7. Efficiency and equity effects of healthcare decentralization: evidence from Italy

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1. ECONOMIC THEORY OF DECENTRALIZATION

Public policy making at national and supranational level must rely on delegated choices in which autonomous decision makers are charged with the responsibility for a specific competence, which may concern either policy design or policy implementation, or both. Policy implementation at decentralized levels may vary from goods or services production to market regulation. A significant body of economic literature has investigated the rationale for economic decentralization, providing both normative and positive perspectives on this policy issue. These contributions are generally classified into two strands, commonly known as first- and second-generation models of fiscal federalism.

1.1 First-Generation Fiscal Federalism

Traditional literature on fiscal federalism, or, as it is generally referred to, first-generation theory of fiscal federalism (Oates, 1972, 2005; King, 1984), suggests that under certain circumstances, decentralization increases public sector efficiency. Therefore, under a normative perspective, decentralization is justified for efficiency reasons (Rosen, 1988; Tresch, 2002). Efficiency is enhanced when expenditure decisions concerning local public goods are left to the tier which is better informed on local preferences, allowing for differentiation in local provision (Oates, 1972), while intergovernmental grants might be used for equity and efficiency reasons. Furthermore, fiscal federalism should increase efficiency by inducing some interjurisdictional competition among political powers resulting from "voting with the feet" (Tiebout, 1956) or yardstick competition (Besley and Case, 1995). In addition, efficiency and effectiveness may also stem from diversity and experimentation in public policies allowed by decentralization (the so-called "laboratory federalism"; Oates, 1999, p. 1132).

Although the efficiency gains from decentralization are well recognized, in practice for them to be fully exploited, local governments would need their own adequate financial resources, and this opens up the problem of identifying the appropriate tax sources for decentralized levels of government, the so-called "tax assignment" problem (McLure, 1983). Intergovernmental grants may contribute to finance local governments' expenditure, when their own tax revenues are not enough. Grants also fulfil additional functions, namely: correction of externalities (spillover grants), fiscal equalization (grants pursuing horizontal equity), achievement of minimum service levels (according to grantors' decisions and preferences), insurance for external shocks affecting decentralized governments, compensation of vertical fiscal imbalances (revenue-sharing grants) and improvement of the overall tax system (Oates, 1999).

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Overall, first-generation models of fiscal federalism generally depend on stringent assumptions, primarily demand heterogeneity, the absence of economies of scale in public production and benevolent social planners. Relaxing these hypotheses does not guarantee that their main results still hold. Nevertheless, these models are highly significant in that they first identified an *economic* rationale for decentralization and opened the way to a discussion of the relative advantages of decentralization on economic grounds.

1.2 Second-Generation Fiscal Federalism

Second-generation theory of fiscal federalism (Oates, 2005) is more recent than first-generation models and has more of a positive rather than normative approach, although the distinction is not always clear-cut (Weingast, 2009). Second-generation models acknowledge that centralization allows greater coordination, but decentralization may be efficiency-enhancing (Alonso et al., 2008). However, the success of fiscal federalism in terms of efficiency gains is conditional to a wide array of factors which should be better investigated and understood. These factors are primarily linked to economic agents' information and to fiscal and political incentives facing local and central politicians as well as local lobbies. These factors become significant because second-generation models relax the key assumption that politicians are benevolent social planners and maximize social welfare (Weingast, 2009) and analyse a setting of imperfect information and control. In this new framework, the comparative advantages of decentralization must be assessed, taking into account public officers' objective functions and the fiscal and political incentives they face. For this purpose, second-generation fiscal federalism builds on results from different strands of economic literature, besides agency theory, economics of information, the new theory of the firm, organization theory and the theory of contracts (Oates, 2005). Under this perspective, the success of fiscal federalism is affected by important agency problems (e.g., rent seeking, lobbying) and this marks a significant difference from first-generation models. In first-generation models, citizens (the agents) have private information on their demand function for local public goods and decentralization could solve the problem of preference revelation for central government (the principal), allowing for optimal provision of local public goods by subnational jurisdictions. In second-generation models, the relevant asymmetry of information is rather between local politicians (the agents), from one side, and central government and citizens-voters (the principals), on the other side. Inefficiencies may arise due to local politicians' rent-seeking behaviour or by their capture by local lobbies (Bardhan, 2002), although rent seeking may be limited by yardstick competition and mobility (Besley and Case, 1995).

Therefore, the comparative advantages of decentralization depend on the information the agents possess; for instance, about specific parameters (Levaggi and Smith, 1994; Snoddon and Wen, 2003; Akai and Mikami, 2006; Levaggi and Levaggi, 2016). Finally, the demand for decentralization may itself depend on the choice of the instruments the regulator is using to reduce horizontal fiscal imbalance (Levaggi and Menoncin, 2017).

These problems have been widely studied in literature and suggest a trade-off between autonomy and control: the local level is better informed than the centre about the relevant parameters that affect welfare and it can strategically use such information. Central government should then balance the improvement in welfare from decentralization with the cost deriving from asymmetric information. At central level the problem is essentially that of finding the best equilibrium between autonomy, control (Levaggi, 2002, 2007, 2010) and the

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need to reduce the drawbacks of asymmetry of information. In fact, on the one hand the local government (being better informed on preferences) is the better tier to choose local services (Petretto, 2000); however, such information may be used to pursue interests that are in contrast with either national welfare, or even with the maximization of welfare altogether (Wildasin, 2004; Crivelli and Staal, 2013). Even with benevolent governments, local initiatives' coordination may be needed because of the presence of spillovers (Besley and Coate 2003; Ogawa and Wildasin, 2009). Empirical evidence is, however, less clear-cut and has revealed some drawbacks of decentralization; for instance, the increase in the number and size of bureaucracies (Reverte-Cejudo and Sánchez-Bayle, 1999; Repullo, 2007).

In this new framework, which accounts for self-interest and opportunistic behaviours, moral hazard problems may arise. Local officials may take advantage of soft budget constraints (Weingast, 2009) and expand local expenditures beyond the efficient level, if the central government cannot commit not to bail out their deficits. In addition, efficiency gains are highly dependent on the shape and extent of local governments' fiscal interactions, both horizontal and vertical. Horizontal interactions among local governments may take the form of either tax competition or yardstick competition, or finally may be connected with externalities. When competition is for mobile factors of production, the suboptimal outcome may be a race to the bottom, where tax levels decrease and mobile factors' owners appropriate all efficiency gains. Vertical competition involves different levels of government, and may concern tax and expenditures or intergovernmental transfers. Vertical competition may specifically arise when fiscal arrangements contemplate tax base sharing, when taxes levied by other levels of government have an impact on local demand and when goods and services provided by other levels of government are complements or substitutes to those locally offered.

