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How Financialization Reshapes Public Health Care Systems : The Case of Assurance Maladie

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Abstract: This article seeks to show how financialization is reshaping Public Health Care Systems (PHCS). To do so, we combine a theoretical discussion and an empirical investigation to examine the increasing participation of financial actors and instruments in these systems over the last decades. In the first part, we present the conventional approach for assessing PHCS transformation to date and argue for the need to incorporate the concept of 'financialization'. In the second part, we suggest a method for empirically examining how financialization alters the internal structures and organization of PHCS. In the last part, we apply this method to conduct an in-depth analysis of the French public health system, Assurance Maladie (AM). Our findings provide robust evidence that financialization had a major influence in the direction taken by the post-1990s reforms in this case, with new strategies allowing the increased participation of financial capital in the system's long-term, short-term, and investment financing. In the conclusion, we provide a critical assessment of financialized strategies, highlighting their adverse impacts on core principles of PHCS such as solidarity, stability, and democratic participation.

Keywords: Health, Health Care Financing, Public Health, National Government Health Expenditure, Social Security, Deficit, Debt, General Financial Markets

JEL Codes: I100 Health, I130 Health Care Financing, I180 Public Health, H510 National Government Health Expenditure, Public Health, H550 Social Security, H620 Deficit, H630 Debt, G1 General Financial Markets

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INTRODUCTION

'Health systems' comprise the ensemble of institutions, resources, and people involved in the financing, organization, and delivery of health services at the national level (WHO, 2010). The recognition of the essential nature of health care led to the institution of public health care systems (PHCS) in several countries over the past century. By PHCS, we refer to health systems organized by the public sector and underpinned on the principles of universality, equity, and integrality. This means they are accessible to all citizens, financed on a solidarity basis through compulsory taxation, and committed to the provision of a comprehensive range of health services. PHCS represent the main gateway to health care for the largest part of the population where they exist, besides mitigating inequalities and exclusions of access typical of private systems. Today, one can find public systems across several rich and developing economies such as France (Assurance Maladie), England (National Health Service), Italy (Servizio Sanitario Nationale), Australia (Medicare), Ireland (Hospital Services), Canada (Medicare), Brazil (Sistema Único de Saúde), and Costa Rica (Caja Costarricense de Seguro Social). Their relevance also transcends national frontiers, serving as blueprints for countries still striving to guarantee health as a fundamental right.

PHCS have undergone continuous reforms over the past four decades. There is a vast and rich literature on PHCS transformation, with a large number of works identifying similar justifications and features in different countries. Several authors suggest that the main justifications for reforming PHCS were the need for curbing expenditures and increasing efficiency in the public sector. To pursue these goals, governments implemented measures for cutting costs, capping budgets, privatizing or outsourcing public provision, and expanding the market *rationale* within public structures. For a significant part of this literature, these actions deteriorated the quality and quantity of public provision, intensified inequalities of access among individuals, and increased total health spending (André et al., 2015; Böhm, 2017; Hassenteufel and Palier, 2007; Ortiz et al., 2015; Yilmaz, 2017).

However, recent developments in the Health sector present distinctive features that are yet to be fully apprehended by the literature (Bayliss, 2016; Sestelo, 2017; Vural, 2017). Financial actors and instruments are becoming ever more crucial for the financing and provision of health activities worldwide and bringing about a structural change in the sector. We argue that this is likely to affect public systems, responsible for a large share of health activities in several countries. Despite its significant contributions, the existing literature on PHCS reforms remains anchored in concepts that no longer seem sufficient to grasp the specificities of these latest transformations. Therefore, it seems necessary to update this conceptual framework to better understand present-day reforms in PHCS.

This study proposes to refine the conceptual framework of PHCS transformation by incorporating the concept of 'financialization'. Financialization considers the expansion of the financial sector in size and influence, affecting other dimensions of social, economic, and political life (Aalbers, 2019; Epstein, 2005; Fine et al., 2017). As such, this notion seems particularly useful to apprehend the role of financial actors, instruments, and interests in shaping PHCS today.

The goal of this study is to discuss how financialization changes PHCS. To do so, it combines a theoretical discussion and an empirical investigation. The theoretical part draws on scholarly works on PHCS reforms and financialization to suggest how we can interpret and investigate this process within PHCS. The empirical investigation applies this method to look at the French PHCS (*Assurance Maladie*), examining the increasing participation of financial capital in this case. France is a particularly illustrative case study: on the one hand, it has one of the oldest and largest systems of public health provision in the world; on the other, it is a pioneer on the creation of strategies for attracting financial capital into the system.

The methodology of the empirical investigation consists of a mixed-method approach combining qualitative and quantitative information. We reassess the path of transformations in AM since the 1990s examining policy shifts that allowed the incorporation of financial capital into the system's operation. We focus on three particular changes related to long-term, short-term, and investment financing. The primary sources of data are annual reports and financial statements from Social Security agencies (ACOSS and CADES), statistics from the Health and Solidarity Ministerial Statistical Department`s database (DREES), selected reports from the supreme body for auditing public finances (Cour des Comptes), and documents registered at the national regulatory agency of financial markets (AMF).

The findings reveal a structural transformation in the French PHCS in the last decades, with the financial sector becoming the chief provider of funds for debt refinancing, short-term needs, and capital expenditures, in detriment of public banks and government support. We also identify an internal transformation of public bodies involved in health care financing and provision, with the emergence of financial languages, metrics, instruments, and priorities that enabled and supported shifts in financing. The results suggest that financialized strategies were able to reduce the immediate costs of financing in some cases, but brought new costs and risks that are likely to undermine solidarity, stability, and democratic participation in the long run.

This work contributes to the existing literature on two fronts. For the research in PHCS, it provides a fresh perspective on recent developments, presents original empirical findings, and suggests a grid of analysis for future investigations. For the body of knowledge on financialization, it shows how such a process unfolds in a dimension still largely unexplored.

The article is organized into three parts. In the first part, we lay out the theoretical underpinnings of the research, presenting the conventional framework on PHCS research and introducing the concept of financialization. In the second part, we draw from this review to devise a method for investigation. Finally, we apply this method to examine the French case, providing evidence of how financialization reshaped the financing and the provision of public health care in this case. In the conclusion, we tie together the theoretical and empirical discussions to reflect on the implications of financialized strategies for PHCS.

THEORETICAL DISCUSSION

The conceptual framework in PHCS research

When it comes to the research on PHCS reforms, two trends stand out: the adoption of a private-sector *rationale* in the public system and the incorporation of private actors in the financing and provision of public services. While general trends seem clear, researchers must deal with the complexity and specificities of health systems, which make them to manifest differently in each country. The process of PHCS transformation has been, in fact, a mosaic of ideological and material changes, implemented and combined in different ways in each system and period.

In light of this diversity, the academic literature employed different concepts that allow apprehending the varied aspects of PHCS change. These concepts constitute what we will call the 'conventional' conceptual framework of PHCS research. From a reading of theoretical reviews on health system transformation (André et al., 2015; André and Hermann, 2009; Böhm, 2017; Ewert, 2009; Mackintosh and Koivusalo, 2005; Whitfield, 2006; Yilmaz, 2017), we can argue that the current knowledge on the field is grounded in the notions of 'privatization', 'economization', 'marketization', 'liberalization', 'commercialization', and 'commodification'. There are also terms to differentiate changes occurring *inside* and *outside* the public sector. We can mention the ideas of 'partial' vs 'total' privatization (Starr, 1988) and 'external' vs 'internal' privatization (André et al., 2015).

There seems to be some agreement on the general meaning of each of these concepts. 'Privatization' is the most popular and encompassing term, employed to describe transformations both in the health sector at large and in the public sector in particular. In the first usage, for the Health sector broadly understood, privatization is associated with the growth of private activities and actors, as well as their increasing participation in the economy relative to public ones. In the second sense, considering transformations inside the public sector, privatization acquires different meanings. Strictly speaking, it describes the delegation of parts of the public system to private actors, such as ownership, financing, provision, or management (Starr, 1988). Broadly conceived, it appears as an 'umbrella term' encompassing a variety of ideological and material changes, which received specific names such as 'economization', 'marketization', and 'liberalization. It is worth noting that the 'dictionary definition' of privatization – the total transfer of ownership from the public to the private sector – has little applicability in this case, given that such experiences are rare in the sector (André et al., 2015).

'Economization' denotes the tendency of public bodies to incorporate languages, principles, and methods used in the private sector, along with the entry of professionals and firms from the private corporate sector to work in public structures (Ewert, 2009). The idea of 'marketization' is associated with the reorganization of exchanges within public bodies according to the logic practiced in the private sector, such as when the public sector puts public bodies in competition with one another and with private firms (Hermann and Verhoest, 2012; Whitfield, 2006). Liberalization', in turn, refers to the abolition of monopolies and the entry of more providers delivering goods or services (Hermann and Verhoest, 2012).

Another popular concept is that of 'commercialization', defined as the increasing use of market relations in health care due to several related developments in the public and private sector. This

includes processes already described under the ideas of privatization, marketization, and liberalization: the provision of health care services through market relationships to those able to pay; investment in, and production of, those services, and of inputs to them, for cash income or profit, including private contracting and supply to publicly financed health care; and health care finance derived from individual payment and private insurance (Mackintosh and Koivusalo, 2005). Together, these shifts would lead to 'commodification', understood as the transformation of non-marketable public services (namely those associated with 'essential rights', such as water provision, health care, or housing) into marketable commodities (Swyngedouw et al., 2002).[1]

This framework has been fundamental to understand the trajectory of health systems since the 1980s. However, current developments in the Health sector seem qualitatively and quantitatively different from those that have been extensively examined by seminal health policy studies (Sestelo, 2017). The multiplication of financial undertakings radically transformed the landscape of Health. The forms these developments assume, the actors involved, and the destination of returns differ from those most commonly identified in the past. Public and private actors are increasingly subjected to the influence and control of financial players and engaging in an ever-increasing number of financial instruments and practices. Moreover, health activities are now provided to generate profits for investors and international financial groups, in stark opposition to their original nature (Bahia et al., 2016; Bayliss, 2016; Hunter and Murray, 2019; Lavinas and Gentil, 2018).

Without detracting from their contributions, the concepts mentioned so far were developed at earlier stages of capitalism and with a view on the private corporate sector. The processes they describe are conventionally associated with the growth of private health companies in the public and private sector, namely for-profit ones. Even though researchers recognize the increasing role of financial actors and instruments in pressuring for reforms in PHCS, these concepts do not allow examining the latter in detail. We argue that the concept of financialization can be employed to explain them better. Incorporating this notion can complement the existing analysis of PHCS transformation by shedding light on other actors, instruments, and interests that are playing an increasingly important role in recent developments in these systems.[2]

Financialization and the Health sector

Finance denotes the activity of making money from money (Appadurai, 2015). This comes through the use of instruments such as credit, investments, and speculation, from which financial actors earn interest payments, dividends, capital gains, and fees (Durand and Broder, 2017). By financial actors, we mean those who provide and manage funds, including banks, insurance companies, financial departments of non-financial corporations, investment funds of all types, and the wealthy individuals who invest in them (Chesnais, 2016; Guillen, 2014). The expansion

[1] It is acknowledged that such terms reflect interconnected and mutually reinforcing processes, (Mercille and Murphy, 2017), and the definitions employed can vary from one study to the other. It is beyond the scope of this paper to explore such differences in detail.

[2] We suggest that the privatization and financialization are different but mutually reinforcing processes. A more thorough discussion will be provided in Cordilha (forthcoming).

of such activity in the last decades underpins the concept of financialization, commonly defined as '*the increasing role of financial motives, markets, actors, and institutions in the operation of the domestic and international economies*' (Epstein, 2005: 3). As research in the theme evolved, it became clear that the unprecedented growth and power of the financial sector reached not only other areas of the economy but also social and political life. In this article, we adopt a revised definition that characterizes financialization as '*the increasing dominance of financial actors, markets, practices, measurements, and narratives, resulting in a structural transformation of economies, firms, States, and households*' (Aalbers, 2019: 3). Among several characteristics of this process, financialization pushes for an increasing dependence on financial products for accessing essential goods and services (e.g., loans and insurance), while public provision shrinks and deteriorates (Lavinas, 2017).

One of the cornerstones of the financialization process is the capacity of financial actors to appropriate from stable revenue streams previously considered off-limits for the financial system (Leyshon and Thrift, 2007). Securing stable sources of income is essential for the financial sector as they serve as collateral for lending, investing, and trading, allowing finance to expand their activities and capacity of extracting financial returns (Lavinas, 2018; Storm, 2018). The search for new sources of revenues extends to sectors associated with 'public services', including health, education, housing, and others.

