Is Private Equity Good for Health? Regulation and Competition Policy Lessons from a Survey of the Evidence

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Abstract

The paper summarizes the evidence on regulatory and competition policy weaknesses in dealing with healthcare market failures associated with the entry of private equity (PE) investors in the sector. It also suggests reforms that would address some of the main issues. In that context, it contributes to the debate on how fairness and social concerns could be added more explicitly to the efficiency mandate of regulatory and competition agencies. This debate and related ones in the sector have emerged in view of the growing evidence on the risks of negative coverage, pricing and quality impacts due to the margin for cream-skimming allowed to PE firms to ease their entry in the sector. Although the evidence shows that the negative outcomes are not systematic, there are common and can be associated with the failure of current regulatory and competition policies and tools to protect jointly investors, medical and para-medical staff, patients and taxpayers. The case to internalize the insights of the global experience to reassess the design of current policies aiming at diversifying the financing sources in the health sector seems to be strong.

Keywords: Health Care Financing, Health Expenditures, Health outcomes, Health quality, Private Equity, Fairness, Efficiency, Regulation, Anti-trust

JEL Classifications: G23, G32, H51, I11, I13, I18

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1. Introduction

Since the mid-2010s, various high profile consulting firms (Bain, Deloitte, McKinsey, PwC, …) have been advertising the growing interest in the health sector of private equity investors (defined broadly to include buyouts, hedge, infrastructure and sovereign funds). For instance, according to McKinsey (2022), in 2021, global PE investment in health activities was US$151 billion, equivalent to about 1.8% of health expenditures in high income countries and contributing mostly to the financing of activities such as hospitals, nursing homes, dentistry and a few specialized facilities and services.

Healthcare has indeed enjoyed the fastest growth in PE commitments across sectors globally since 2016 with a rate of 14.3% (8% on average for all sectors). This can be partially explained by median healthcare deals returns between 2010 and 2021 of 27.5% as compared to 21.1% for the other industries according to Bain (2022). In Europe, it is also explained by the explicit commitment of the European Commission to increase competition and the role of private capital in the sector.[1]

The apparent strong margin to open the health sector to PE stems from its market characteristics. On the supply side, it is a diversified and atomized industry offering a large number of consolidation or bundling opportunities to make the most of scale and scope economies.[2] Healthcare is also consistent with a wide range of organizational approaches to manage costing and pricing options in very different regulatory contexts, most relying on heavy subsidies. Managers, almost across the spectrum of activities, also enjoy strong opportunities to develop new revenue sources through new technologies and other innovations in easily targeted activities. On the demand side, the market is likely to benefit from an increased need for diversified healthcare from aging populations, growing and lasting concerns for chronic diseases, for aesthetics and for a fast developing preference for preventive health care among other factors.

From a policy perspective, the attractiveness for PE firms is their ability to raise capital to help finance the sector expansion and modernization needs. PE firms can indeed be quite effective at leveraging the capital needed to finance specific activities, including through LBOs. They can also influence the activities they invest in to improve their financial ratios and markets prospects through changes in management, operational and financing decisions.

Their entry strategy is quite predictable. PE firms typically first acquire a good size asset that becomes their initial platform, such as a local hospital, and then progressively add capacity through mergers or acquisitions of smaller facilities catering to various specialties, such as dentistry, dermatology or ophthalmology. The progressive approach makes it easier to clear common competition policy filters. The PE investors usually aim at improving within 5 to 7 years the value of the business significantly enough (3 to 4 times the original capital committed) to resell it to other private actors and sometimes to the public sector.[3]

Three notable characteristics makes these deals quite sensitive to the financial markets context. The first is that the assets of the acquired firms serve as collaterals. The second is that they may have to earmark a significant share of the revenue to finance the debt service (which can be an issue in an environment with increasing interest rates). The fact that PE deals are not free is a third relevant characteristic as it can significantly change management incentives and time horizons as compared to publicly operated facilities. Firms commonly charge their investors a management fee around 2% and

[1] For an early discussion see European Commission, Expert Panel on Effective Ways on Investing in Health (2015)

[2] Zhu et al. (2020) offer a very detailed overview of the diversity of health related activities in which PE is involved.

