitants in 1996 to 3.07 today, and production factor “caps” (personnel, goods and services).

As a consequence of this lack of perspective, we have neglected the needs deriving from the progressive lengthening of average life expectancy, depriving the necessary post-acute phases in the infrastructures to respond to protocols with reduced health intensity and growing assistance modulation (intermediate hospital stay, functional recovery, maintenance, hospices, protected and autonomous home care with remote surveillance). A qualitative and quantitative weakness of this segment in the social health services sector which, even more than the saturation crisis in intensive care units, will affect the times and costs, both material and human, to exit the epidemic curve.

There are those who attempt to explain these instrumental inefficiencies by invoking an excessive privatization of the healthcare service in our country. The data in Table 1, however, does not support this simplified explanation: in fact, between 2010 and 2018, the share of healthcare services purchased by the IHS from the private sector remained substantially unchanged, close to 21 percent, and also showed a decline in private hospital accreditation.

TABLE 1 - *IHS Healthcare Expenditure and Accredited Private Healthcare Expenditure (Economic Classification) (millions of Euro)*

	2005	2010	2018
<b>Public Expenditure IHS</b>	<b>96,797</b>	<b>111,331</b>	<b>118,964</b>
of which			
Private Hospital accreditation	8,147	8,849	8,803
Private Outpatients accreditation	3,231	4,504	4,792
Other services from accreditation <sup>(1)</sup>	7,939	10,177	12,034
Total expenditure for accreditation	19,317	23,530	25,629
<b>% Total expenditure for accreditation on NHS expenditure</b>	<b>20,0%</b>	<b>21,1%</b>	<b>21,5%</b>

<sup>(1)</sup> Social health benefits (Long Term Care (LTC) residential, semi-residential, home-based scheme.  
Source: Ministry of Health (2019).

The structural and instrumental insufficiencies of the IHS can therefore be traced to other explanations. Two of them appear to be the main ones: the dynamics of current public health spending and investment spending over the last 8-10 years.

With reference to the first aspect (Table 2), it has been noted that since 2005, the difference in the current resources used for healthcare between Italy and other similar countries has gradually widened, and in 2018, for every euro spent by the public for an Italian citizen, the French government spent 70 percent more and the German government spent more than double.

TABLE 2 - *Public Health Expenditure*  
(absolute values per capita in euros – P.P.A.)

	2005	2010	2018	<i>Dev. % from Italy</i>		
				<b>2005</b>	<b>2010</b>	<b>2018</b>
<b>Italy</b>	<b>€ 2,292</b>	<b>€ 2,402</b>	<b>€ 2,549</b>	-	-	-
France	€ 2,949	€ 3,161	€ 4,348	28.6	31.6	70.5
Germany	€ 3,005	€ 3,436	€ 5,200	31.1	43.0	104.0
UK	€ 2,246	€ 2,821	€ 3,302	-2.0	17.4	29.4

Source: OECD Health Data (2019).

With reference to the second aspect, during the 2013-2018 period, investment expenditure in Italy decreased by approximately 55 percent for real estate infrastructures, 42 percent for plants and machinery and about 21 percent for medical and scientific equipment.

TABLE 3 - *Public Healthcare Expenditure for Investments - Years 2013/2018*  
(absolute values per capita in euros)

	<b>2013</b>	<b>2018</b>	<b>Var. % 2013/2018</b>
Real estate infrastructure	€ 19.6	€ 8.9	€ -54.6
Plants and machinery	€ 2.4	€ 1.4	€ -41.7
Medical and scientific equipment	€ 10.1	€ 8.0	€ -20.8

Source: Corte dei Conti, Rapporto coordinamento finanza pubblica (2019).

The above expenditure data provides an explanation for a health service with only 5,000 intensive care units, 30 percent less than France (14,000) and 80 percent less than Germany, and a level of expenditure for health supplies (including drugs and medical devices) that has not changed in real value compared to 2010.

Even for the medical staff, nowadays defined as “*heroic*”, in 2018 IHS public expenditure was reduced by almost one percentage point compared to 2010.

The underfunding of IHS expenditure is determined by two main factors.

First, we must note that after 2008, Italy’s GDP growth was about half that of the EU and significantly lower than that of France and Germany. Low GDP growth implies low tax revenue and, therefore, low public expenditure including for health care.

Secondly, in Italy, priority in the allocation of public resources was given to other welfare services other than healthcare.

Between 2010 and 2018, the incidence of health expenditure on total public expenditure decreased in Italy, while it increased in other major European countries (Table 4).