The health sector, in particular, bears large, stable, and low-risk revenue flows that make it highly attractive to financial players. The own nature of health care explains the large volume of funds circulating in the sector, an activity with relatively inelastic demand (individuals will always need and seek care), continuously rising expenditures (due to demographic, medical, and technological developments), and the State's commitment to the financing of services in many countries (either directly or by subsidizing demand and supply). [3] Financial actors are readily available to finance and invest in health actors due to the possibility of creating new assets and securing returns from such flows. Not by chance, investment firms describe the Health sector as '*an island of growth*' and '*a virtually recession-proof industry,'* offering '*the holy trinity of strong growth, recession resistance, and superior historical returns*' (Bain & Company, 2019: 25; 2018: 31).

At the same time, health actors are increasingly receptive to borrowing and attracting investments from the financial sector. With rising costs and increasing constraints to public funding, finance represents an opportunity to top up financing needs and raise additional funds. Public health systems, in particular, face strong incentives for turning toward the financial sector as they need to accommodate growing expenditures within ever more limited budgets. It seems logical that, in this context, financial capital will seek to participate in the financing of PHCS covering financing needs, while using public revenues as collateral to secure returns. However, due to the paucity of research thus far, it remains unclear whether and how the financial sector engages in the financing of public health systems worldwide.

[3] Global health spending is currently around eight trillion dollars per year and is expected to reach over ten trillion per year in the upcoming years (Delloite, 2018).

What we currently know about how financialization reshapes the landscape of the Health sector comes from a rich literature tackling different countries and types of activities (e.g., Andreu, 2018; Bahia et al., 2016; Bayliss, 2016; Cordilha and Lavinas, 2018; Hooda, 2016; Hunter and Murray, 2019; Lavinas and Gentil, 2018; Mulligan, 2016; Sestelo, 2017; Tchiombiano, 2019; Vural, 2017). From a cumulative reading of those works, we can define the financialization of health as its transformation into a financial asset along with an increasing participation of financial actors in the sector. Seddon and Currie (2017: 1) defines financialization in health as '*the exchange of goods and services as financial instruments*', while Bayliss (2016: 4) describes it as the '*transition from a public service to a financial asset*'. Similarly, Hunter and Murray (2019: 9) associates financialization with the process of '*transforming population ill-health into zones for investment and creating saleable commodities that can be traded by domestic and transnational private capital'*. With a view on the actors behind such changes, Vural (2017: 1) shows how this process entails '*a greater reliance of health care providers on financial markets, as well as the increasing penetration of financial actors and institutions into health care provision and funding*'. Likewise, Bayliss (2016: 40) summarizes it as the transformation of health '*from a local community service to a segment of global investment portfolios of international private finance*'.

From the empirical findings of these works, we can suggest that there are two main channels through which finance enters the sector: changes in ownership and financial innovations. Changes in ownership are a result of the total or partial transfer of property rights from health to financial actors, which can occur through different processes. These include, for example, the issuance of shares (public or to selected investors), private equity investments, public-private partnerships (PPPs), and mergers and acquisitions (M&As).[4] Over the last years, these processes expanded at a fast pace across different areas of activity, including hospitals, insurance companies, and service providers, both for and not-for-profit. As a result of such processes, health companies end up listed in financial markets and become part of the portfolio of investment funds and firms (Bahia et al., 2016; Bayliss, 2016; Cordilha and Lavinas, 2018; Hooda, 2016; Lavinas and Gentil, 2018; Sestelo, 2017; Vural, 2017). Though some of these processes are not new in the Health sector, financial actors and activities acquire a prominent role in the present phase that makes it distinct from earlier rounds associated with 'privatization' (Bayliss and Waeyenberge, 2018; Hunter e Murray, 2019).

Financial innovations, in turn, refer to new asset classes and strategies adopted by health actors themselves to finance health activities. Among the ever-growing number of innovations, two prominent ones are health bonds and financial platforms. Health bonds are financial securities created for the financing of specific actions related to health. Public and private institutions sign contracts with investors or issue bonds to raise the necessary funds for such actions, in exchange for future repayment and compensations based on results. The 'Social Impact Bonds' (SIBs) issued by public agencies, the 'Pandemic bonds' from the World Bank, and the 'Humanitarian

[4] Securities issuance refers to the offering of stocks and bonds to investors in exchange for funds. Private equity is a form of investment in which specialized funds raise money from other actors to purchase, restructure, and sell a company for an expected profit. Public-private partnerships are long-term contracts in which the private sector assumes total or part of the financing, building, and/or operation of public projects. PPPs and M&As are often intermediated by financial companies.

Impact Bonds' offered by the Red Cross are some examples of these new methods to finance health policies (Andreu, 2018; Hunter and Murray, 2019). Financial platforms encompass arrangements that articulate actions and pool funds from governments, non-profit organizations, for-profit companies, and financial actors to tackle one specific problem of global health. It replaces, to a certain extent, previous forms of 'humanitarian aid'. Some examples are the 'Global Fund to Fight AIDS, Tuberculosis, and Malaria', a joint initiative of national States and the private sector, and the 'Pandemic Emergency Financing Facility' set up by the World Bank to fight epidemics (Hunter and Murray, 2019; Stein and Sridhar, 2018; Tchiombiano, 2019).

Along with the entrance of financial players, these studies note how health actors themselves tend to change in light of the process of financialization. As finance becomes critical to the sector's operation, there is the emergence of patterns of thinking and behaving characteristic of financial institutions to conform to their standards and meet their requirements. The dissemination of a financial logic within health actors is important as this brings ideological and material impacts over health provision. First, health activities take on a new meaning: generating financial returns rather than prevention and healing. Second, the need for returns impacts decision-making processes about service provision. It alters decisions about what kind of services will be provided, where, to whom, and at what costs and conditions, favouring those that maximize financial returns (Bayliss, 2016; Lavinas and Gentil, 2018; Mulligan, 2016; Sestelo, 2017; Vural, 2017).

The developments described in this section contribute to explain how finance manages to appropriate from revenue streams destined to health activities. Payments from households, governments, and companies underpin the activities upon which financial undertakings flourish, including medical care, ancillary services, insurance, infrastructure, and others. Moreover, these revenues provide secure returns on the investments as they are used to reimburse loans, pay interests, compensate for financial services, and as collateral for securities trading. This shows some of the ways through which revenue streams primarily destined to pay for health activities can be instrumentalized and channelled toward financial actors.

In conclusion, while the presence of financial instruments and actors *per se* does not characterize financialization (health insurance, for example, has a long history in the sector), the present phase seems to be distinguished by the significant ideological and material changes produced by these latest developments. As shown throughout this section, the transformation of health into a financial investment alters how one conceives, funds, and provides care, and reorient resources toward financial players. Despite extensive evidence on how financialization restructures the health sector, there are minimal references to how these changes unfold within public health systems. The following sections present the role usually attributed to PHCS in the process of financialization of health and draw from other strands of research to suggest a different perspective.

Financialization and the public sector

Most of the literature on the financialization of health looks at the private sector, considering developments in segments such as insurers, hospitals, and pharmaceutical companies. The usual

approach to public health systems describes them as a supporting apparatus for the expansion of the private, now highly financialized health sector. From this perspective, financialization affects PHCS by pressuring for austerity and cost-cutting measures, forcing the public sector to focus on the riskiest activities and individuals while private actors can serve only the most profitable ones. While we do not disagree with this view, we argue that financialization also affects PHCS internally, pushing for a greater participation of financial capital in their structures of financing and provision.

However, in contrast to the private sector, there is much less investigation into the consequences of financialization for public systems. Discussions about the use of financial capital by public health actors usually focus on particular events, such as the resort to PPPs for financing infrastructure and, more recently, the issuance of SIBs for piecemeal policy interventions. So far, the only study looking at the effects of financialization for a public health system is Bayliss (2016), who examines developments in the National Health System (NHS) in England. In this seminal study, the author identifies four mechanisms contributing to the spread of financial motives, practices, and actors inside the NHS: the creation of internal markets, the outsourcing of public services, the provision of private services within public structures, and public-private partnerships (there named 'Private Financial Initiatives' – PFIs). Such shifts allow investors to profit from the NHS directly, once PFIs entails government payments to financial companies, and indirectly, strengthening the participation of private providers associated with financial corporations. Despite not fitting the definition of PHCS used in this work, the study of Hooda (2016) for the national public insurance scheme in India also considers how financialization reshaped the country's approach to public provision. It describes the move from a tax-based system of public provision to a tax-financed scheme allowing the poor and informal workers to access to private services and insurance plans, which are backed up by the financial sector.

While these works provide solid evidence of the influence of financialization in the post-1990s reforms, they consist of exploratory and qualitative investigations for specific countries. This means there is still room to advance in terms of the theoretical frameworks and research methods that can be applied to conduct systematic investigations of different PHCSs. Existing studies on the financialization in the public sector can provide valuable insights for advancing these discussions: they show how the public sector at large tends to change due to financialization, which we could apply to the particular case of PHCS.

Studies looking at financialization within public structures (Chiapello, 2017; Fastenrath et al., 2017; Fine and Hall, 2012; Karwowski and Vicencio, 2018) reveal how this process entails more than pressures for austerity and the adoption of 'finance-friendly' monetary and fiscal policies.[5] Based on their findings, financialization in the public sector seems to be associated with the increasing participation and influence of the financial sector in public financing and provision. This comes through changes in the mental frameworks, techniques, financing instruments, and

[5] These studies adopt different approaches that we summarize as financialization in the public sector. This includes, for example, the financialization of public policies (Chiapello, 2017) and the financialization of the State (Karwowski and Vicencio, 2018). Prior to these works, one can find studies for specific arenas of public policies, such as the financialization of social policies (Fine, 2009, 2014; Lavinas, 2015a, 2015b).

organization of public bodies, mirroring those typically found in financial institutions. Such changes have the effect of making financial capital to seem a possible, logical, and desirable solution for funding problems, leading to the adoption of policies promoting financial capital both in and out of the public sphere.

We can further explain how financialization reshapes public bodies by separating these changes into two levels. First, there are changes in financing circuits, which seem to be the most visible way through which financialization redesigns public structures. Changes in financing circuits mean changes in the ways of financing public services, policies, and bodies. Over the last decades, there has been the introduction of new instruments and strategies that create opportunities for the financial sector to finance them in ever higher and diversified ways. One can mention, for example, the creation of new types of public securities, the development of programs to promote existing ones, and the engagement of public bodies in derivative contracts. Such innovations allow the public sector to mobilize funds voluntarily, notably from foreign investors (Chiapello, 2017; Fastenrath et al., 2017; Karwowski and Vicencio, 2018). With these innovations, the financial sector can increase its influence in public affairs in ways that go beyond the traditional mechanism of purchasing sovereign bonds (Lazzarato, 2012; Streeck, 2013).

The provision of incentives and guarantees plays a decisive role in changes in financing circuits. Guarantees are agreements under which a public authority agrees to bear some or all the downside risks of programs or projects, incentivizing the financial sector to participate in these undertakings. Sponsors, banks, capital market investors, and equity providers are some of the actors that can be backed by State guarantees. By withdrawing risks and securing profitability for investors, these measures ensure their participation and guarantee the 'success' of these new forms of financing. Governments can do so in different ways including by guaranteeing minimum levels of returns on the investments, committing to intervene in the event of solvency and liquidity problems, and changing laws and regulations (EPEC, 2011).

Second, this literature shows that changes in financing circuits are part of a broader reorganization of the public administration due to financialization. This reorganization encompasses shifts in the '*conceptions of the world, methods for approaching problems, calculation techniques and decision-making principles*' of public bodies (Chiapello, 2017: 27), incorporating those typical of the financial world. For the sake of simplicity, we can systematize these shifts into five fronts: languages, techniques, organizational structures, financing instruments, and decision-making criteria.

Shifts in languages mean the vocabulary that public bodies apply to present and discuss public policy issues, adopting terms imported from the financial world such as 'investments', 'risks', and 'returns'.[6] The techniques for measuring and reporting public issues are also 'refined' to accommodate this new terminology, including the metrics, indicators, models, and accounting standards used by these bodies. Accordingly, organizational structures undergo profound shifts

[6] It is true that the inclination for framing public issues in purely economic terms is not new. Da Silva (2017), for example, shows how terms such as 'costs' and 'deficits' were already present in the debates on social security financing in France as early as in 1949. Nevertheless, this language clearly evolved in keeping with the development of the financial sector.

to introduce the necessary expertise and technology for working with financial languages, techniques, and financing instruments. This comprises the physical infrastructure of public bodies, how they relate to each other, the individuals working in them, and the working culture they follow. Examples of institutional changes pushed by financialization are the creation of public agencies and departments specialized in financial operations inside public structures, the contracting of professional coming from banks and financial companies, and the 're-education' and 'training' of existing public servants according to their working culture.