In second-generation models, the role of fiscal transfers also changes. They are no more simple tools designed to compensate vertical and horizontal fiscal imbalances and thus to enhance efficiency and equity, but rather the design of intergovernmental transfer schemes becomes critical to align incentives between local and central policy makers under asymmetric information (agency problems), in a context where the importance of local government tax autonomy is recognized. In particular, second-generation theory of fiscal federalism emphasizes the importance of local revenues for subnational governments' financing, arguing that the higher the alignment of spending and funding responsibilities obtained through a greater tax autonomy, the stronger the electoral accountability of local politicians and their incentives to efficiently manage spending (see, for example, Qian and Weingast, 1997; Oates, 2005; Weingast, 2009; Boetti et al., 2012; Eyraud and Lusinyan, 2013). In addition, the design of transfer schemes is analysed for its potential to mitigate spillover problems, help control local debt growth (Martell and Smith, 2004; Huber and Runkel, 2008) and help solve problems of mobility and efficiency. Therefore, the key role of intergovernmental transfers with a hierarchical governance is acknowledged. Transfers may be either vertical (generally top-down, but in principle also bottom-up) or horizontal (within the same level of government). Vertical transfers may be used to compensate for vertical fiscal imbalances, to equalize local fiscal endowments, to internalize externalities and spillovers, to create the right incentives for subnational governments and to control subnational spending, to provide insurance for lower levels of government against external shocks, or to pursue redistributive objectives.

A final relevant issue for second-generation theory concerns the wider institutional framework, which is deemed of critical importance. As Weingast acknowledges (2009, p. 280): "local governments exist within a complex set of institutional arrangements, with political,

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legal-constitutional, and economic aspects", which shape individual actions and interactions, and therefore affect decentralization outcomes and the performance of decentralized governments. The institutional arrangements and political processes behind decentralization are widely studied (Rubinchik-Pessach, 2005; Mookherjee, 2015) and have an impact on the relative efficiency of decentralized systems. For instance, they shape the way conflicts of interest between citizens of different jurisdictions are solved (Besley and Coate, 2003) and define the voting rules that make decentralization welfare-improving (Rubinchik-Pessach, 2005).

In conclusion, second-generation models of fiscal federalism analyse a wide array of problems and instances, in a growing body of literature, to an extent that it has been maintained that there is a need for a new political economy of fiscal federalism (Inman and Rubinfeld, 1997) and to systematize all these contributions.

Both first- and second-generation theories of fiscal federalism, however, suffer from two main limitations. First, these models are generally biased towards efficiency concerns. The comparative advantages of decentralization are mostly assessed under an efficiency perspective. Conversely, equity considerations are generally disregarded, though according to some authors decentralization can lead to an uneven geographical distribution of its benefits (e.g., Martinez-Vazquez and McNab, 2003). However, evidence from empirical studies is scarce and results are mixed (McKinnon, 1997; Qian and Weingast, 1997; Cheshire and Gordon, 1998; Shankar and Shah, 2003; Gil et al., 2004; Rodríguez-Pose and Ezcurra, 2010; Ferrario and Zanardi, 2011; Di Novi et al., 2019). A second important point is that, although sophisticated in its modelling approach, most of the literature models decentralized decisions assuming that the good to be provided is a local public good with spillovers (significant exceptions are Wildasin, 2001; Ogawa and Wildasin, 2009). In the presence of a (local) public good, government intervention is justified either because a market does not exist or for efficiency reasons. The prevailing focus on public goods and the disregard for other types (private, common, club, merit goods, etc.) is a legacy of the early literature on fiscal federalism. That literature was indeed developed along these lines, mostly because they reflected the actual scope for government at that time and the characteristics of most of the goods and services traditionally produced by government. However, later on, with the development of the welfare state, the nature of government has changed and, with it, also the goods that are produced. Nowadays, most of the services produced at local level are either impure public goods or merit goods (Levaggi and Levaggi, 2016). The former are both private goods (positive correlation between utility and quantity actually bought) and public goods (increasing utility for the entire amount produced), and they are more efficiently produced under decentralization or a limited form of fiscal federalism (Levaggi, 2007); the latter are private goods whose consumption is financed by the government for equity/redistribution purposes. Examples are refuse collection, local transport, sporting facilities, healthcare and education (Cornes and Sandler, 1994). Merit goods can be made available to a specific community either by producing them or by allowing people to receive them outside the local authority boundaries. The main examples of goods falling into this category are education and healthcare, for which public provision is in practice driven more by equity than by efficiency concerns and also follows the need to ensure equal citizenship rights to all citizens in a country. Fiscal federalism in this context has particular characteristics that have not yet received due attention. Contrary to local public goods, although the price of merit goods is subsidised through general taxation, the quantity to be produced is set by the market. Government can use only indirect instruments to produce an optimal allocation, but the quantity of information necessary to achieve a first-best result is

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usually not accessible and only second-best solutions can be attained. In the following these specific characteristics of healthcare provision under decentralization are analysed, but, before that, the reasons for healthcare decentralization are discussed.

2. HEALTHCARE DECENTRALIZATION: THEORETICAL PERSPECTIVES

2.1 The Economic Rationale for Healthcare Decentralization

One of the key issues in fiscal decentralization is the optimal allocation of government functions to the different levels of government, the so-called "assignment problem" (Oates, 2005; Boadway et al., 2008). Efficiency criteria are pivotal for first-generation fiscal federalism, which emphasizes demand heterogeneity, technology of production, externalities and fiscal competition as the key factors to be taken into account when assigning competencies. Second-generation models have added agency problems to this list (Tommasi and Weinschelbaum, 2007); for instance, lobbying behaviour under different institutional configuration (Bordignon et al., 2008).

Healthcare provision is quite often decentralized (Saltman et al., 2007; Costa-Font and Greer, 2013), either in federal countries (e.g., Canada and Australia) or in regional states (e.g., Spain), or even in unitary but decentralized countries (e.g., Sweden). However, the institutional setting of decentralized healthcare varies extensively across countries (Levaggi and Smith, 2005; Saltman et al., 2007) and the impact of decentralization on healthcare system performance is widely debated (Schneider, 2003; Saltman et al., 2007; OECD, 2014; Toth, 2014; Cavalieri and Ferrante, 2016; Marchildon and Bossert, 2018).

Decentralization may concern both the revenue and the expenditure side. As for expenditure, central government may transfer only spending competencies to decentralized governments (spending decentralization) or also legislative powers (political devolution). On the revenue side, fiscal autonomy may be granted to decentralized governments by assigning them their own tax revenue (fiscal decentralization). Therefore, in many countries, public health policy results from the interaction of various levels of governments (Greer and Da Fonseca, 2015; Greer et al. 2016). However, it has not always been the case. Before the development of the modern welfare state, healthcare was provided at the local level by charity or religious associations, and later by mutual funds. With the birth of the modern welfare state, healthcare was generally centralized, to better pursue universality and uniformity of provision, in a context where the major concern was effectiveness in ensuring basic care to all citizens. However, pre-existing providers of healthcare did not cease to operate, and in many countries healthcare services were centrally planned but locally organized. Later, due to the over-expansion of public sector welfare spending, healthcare reforms became a critical issue and the advantages of decentralization under an efficiency perspective were recognized. At the same time, decentralization was advocated for it could allow differentiation, competition, higher accountability of decision makers and better alignment of services offered to local needs and specificities, together with experimentation. However, from a theoretical perspective, the significant externalities from local healthcare services should be considered when assessing the advantages of decentralization. In addition, efficiency arguments for decentralization generally apply to pure public goods, while healthcare services are rather merit goods. For these goods there is seldom

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a comparative advantage in local production (Levaggi and Menoncin, 2014). Rather, the reasons for devolution may rest in a reduction of solidarity among jurisdictions (Calsamiglia et al., 2006; Dirindin, 2019).