TABLE 4 - *Healthcare Expenditure on Total Public Expenditure%*

	2010	2018	2010/2018
<b>Italy</b>	<b>14.1</b>	<b>13.5</b>	<b>-4,3</b>
France	14.1	17.0	20.6
Germany	19.5	21.4	9.7
UK	15.0	18.9	26.0

Source: WHO, Global Health Observatory Database (2019).

It is a fact that about two thirds of the difference in healthcare spending in Italy compared to the main European countries is attributable to the lesser importance that governments have attributed to healthcare in defining their spending policies, and in particular to the lesser weight given to other welfare services such as assistance and social security (Table 5).

TABLE 5 - *Public Expenditure for Social Protection – Composition*  
(millions of euros)

	<b>2010</b>	<b>2018</b>	<b>average growth rate 2010/2018</b>
Healthcare	<b>111,331</b>	<b>119,052</b>	<b>0.2</b>
Social Security <sup>(1)</sup>	301,642	337,329	1.4
Assistance <sup>(2)</sup>	35,497	51,731	4.7

Source: Ministero della Salute (2019), ISTAT (2019), FMI (2019).

<sup>(1)</sup> pensions and annuities, severance pay, sickness / accident / compensation maternity, unemployment benefit, wage supplement allowance, family allowances, other subsidies and checks.

<sup>(2)</sup> pension and social allowance, war pension, benefits to civil invalids, benefits for the blind and deaf, other allowances and subsidies.

The diverse behaviour observed in the different countries has led to current healthcare services with profoundly different levels of infrastructures, technologies and equipment. A circumstance that offers the governments of more affluent countries, generally those in central and northern Europe, the possibility of defining different strategies in response to the epidemic from those feasible in less equipped countries such as Italy and Spain. With a wider availability of health structures and more digital technologies applied to healthcare, the countries in central and northern Europe have a better chance of managing the effects of the epidemic in a more flexible way, reducing the impact on economic activities and safeguarding the productive base of the country in order to allow it to recover more quickly when the crisis emerges.

This circumstance can help explain the different assessment of the economic risk represented by the COVID-19 emergency in the northern areas of the EU and therefore their reluctance to share the costs of the debt to be contracted out to support the expenses necessary to fight the virus and safeguard the economy of southern European countries.

## 2. NEW PERSPECTIVES: FUNDING

For the future of the HIS, it is important to intervene on three fundamental aspects:

- i. increase the level and quality of health spending;
- ii. direct the use of resources towards the capability of increasing the service's effectiveness rate in responding to medium-long term needs;

- iii.* modify the rules that govern both the decision-making processes and, above all, the procedures for carrying out structural interventions.

With regard to the first aspect, the availability of the resources necessary to strengthen the health service does not seem to be the main problem. In fact, it is possible to draw on resources through the European Recovery Fund (ERF or Recovery Fund) as well as additional ones for the specific financing of the health sector's spending made available by the European Stability Mechanism (ESM).

The first consideration in reference to the quantitative aspects shows a substantial indifference between the two options, both of which are able to ensure spending program coverage for an amount between 1.8 and 2 percent of the GDP (28/32 billion overall).

Both instruments, therefore, would be able to ensure coverage for infrastructure investments planned up to 2045 and would do so at a cost roughly equivalent in terms of interest rates (between 0.1 and 0.125 percent).

TABLE 6 - *Infrastructural Needs 2019-2045*

DATA BY REGION (millions of euros)	
Valle d'Aosta	98.8
Piemonte	3,174.5
Lombardy	5,438.9
Veneto	3,560.7
Friuli V. G.	477.1
Liguria	783.3
Emilia-Romagna	3,109.7
Toscana	945.4
Marche	459.1
Umbria	374.7
Lazio	2,250.8
Abruzzo	714.1
Molise	219.6
Campania	2,466.0
Puglia	2,182.6
Basilicata	390.6
Calabria	1,397.4
Sicilia	3,020.9
Sardinia	1,063.0
<b>TOTAL</b>	<b>32,127.0</b>

Source: Corte dei conti – Ministero della Salute.

With regard to the qualitative profile of the resources, both in the timing of availability (starting from the fourth quarter 2021) and the lower conditionality in the nature of the expenses that could be financed, they tend to favour the use of ESM loans which have the further advantage of covering current expenses aimed at the operational strengthening of health services (personnel and intermediate consumption).