Shifts in languages, techniques, and organization create an environment conducive to the adoption of policies favouring financial capital. They shape the decision-making criteria of public bodies, pressing for options that minimize financial costs and risks regardless of broader economic and social impacts. Inside the public sector, they favour changes in financing circuits, making financial instruments appear an increasingly possible and advantageous solution to ease budgetary constraints.

Incorporating financialization into PHCS research

The review presented in the previous section can contribute to devising a method to empirically examine how financialization reshapes PHCS. Building on their insights, we can define the financialization within a PHCS as the increasing participation of financial capital in the system's financing, along with its growing influence over the bodies responsible for its operation. To apprehend this greater participation and influence, we can look at changes in financing circuits and the reorganization of public bodies that accompanied them. Shifts in financing relate, in this case, to the introduction of financing instruments and strategies that allow the private financial sector to lend money directly to bodies responsible for the public health system. As PHCS are country-specific, the ways in which financialization reshape them are likely to assume different forms. To gain further understanding of how this process unfolds in practice, we follow the suggested guidelines to examine the French case, providing clear empirical evidence for financialization in this case.

HOW FINANCIALIZATION RESHAPED THE FRENCH PHCS

This section examines the French case in detail, showing how financialization had a significant impact on the trajectory of the country's PHCS since the 1990s. We show that the participation of financial capital increased dramatically over the years through the introduction of new forms of financing within administrative bodies and service providers. We also highlight the adoption of ideological and behavioural patterns similar to those of financial institutions. After a brief characterization of the system, we portray the emergence of 'financialized strategies' in three dimensions: short-term, long-term, and investment financing. Next, we illustrate the underlying institutional shifts by gathering evidence from different bodies within the system.

The institutional framework of the French public health system

The French PHCS, known as *Assurance Maladie* (AM), is an international reference when it comes to public and effective health care provision. In 2000, AM ranked first among 191 countries in the World Health Organization's comparison of national health care systems (WHO, 2000).[7] Since then, the country maintains better results than the average of advanced countries for the most part of health indicators (OECD, 2019). While the public sector covers more than three-quarters of health expenditures, total spending is in line with neighbouring countries such as Germany and far below that of the United States (WHO, 2019).[8]

Two chief and seemingly paradoxical trends mark the evolution of AM over the last three decades. On the one hand, the government enacted restrictive measures that constrained the public system, fostered private sector growth, and deepened inequalities of access; on the other, it created programs for universalization that incorporated individuals previously excluded from the public insurance scheme (Abecassis et al., 2017; Barbier and Théret, 2009; Batifoulier, 2015). Another key, but less studied part of the reforms, was the adoption of new strategies for additional financing, which we will examine in the next section.

AM is part of a more comprehensive structure of risk coverage, the French Social Security system – *la Sécurité Sociale* (SS). Created in 1945, SS is a public insurance system that protects against risks related to health, old-age, occupational accidents and diseases, and household charges. Accordingly, SS is divided into four 'branches': *Maladie* (Illness), *Retraite* (Retirement), *Accidents du travail et maladies professionnelles* (Occupational injuries and diseases), and *Famille* (Family). As a typical 'Bismarckian' or 'social insurance' model (Wendt et al., 2009), SS is not a single scheme, but a group of different mandatory insurance schemes determined by professional category. AM is a generic term that refers to the health insurance system provided under each SS regime. Since 1999, the country universalized access to health care by entitling individuals ineligible for any scheme to join the General Regime for salaried workers, which now covers more than 90 per cent of the population (DSS, 2019).[9]

The idealizers of SS set out fundamental principles seeking to explicit the system's core values and steer future policies according to them. These include universality (all individuals should be protected), redistribution (resources should go from the most to the least favoured ones), mutualization (each individual should contribute according to their means and receive according to their needs), and integrality (the system should cover a wide range of risks). Together, they underpin the notion of 'national solidarity' present in the text of SS up to this date (République Française, 1945, 2019). Another founding pillar of SS was self-governance, which means that the system should be run jointly by employers, employees, and their representatives,

[7] The WHO's criteria considered indicators of population health, social and regional inequalities, quality of services, and progressivity in financing.
[8] Considering government expenditures and current expenditures as a percentage of the gross domestic product.
[9] For methodological reasons, this work refers to AM as the public health insurance scheme provided under the General Regime. The terms *Illness branch*, *Health branch*, and *Assurance Maladie* will be used indistinctively in reference to this scheme.

independently from the central government (Vahabi et al., 2020).[10] Such a model was deemed essential to protect the workers' interests and ensure democratic participation. The primacy of wages as the main source of funding would allow to further strengthen the workers' leading role, besides securing stable sources of revenues. In line with the general principles of SS, AM defines equality of access, solidarity, and quality of provision as its core tenets (République Française, 2004).

Within AM, the concerted action of public and private providers guarantee access to care. As a model of public insurance, AM reimburses individuals for services acquired in the public or private sector. The public coverage exempts or reimburses the largest share of the standard price for medical appointments, hospitalization, exams, drugs, and other services, at different rates in each case. Individuals bear the remaining costs, that can be paid *out-of-pocket* or covered by a private insurance plan. The largest share of the population benefits from 'complementary' health insurance, mostly run by non-profit organizations.[11] Direct public provision plays a chief role in specific segments such as hospital care, once public establishments offer the majority of hospital beds and treatments in the country (DREES, 2018).

The financing of AM depends on the general budget of SS. SS revenues derive primarily from contributions on wages (*cotisations*), followed by general contributions on several types of income (*contributions sociales*), and State transfers based on general taxation.[12] Collecting agencies (URSAFFS) are responsible for gathering SS revenues from individuals, public, and private institutions, and addressing them to the Agence Centrale des Organismes de Sécurité Sociale (ACOSS) – the Central Agency of Social Security. The central agency allocates resources across SS branches, among which there is the Illness branch (AM). Each SS branch has individual accounts within ACOSS, with revenues and expenditures accounted separately.[13] ACOSS allocates resources by depositing them into each branches' Fund (Caisses). Public hospitals are institutionally and financially autonomous from AM, with separated governance and budgets. Nonetheless, they are largely dependent on it: the lion's share of their revenues – more than 70 per cent – derives from AM payments, while individuals, private insurance, and State transfers respond for the remaining part. SS can also resort to external borrowing, meaning revenues that do not come directly from taxes and contributions.

[10] In France, the public sector is divided into four administrative spheres institutionally and financially separated: the State (central government), other central government agencies, local public administrations, and Social Security administrations. In the latter case, they comprise the mandatory SS schemes (the SS system *strictu sensu*), plus complementary schemes, special funds, the unemployment insurance regime, and public hospitals, among others.

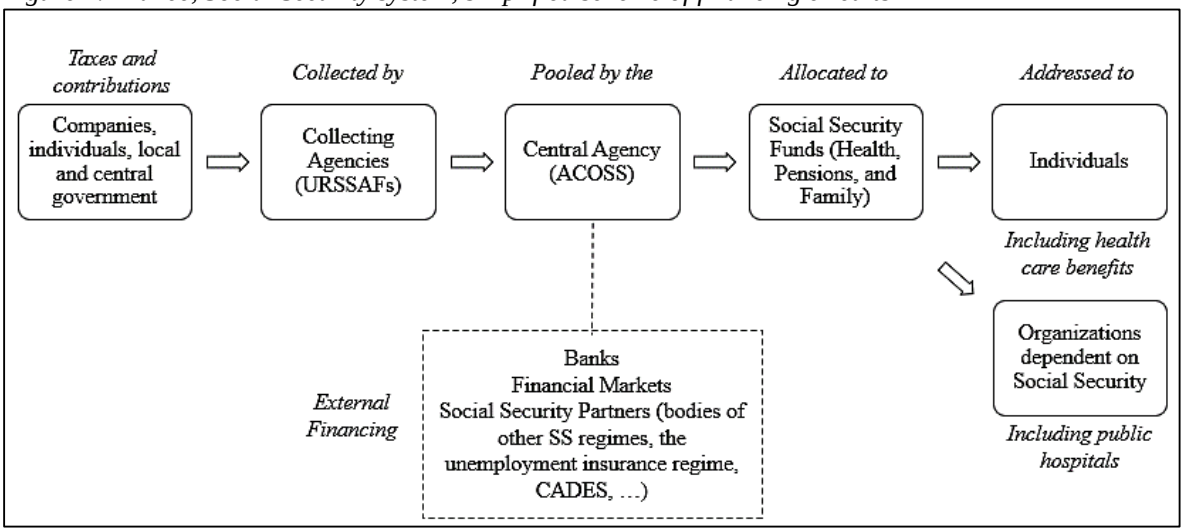
[11] Approximately 95 per cent of the French population is covered by private health insurance plans (DREES, 2019a). The non-profit segment has a historical importance in the French system, dominating the sector. In recent decades, however, it has been losing ground for for-profit insurance companies and incorporating several of their behavioural patterns (Abecassis et al., 2014; Cordilha and Lavinas, 2018).

[12] In 2017, these sources accounted for around 45, 30, and 25 per cent of AM's revenues, respectively (DSS, 2018).

[13] The 'individualization of SS accounts' was not envisaged during the creation of the system and represented a major break with the system's initial ideas (Friot and Jakse, 2015; Vahabi et al., 2020).

Figure 1 illustrates SS' financing circuit.

Figure 1. France, Social Security system, simplified scheme of financing circuits



Note: refers to the General Regime of Social Security. Source: own elaboration based on ACOSS (2018).

Since the 1980s, the financial pressures faced by SS, and AM in particular, led to several waves of reforms aimed at increasing revenues or, most often, curbing spending. In the case of AM, new measures included the introduction or raise of co-payments, a decrease in the rate of reimbursement or stricter conditions to access it, and spending targets determined by the central government. These reforms also affected public hospitals directly, with budget controls and changes in their payment systems. Studies highlight the detrimental impacts of such reforms in terms of fostering gaps in public coverage and deepening inequalities of access among individuals (Abecassis et al., 2017; Batifoulier, 2015; Batifoulier et al., 2018; Domin, 2015).

Turning toward financial markets

Along with reforms to increase revenues and reduce spending, another facet of public sector responses to growing financial pressures came with the deployment of new strategies through which SS could borrow funds from financial actors. From the government's perspective, financial markets offered the possibility of addressing financing issues by borrowing additional funds without weighing on the State budget. The turn of SS toward the markets began precisely in the 1990s, in a period when the system's reported deficits (the difference between revenues and expenditures) were rising year after year. The Illness branch (AM) was the main driver of imbalances in SS accounts: in 1995, the deficit reached 14 billion euros, more than half coming from this branch alone (CCSS, 1996).[14] Therefore, while the reasons for AM's financial

[14] Values converted from Francs to Euros as of 2018 according to the national Consumer Price Index (IPC). As of 2017, the system reported a deficit of just under two and a half billion euros, half of that from AM, which closed the year at around *minus* five billion; the higher results for SS mean the deficits were partially offset by positive results in other branches (CCSS, 2018).

imbalances are a matter of controversy, we can argue that they open the door for financialization within SS.[15]

For the markets, SS represented a safe investment, justifying their willingness to lend. The attractiveness of the French system lies precisely in its scope and strength that entails, on the one hand, high spending needs, and, on the other, large and stable revenue flows. The volume of funds circulating in the SS system reaches nearly unparalleled levels: since the 1990s, annual revenues and expenditures have been around 20 per cent of the country's GDP, and in 2017 the sum of financial operations, including internal exchanges among SS bodies, surpassed two trillion euros (ACOSS, 2018b; CCSS, 1996; INSEE, 2018). In this context, financial actors can lend resources for covering SS spending needs while profiting from revenue inflows to secure the payment of principal, interests, fees, and commissions. The following sections describe the emergence of these new relationships between governments and markets for the financing of SS from the mid-1990s onwards.

Long-term financing

The first mechanism of financialization identified relates to long-term financing, with changes in the management of the 'SS debt' over the years. [16] This debt, previously refinanced via public banks, is now converted into debt securities bought by domestic and foreign investors. Changes in tax policies and regulations, in turn, guarantee the necessary amount of revenues for reimbursing them at a later date. The coupled strategy depends on the Caisse d'Amortissement de la Dette Sociale (CADES) – the Social Debt Amortization Fund, a public agency created in 1996 for carrying out this transition.