Besides efficiency, and given the merit good nature of healthcare, equity concerns have always been highly significant. In many countries healthcare policies are informed by the principle of universality: access to public health services is ensured to all inhabitants regardless of personal characteristics (gender, age, employment, economic and social conditions) or geographic location. Thus, both social and geographical equity may be pursued. The latter is a significant goal in countries characterized by stark geographical differences (e.g., Magnussen and Martinussen, 2013, for Scandinavian countries). Ensuring equity may in fact be more challenging as differences in healthcare standards *between* geographic areas of the nation become a key issue, together with the more widespread concern for differences *within* each area, which has more to do with social equity. When healthcare provision is decentralized, geographical equity becomes an even more critical stance and there is an important role to play for the central government in ensuring that differences *between* geographical areas are minimized.

Therefore, in healthcare provision, both efficiency and equity concerns are significant. While the advantages of decentralization under an efficiency perspective are well investigated (e.g., for the Italian NHS, Bordignon and Turati, 2009; Francese et al., 2014; Piacenza and Turati, 2014; Cavalieri and Ferrante, 2016), the properties of decentralization in terms of equity enhancement are rather disregarded by the economic literature. It is, however, clear that in a decentralized setting, equity concerns make interregional grants for health services necessary, especially in order to prevent different fiscal endowments from causing unequal access to services and quality of care across regions. Grants are also needed to compensate for cross-border provision, which is common in healthcare. Further, Levaggi (2007) shows that competition may reduce differences. When levels and quality of services are highly different across areas, equity may be partially restored if patient mobility is allowed, with reimbursement schemes for receiving territories. In this framework, patient mobility should improve quality and allow cost containment. Further, Puy (2007) shows that there is compatibility between mobility and redistribution. Although in a different setting, Kessler and Lülfesmann (2005) show that a trade-off between policies' allocative and redistributive effects may arise. Finally, citizens' attitudes towards equity, or solidarity, may be positively correlated with the degree of decentralization in their country. Specifically, Calsamiglia et al. (2006) show that the higher citizens' preferences for solidarity, the lower the degree of decentralization in the country. However, Ferrario and Zanardi (2011) show that, given a certain degree of healthcare decentralization, a reduction in solidarity (in terms of lower central government equalizing grants) significantly widens *between-regions* inequality.

2.2 The Problems of Healthcare Decentralization

Fiscal federalism in the context of healthcare provision has specific characteristics that deserve a careful analysis. These refer to the role of intergovernmental transfers and equity concerns.

With a hierarchical governance, grants are generally required, primarily to ensure sufficient resources to decentralized governments (vertical fiscal imbalances) and to compensate for territorial differences in the fiscal base (horizontal fiscal imbalances). By its nature, the equalization grant plays a very important role, especially due to the merit good nature of healthcare,

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which requires *ex ante* redistribution of resources in contexts where income is unevenly distributed, to prevent differences in access and quality of care across regions. Second, spillovers and cross-border provision have financial implications. Generally, they give rise to financial agreements that need to be regulated. Third, the very existence of grants may reduce fiscal responsibility of decentralized governments that may over-expand their healthcare budget. Fourth, in a decentralized context, diversification of services gives rise to the problem of ensuring equity for all citizens regardless of their residence. Besides equity *within* territories, *between* territories equity also becomes an important issue if health is conceived as a citizenship right.

As regards the first point, one key issue in the health sector is the optimal grant structure. Grants, besides providing sufficient financial means, may be used to align incentives between central and decentralized governments. Snoddon and Wen (2003) investigate the optimal grant structure in a context of strategic interdependence of central government's choice of grants and local governments' responses. In addition, Huber and Runkel (2008) and Martell and Smith (2004) analyse the interaction between central government grants and debt policy, showing that under certain circumstances transfers can limit local government debt.

A second issue is the need for coordination between levels of government due to the existence of spillovers and cross-border provision for healthcare services. Generally speaking, decentralization is welfare-enhancing compared to centralized uniform provision when policies exhibit limited spillovers and individuals show heterogeneous preferences (Besley and Coate, 2003). However, when it comes to decentralized health policies, as explained by Levaggi and Menoncin (2013), it is often the case that coordination is necessary for at least two reasons: spillover effects (deriving from the public good characteristics of the services produced) as well as the contractual agreement for mobility-related service supply (deriving from the merit good aspect of the good produced). Coordination may entail the design of compensating transfers, either horizontal – between decentralized governments – or vertical, top-down from central government.

Therefore, vertical fiscal transfers are essential to top up local resources and guarantee local service provision if the local tax base and local tax revenues are not sufficiently wide. However, the very existence of vertical fiscal transfers may induce opportunistic behaviour by decentralized governments whenever they face soft budget constraints (Kornai, 1986; Kornai et al., 2003; Rodden et al., 2003, p. 14; Levaggi, 2018). There is significant empirical evidence on problems of soft budget constraints in intergovernmental relations (Rodden et al., 2003) and on the critical role played by expectations (Pettersson-Lidbom and Dahlberg, 2003; Rodden, 2006; Bordignon and Turati, 2009; Pettersson-Lidbom, 2010; Piacenza and Turati, 2014). If decentralized governments have expectations that the central government will transfer additional resources and foot their health bills, this may negatively affect the efficient allocation of resources. Local governments may become less fiscally responsible, causing an over-expansion of the local health budgets, inefficient expenditures and an undesirable negative impact on general government fiscal balances (Kornai et al., 2003). There is evidence that soft budget constraints are widely occurring in healthcare policies (Kornai, 2009), because the central government has an interest in preventing decentralized government from "failing" to provide essential healthcare services (Wildasin, 1997; Bordignon, 2006), especially if health policy is a shared competency and therefore the central government can be held responsible for the failure (Bordignon and Turati, 2009). This obviously feeds expectations of future bailouts. Institutional and political variables have a significant influence on the formation of

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expectations. For instance, there is evidence that richer and more autonomous regions have lower expectations (Rodden, 2002, 2006) and that central government fiscal discipline reduces bail-out expectations (Bordingon and Turati, 2009). As for political factors, according to Bordignon and Turati (2009), when regional and central governments are politically aligned then decentralized governments show higher fiscal discipline.

Specific mechanisms have been proposed to prevent financial irresponsibility of subnational governments and reduce inefficiencies. The first solution is an increase of decentralized governments' fiscal autonomy, through local taxes, which reduces financial dependency and increases accountability of local politicians. Second, fiscal rules to constrain expenditure and deficit of central or local governments, or both (Grembi et al., 2016; Schakel et al., 2018). Third, the central government may impose some kind of "administrative subordination" on decentralized governments that show financial irresponsibility. This may take the form of technical controls (e.g., appointing an accountant to supervize decentralized budgeting) or recovery plans imposed on decentralized governments (e.g., the Italian "Piani di Rientro"; Bordignon et al., 2020) or even enforcing temporary administration of health policy and health recovery plans by a commissioner appointed by the central government (Ben-Bassat et al., 2016; Aimone Gigio et al., 2018; Depalo, 2019). However, if excess spending is not the result of inefficiencies, but due to insufficient local financial means to finance the needed services, then hardening the budget constraint may reduce social welfare (Piacenza and Turati, 2014). A related point made by Levaggi and Menoncin connects the merit-good nature of healthcare to the existence of soft budget constraint problems in healthcare policy:

> Merit and impure public goods for which decentralisation is sought seldom present a comparative advantage in being produced locally. The reasons for devolution in this case may be determined by a reduction in solidarity among jurisdictions. We believe that this aspect related to gainers and losers may also explain the onset of soft budget constraint policies (Kornai et al., 2003), one of the less desirable effects of fiscal federalism. In a federal system where wealthier local authorities may be the ultimate gainers from devolution, less wealthy ones may try to reduce their losses by running into a deficit. (2011, p. 2)

When healthcare is decentralized, if countries exhibit stark differences in terms of local economic development, tax base and/or local needs, and if equalizing grants (or even deficit spending) are not enough to ensure equity *between* territories, then citizens' right to healthcare may be hindered. There is, however, mixed evidence on the impact of fiscal decentralization on *within-* and *between-region* inequalities, in terms of both access to services and health outcomes (Chandra et al., 2012; Skinner, 2012; Costa-Font and Turati, 2018; Di Novi et al., 2019). In this framework, patients' mobility may help reduce differences in the standards of healthcare affordable to residents of different areas of the same country, and also enhance efficiency in provision (Ferrario and Zanardi, 2011).