On the other hand, the resources made available by the Recovery Fund, discounting an availability of employment starting from the second half of 2021 and stricter selection criteria regarding items of expenditure that can be financed (fixed investments and investment grants), provide for a thirty-year repayment period, unlike the ten-year programme for ESM loans, that better suits the rapid rise in public investment spending observed in the last twenty years.

In theory, the combined use of the two instruments through an alternative and temporally modulated mechanism for the use of resources as a substitute for each other would be optimal, considering the amount and nature of the expenditure as well as start-up and completion times.

With regard to the second aspect to which the strategy of strengthening the IHS is linked, the selection of projects capable of ensuring incremental productivity margins for the IHS at rates higher than the increase of current resources is determined by the nature of the loans that will be made available and, at the same time, it is a condition of sustainability of the service in the future.

Indeed, assuming a composition of the sources of financing for the HIS development program of which one third is non-recoverable and two thirds is through debt financing, as well as an amortization and maturity between 25 and 30 years at a constant rate not exceeding 0.125 per cent, starting from 2025, the financial structure of the IHS is destined to indirectly bear an average annual amortization charge of between 0.8 and 1.2 billion.

Although these are apparently insignificant amounts compared to the total amount of public health expenditure (approximately 115 billion in 2019), it must be noted that the annual charge for repayment of this new debt would correspond to more than 50% of the annual increase of resources recorded by the IHS in the 2010 - 2018 period (1.8 billion).



### 3. NEW PERSPECTIVES: AREAS OF INTERVENTION AND OBJECTIVES

If the recovery of IHS delivery productivity guarantees the sustainability of the larger debt used in investments necessary for its enhancement, the main areas of intervention on the structure of the IHS concern:

- i.* the area of the hospital offer;
- ii.* the area of Long-Term Care (LTC);
- iii.* the area of territorial services

With regard to the first area, the productivity recovery to be generated is to be achieved through the re-engineering of hospital networks, with a homogenization of structural and technological standards by level of complexity assigned in relation to the role in the network. Delivery points capable of increasing productivity levels through highly efficient diagnostic and therapeutic approaches and technologies, exclusively dedicated to internal consumption, reduce response times.

In order to achieve the recovery of productivity of the hospital segment, it is necessary to review the structural management system of the post-acute approach and LTC, which in the epidemic period proved to be the weak point characterized by small- and medium-sized providers and, as such, not equipped with structures capable of responding to the quantitative and qualitative shocks in demand that require an upgrade in volume and in healthcare complexities. This characteristic is the cause of chronic substitution – as necessary as it is inappropriate – in the hospital segment in response to a demand with low-intensity healthcare services and which is a source of inappropriateness and the loss of clinical and economic efficiency for the system.

Even more relevant for the purposes of strengthening the response capability of the system are the intervention programs on the structure of the territorial services which, more than the other productive segments, require the combination of interventions on the system structures together with a review of the rules that define actors, roles and governance.

The first objective for the development of territorial function in the IHS is the necessary increase of territorial non-hospital delivery points, designed as universal healthcare delivery points and central locations for the recognition, monitoring and design of the response model for basic medical functions.

But the model for the enhancement of the territorial functions cannot be separated from new rules in the management of the productive factors involved with the construction of assistance services to be provided. New rules starting from the general internal medicine department which needs to be redefined within the organizational model approach to response in the IHS based on criteria that rewards productivity and values generated for individual clients and for the IHS as a whole.

But the strengthening of the health system through the provision of massive investments in the health sector cannot ignore the re-engineering of the legislative framework that regulates the financial and procedural dynamics.

As for the financial aspect, the need to contain the expansion of public debt combined with the urgency to implement a structural strengthening program makes it necessary to consider the role that private capital can play in the financing and construction of the service's infrastructures, subject to public governance of health services.

Furthermore, it should be noted that in Italy, public investments are heavily hampered by the limited resources available, as well as by implementation procedures that are unparalleled in any other progressive country. It is therefore necessary to accentuate the reform processes, already partially undertaken, by liberalizing the processes of acquisition of production factors and measuring the cost-effectiveness of administrative decisions on the efficiency of the final service rather than the convenience of individual expenditure.

Similarly, to ensure the effectiveness of the new public investment policies, interventions on the regulatory framework that oversees the public organization and its means of action must be consolidated and integrated. Restoring discretionary political, administrative and technical autonomy to public administration is the only way to reduce the costs of superfluous decision-making processes and the implicit cost of the latent judicial risk due to a structural misalignment in the accountability model of Italian public administration.

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