The government created CADES to confront the growing challenges posed by the SS debt in the early 1990s. Prior to its creation, ACOSS – the central agency of SS – was in charge of managing the SS debt. It did so by taking advances and loans from a public bank, the Caisse des Dépôts et Consignations (CDC). However, the progressive deterioration of SS accounts, with ever-larger deficits and accruing debt, led to an increasing dependence on the bank's support. Along with higher loans, there were mounting interest charges, which contributed to deteriorating the system's accounts further. In 1993, ACOSS paid around 1.2 billion euros in interest payments to the Treasury and the CDC – ten per cent of the deficit estimated for the year

[15] Financial imbalances in AM are usually attributed to increasing expenditures by the government. However, studies show that poor economic performance and decelerating revenues play an important role in these results (CCSS, 1993; Cornilleau, 2008). This puts in question the very own legitimacy of terms such as 'deficits' and 'debt' when referring to SS accounts (Da Silva, 2017; Duval, 2007). Despite sharing from this critical view, we adopt these terms to conform with the terminology adopted by the government.
[16] In this context, the terms 'social debt' and 'SS debt' refer to the debt accumulated by SS due to recurrent 'deficits' over the years. They can assume different meanings in the literature, referring to the debt of the General Regime (as employed here), that of the ensemble of mandatory basic schemes, or even that of the whole scope of Social Security administrations.

(CCSS, 1994).[17] In the same year, the French Treasury assumed part of the SS debt from ACOSS to ease its financial distress.

In 1996, in the context of a structural reform in the SS system (the *Plan Juppé*), the government enforced a new approach for financing and eventually paying off the 'social debt'. The idea was finding lower interest rates than those from the CDC, refinancing the debt at these more favourable conditions, and benefitting from them to erase the debt in the long run. Such conditions would be found in the financial markets. To reach them, the State created CADES, a financial agency in charge of absorbing and paying the SS debt. Despite being approved as a temporary entity to amortize the debt accumulated up to that year and shut down by 2008, successive legal amendments have transferred new amounts of debt and postponed its closure through to today.[18]

The financial engineering begins by transferring the SS debt accumulated in ACOSS to the new agency through an accounting move authorized by the Parliament.[19] CADES' strategy to refinance and amortize the debt on its balance sheets rests on two pillars. The first is the refinancing of the debt in the financial markets. The refinancing occurs through the issuance of debt securities, which work as a form of loan: CADES sells securities to investors in exchange for funds, repaying the buyers with interests in the future. These funds serve to write off part of the debt lying in the agency's balances. The second pillar of the strategy is the collection of revenues to repay the investors. The government provides CADES with earmarked revenues, mostly from taxes levied on the population at large. This helps to pay for the principal, interests, and commissions on the securities. In sum, the market strategy is viable not only due to better refinancing conditions but also by the mobilization of additional sources of revenues that were not available during the previous strategy.

The new approach allows greater participation of foreign capital in the financing of SS. CADES is authorized to issue securities in foreign markets and currencies, which is precluded for State bonds (Treasury bonds). This is especially attractive to foreign investors, who often face stricter regulatory constraints to invest in countries or currencies other than their own. Through CADES, they can purchase bonds with the same risk levels of the French sovereign bonds, close to zero, under more favourable conditions. Most of the funds borrowed by CADES come from European countries other than France, followed by Asian and North American countries.[20]

[17] Values for the general regime, converted from Francs to Euros as of 2018 adjusted by the National Consumer Price Index (IPC) (CCSS, 1993).
[18] Already in 1998, the end date was postponed to 2014. In 2004, its extinction was suspended. In 2010, a new end date was approved, this time until 2025.
[19] The debt transfers are voted with no defined frequency. In practice, they occur around every three years and cover the largest part of the debt accumulated in ACOSS throughout this period.
[20] In 2016, these regions accounted for 50, 27, and 9 per cent of CADES borrowing, respectively. CADES issues securities in currencies such as US dollars, British pounds, Swiss francs, Japanese Yens, Chinese Yuans, and Polish Zlotys (CADES, 2016).

CADES' instruments were initially limited to long-term debt securities.[21] Over the years, the agency assumed additional roles for SS financing and started using other instruments, including medium and short-term securities. Besides those, CADES also work with derivatives to hedge against fluctuations in foreign markets, engaging with interest and currency swaps.

The interest rates paid on the securities can be fixed, variable, or linked to inflation. During most of the time since its creation, these rates have been higher than those paid by State securities, which was a way of attracting investors who would otherwise just opt for the latter. Interestingly, the atypical scenario of negative interest rates in European financial markets since 2014 reversed this relation. Once CADES enjoys the same levels of creditworthiness of the French State, it could find demand for its securities at negative interest rates.[22] Adding to that, the prerogative of operating in foreign markets and currencies allowed the agency to exploit exchange and interest rate differentials in its favour, obtaining interest rates that, when converted to Euros, were even lower than those paid by the French State (Assemblée Nationale, 2016, 2018).

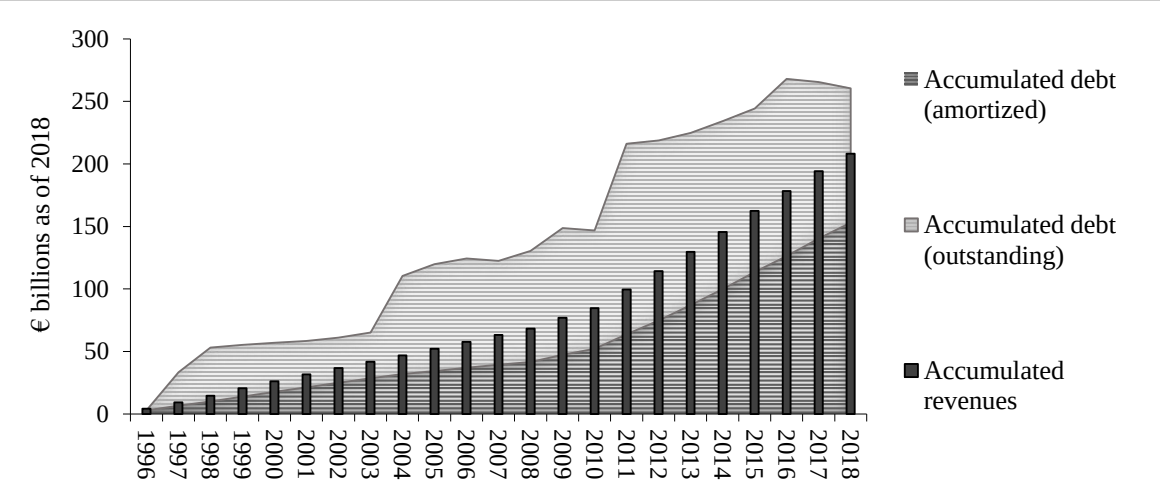
The money to pay for financial returns derives from public revenues partially or entirely earmarked to the agency. The largest part of CADES revenues come from social contributions falling on a wide range of revenues, namely the *Contribution Sociale Généralisée* – CSG (General Social Contribution) and the *Contribution au Remboursement de la Dette Sociale* – CRDS (Contribution for the Reimbursement of the Social Debt). In practice, most of their proceeds come from taxation on wages and social benefits, such as retirement pensions and unemployment insurance payments. A secondary source of revenues is the Fond de Réserve pour les Retraites (FRR) – the Pension Reserve Fund, created in the early 2000s to finance public pensions after 2020. [23] Since 2011, the legislation obliges the FRR to transfer 2.1 billion euros to CADES per year, with no reimbursement.[24] The public health system was also directly implicated in the strategy: through the law n° 2004-810, the government decreed that any future surpluses achieved by AM would be allocated to the agency.

Figure 2 shows the evolution of CADES revenues and debt accumulated since its creation, discriminating between the outstanding share and the one already amortized. The figure reveals a steady growth in both the agency's revenues and debt over the years. From 1996 to 2018, CADES received 208 billion euros from social contributions and the Pension Reserve Fund.[25] Annual revenues have been rising each year, reaching 17 billion euros in 2017. During the same period, CADES absorbed 260.5 billion euros of the 'social debt', from which slightly more than half (59 per cent) had been amortized by 2018.[26] Among the four branches of SS, the one with

[21] The concept of 'long-term' is usually applied to securities maturing in five years or more, in contrast to 'medium-term' securities, ranging from one to five years, and 'short-term' securities, due within less than one year.
[22] In practical terms, this implies repaying a lower amount than the value originally borrowed.
[23] In 2017, the CSG, CRDS, and FRR accounted for 46, 41, and 12 per cent of CADES' revenues (CADES, 2017).
[24] In 2018, FRR's net assets worth 32.6 billion euros (FRR, 2019). The sum of transfers expected from 2011 to 2024, of 2.1 billion euros per year, amounts to 30 billion euros in real values of 2018.
[25] Figures expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).
[26] When the principal and interests are paid, the debt is considered amortized.

the highest weight in the build-up of the debt assigned to CADES was AM; the estimation is that at least 147 billion euros of CADES' debt came from the latter (CNAM, 2018).

Figure 2. France, Social Debt Amortization Fund (CADES), accumulated revenues and debt, 1996-2018



Note: *values estimated by CADES, expressed in euros as of 2018 adjusted by the Consumer Price Index (IPC). The outstanding debt is calculated as total debt transferred to CADES minus the share amortized. The decrease in 2018 values is due to the use of nominal and estimated values*. Source: own elaboration based on CADES (2019).

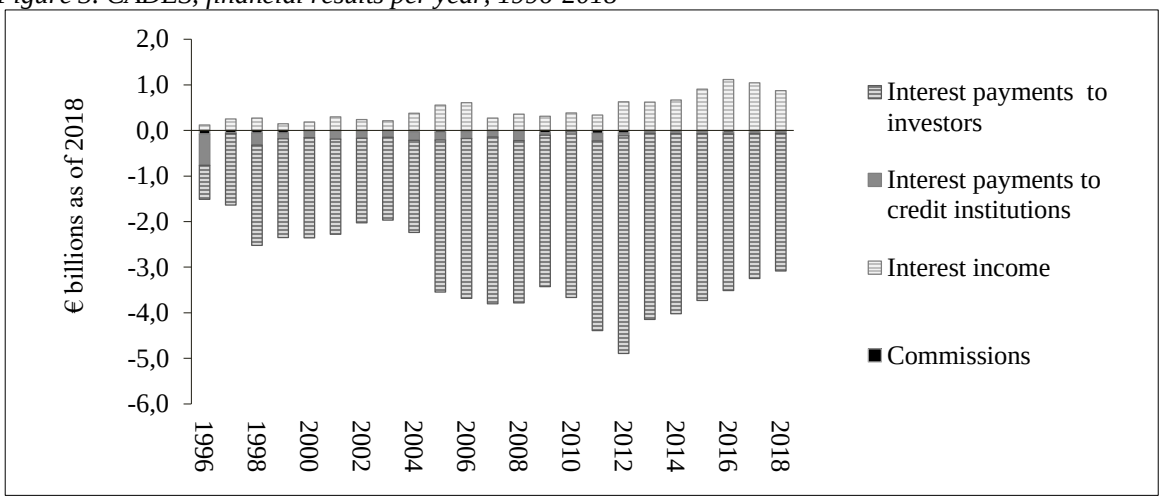
Besides investors, the strategy also depends on a vast chain of intermediation. The main intermediaries are national and foreign banks, which are responsible for issuing and selling the securities.[27] Among the institutions involved, we can find BNP Paribas, KLB, Citigroup/Citibank, Merrill Lynch, BRED, Citigroup, Crédit Agricole, Deutsche Bank, HSBC, Natixis, Nomura, The Royal Bank of Scotland, Société Générale, and UBS (CADES, 2018a, 2018b). The strategy also depends on other types of actors, such as clearinghouses and credit rating agencies. Clearinghouses are privately-owned institutions responsible for settling the transactions, which, in this case, are based in Belgium and Luxembourg. Credit rating agencies, in turn, are private companies that assign grades on financial instruments, signalling to investors the perceived level of risks. CADES is evaluated by the three giants of the rating industry: Standard & Poor's, Moody's, and Fitch Ratings. They have a direct influence on the volume of demand and the minimum levels of returns required on the securities. The risk level assigned to the agency follows that of the French State, considered negligible.