Finally, there is a concern that decentralization in healthcare, rather than enhancing quality and responding to local needs and preferences, may give rise to a "race to the bottom" among decentralized governments (Oates, 1999; Costa-Font and Rico, 2006) and may hinder service appropriateness. However, Costa-Font and Greer (2013) recognize that it is not decentralization per se that affects health policies' efficiency or effectiveness, but rather the outcomes from decentralization depend on the institutional design and how it shapes incentives, democratic accountability and the effective political power of each level of government. For instance, the design of the financial framework is critical, as it shapes the extent of potential

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policy divergence and the extent of "coercive isomorphism" (Costa-Font and Greer, 2013; Francese et al., 2014).

3. HEALTHCARE DECENTRALIZATION IN ITALY

As for decentralization of health policy, Italy is an interesting case study for many reasons. First, the public sector has long played a major role in healthcare provision. Second, the public National Health Service performs rather well in terms of outputs and outcomes as well as for cost containment. Third, although Italy is a unitary country, in the past 30 years intergovernmental relations have been deeply transformed by fiscal devolution reforms towards a model of regional governance. In particular, public healthcare is decentralized on both the revenue and the expenditure side, while central government retains a role in defining mandatory services, enacting framework legislation and topping up regional resources to ensure sufficient financial means to all regions. And finally, decentralization of service organization and management to the regional level has allowed the development of differentiated models of public health provision, an example of laboratory federalism (Oates, 1999).

According to the Italian Constitution, health is a fundamental individual right and is of collective interest. The National Health Service, or NHS (Servizio Sanitario Nazionale, or SSN), a public national health insurance service, is based on principles of universal coverage and provision of a comprehensive range of health services largely free at the point of use, and is financed through general taxation. It is decentralized on both the revenue and the expenditure side. As for expenditure, according to Article 117 of the Constitution, healthcare is the responsibility of both central and regional governments, with different roles and competencies. Generally speaking, central government is responsible for defining the fundamental principles of national health policy, for setting the minimum level of services to be offered to all citizens and for deciding the amount of resources that every year make up the National Health Fund, or NHF (Fondo Sanitario Nazionale). Regional governments autonomously organize and manage healthcare services in their jurisdiction, and also define the rules related to the involvement of private providers. On the revenue side, regional governments have autonomous tax sources to finance healthcare services, topped-up by their share of the NHF. Co-payments may be required for outpatient services and for pharmaceuticals. The current structure of the public health service is the result of various reforms implemented in the last 40 years which alternatively focused more on improving efficiency or on equity issues in service provision and resulted in regions now having political, administrative, fiscal and organizational responsibility for healthcare provision.

The health sector reforms were part of a wider transformation of intergovernmental relations in Italy, inspired by fiscal federalism principles and pursuing higher devolution of revenue and expenditure.

3.1 The Birth of the National Health Service, 1978

According to Article 32 of the Constitution, "The Republic safeguards health as a fundamental right of the individual and as a collective interest, and guarantees free medical care to the indigent." Despite this constitutional provision, it was only in 1958, 11 years after the Constitution was approved, that the Health Ministry was established for the first time (law 296/1958).

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Then, in 1968 autonomous public institutions providing hospital care (*enti ospedalieri*) were introduced. However, healthcare provision rested on a fragmented system of more than 100 different health insurance funds, of a corporative nature, which did not cover the whole population nor offered uniform services, and which also ran into large deficits. In 1978 a major reform radically transformed healthcare, by abolishing health insurance funds and establishing the Italian NHS (law 833/1978), a universal and comprehensive public fund financed by sickness contributions, levied on gross wages or pensions, and by central government general revenues. By law, the Italian NHS is "the complex of functions, structures, services and activities directed to promoting, maintaining and recovering the physical and mental health of the whole population, without distinctions based on individual or social conditions, and ensuring equality of all citizens with respect to the service" (Art. 1, law 833/1978). Equity was therefore a central concern in this reform, and with the establishment of the NHS, the constitutional provisions defining health as a fundamental right of the individual came into force. The Italian NHS was set out to provide universal and comprehensive health protection and to guarantee equal access to uniform health services for all, irrespective of income or location. In addition, the main aims of the NHS included controlling health spending and ensuring public democratic control. As for its organization, it had a multi-layered structure, involving all levels of Italian government, each one with a specific function. The central government had a planning role, in accordance with regional governments, through the drafting of a national health plan that would define the goals of the NHS and the levels of healthcare for the entire country, the amount of financing of the NHF and the criteria for its apportionment to regions; regional governments had responsibilities for planning, organizing and managing services in their jurisdiction. Administrative responsibilities and service provision was the task of local health units (Unità Sanitarie Locali, or USL), public bodies involving one or more municipalities, responsible for providing services directly or by contracting with private producers according to the regional government framework for private providers' involvement.

Since 1978 three major reforms have significantly transformed the structure and operation of the NHS, by introducing elements of an internal market, by giving managerial autonomy to local health units and public hospitals, and by increasing regional governments' autonomy and responsibilities.

3.2 The First Wave of Reforms, 1992–1993

In 1992–1993, a first wave of reforms produced a significant transfer of managing and funding competencies, as well as financial resources, to the regional level of government. Reforms were implemented for the primary purpose of improving efficiency and controlling expenditure, which had been increasing steadily since 1978. At the same time, universal coverage and equity of access were safeguarded. As for efficiency, a separation between service producers and purchasers was sought, based on the experience of the British NHS, where quasi-markets were introduced in 1990. For this reason, local health units were transformed into publicly owned firms named local health firms (Aziende Sanitarie Locali, or ASL), with their own management and budget. Hospitals were then separated from ASL and became hospital firms (Aziende ospedaliere). This business-like transformation implied two main changes: first, budgets needed to be efficiently managed; second, a new managerial organization was required. However, as key managing positions of local health firms were appointed by regional governments, these firms remained strongly exposed to political pressures (although

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no more from municipalities). In a quasi-market framework, local health firms were responsible for purchasing services for citizens from different producers, from general practitioners, to publicly owned hospital firms, to private providers, and competition was expected to boost the efficient allocation of public funds. Contracts with providers made use of a prospective payment system based on diagnosis-related groups (DRGs), later partly substituted with a budget-based approach, used in particular with private producers. The separation of functions has also meant a revolution in the concept of public healthcare. While in the previous system cost was about the only measure of service provision, with the reform outputs are measured and providers are paid on the basis of what they provide.