[3] The cash flows generate allow a reimbursement of the debt and returns to the investors even if the EBITDA margins or the exit EBITDA have not improved.

get to appoint representatives on the board of the firms they invest in. They also often negotiate a share of profits of the firms they are managing.

From a sector wide financing perspective, for now, this growth in PE financing commitments to health related activities is however still modest when compared to the needs. This is much more the case in Europe than in the US. For the sample of 13 European countries that attracted the interest of PE investors analysed in Estache and Litaj (2023), the average share of PE in total health expenditures in 2020 was 4.4%.[4] This a solid increase from 3% in 2008 but it leaves a significant margin for private investors to contribute to closing the growing financing gap observed for the sector.[5]

The current size of the PE in health is growing but insufficient to address the predicted healthcare needs. Health expenditure growth will be higher than GDP growth at least until 2030 according to the OECD and various think tanks.[6] As of 2019, according to the World Bank, total health expenditures in the European Union averaged already about 10% of GDP. Private out of pocket health expenditures represented 25.1% of that. This is about half of the share observed in the US for instance.[7]

In countries in which fiscal constraints are likely to be increasingly binding and other sectors such as education, energy transition, technological transition, pensions or defence increasingly competing for public money, the incentive to rethink the financing model of the healthcare sector seems to be strong. So is the case to assess the margin to increase the absolute and relative importance of PE. But in many ways, this also implies changing the sectoral, regulatory and competition policy conditions under which this scaling up could and should take place in Europe, accounting for societal preferences as much as the fiscal context.[8]

On the face of it, the margin to get more financing from PE investors seems to be reasonably realistic and attractive from a fiscal perspective. This seems to be relatively clear when focusing mainly on the likely growing financing gap in a business-as-usual scenario.[9] But the details of any related policy change tell a more subtle story. As discussed in many of the papers reviewed in this survey, these details imply risks that should influence the regulatory and competition policy environment of the activity.

The first potential concern is that the aggregate fiscal impact of a bet on PE is uncertain if the margin to cross-subsidized falls. This will happen if policies allow low cost-high margins activities to be passed on to PE operated facilities while leaving to the public sector the high cost-low or no margin activities.

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[4] This sample includes Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom

[5] According to Bain & Company (2022), in absolute terms, in 2021, the European market delivered 112 deals (up from 75 in 2020) and grew well in value from US$14 billion in 2020 to US$26 billion and also more than the previous high of US$19.7 billion in 2019). In comparison, the North American counted 216 deals (up from 142 in 2020) for an increase in total value from 34.7 billion to US$107.5 billion while the Asia-Pacific market represented a deal volume of 179 (up from 156 in 2020 and two thirds credited to China) for a value of US$17.8 billion (up from US$16.9 billion in 2020). Note that Biopharma and life science tools and diagnostics accounted for 74% of deals value in Europe

[6] Some of this reflects that the health sector is quite sensitive to Baumol's cost disease (i.e. the rise of salaries in jobs that have experienced no or low increase of labour productivity, in response to rising wages in other jobs that have experienced higher labour productivity growth as discussed in Baumol (2012)). Some argue that new technologies will help in some activities such as how medical bills are processed and revenue cycle management. For now, the assumption is still that productivity gains will be slower than needed to keep the costs under control.

[7] See Domestic private health expenditure (% of current health expenditure) | Data (worldbank.org)

[8] In the OECD, the public-private allocation of healthcare expenditure is about 73% vs 27%. The US is an outlier with 52% of private funding and 48% of public funding.

[9] Medium to long terms prospect seem to be good indeed, even in the short run they may be quite sensitive to the Fall 2022 increases in interest rates and the loss of value in many publicly trader assets. It may make it harder for PE firms to raise and commit funds until OECD countries recover and leverage becomes a sustainable option again.

Ignoring the extent to which the public sector has the fiscal capacity to compensate for the cancellation of cross-subsidies built-in pricing decisions is a policy and regulatory failure to be avoided, in particular in complex fiscal contexts.