This strategy entails specific costs, namely interest payments to investors and commissions to banks. Figure 3 displays CADES expenditures with these items, which amounted to nearly 72 billion euros from 1996 to 2018. The figure also indicates the agency's financial income, which increased significantly after 2014, when the agency started borrowing at negative interest rates. CADES' financial income amounted to more than ten billion euros in total, peaking at nearly one

[27] This comprises for- and not-for-profit institutions ('mutual' and 'cooperative' banks). Despite this distinction, the latter have been progressively distancing themselves from their original principles and behaving as for-profit banks (Abecassis et al., 2018).

billion euros per year in 2016–17. Deducting these gains, CADES' net expenditures amounted to 61 billion euros from its creation until 2018. These results are not negligible: in 2017, the agency paid 2.2 billion euros in net interests and commissions, the equivalent of the Social Security 'deficit' for that year (CCSS, 2018).[28]

Figure 3. CADES, financial results per year, 1996-2018



Note: values estimated by CADES, expressed in euros as of 2018 adjusted by the Consumer Price Index (IPC). Source: own elaboration based on CADES (1996-2018).

This section described the innovative way in which the French state started managing the Social Security debt in the long run, transforming it into assets and selling them in financial markets. The next section examines how a similar strategy was put in place to cover short-term needs, this time within the existing structure of SS.

Short-term financing

While in 1996 SS turned toward financial markets for long-term borrowing, a similar strategy emerged in 2007 for short-term financing. This time, policy shifts reflected concern not with the debt amassed over the years, but with short-term borrowing for covering current expenditures. The second mechanism of financialization relates to the management of these financing requirements, known as 'Treasury' or 'cash needs'. They arise from mismatches between revenues and expenditures at a certain point of the year, when the amount of funds available at that time is insufficient to cover all benefits and transfers due in the closing days.[29]

ACOSS, the central agency of SS, is in charge of managing the systems' cash needs. Historically, the agency covered them through loans from a public bank, the CDC – the same

[28] Values expressed in euros as of 2018 adjusted by the Consumer Price Index (IPC)

[29] Cash needs are ordinary events in SS accounts and do not necessarily imply a financial imbalance in the system.They can appear, for example, because contributions are typically collected at the end of the month, while part of benefits and transfers are paid at earlier dates. These are temporary mismatches, different from the imbalance between the total amount of SS revenues and expenditures at the year-end that characterizes the SS 'deficit'.

institution that refinanced the SS debt until CADES' creation. In the early 2000s, growing imbalances in SS accounts led to higher cash needs and dependence on CDC loans.[30] ACOSS considered the CDC's interest rates as excessively high; for the sake of illustration, financial charges reached 168 million euros in 2003, more than 10 per cent of the General Regime's deficit in that year (Cour des Comptes, 2004).[31]

By the middle of the decade, short-term financing became a challenge for ACOSS. The CDC showed increasing resistance to covering financing requirements due to the agency's accruing debt with the bank and expectations of higher needs in the future. At the same time, the government was reluctant to approve extra financial support for ACOSS and the latter longed for alternative, cheaper sources of financing (Cour des Comptes, 2004; IGAS, 2018). This set the context leading SS to turn once again toward financial markets.

The strategy for short-term borrowing started in the second half of the 2000s with regulatory changes authorizing ACOSS to issue financial securities. The move allowed the agency to cover cash needs by borrowing directly from financial markets. As in the case of CADES, the securities can replace traditional loans to the extent that investors provide funds when purchasing them, being reimbursed with interests at their maturity. In 2006, the government authorized ACOSS to issue commercial papers (CPs) – short-term securities issued in domestic markets (later renamed negotiable European commercial papers, NEU CPs). In 2010, the authorization included Euro commercial papers (ECP) – short-term securities issued in foreign markets. Over the years, the use of financial instruments became widespread within SS, acquiring other roles besides external borrowing. SS bodies started using financial securities to exchange funds with each other, lend to other SS bodies, and refinance the SS debt still not transferred to CADES, among others (ACOSS, 2019; IGAS, 2018).

Regulatory changes also altered the role of public banks, turning them into a supporting apparatus for market financing. The agreements signed between ACOSS and the CDC after 2006 limited the bank's participation to a small share of the total borrowing authorized by the Parliament at each year. In this way, the financing of SS' short-term needs moved from public bank loans to financial markets, following the pattern of the SS debt.

CADES' and ACOSS' strategies for reaching the financial sector are similar in several ways. Both can issue securities in foreign markets, which provide the largest part of the funds. The issuance of securities comes with the use of other financial instruments, namely derivatives (swaps). The intermediaries involved – banks, clearinghouses, and credit rating agencies – are most often the same. Finally, both enjoy the same levels of creditworthiness of the French State, once the government provide implicit and explicit guarantees against liquidity and solvency problems that may prevent debt repayments. The main difference between the agencies is that ACOSS can only engage in short-term borrowing, which means interest rates are different (usually lower than for long-term borrowing) and securities mature in less than one year.

[30] Similarly to what has been noted for the deficits, increasing cash needs should not be attributed to the growth of expenditures only, but also by the deceleration of revenues and systematic delays in State compensations for payments on its behalf (Cour des Comptes, 2004).
[31] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).

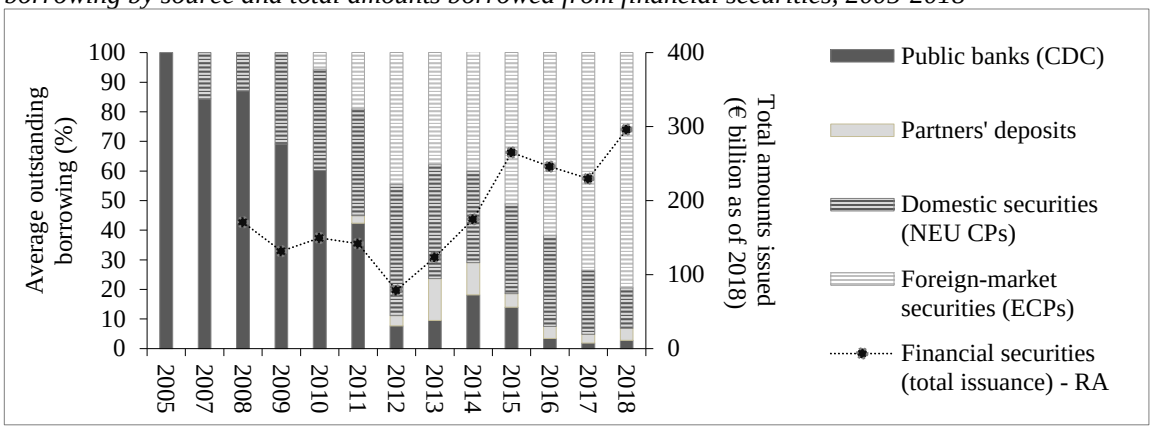
ACOSS remunerates creditors and intermediaries differently according to the financing method. CDC loans entail the payment of interests and commissions at predefined rates, determined by agreements signed every three to four years between the institutions. Debt securities, in turn, require the payment of interest to investors, at fixed or variable rates. Differently from CADES, intermediaries (banks) do not earn commissions directly, but profit when placing the securities in the markets. ACOSS does not specify the sources of funds to pay for interests as in the case of CADES, but they forcefully derive from the agency's revenues. As previously shown (

Figure 1), these revenues come from the pooling of contributions and transfers collected from the population, companies, the State, and other SS institutions.

Figure 4 breaks down the sources of funds for short-term borrowing from the mid-2000s onward, showing a structural change from public banks to financial markets as the chief creditor of SS. Up to 2005, public banks (mainly the CDC) covered the totality of ACOSS' cash needs; from then to 2018, their participation fell from 100 per cent to three per cent. In the same period, the share of financing requirements covered by securities grew from zero to 93 per cent. Foreign capital rose progressively to become the primary source of borrowing in the last years: the share provided by foreign-market securities (ECPs) went from six per cent in 2010 to 79 per cent in 2018. To a lesser extent, SS 'partners' such as the State, CADES, and other Social Security administrations can also exchange funds with ACOSS and subscribe to its securities, providing a minor share of this financing.

Figure 4 also displays the value of funds borrowed through securities in absolute numbers, which amount to two trillion euros from 2007 to 2018. After declining during the first years of the financial crisis, the volume of emissions grew significantly year after year. In the last year of the series, ACOSS issued nearly 300 billion euros in financial securities, reaffirming its status as the world's largest issuer of EPCs among public entities (ACOSS, 2019b). As ACOSS can only borrow in the short-run, its securities are continually maturing and being replaced by new ones. This explains why the total value of emissions at the end of the year is significantly above the average cash needs faced by the agency over the year.

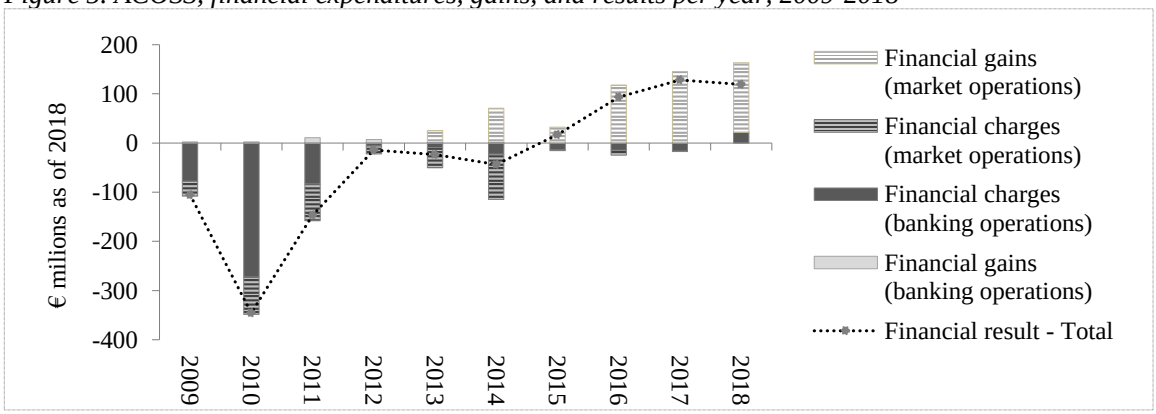
Figure 4. France, Central Agency of Social Security Organizations (ACOSS), share of short-term borrowing by source and total amounts borrowed from financial securities, 2005-2018



Note: share in total financing calculated based on average amounts borrowed per instrument throughout the year. Data based on values in Euros as of 2018 adjusted by the Consumer Price Index (IPC). RA: right axis. Source: own elaboration based on ACOSS (2007-2019a, 2007-2019b) and Securité Sociale (2019).

The costs of ACOSS borrowing include charges from operations with banks (namely the Central Bank and the CDC) and with financial securities. 'Bank charges' comprise interest payments and commissions on loans; 'market charges' refer to interest payments on the securities, plus accessory charges such as margin calls. Figure 5 details ACOSS' financial results over the last decade. Two trends mark the evolution of ACOSS' accounts in this period. The first was a progressive decline in the costs of CDC loans (banking charges) yet an increase in the costs of financial securities (market charges). In total, from 2009 to 2018, ACOSS paid 840 million euros in charges for external borrowing.[32] The second trend was the increase in financial income after 2015. Similarly to CADES, the agency started reaping financial profits in the second half of the decade by borrowing at negative interest rates. The financial results (financial charges net of income) remained thus negative until the mid-2010s and improved afterwards accompanying the atypical interest rates in the Euro Zone.

Figure 5. ACOSS, financial expenditures, gains, and results per year, 2009-2018



[32] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).

Note: values expressed in euros as of 2018 adjusted by the Consumer Price Index (IPC). Source: own elaboration based on ACOSS Combined Accounts (ACOSS, 2009-2018).

The two first sections showed how financialization redesigned public health financing through changes at the broader level of SS. The last section describes how this process impacted public health care providers more directly by looking at developments in the public hospital sector.

Investment financing

The third mechanism through which financialization reshaped the public health system relates to the financing of public infrastructure. It concerns the form of raising funds to revitalize and expand public hospitals, which shifted from government funding to bank credit, namely from private institutions. This shift was implemented via regulatory changes and incentives that encouraged public health institutions to borrow and minimized risks for creditors.

Historically, public health infrastructure was financed by government funding, self-financing, and borrowed funds, at different weights depending on the type of facility.[33] The government played a central role in hospital financing, being the primary sponsor for the largest centres that are responsible for the bulk of hospital services up to today. This is the case of the regional and university hospital centres, for example, built with State funding free of interest payments during the 20th century (Debeaupuis, 2004; Garnier, 2015). Today, these establishments provide around one-third of the beds in the public hospital sector, besides leading medical teaching, research, and innovation (DREES, 2018).