The 1992–1993 reform also concerned the financing side: sickness contributions were assigned to regional governments, thus attaining some degrees of fiscal decentralization, in an attempt to align funding and expenditure responsibilities at the regional level and to increase regional government accountability. This initial form of fiscal decentralization was accompanied by a law provision explicitly forbidding central government from bailing out future regional deficits (Art. 13 legislative decree 502/92, later modified by legislative decree 517/93). In addition to sickness contributions, the NHF financed through general taxation continued to contribute to cover NHS financial needs, by topping up regional funds, but with a new equalizing function, due to large regional inequalities in the distribution of sickness contributions. The *ex ante* definition of the amount of resources making up the NHF is a critical factor that contributes to controlling expenditure.

3.3 The Second Wave of Reforms, 1999

The 1999 reforms were more concerned with equity, but also efficiency was fostered mostly through changes affecting the financing side. Equity was pursued by introducing the so-called essential levels of care (Livelli Essenziali di Assistenza, or LEA), mandatory and uniform services to be provided on the whole national territory (legislative decree 229/99), defined by the central government with the agreement of regional governments. At the same time Supplementary Funds of the NHS were introduced, to cover both expenses for services excluded from the NHS and expenses for co-payments required for services included in the NHS. Finally, a step back from the quasi-market model and the search for competition introduced in 1992–1993 was made by requiring more co-operation between ASL and providers, especially private providers. To further improve regions' responsibility and accountability, in 1999 regions' tax autonomy was increased by abolishing sickness contributions and substituting them with two new regional taxes: a tax on productive activities (Imposta regionale sulle attività produttive, or IRAP) and a surcharge on personal income tax (Addizionale IRPEF). This was consistent with the wider fiscal federalism reform underway in Italy in those years (and not yet completed). Finally, the reform reinforced the role of regional governments in healthcare services organization and management. Each region, besides providing the LEAs, could also autonomously enlarge its offer and finance it with its own resources. This gave way to a wider regional differentiation in service provision.

3.4 The Third Wave of Reforms, the Early 2000s

In the early 2000s, newly approved legislation affected the NHS, but generally produced a consolidation of trends already defined in the previous two decades. Specifically, the

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management role of regional governments in healthcare was consolidated and their fiscal autonomy reinforced. These trends reflected the prevailing political orientation towards higher decentralization of government functions.

The most important act was the 2001 constitutional reform, which modified intergovernmental relationships and designed a more decentralized institutional asset for Italian government (Constitutional Law n. 3/2001), with a significant impact also on the NHS.

In particular, the reformed Article 117 of the Constitution, on the assignment of legislative powers, defines an explicit list of matters on which the central government has exclusive legislative powers. It then identifies areas of concurrent central/regional competence and finally states that regions have legislative powers in all subject matters that are not expressly covered by state legislation. The protection of health is a shared responsibility of central and regional governments (Art. 117, par. 2). Central government (the Ministry of Health) defines framework legislation and has responsibility for essential levels of care; that is, for the "determination of the basic level of benefits relating to civil and social entitlements to be guaranteed throughout the national territory" (par. 1, letter m). The central government also defines the total amount of resources needed to finance LEAs, and ensures that they are effectively attained. Regional governments have management responsibilities: they organize regional health policy, guarantee that essential levels of care are offered and ensure quality and performance of their health systems. Local health authorities (a total of 148 all over the country) are in charge of service provision in a geographically defined area, but citizens can freely access healthcare services wherever they prefer. Overall, regional governments enjoy large autonomy, but they have to comply with the framework legislation defined by central government.

The second process affecting the NHS was the ongoing fiscal federalism reform, pursuing decentralized governments' higher financial autonomy (and responsibility). In 2000 regions' own tax sources were enlarged thanks to the increase in revenue-sharing on the Gasoline Tax and the introduction of revenue-sharing on the Value Added Tax. The need for a proper equalizing formula to apportion the NHF to the regions was solved by introducing the concepts of standard needs and standard costs that would drive the allocation of funds. Law 42/2009 on fiscal federalism prescribed "the gradual overcoming … of the historical spending criterion in favour of standard financial needs" (Art. 2, par. 2, letter m), and that "[expenditures] are determined with respect to standard costs" (Art. 8, par. 1, letter b). Criteria to compute standard costs were defined in 2011 (legislative decree 68/2011), but the implementation process proved to be long and complex and today the allocation criteria are essentially based on weighted capitation.

A critical issue in the financing of regional health expenditure is how regional deficits are dealt with. Initially, central government simply bailed out regional health deficits, an approach obviously producing distorted incentives. To limit regional deficits, in 2005 regions' access to the so-called premium share of the NHF was conditioned to having a balanced budget (law 311/2004) or, in case of deficits, access was granted only if the region identified the causes beneath the deficit and defined a so-called Operation Programme (Programma Operativo) to restructure and improve the regional health service. In 2007 so-called recovery plans (Piani di Rientro) were introduced to improve the accountability of regional governments (law 296/2006). This was seen as a form of re-centralization, also because of the controlling role assumed by the Ministry of Finance. Recovery plans are formal agreements between central government and a region that runs health deficits (initially above 7 per cent, reduced to 5 per cent since 2010), committing them to restore economic and financial balance while continuing

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to ensure the essential levels of care. Recovery plans are three years long and may be extended for a further three-year period. If deficits are not wiped out, a commissioner *ad acta* (the president of the regional government) is charged with the implementation of the plan and austerity measures are introduced, such as personnel reduction and tax rate increases.

Finally, the economic crisis that hit the world economy in 2008 forced governments to introduce austerity measures in response to increasing government budget deficits. In Italy, as in many other countries, these also included measures in health policy, in terms of both resources and governance, such as controls and rationalization of health expenditure (expenditure caps, standard costs), reorganization of hospital services, revision of public procurement rules and procedures, and strengthening of controls on regional deficits.[1] Under cost-containment policies, NHS under-financing and understaffing worsened, also compared with the main European Union (EU) countries (Neri and Mori, 2017). Under the EU's and financial markets' pressures for balanced budgets, the central government took a stance to limit health deficits, which were run by southern regions in particular. This implied a partial re-centralization of policy making and restrictions to regional autonomy, which affected regions in an asymmetric way: most southern regions had to implement recovery plans, aimed at restoring fiscal discipline. Since 2007 all southern regions plus Lazio have been constantly under recovery plans, Puglia "only" since 2010 (the only exception is Basilicata, which so far has not undergone any recovery plan). Conversely, in the centre north of Italy recovery plans were introduced only exceptionally. The Liguria region was under a recovery plan in 2007–2009 and Piemonte in 2010–2015. Therefore, central and northern regions retained organization autonomy, and have even asked for increased decentralization.

3.5 The Italian NHS Today

In Italy, healthcare policy results from the interaction of the central and regional levels of government and is ruled by a complex set of institutional and political arrangements, structured according to the reforms that have taken place since 1978 and especially in the last 30 years. The main steps in this process were the constitutional reform of 2001, which also defined the general framework for the implementation of health policies, and ensuing law provisions, primarily law 42/2009 and legislative decree 68/2011.

Total health expenditure in 2019 in Italy amounted to 8.7 per cent of gross domestic product (GDP), of which public health expenditure was equal to 6.4 per cent (from 4.7 per cent in 1980). Both values are below the Western European average and significantly less than expenditure in the major European countries, which amount to, respectively, 11.7 per cent and 9.9 per cent in Germany; 11.2 per cent and 9.4 per cent in France; 10.3 per cent and 8 per cent in the UK; and 9 per cent and 6.4 per cent in Spain (OECD, 2020). In addition, over the period 2010–2019, cuts to the NHS amounted to more than €37 billion. The Italian NHS is considered among the most efficient in the world (it ranked fourth according to Bloomberg, 2018) and Italy is one of the healthiest countries (Bloomberg, 2019; WHO, 2019).

Over the years, health expenditure has been near-constantly growing, from an initial 4.7 per cent of GDP in 1980, and has constantly produced deficits. In the early 1990s effective measures were taken to curb expenditure, in an effort to meet the Maastricht Treaty parameters. By the early 2000s health expenditure had been reduced to 5.5 per cent of GDP but then started growing again, at an average yearly growth rate of 5 per cent. In 2009 it reached 7.1 per cent of GDP. Especially after the 2008 economic and financial crisis, austerity measures were

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introduced, aiming to control public expenditure. As a result, since 2009 public healthcare expenditure has constantly declined, to reach 6.4 per cent of GDP in 2019. In these years, the nominal growth rate of public funds was on average equal to 0.9 per cent, while average inflation rate was 1.07 per cent (thus in real terms public healthcare expenditure has declined on average by 0.8 percentage points) and per capita expenditure reduced from 1.893 to 1.746 euros (Fondazione Gimbe, 2019). This reduction was mainly concentrated in southern regions, where expenditure cuts were made according to recovery plans. Savings were obtained essentially from curbing personnel expenditure (for instance, by freezing personnel turnover), and reducing hospital beds and pharmaceutical expenditure. However, these measures inevitably impacted on public healthcare, and produced an increase in out-of-pocket payments (WHO, 2012) and probably unevenly affected access to care (Torfs et al., 2021). For instance, hospital beds' reduction implied that their number reached 34.9 per every 10,000 inhabitants in 2019 (the number was 51 in 2000, 45 in 2005, 40 in 2009), while in Germany and France they were respectively 80 and 60 in that same year. However, the Italian national average results from significantly different territorial data: in 2019 the number of hospital beds per every 10,000 inhabitants was 37.5 in the northern regions, 34.3 in central regions and 31.6 in southern ones (Istat, 2022). In 2019 the average occupancy rate (78.7 per cent) was higher than the European average, a clear indicator of stress on hospital services, which makes them vulnerable to sudden increases in demand. Further, Italy had one of the lowest numbers of intensive care beds in Europe: nine per every 10,000 inhabitants in the north of the country, eight in the centre–south.

Despite expenditure cuts, according to various indicators the health of the Italian population has improved over the last few decades. Average life expectancy at birth reached 83.57 in 2020, an indicator that is constantly improving, although with important regional and socio-economic differences. Both adult and infant mortality rates have fallen significantly (Istat, 2022). And it is still true that Italy is doing quite well in the group of heavily regulated public systems characterized by a stringent budget constraint (Joumard et al., 2010, p. 51). However, in almost all demographic and health indicators, there are marked regional differences moving from north to south (Turati, 2013). For instance, southern regions are not effectively supplying the set of constitutionally guaranteed essential services (Di Novi et al., 2019, p. 2). These regional disparities explain the significant interregional mobility of patients in Italy, which accounted for approximately 4.1 per cent of total public health expenditure in 2018 and is characterized by a net structural patients flow from southern to northern regions (Fondazione Gimbe, 2020, p. 10). Various factors affect patients' interregional mobility, such as the effectiveness and efficiency of each regional healthcare service, the presence of reference centres for specific diseases, waiting lists, diagnostic services and availability of treatments, and perceived or real quality of assistance (Berta et al., 2021; De Curtis et al., 2021; Ricci et al., 2021). Patients' mobility reflects the difficulties for southern regions in addressing the accountability process (Bruzzi, 2012), and interregional mobility reimbursements impose a burden on these regions' budgets.

3.6 The Italian NHS: Equity and Efficiency Evaluations of Fiscal Decentralization

The Italian NHS pursues both equity and efficiency objectives: it aims to guarantee all citizens uniform access to healthcare while attaining efficiency in service provision and containing costs. Decentralization to regional governments of competencies for healthcare organization

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served the purpose of improving effectiveness in service delivery while fiscal decentralization pursued accountability and responsibility in health spending.

Data reported above show that since the early 1990s the Italian NHS has successfully contained costs. In addition, fiscal decentralization contributed to a reduction of *within-regions* inequality (Di Novi et al., 2019). However, public healthcare provision is affected by problems under both an efficiency and an equity perspective. As for equity, the wide differences in the availability and quality of services among different regions, in particular along the North–South divide, and the significant interregional patient mobility (primarily from southern to northern regions) suggest that *between-regions* equity is far from being attained both in access to healthcare and, as a consequence, in citizens' health levels. The North–South gap is hard to reduce: regional disparities in health services are a legacy of the past, and the empirical literature has found mixed evidence of decentralization effects on them (De Belvis et al., 2012; Toth, 2014; Blöchlinger et al., 2016; Costa-Font and Turati, 2018; Di Novi et al., 2019). Significantly, cross-region inequality cannot be ascribed to regions' different financial endowments. In fact, the Italian NHS is characterized by a significant *ex ante* redistribution, aiming at ensuring comparable financial resources to all regions. Under fiscal decentralization, regions enjoy their own tax revenues, but these are topped up by central government equalizing grants. Rather, between-regions inequality is a clue regarding across-regions differences in the degree of efficiency and effectiveness in using financial resources.

A critical issue is therefore the identification and correction of sources of inefficiency in health expenditure, which hinder *ex post* redistribution, despite the *ex ante* significant positive redistribution (Turati, 2013, p. 61) and despite the mandatory uniform essential services (LEAs) across the country. The previously discussed results of the theoretical and empirical literature on grants in a financially decentralized setting may contribute to the explanation. According to second-generation fiscal federalism, decentralization is effective in attaining efficiency when regions enjoy fiscal autonomy and spend their own revenue sources (Oates, 2005; Boetti et al., 2012). Conversely, when decentralization of competencies is not matched by devolution of fiscal revenues and local financing heavily relies on central government grants (vertical fiscal imbalances), incentives for decentralized government accountability are lost (Weingast, 2009; Eyraud and Lusinyan, 2013). In Italy this happens especially for southern regions, where the share of their own revenues in total health expenditure is rather low. In addition, distorted incentives may arise, fostering excess inefficient expenditures, if the central government cannot commit to avoid future bailouts of decentralized governments' deficits (soft budget constraints). For Italy there is empirical evidence that regional financing suffers from problems of soft budget constraints (Bordignon and Turati, 2009) and that moral hazard has a negative impact on the efficient allocation of health expenditure (Piacenza and Turati, 2014). Fiorani and Meneguzzo (2008) maintain that regions acted as if central government would repay their health-related debts in the case of default, and the model proposed by Levaggi and Menoncin (2013) is consistent with this assumption. Some empirical works focusing on this phenomenon have reached interesting empirical conclusions for Italy. First, there is evidence that the link between *ex ante* resources and *ex post* expenditure (so absence of excess inefficient spending) was stronger when regional expectation of future central government bailouts were lower. In addition, there is evidence that regional governments of the same political party as the central government were less inclined to run deficits (Bordignon and Turati, 2009). Finally, central government fiscal discipline effectively hardened subnational governments' budget constraints in the years 1993–2006. More significantly, fiscal discipline

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did not negatively impact on citizens' health (as a consequence of a potential reduction of needed services), it only affected the inefficient component of regional governments' expenditure (Piacenza and Turati, 2014).