The new approach for public hospital investments emerged in the context of two national programs to revamp the sector in the 2000s. It started in 2002 with a five-year program called *Plan Hôpitaux 2007* (2007 Hospital Plan), extended in 2007 with the *Plan Hôpitaux 2012* (2012 Hospital Plan). These plans aimed at upgrading and expanding public facilities, which required a boost in investment expenditures – the initial goal was raising investments by 30 per cent in five years. However, as previously discussed, the government faced growing pressures to contain social security and particularly AM spending since the 1990s, which meant there was an adverse context for increasing government expenditures with hospitals. This prompted the adoption of so far unknown strategies to boost public hospital investments without resorting to public financing directly.

The government's strategy for boosting investments relied on two central sets of measures. The first was providing direct financial support, which came through capital grants from a public fund financed with AM resources (the Fonds de Modernisation des Établissements de Santé Publics et Privés – Fund for the Modernization of Public and Private Health Facilities).[34] The

[33] In France, the public hospital sector is divided into different types of facilities, including regular hospital centres, regional and university hospital centres, specialized hospital centres, and long-term care facilities.

[34] As a reminder, AM revenues derive from the SS budget, technically separated both from the central government's and from hospitals' budgets.

second was facilitating hospitals to borrow from banks by changing regulations and offering financial incentives. Regulatory changes focused on reducing administrative barriers for hospitals so they could contract loans directly with banks. A key shift was the 'simplification' of procedures, which exempted hospitals from getting the authorization of a supervisory body before taking out loans. Financial incentives came in the form of subsidies for hospitals to repay the loans. These subsidies were ultimately financed by AM, since these funds came from a rise in the volume of transfers to public hospitals. The initial plan assigned 1.9 billion euros in capital grants to public health facilities plus 536 million euros per year in subsidies, which were incremented in the following years. The 2007 plan continued the strategy but focused on subsidies, approving 5.7 billion euros in financial support, namely in this form (Cour des Comptes, 2014).[35]

A few banks, mostly private, dominated lending to public hospitals in the beginning. As of 2010, the largest owners of public hospital debt were Dexia, Caisses d'Épargne, Crédit Agricole, Société Générale, and Crédit Foncier de France. Private banks adopted aggressive commercial approaches and used financial innovations that contributed to a crisis of over-indebtedness in the following decade. They soon began offering 'structured loans' to hospitals, part of which became known as 'toxic loans' after the financial crisis.[36] As of 2012, the value of public hospitals' 'toxic debt' reached 1.5 billion euros (Cour des Comptes, 2014, 2018).[37] After the financial crisis in 2008–9, public institutions such as the CDC, the European Investment Bank, and the Agence Française de Développement (French Development Agency) gained participation by compensating the withdrawal of private lenders (Assemblée Nationale, 2015; Cour des Comptes, 2014).

This strategy entailed high costs to health establishments, namely interest payments to banks. The average interest rate remained above three per cent per year during most of this period, peaking at four per cent just before the 2008 crisis. Interestingly, the general fall in interest rates following the crisis hardly affected the banks' rates. Considering the sharp decline in the interests paid by the French State for its sovereign bonds in this period, one can argue that the costs of bank financing grew significantly higher relative to direct government financing. In 2017, the average interest rate of public hospitals' debt stood at 2.9 per cent per year, for an average length of sixteen to eighteen years; meanwhile, the rate on the *emprunt phare dix ans* (French State's 10-year bond) closed the year at 0.8 per cent (Banque de France, 2019; Finance Active, 2016, 2018).[38]

Similarly to the shifts described in the previous sections, the move from public to private financing came hand in hand with State policies that secured stable sources of income for

[35] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).
[36] Structured loans offer different repayment conditions during the length of the contract, usually attractive in the beginning and stricter in a second phase. They bear higher risks than normal loans, determined by their terms and the complexity of their formulas. In the context of hospital lending, 'toxic loans' refer to structured contracts whose risks could not be assessed.
[37] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).
[38] Figures for hospitals are based on Finance Active's survey, which covers approximately 400 establishments and more than three-quarters of the sector's debt.

financial payments. Public hospitals service the debt using their revenues, which derive mainly from AM transfers (therefore, from SS revenues). Over the last decade, nearly 80 per cent of the sector's annual revenues came from SS transfers (DREES, 2015-2017).

State policies that aimed at withdrawing risks for creditors also played an important role in this case. First, during the 2002 plan, the rise in indebtedness levels far above the original expectations led the government to allocate higher sums of money to hospitals than those initially approved. Second, at the end of the decade, the government intervened to avoid a liquidity crisis in the sector: amidst the financial crash and an observed deterioration in the hospitals' capacity to service the debt, private banks reduced the supply of funds for the sector drastically. In this context, public financial institutions intervened to compensate for the credit crunch and contain the escalation of indebtedness levels (Cour des Comptes, 2014). Third, the government also mobilized public resources to settle illiquid debts in the new decade. As part of bank lending consisted of toxic loans, several hospitals entered a cycle of over-indebtedness when financing conditions changed. In 2014, the State put in place a special fund to finance the earlier exit from such contracts, pooling resources to pay the indemnities required for paying off these debts in advance. The rescue fund cost 678.8 million euros, from which 51 per cent was borne by the public sector (12 per cent by AM and 39 per cent by public hospitals) and 49 per cent by the banks providing these contracts (Cour des Comptes, 2014).[39]

Table 1 displays investment and indebtedness indicators at the beginning of the 'Hospital Plans' and in the following decade. The data allow to apprehend two distinct phases: in the beginning, the strategy allowed for a significant increase in investments, with a simultaneous rise in indebtedness to finance those projects; in the following decade, investments began to decelerate, while indebtedness levels continued to rise. The sector's 'investment effort' (the share of annual revenues allocated to investments) increased from 7.2 per cent in 2002 to 11 per cent in 2009. In the new decade, it sunk to reach 5.2 per cent in 2018. In absolute numbers, public hospital investment almost doubled in the 2000s, from 4.4 billion euros in 2003 to 7.4 billion in 2009. It started slowing down afterwards until reaching 3.7 billion in 2018 (Cour des Comptes, 2014; DREES, 2019b).[40]

Contrary to investments, public hospital debt increased without decelerating in the following decade. The 'indebtedness ratio' in the public hospital sector (the amount of debts in relation to total resources – equity, provisions, and debts) rose from around 30 per cent in 2002 to more than 50 per cent in 2018. In absolute values, the sector's outstanding debt went from approximately 12 billion euros in 2003 to 30 billion euros in 2018.[41]

The decline in investments and the rise in indebtedness suggest that a larger share of hospital revenues started being drifted away to other purposes, including to service debt costs. The table also provides indicators for the costs of this strategy, which corroborate the argument. The costs

[39] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC). Only private banks engaged in toxic loans, namely Dexia, bailed out by the French State after the crisis at a cost of over six billion euros (Carnegy, 2013).
[40] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).
[41] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).

can be observed through the sector's financial results, which comprise the hospitals' revenues and expenditures from financial operations. In practice, they reflect the evolution of interest charges, which have the largest weight in the indicator. The cost of financial operations doubled from around 500 million euros per year at the beginning of the 2000s to approximately one billion by the late 2010s. From 2002 to 2018, the total amount of resources channelled from hospitals to the financial sector – meaning financial expenditures net of financial income – amounted to 13.7 billion euros.

Table 1. French Public hospital sector, financial expenditures and debt indicators, 2002, 2010-2018

		2002	2010	2011	2012	2013	2014	2015	2016	2017	2018
% of revenues	Investment effort	7.2%	10.2%	9.4%	8.8%	7.6%	7.1%	6.6%	5.9%	5.7%	5.2%
	Indebtedness ratio	32.9%	47.4%	48.7%	49.6%	49.8%	50.0%	50.5%	51.5%	51.6%	51.6%
Billions of euros	Financial result	-0.5	-0.8	-0.9	-1.0	-1.1	-1.1	-1.1	-1.0	-0.9	-0.9
	Outstanding debt	n.a.	26.3	28.1	29.4	30.2	30.2	30.6	30.8	30.4	29.4

Notes: values in Euros as of 2018 adjusted by the Consumer Price Index (IPC). Investment effort: investment spending as a share of revenues. Indebtedness ratio: outstanding debts as a share of stable resources (equity, provisions, and debts). n.a.: non-available. Source: own elaboration based on DREES (2010-2014, 2015-2017).

In conclusion, the government's support for credit financing facilitated loans but did not provide the hospitals with the necessary financial security for them to fully repay their debts. The relatively high interest charges, coupled with an insufficient rise in revenues for hospitals, contributed to a situation of growing indebtedness. After the end of the second investment plan, around one-third of public health establishments were 'excessively indebted'.[42] Thus, the strategy paradoxically boosted investments at first but reduced the hospitals' investment capacity afterwards in light of increasing debt costs. In the end, the plans ended up facilitating access to credit more than effectively financing investments (Cour des Comptes, 2014). Since 2012, negative financial results accompanied a deterioration of operational results (related to the provision of health services directly) (DREES 2010-2014, 2015-2017). Combined with high indebtedness levels, this led to a long-lasting crisis in the sector that continues to date.

In addition to bank loans, part of the sector also started resorting to financial securities for financing capital and current expenditures. This is especially the case of *Assurance Publique-Hôpitaux de Paris* (AP-HP), the central network of public hospitals in the capital and the largest one in Europe. AP-HP joined the financial markets in the early 2000s, issuing long-term securities to borrow funds for investing. Later on, in 2016, the institution expanded the practice resorting to short-term securities to cover operational costs. Smaller hospitals entered the markets by grouping and issuing securities collectively, as financial markets require minimum levels of scale that most establishments alone cannot reach (Cour des Comptes, 2014). The use

[42] According to the criteria for 'excessive indebtedness' set by the national decree n. 2011-1872.

of financial instruments is still limited in the sector: as of 2017, 10 per cent of public hospitals' debt came from financial securities, while 90 per cent was due to bank loans. Nevertheless, the practice gained relevance in recent years, becoming the primary source of external financing for some of the establishments that adopted them. In the case of AP-HP, more than 70 per cent of its debt was in the form of financial securities by the end of 2017, more than half held by foreign investors (AP-HP, 2018a, 2018b).[43]

Underlying transformations in the public sector

In previous sections, we argued that changes in financing circuits are the most visible stage of a more profound transformation in the public sphere influenced by financialization. To illustrate how this unfolds in the French case, we can point out, in a non-exhaustive way, to changes within the institutions of SS that enabled and accompanied these shifts in financing.

Starting with transformations in language, the long-standing use of economic terms to discuss SS issues has been enlarged in this more recent period to include concepts from the financial sector. The debate on the system's financing is no longer informed only by expressions such as 'increasing revenues,' 'reducing costs', and 'improving efficiency'. The government and SS bodies themselves now present SS financing challenges as a matter of 'debt management,' requiring measures of 'risk diversification' and 'cost optimization' (see, for example, ACOSS 2019a, 2018a). The forms of measuring, accounting, and reporting were adapted to fit this new form of framing and solving problems. Among technical shifts, we can cite adjustments in the models used to estimate financing needs, structures of balance sheets, and layouts of reports submitted to authorities, emphasizing notions such as 'risks' and 'returns' (IGAS, 2018).

The financing circuits of by SS bodies also changed significantly with the incorporation of new financing instruments, namely securities and bank loans. As previously examined, these shifts allowed SS bodies to borrow directly from financial actors without central government intermediation. The use of financial instruments became widespread within the SS system, serving to finance debts, current, and capital expenditures. Moreover, they also changed how SS bodies exchanged funds with each other, as an increasing part of such transactions used securities rather than regular cash deposits (see, for example, ACOSS, 2018c).

These new strategies required a physical reorganization of the public sector to provide the necessary expertise and infrastructure for carrying out financial operations. In this case, we can mention the creation of new public agencies (such as CADES), the setting-up of financial departments in existing ones (as in ACOSS), and the recruitment of professionals from the financial sector to work in them. ACOSS provides as a prime example of this reorganization process: the agency created a specialized unit dedicated to financial operations, divided into 'front,' 'middle,' and 'back office', as in conventional financial institutions; the size of the staff in charge of market operations doubled in ten years, bringing in professionals from the banking,

[43] Values expressed in euros as of 2018 adjusted by the National Consumer Price Index (IPC).

insurance, and corporate sectors; finally, part of them was recruited under special contracts, with pay scales akin to those offered by financial institutions (IGAS, 2018).

We can also point to the emergence of new goals typical of financial institutions within SS agencies, who had now the instruments and incentives to seek market opportunities for maximizing results. SS agencies started trading securities, engaging in derivatives, and exploring exchange rate differentials to reduce financing costs. The arrival of negative interest rates in the Eurozone exacerbated this trend, as the aim of lowering costs gave way to that of reaping financial income by borrowing in strategically selected markets.