The complex system of intergovernmental relations and the need for coordination to prevent deficits and guarantee a minimum level of services have prompted central government's interventions. Since 2007, the central government has addressed regional inefficiencies by imposing on regions running large deficits a form of "administrative subordination" through recovery plans. They appear to have been effective in containing expenditures, restoring sound financial conditions and reducing unjustified and inappropriate provision of services (Atella et al., 2019; Bordignon et al., 2020). However, evidence is less clear-cut regarding their impact on health outcomes and access to healthcare services. For instance, Bordignon et al. (2020) do not find any significant effect of recovery plans on citizens' health and on the perceived quality of services, while, using a different methodology, Depalo (2019) estimates an increase in mortality rates in some regions, and Arcà et al. (2020) estimate a 3 per cent rise in avoidable deaths, a reduction in hospital capacity and a rise in south-to-north patient migration as a consequence of recovery plans. A comprehensive study by Aimone et al. (2019) stresses that recovery plans achieved mixed economic results, because some regions still suffer from deficits. This study also points out that recovery plans' impact on service quality was even more mixed. Among the regions under recovery plans, only one could guarantee the essential levels of care (Piemonte), while two regions were never able to meet these standards (Calabria and Campania).

The alternative strategy to foster efficiency – i.e., increasing fiscal autonomy – is constrained by the limited availability of taxes that can be efficiently decentralized according to fiscal federalism theoretical prescriptions on optimal tax assignment. It is also constrained by the unequal distribution of tax bases, due to the relevant economic differences across Italian regions.[2] Therefore, despite the devolution of tax sources to regional governments under the fiscal federalism reform, in Italy the central government has continued to allocate grants to finance regional health policy for two reasons: to top up regions' insufficient revenues (vertical fiscal imbalances) and to equalize different regional fiscal capacities (horizontal fiscal imbalances). As a result, after fiscal devolution, the relative amount of funds for each region's health budget did not change, while the composition of sources of finance across regions became significantly different, according to the regional distribution of the tax base: more endowed regions receive limited grants, while those with a limited tax base heavily rely on grants (Di Novi et al., 2019, p. 3). Significantly, efficiency and accountability of health policy is higher in regions that rely more on their own resources, compared to those that are more dependent on central government transfers. This is not enough to assume a causal nexus between the two; in fact, a limited local tax base and limited local efficiency may both be caused by a third factor – for instance, different socio-economic conditions (Putnam et al., 1993). Surely further empirical tests should be required to clarify this issue, but it is nevertheless interesting to note that evidence from Italy is consistent with fiscal federalism theoretical conclusions that, as the share of transfers reduces and that of regions' own taxes increases, decentralized governments' accountability increases and so does the efficiency and effectiveness of public policies (Weingast, 2009; Eyrand and Lusinyan, 2013). For instance, Francese et al. (2014) show that regions having access to their own significant revenues to fund health expenditure are more accountable towards citizens-voters and hence perform better in terms of controlling the inappropriateness of treatments. Northern Italian regions, enjoying a wider tax

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base and relying less on central government grants, perform better. This also shows that decentralization does not produce accountability for all, but only for the more fiscally endowed regions. Italy illustrates how, in a country characterized by stark regional economic differences, decentralization may work well for some and much less for some others. This suggests the efficiency of implementing some form of asymmetric federalism, which grants spending autonomy only to those regional governments characterized by low degrees of vertical fiscal transfers and higher accountability.

The Italian Constitution, after the 2001 reform, envisages the possibility for asymmetric federalism (Art. 116, par. 3): "Additional special forms and conditions of autonomy … may be attributed to other Regions by State Law, upon the initiative of the Region concerned, after consultation with the local authorities." Actually, since 2017 some northern regions (Lombardia, Veneto, Emilia-Romagna) have started the procedure to obtain larger autonomy in an asymmetric way. The process is now at a halt and there are specific problems that need to be dealt with. But surely in healthcare a kind of asymmetric federalism has already been implicitly implemented, as practically all southern regions in the last 10 years have been under central-government-controlled administration through recovery plans.

The demand for greater autonomy by some regions is partly a local response to alleged inefficiencies and lack of effectiveness of the central government, but it also reflects a cultural change that has weakened the focus on solidarity, in Italy and abroad (Dirindin, 2019), although solidarity is a founding principle in the Italian Constitution (Art. 2 and Art. 119). However, in practice, implementing asymmetric federalism is not straightforward: there are major issues that need to be resolved under a public finance perspective. First, universalism is at risk – there is the problem of how under asymmetric federalism the constitutional right to health can be equally guaranteed to all citizens, the risk being that inequalities could further increase; second, a balanced budget should be attained; third, criteria to define the amount of resources needed to finance new decentralized functions should be identified; and finally, the appropriate tax instruments have to be used to finance decentralized fiscal autonomy (Zanardi, 2019).

4. CONCLUDING REMARKS AND FUTURE PERSPECTIVES FOR ITALY

Given the marked regional economic differences and the uneven development of regional tax bases and tax autonomy (Brandolini and Torrini, 2010; Daniele and Malanima, 2011; Bordignon, 2017; Bank of Italy, 2018; Cannari et al., 2019), the implementation of healthcare decentralization in Italy faced different problems and produced different outcomes across regions, displaying a clear North–South asymmetry. These disparities resulted in an unintended form of asymmetric federalism in healthcare. Evidence from Italy, showing a clear correlation between wealthier local economies and wider regional tax bases on the one side, and autonomous, diverse, more efficient and equitable regional health systems on the other, seems to support the theoretical conclusions that decentralization of public functions can be effectively implemented only under fiscal autonomy which favours regional government responsibility. This seems to imply that effective decentralization requires a set of economic and institutional conditions, and it cannot be equally effective with highly diverse economic bases. Although these conclusions concern a developed country, they are consistent with

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findings from the extensive literature on decentralization and development, which provides evidence that decentralization often falls short of its expected outcomes if implemented in the context of low economic and institutional development (Bardhan, 2002; Schragger, 2010), that the fiscal system needs to be carefully designed (Shah, 2004), that a well-functioning democracy is required to obtain benefits from decentralization (Bardhan and Mookherjee, 2006), and that local governance and the process of implementing decentralization can be as important as the design of the system in affecting service delivery outcomes (Ahmad et al., 2005). Therefore, institutions, accountability, governance and capacity play a key role for the success of decentralized policies, and there is scope for further empirical analyses of evidence from Italy under this perspective.

Similar concerns for the attainments of decentralization have arisen in developed countries and prompted some forms of re-centralization (Prud'homme, 1995; Treisman, 2007; Terlizzi, 2019). In the health sector, since the first years of the 21st century the role of the central government has strengthened (Saltman, 2008; Tediosi et al., 2009). In healthcare, limited and selective re-centralization was a response to healthcare systems' financial sustainability problems, equity and accessibility concerns, and territorial differences in service provision (Mauro et al., 2017). In the Italian policy debate, re-centralization is sometimes proposed as a way of ensuring higher nationwide equity and efficiency, because the territorial socio-economic divide and the uneven financial endowments may produce a zero-sum game, where the gains from decentralization for the better-off regions are counterbalanced by the losses in performance of the weaker ones (Pavolini and Vicarelli, 2012). In practice, since 2006, within the country's decentralized regional health system an unintentional re-centralization process has been underway, through recovery plans that targeted the weaker regions, or in extreme cases, through centrally appointed Commissioners charged with ensuring the attainment of central government's targets (Mauro et al., 2017).