Such shifts reflect the view of SS as a financial undertaking bringing risks and returns, which contrasts with its interpretation as a mechanism to improve welfare and foster income redistribution. The conflict between these approaches is evident in the statement of CADES' former president before the National Assembly: '*When CADES was created, I was working as an insurer. At the time, I prohibited the purchase of CADES' securities, considering that social security should not be financed in such a way'* (Assemblée Nationale, 2016: 15).

CONCLUSIONS

In the first part of the article, we presented the 'state of the art' in the current research on public health care systems and called attention for the need to incorporate the concept of financialization to better understand recent developments. In the second part, we explored ways in which financialization altered the dynamics of the Health and public sectors, and suggested a method to investigate the process of financialization within public health systems. In the third part, we applied this method to examine the French case.

The empirical findings suggest that financialization exerts a greater influence on present-day developments in *Assurance Maladie* than what is usually acknowledged in the literature. They show an increasing participation and influence of the financial sector within the PCHS over the last three decades. We examined the incorporation of financial instruments into SS financing, along with a broader requalification of languages, techniques, organization, and goals within SS bodies aligned to those of finance.

These results are significant as they reveal an attempt to dissociate SS financing from the public fund. As financialized strategies allow SS addressing financial imbalances by borrowing from banks and financial markets, they support the advance of a neoliberal State based on less taxation and lower public spending. These strategies also bring adverse impacts on income redistribution, economic stability, and democratic participation within SS; consequently, they can undermine the system's capacity to fulfilling the roles for which it was created.

The new logic poses challenges for income redistribution once the funds to remunerate financial actors are drawn from the population at large, namely from workers, retirees, and recipients of social benefits. This has important distributional impacts, contributing to concentrate wealth amongst individual investors and financialized firms. Besides channelling income from the

poorest to those at the top of the distribution, these strategies also contribute to transferring national wealth to other countries, as foreign capital is the chief lender for SS.

The finance-based strategy also exposes SS to higher volatility and new kinds of risks. The system's operation becomes dependent on the availability and costs of capital in the national and international markets, which are determined by multiple factors beyond the State's control. In other words, SS financing becomes contingent on the 'moods' of the markets. It also becomes exposed to risks from which it was previously isolated, including liquidity risks (as the availability of capital fluctuates over time) and interest risks (once the costs of borrowing depend on the market rates at that moment). The increased volatility in SS financing can undermine the system's capacity to function as a buffer against economic cycles, and might even exacerbate them.

Lastly, these strategies pose challenges for democratic participation to the extent that financial trading reduces transparency in the use of public money. The origins of funds for SS financing (and the destination of reimbursements later on) cannot be fully known due to confidentiality agreements and exchanges on secondary markets. Financial intermediaries exacerbate this opacity, often refraining from providing publicly available information. Even public managers themselves admit not having complete knowledge of the final holders of social security bonds.

The drawbacks of financialized strategies make it essential to continue the research on financialization within PHCS. The first lesson from this study is that there is no dichotomy between large systems of social protection and public health care, on the one hand, and the advance of financialization, on the other. In fact, it was precisely the magnitude of the French Social Security system that justified the implementation of financialization mechanisms of similarly grand proportions. The second lesson is that such shifts are not natural, but a product of deliberate State decisions toward the markets. In our case study, they involved restrictions to public funding, regulatory changes, financial incentives, and guarantees against credit risks, among others.

Considering that austerity, market-friendly government agendas, and a growing power of financial actors are common trends in several countries, the financialization of PHCS represents an important research agenda. Future studies should emphasize the discretionary character of such developments and the possibility of devising alternatives that can enhance redistribution, transparency, and democratic participation.

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References

Aalbers, M.B. (2019) 'Financialization', *The International Encyclopedia of Geography: People, the Earth, Environment, and Technology*, pp. 1–12. Oxford: Wiley.

Abecassis, P., N. Coutinet, and J.-P. Domin (2018) 'Les Transformations de l'Assurance Maladie Complémentaire à La Lumière de La Démutualisation/Hybridation Des Banques Coopératives' (Transformations of Complementary Health Insurance in the Light of the Demutualisation/Hybridization of Cooperative Banks), *Revue d'économie Industrielle* (161): 9–38.

Abecassis, P., P. Batifoulier, N. Coutinet, and J.-P. Domin (2017) 'Éditorial : La Généralisation de l'Assurance Maladie Complémentaire: Comment Faire Rimer Inefficacité Avec Inégalité' (Editorial: The Generalization of Complementary Health Insurance: How to Rhyme Inefficiency with Inequality), *Revue Française de Socio-Economie* 18(1): 13–22.

Abecassis, P., N. Coutinet, and J.-P. Domin (2014) 'Les Principes Mutualistes Confrontés Aux Modalités de Regroupement Des Organismes Complémentaires d'Assurance Maladie', (The Mutualist Principles Confronted With The Re-Grouping Modalities Of Complementary Health Insurance Organisations) *Revue Internationale de l'économie Sociale* (331): 60–75.

ACOSS (Agence Centrale des Organismes de Sécurité Sociale) (2007-2019a) 'Comptes Annuels' (Annual Accounts). Montreuil.

ACOSS (2007-2019b) 'Rapports Thématiques - Conjoncture et Financement' (Thematic Reports - Context and Financing). Montreuil.

ACOSS (2009-2018) 'Comptes Combinés' (Combined Accounts). Montreuil.

ACOSS (2018a) 'Rapport Thématique - Conjoncture et Financement 2017' (Thematic Report - Context and Financing 2017). Montreuil.

ACOSS (2018b) 'Rapport Annuel 2017' (Annnual Report 2017). Montreuil.

ACOSS (2018c) 'Comptes Combinés 2017' (Combined Accounts 2017). Montreuil.

ACOSS (2019a) 'Comptes Annuels 2018' (Annual Accounts - 2018). Montreuil.

ACOSS (2019b) Webpage - Investisseurs (Webpage - Investors). https://www.acoss.fr/home/investisseurs.html (accessed 2 June 2019).

Agartan, T. (2012) 'Marketization and Universalism: Crafting the Right Balance in the Turkish Healthcare System', *Current Sociology* 60(4): 456–71.

André, C., P. Batifoulier, and M. Jansen-Ferreira (2015) 'Privatisation de La Santé En Europe Un Outil de Classification Des Réformes'. CEPN Working Papers 2015–02.

André, C. and C. Hermann (2009) 'Privatisation and Marketisation of Health Care Systems in Europe', in M. Frangakis et al. (eds) *Privatisation against the European Social Model: A Critique of European Policies and Proposals for Alternatives*, pp. 129–44. London: Palgrave Macmillan.

Andreu, M. (2018) 'A Responsibility to Profit? Social Impact Bonds as a Form of "Humanitarian Finance"', *New Political Science* 40(4): 708–26.

Appadurai, A. (2015) *Banking on Words*. Chicago/London: The University of Chicago Press.

Assemblée Nationale (2015) Commission des Affaires Sociales. 'Projet de Rapport d'information sur la dette des établissements publics de santé' (Social Affairs Committee. Draft Information Report on Public Health Care Establishments' Debt). Paris.

Assemblée Nationale (2016) Commission des Finances, de l'économie générale et du contrôle budgétaire. 'Compte rendu du 9 mars 2016' (Committee on Finance, General Economics and Budgetary Control. Minutes of 9 March 2016). Paris.

Assemblée Nationale (2018) Commission des Affaires Sociales. 'Comptes rendus de la Commission des Affaires Sociales pour le Projet de loi de financement de la sécurité sociale pour 2019 - Tome I' (Social Affairs Committee. Minutes of the Social Affairs Commission for the Social Security Financing Bill for 2019 - Volume I). Paris.

AP-HP (Assistance Publique - Hôpitaux de Paris) (2018a) Programme d'émission €2,500,000,000 Euro Medium Term Note Programme. URL: https://www.aphp.fr/programme-demissions-de-titres (accessed 3 October 2019).

AP-HP (Assistance Publique - Hôpitaux de Paris) (2018b) Présentation de l'Institution Aux Investisseurs (Presentation to Investors). Paris, November 15, 2018.

Bahia, L. et al. (2016) 'From Health Plan Companies to International Insurance Companies: Changes in the Accumulation Regime and Repercussions on the Healthcare System in Brazil', *Cadernos de Saúde Pública* 32: S1–13.

Bain & Company (2018) Global Private Equity Report 2018. Boston.

Bain & Company (2019) Global Private Equity Report 2019. Boston.

Banque de France (2019) 'Taux Indicatifs Des Bons Du Trésor et OAT' (Indicative Rates for Treasury Bills and OATs), *Banque de France*. https://www.banque-france.fr/statistiques/taux-et-cours/taux-indicatifs-des-bons-du-tresor-et-oat (accessed 2 June 2019).

Barbier, J.-C. and B. Théret (2009) *Le Système Français de Protection Sociale (The French Social Protection System)*, Repères. Paris: La Découverte.

Batifoulier, P. (2015) *Capital Santé: Quand Le Patient Devient Client (Health Capital: When the Patient Becomes a Client)*. Paris: La Découverte.

Batifoulier, P., N. da Silva, and J.-P. Domin (2018) *Économie de La Santé (Health Economics)*. Malakoff: Armand Colin.

Bayliss, K. (2016) 'The Financialisation of Health in England: Lessons from the Water Sector'. Leeds: FESSUD Working Paper Series 131.

Bayliss, K. and E. Van Waeyenberge (2018) 'Unpacking the Public Private Partnership Revival', *The Journal of Development Studies* 54(4): 577–93.

Böhm, K. (2017) *The Transformation of the Social Right to Healthcare: Evidence from England and Germany*. London: Routledge.

CADES (Caisse d'Amortissement de la Dette Sociale) (1996) 'Rapports financiers' (Financial Reports). Paris.

CADES (Caisse d'Amortissement de la Dette Sociale) (2016) 'Conférence de Presse 2016' (Press Conference 2016). Paris, December 13, 2016.

CADES (Caisse d'Amortissement de la Dette Sociale) (2017) 'Rapport Financier' (Financial Report). Paris: CADES.

CADES (Caisse d'Amortissement de la Dette Sociale) (2018a) 'Programme d'Émission €10,000,000,000 Negotiable European Medium-Term Note'. URL: https://www.banque-france.fr/sites/default/files/fileadmin/user_upload/banque_de_france/Politique_Monetaire/Services/Service_a_la_Place_bancaire_et_financiere/Dossiers_de_Presentation_Financiere_des_emetteurs_de_TCN/DPFLT180020174.pdf (accessed 3 October 2019).

CADES (Caisse d'Amortissement de la Dette Sociale) (2018b) 'Programme d'Émission €65,000,000,000 Global Medium-Term Notes'. URL: https://www.amf-france.org/technique/multimedia?docId=c7a16aa4-ed6f-47ef-a9c9-9beea5a6126c&famille=BDIF&bdifId=5820-81_18-0285 (accessed 3 October 2019).

CADES (Caisse d'Amortissement de la Dette Sociale) (2019) 'Press Release 2018 Annual Results'. Paris, December 2019.

Carnegy, H. (2013, July 18) 'France's Losses on Dexia Bailout Hit €66bn', *Financial Times (18/07/2013)*.

CCSS (Commission des Comptes de la Sécurité Sociale) (1993) 'Les Comptes de la Sécurité Sociale' (Social Security Accounts). Paris.

CCSS (Commission des Comptes de la Sécurité Sociale) (1994) 'Les Comptes de la Sécurité Sociale' (Social Security Accounts). Paris.

CCSS (Commission des Comptes de la Sécurité Sociale) (2018) 'Les Comptes de la Sécurité Sociale' (Social Security Accounts). Paris.

Chesnais, F. (2016) *Finance Capital Today - Corporations and Banks in the Lasting Global Slump*. Leiden/Boston: Brill.

Chiapello, È. (2017) 'La Financiarisation Des Politiques Publiques', *Mondes En Développement* 178(2): 23–40.

CNAM (Caisse Nationale d'Assurance Maladie) (2018) 'Comptes CNAM 2017' (CNAM Accounts 2017). Paris.

Cordilha, A.C. (forthcoming) 'Reshaping Public Health Care Systems in the Age of Financialization: Lessons from France and Brazil'. Doctoral Thesis. Université Sorbonne Paris Nord, Centre d'Économie Université Sorbonne Paris Nord (CEPN), Villetaneuse.

Cordilha, A.C. and L. Lavinas (2018) 'Transformações Dos Sistemas de Saúde Na Era Da Financeirização Lições Da França e Do Brasil' (The Reshaping of Healthcare Systems in the Age of Financialization Lessons from France and Brazil), *Ciência & Saúde Coletiva* 23(7): 2147–58.