The recent outbreak of the Covid-19 pandemic offered additional arguments in favour of re-centralization of healthcare, as a way of ensuring effective and timely responses (Greer et al., 2020a, 2020b) and of improving institutional coordination. In Italy a strong centralized response was advocated (Bosa et al., 2021) and a "state of emergency" was declared: power and authority were concentrated within the central government, which directly intervened in the management of the health system (Mauro and Giancotti, 2021). In turn, the central government drew on the advice of the Covid-19 emergency commission and scientific advisory panel (Comitato tecnico scientifico), which was set up early on in the pandemic. In this framework, although different regions adopted different management models to address the health emergency, in accordance with the differences in their health systems (Mauro and Giancotti, 2021), regional governments were subordinated to central government decisions, which pursued coordinated strategies. The issue is whether this approach is a form of re-centralization in response to the severe limits of a decentralized system, which cannot properly respond to sudden and severe threats to public health. According to Greer et al. (2020b), re-centralization, or *between-government* centralization, as they name it, was only a temporarily response, with the central government making more policies than usual. In fact, in the second wave of Covid, centralization was lower and decentralized governments regained more autonomy. As for Italy, the prominent role of the central government during the pandemic is consistent with the country's institutional design of healthcare decentralization. In fact, healthcare is a shared responsibility of central and regional governments. In addition, there is an implicit supremacy clause (Onida, 2020; Poggi and Sobrino, 2021) in that a transfer of powers to the central gov-

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ernment, limited in time and scope, is provided for by the Constitution in exceptional cases; for instance, when public health is threatened, as happens in a pandemic. According to Article 120 (par. 2), the central government

> can act for bodies of the regions, metropolitan cities, provinces and municipalities … in case of severe danger for public safety and security, or whenever such action is necessary … to guarantee the basic level of benefits relating to civil and social entitlements, regardless of the geographic borders of local authorities.

Further, regional and central governments have shared competencies on health policy (Art. 117 of the Constitution), but law 883/1978, which introduced the NHS, foresaw the possibility for the Health Minister to enact ordinances on health matters, of a contingent and urgent nature, with effectiveness on the whole national territory (Art. 32). Therefore, the centralized response to the pandemic and the temporary centralization of healthcare management is not at all in contrast with the Italian decentralized health system (Piperno, 2020).

Rather, central government healthcare measures introduced in response to the pandemic were made necessary by some existing weaknesses of the Italian healthcare system, caused by both national health policy and some regional models of healthcare (Mauro and Giancotti, 2021). These weaknesses were sharply disclosed by the Covid emergency. At the outbreak of the pandemic in early 2020, hospital capacity collapsed rapidly, and hospitals were quickly unable to offer proper care to all those who needed it. This was certainly due to the dramatic spread of the highly infective and aggressive SARS-Cov-19. But it was also caused by policies and choices implemented long before with regard to NHS funding, primary healthcare organization and hospital management (Costa-Font et al., 2020; Buzelli and Boyce, 2021; Plagg et al., 2021). At the national level, these measures included cuts in NHS funding and cost containment through the reduction of hospital beds (Piacenza et al., 2010; De Belvis et al., 2012; Ministero della Salute, 2017; Pecoraro et al., 2021; World Bank, n.d.). At the decentralized level, measures encompassed some regions' hospital-centric organization of care matched by a neglect of primary care, delivered by general practitioners (Kurotschka et al., 2021). The latter included, for instance, dismantling territorial services and constraining the number of general practitioners, whose number per inhabitant is comparatively much lower than in other EU countries (Kringos et al., 2015). These choices resulted in an overuse of emergency departments, which had to substitute insufficient primary care (Berchet, 2015; Garattini et al., 2016). Further, the specific form of managed competition implemented in some regions may have exacerbated the impact of the pandemic by providing the wrong incentives to hospitals (Costa-Font et al., 2020). This was, for instance, the case in Lombardy, where the insufficient development of primary care and territorial services caused excess pressure on hospitals from patients who had no other option for receiving care (Plagg et al., 2021), and where swift coordination was hindered by the region's hospitals' decentralized competition model (Costa-Font et al., 2020). This prompted a faster collapse of hospital capacity, already constrained by the limited number of both ordinary and intensive care beds, which had been constantly cut over the years (Plagg et al., 2021).

In Italy, therefore, the NHS and the different regional health systems face some weaknesses, which the pandemic has amplified (Costa-Font et al., 2020; Dirindin, 2020; Vicarelli and Neri, 2021). There is therefore space for decentralized health systems' improvement, for both their efficiency and equity outcomes. The more efficient northern regions, under healthcare decentralization, had reduced *within* inequality and further increased their health system's effi-

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ciency; however, they now need to rethink their approach to primary care, territorial services and hospital-managed competition in order to foster the efficiency, effectiveness and equity of their regional health systems. The case for southern regions is more complex, as they first need to achieve effective fiscal autonomy, but the limited tax base seems to be a strong obstacle on the way to accountable, efficient and equitable regional health systems. The North–South economic gap is therefore mirrored by a North–South divide in the challenges that regional health systems need to address to further improve equity and efficiency under healthcare decentralization.

For both northern and southern regions, one rather disregarded strategy to achieve equity and efficiency gains would be that of fully exploiting the potential from the so-called "laboratory federalism" (Oates, 1999). The current 21 models of regional health service which make up the Italian NHS provide a rich array of experiences. Effective benchmarking and cross-fertilization would safeguard local autonomy and, at the same time, provide regions with opportunities to revise their approaches and access potentially useful best practices to improve their health services, taking full advantage of the experimentation allowed by decentralization (Marchitto, 2001; Scognamiglio, 2014). Benchmarking is time- and resource-consuming, and its implementation requires specific competencies, but it offers significant opportunities, as proved by some international experiences (Northcott and Llewellyn, 2005; Thonon et al., 2015). Far from being a case for re-centralization, the central government in its coordinating role could become a catalyst for benchmarking across the NHS, an exercise from which service improvements and benefits for public finances may arise for all participating regions, thanks to a win–win strategy of exploiting the gains from decentralization.

NOTES

1. For a synthetic review, see Camera dei Deputati (2022). Many different legislative measures contributed to the end of controlling expenditures, among them: legislative decree 98/2011 on expenditure caps for medical devices (revised by legislative decree 95/2012 and law 228/2012), legislative decree 95/2012 (spending review) on standard prices for healthcare procurement, reduction of hospital beds; a reduction of services purchases from private providers; law 66/2014 on public procurement and legislative decree 78/2015 on the revision of NHS contracts with third parties and on the reduction of inappropriate hospitalizations and in-hospital rehabilitations.
2. The tax base of IRAP, the regional tax that finances health spending, is a proxy of the regional GDP, which is highly unevenly distributed across Italian regions, much more than other tax bases; for instance, that of a consumption tax, which therefore would have been more suitable to finance regional governments.

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