Cornilleau, G. (2008) 'Le Financement de l'assurance Maladie En Question' (Assurance Maladie's financing in question), *Les Tribunes de La Santé* 21(4): 71–7.

Cour des Comptes (2004) 'La Securité Sociale - Synthèse Du Rapport de La Cour Des Comptes' (Social Security - Summary of the Court of Auditors' Report). Paris: Cour des Comptes.

Cour des Comptes (2014) 'La dette des établissements publics de santé (Public health establishments' debt). Paris: Cour des Comptes.

Cour des Comptes (2018) 'Rapport public annuel, 6: la dette des hopitaux' (Annual Public Report, 6: Hospital Debt). Paris: Cour des Comptes.

Da Silva, N. (2017) 'Le Mythe Du « trou de La Sécu » à l'aune Des Débats Parlementaires de 1949 (The Myth of the 'Social Security Deficit' in light of the Parliamentary Debates of 1949)', *Economie Sociale et Économie Politique. Regards Croisés Sur l'histoire et Sur Les Enjeux Contemporains*, pp. 75–92. Louvain: Presses Universitaires de Louvain.

Debeaupuis, J. (2004) ‘Le Financement Des Hôpitaux: Une Maîtrise Générale Rénovée Mais Des Enjeux de Formation et de Recherche Non Résolus’ (Hospital Financing: A Renewed General Control, but Unresolved Training and Research Issues), *Les Tribunes de La Santé* 3(2): 47–55.

Delloite (2018) ‘Global health care outlook - Shaping the future.’ URL: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/gx-lshc-hc-outlook-2018.pdf (accessed 3 October 2019).

Domin, J.-P. (2015) ‘Réformer l’hôpital Comme Une Entreprise Les Errements de Trente Ans de Politique Hospitalière (1983-2013) (Reforming the Hospital As A Business: The Mistakes of Thirty Years of Hospital Policy (1983-2013))’, *Revue de La Régulation. Capitalisme, Institutions, Pouvoirs* (17).

DREES (Direction de la Recherche, des Études, de l’Évaluation et des Statistiques) (2018) ‘Les Établissements de Santé’ (Health Establishments). Paris.

DREES (Direction de la Recherche, des Études, de l’Évaluation et des Statistiques) (2019a) ‘La complémentaire santé: acteurs, bénéficiaires, garanties’ (Complementary health insurance: actors, beneficiaries, guarantees). Paris.

DREES (Direction de la Recherche, des Études, de l’Évaluation et des Statistiques) (2019b) ‘Les Établissements de Santé (Health Establishments)’. Paris.

DREES (Direction de la Recherche, des Études, de l’Évaluation et des Statistiques) (2015-2017) Les Dépenses de santé (Health Accounts). Paris.

DREES (Direction de la Recherche, des Études, de l’Évaluation et des Statistiques) (2010-2014) Comptes de la santé (Health Accounts). Paris.

DSS (Direction de la Sécurité Sociale) (2018) Les Chiffres Clés de la Sécurité Sociale (Key Figures of Social Security). Paris.

DSS (Direction de la Sécurité Sociale) (2019) Les Chiffres Clés de la Sécurité sociale (Key Figures of Social Security). Paris.

Durand, C. and D. Broder (2017) *Fictitious Capital: How Finance Is Appropriating Our Future*. London/New York: Verso.

Duval, J. (2007) *Le Mythe Du « trou de La Sécu » (The ‘Social Security Deficit’ Myth)*. Paris: Raisons d’agir.

Epstein, G. (2005) ‘Introduction: Financialization and the World Economy’, *Epstein, G. (Ed.): Financialization and the World Economy*, pp. 3–16. Cheltenham: Edward Elgar.

European PPP Expertise Centre (EPEC) (2011) ‘*State Guarantees in PPPs - A Guide to Better Evaluation, Design, Implementation and Management*.’ URL: https://www.eib.org/en/publications/epec-state-guarantees-in-ppps (accessed 3 June 2019).

Ewert, B. (2009) ‘Economization and Marketization in the German Healthcare System: How Do Users Respond?’, *German Policy Studies* 5(1): 21–44.

Fastenrath, F., M. Schwan, and C. Trampusch (2017) ‘Where States and Markets Meet: The Financialisation of Sovereign Debt Management’, *New Political Economy* 22(3): 273–93.

Finance Active (2016) *Observatoire Finance Active 2016*. Paris.

Finance Active (2018) *Observatoire de Finance Active 2018*. Paris.

Fine, B. (2009) ‘Financialisation and Social Policy’. Presented at the UNRISD conference on the “Social and Political Dimensions of the Global Crisis: Implications for Developing Countries” 12 – 13 November 2009, Geneva.

Fine, B. (2014) ‘The Continuing Enigmas of Social Policy’. Geneva: UNRISD Working Papers 2014-10.

Fine, B. and D. Hall (2012) ‘Terrains of Neoliberalism: Constraints and Opportunities for Alternative Models of Service Delivery’, *McDonald, D. and G. Ruiters (Eds.) Alternatives to Privatization: Public Options for Essential Services in the Global South*, Routledge Studies in Development and Society, pp. 45–70. London: Routledge; Pretoria: HSRC.

Fine, B., A. Saad-Filho, K. Bayliss, and M. Robertson (2017) ‘Thirteen Things You Need to Know about Neoliberalism’, *Critical Sociology* 43(4–5): 685–706.

République Française (1945) Order N° 45-2259.

République Française (2004) Loi 2004-810.

République Française (2019) Code de La Sécurité Sociale.

Friot, B. and C. Jakse (2015, December) ‘Une Autre Histoire de La Sécurité Sociale’, *Le Monde Diplomatique*.

FRR (2019, February 19) ‘Communiqué de Presse’. http://www.fondsdereserve.fr/documents/communique-de-presse-performance-du-frr-en-2018.pdf (accessed 3 June 2018).

Garnier, D. (2015, March 1) ‘Les Hôpitaux Français Intoxiqués (Intoxicaded French Hospitals)’, *Club de Mediapart*. https://blogs.mediapart.fr/denis-garnier/blog/010315/les-hopitaux-francais-intoxiques (accessed 3 June 2019).

Guillen, A. (2014) ‘Financialization and Financial Profit’, *Brazilian Journal of Political Economy* 34: 451–70.

Hassenteufel, P. and B. Palier (2007) ‘Towards Neo-Bismarckian Health Care States? Comparing Health Insurance Reforms in Bismarckian Welfare Systems’, *Social Policy & Administration* 41(6): 574–96.

Hermann, C. and K. Verhoest (2012) ‘The Process of Liberalisation, Privatisation and Marketisation’, *Privatization of Public Services*, pp. 6–32. London/New York: Routledge.

Hooda, S.K. (2016) ‘Health in the Era of Neoliberalism: Journey from State Provisioning to Financialization.’ New Delhi: ISID Working paper 196.

Hunter, B.M. and S.F. Murray (2019) ‘Deconstructing the Financialization of Healthcare’, *Development and Change* 50(5): 1263–87.

IGAS (Inspection Générale des Affaires Sociales) (2018) ‘La Gestion de Trésorerie de l’Agence Centrale des Organismes de Sécurité Sociale’ (The Cash Management of the Central Agency of Social Security Bodies). Pairs: Report IGAS n. 2017-099R.

INSEE (Institut National de la Statistique et des Études Économiques) (2018) ‘Comptes Nationaux Annuels’ (Annual National Accounts). Paris: INSEE.

Karwowski, E. and M.C. Vicencio (2018) 'Financialising the State: Recent Developments in Fiscal and Monetary Policy.' Oxford: Financial Geography Working Paper 11.

Lavinas, L. (2015a) ‘New Trends in Inequality - the Financialisation of Social Policies’, in A. Gallas et al. (eds) *Combating Inequality: The Global North and South*, pp. 212–25. London/New York: Routledge.

Lavinas, L. (2015b) ‘A Financeirização da Política Social: O Caso Brasileiro’, Politika 2: 35–51.

Lavinas, L. (2017) *The Takeover of Social Policy by Financialization: The Brazilian Paradox*. New York: Palgrave Macmillan.

Lavinas, L. (2018) ‘The Collateralization of Social Policy under Financialized Capitalism: Debate: The Collateralization of Social Policy’, *Development and Change* 49(2): 502–17.

Lavinas, L. and D. Gentil (2018) ‘Brasil Anos 2000: A Política Social Sob Regência da Financeirização’, *Novos Estudos CEBRAP* 37(2): 191–211.

Lazzarato, M. (2012) *The Making of the Indebted Man - an Essay on the Neoliberal Condition*. Los Angeles: Semiotexte.

Leyshon, A. and N. Thrift (2007) ‘The Capitalization of Almost Everything: The Future of Finance and Capitalism’, *Theory, Culture & Society* 24(7–8): 97–115.

Mackintosh, M. and M. Koivusalo (2005) Health Systems and Commercialization, *Mackintosh, M. and M. Koivusalo (eds) Commercialization of Health Care: Global and Local Dynamics and Policy Responses*. London: Palgrave Macmillan UK.

Mercille, J. and E. Murphy (2017) ‘What Is Privatization? A Political Economy Framework’, *Environment and Planning* 49(5): 1040–59.

Mulligan, J. (2016) ‘Insurance Accounts: The Cultural Logics of Health Care Financing’, *Medical Anthropology Quarterly* 30(1): 37–61.

OECD (2019) OECD Statistics Database. URL: https://stats.oecd.org/ (accessed 3 January 2020).

Ortiz, I., M. Cummins, J. Capaldo, and K. Karunanethy (2015) ‘The Decade of Adjustment: A Review of Austerity Trends 2010-2020 in 187 Countries’. Geneva: Extension of Social Security Series No. 53 ILO, 2015.

Securité Sociale (2019) ‘Rapport de Financement du Programme de Qualité et d’Efficience de la Loi de Financement de la Securité Sociale pour 2019’ (Financing Report of the Quality and Efficiency Programme of the Social Security Financing Law for 2019). Paris.

Seddon, J. and W. L. Currie (2017) ‘Healthcare Financialisation and the Digital Divide in the European Union: Narrative and Numbers’, *Information & Management* 54(8): 1084–96.

Sestelo, J.A. (2017) ‘Planos e Seguros de Saúde do Brasil de 2000 a 2015 e a Dominância Financeira’. Doctoral Thesis. Universidade Federal do Rio de Janeiro, Instituto de Estudos de Saúde Coletiva, Rio de Janeiro.

Starr, P.E. (1988) ‘The Meaning of Privatization’, *Yale Law & Policy Review* 6(6): 6–41.

Stein, F. and D. Sridhar (2018) ‘The Financialisation of Global Health’, Wellcome Open Research 3. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5829462/ (accessed 3 June 2019.

Storm, S. (2018) ‘Financialization and Economic Development: A Debate on the Social Efficiency of Modern Finance’, *Development and Change* 49(2): 302–29.

Streeck, W. (2013, July) ‘The Politics of Public Debt: Neoliberalism, Capitalist Development, and the Restructuring of the State’. Cologne: MPIfG Discussion Paper 13/7.

Swyngedouw, E.A., M. Kaika, and E.O. Castro (2002) ‘Urban Water: A Political-Ecology Perspective’, *Built Environment* 28(2): 124–37.

Tchiombiano, S. (2019) ‘Public Health, Private Approach: The Global Fund and the Involvement of Private Actors in Global Health’, *Face à Face* (online). URL : http://journals.openedition.org/faceaface/1418 (accessed 1 February 2020).

Vahabi, M., P. Batifoulier, and N. da Silva (2020) ‘A Theory of Predatory Welfare State and Citizen Welfare: The French Case’, *Public Choice* 182(3–4): 233–42.

Vural, I.E. (2017) ‘Financialisation in Health Care: An Analysis of Private Equity Fund Investments in Turkey’, *Social Science & Medicine* 187: 276–86.

Wendt, C., L. Frisina, and H. Rothgang (2009) ‘Healthcare System Types: A Conceptual Framework for Comparison’, *Social Policy & Administration* 43(1): 70–90.

Whitfield, D. (2006) ‘A Typology of Privatisation and Marketisation’. European Services Strategy Unit - ESSU Research Report 1.URL: https://www.european-services-strategy.org.uk/publications/essu-research-reports/essu-research-paper-1 (accessed 30 June 2018).

WHO (2000) World Health Report. Geneva: WHO.

WHO (2010) Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: WHO.

WHO (2019) ‘Global Health Expenditure Database. URL: https://apps.who.int/nha/database (accessed 3 January 2020).

Yilmaz, V. (2017) *The Politics of Healthcare Reform in Turkey*. London: Palgrave Macmillan.