The second is that the choice can be quite controversial from a social viewpoint when the entry of PE in a specific activity threatens the universal health coverage commitments and service quality. The risks are quite real based on the evidence on the impact of PE in the sector but not systematic as discussed in section 2. This is why the debate on the case and the scope to increase the role of PE in policy and academic circles is now less on the financing side and much more on the impact on quality, on the risks of market concentration and of cream skimming as well as on the loss of margins to cross-subsidize across pathologies or across patients for instance. [10]

The debate is, or should be, about the consequences of an initial underestimation of the diversity of risks associated with the diversification of financing options. One specific concern is that healthcare regulation and the overall vision of the sector may not have adjusted to the evolution of incentive issues driven by the entry of PE financial management preferences.[11] What has proven to be a loose regulation of the entry of new financing actors in the sector may have created an initially underestimated trade-off between profits and returns on the one hand and health service quality and coverage on the other hand. The stocktaking results with often different perspectives published by Appelbaum and Batt (2020), Bruch et al. (2021), Gondi and Song (2018), Lainoff (2020), Livingston (2018), Matthews and Roxas (2022), Scheffler et al. (2021) or Stein and Sridhar (2018) for instance, add up to evidence that there are many cases in which the cost reductions and the matching revenue-increasing strategies have indeed reduced the quality and the coverage of care of the patients in specific activities and increased mortality rates, in some cases quite significantly.[12] However, other authors have documented success stories or cases in which the switch to PE had no impact on quality outcomes even if they do indeed often lead to price increases or other financial and management changes (see for instance, Cerullo et al (2022), Bruch et al. (2020) or Gao et al. (2021)). Clearly, the jury is still out but some patterns on potential issues are emerging.

In many ways, the current debates on quality and coverage risks associated with PE in health are similar to those that started in the early 1990s on the costs and benefits of privatization of infrastructure services such as electricity, water or rail services.[13] The scope to cut costs and improve the choice and use of assets needs to be balanced against the risks of failing to regulate properly the delivery of basic needs in a more complex market structure.[14] The evidence shows that betting on PE can be a wise decision whether in health or in infrastructure. But when this involvement fails somehow, it can have brutal consequences as illustrated by the dramatic living conditions observed in some PE owned nursing homes in the US and in France in recent years and in particular during the Covid crisis. In infrastructure, this is equivalent to the deaths from a bridge mostly owned by hedge funds falling due to an underfinancing of the maintenance needs of the asset.[15]

[10] There are also other debates such as on the relevance of PE to finance and stimulate innovation or on the private access to personal information on health. These will not be addressed in this paper.

[11] See Nirello and Delouette (2020) for a useful discussion.

[12] For instance, the now widely quoted paper by Gupta et al. (2021) shows that, between 2000 and 2017, in the US, PE ownership increased the short-term mortality of Medicare patients by 10%. This represents 20,150 lives lost.

[13] Bayliss (2016) recognized this similarity early on in her case study of the UK.

[14] Ikram et al (2022) provide an insightful practitioners' perspective on the case for regulation.

[15] When a bridge fell in Italy in 2018, the political debate quickly turned around the fact that the privatization of highways had left the assets and its management under the control of private holding companies. For details, see https://www.ft.com/content/874b7e4c-ac3f-11e8-94bd-cba20d67390c

This somewhat brutal comparison of health risks related to PE with those observed in the delivery of infrastructure services argues for the case for healthcare advisors to learn from the mistakes made in other sectors. It also strengthens the case to review the changes in regulation that were adopted to minimize the risks of failures due to the underfunding of some activities. The incentives issues associated with the mismanagement of PE entry in a sector are conceptually similar across sectors. To a certain extent, from a practical perspective, it could be argued that the infrastructure sector has a few years of lead time in terms of mistakes. Whenever useful, the parallel between the two sectors will be drawn to illustrate the extent of the risks and the margin for solutions.

With these concerns in mind, the main purpose of this survey is to argue for a fine-tuning of regulation and competition policy as it applies to the entry of PE in a sector highly socially sensitive. Section 2 summarizes the evidence on outcomes associated with PE across health subsectors and highlights a selected range of policy, competition and regulatory issues that have been identified as explanation for undesirable outcomes. Section 3 presents a minimum number of steps that need to be considered to make the most of the opportunities offered by PE to cater to health needs without penalizing patients, doctors or taxpayers. Section 4 shares some thoughts on the modest margin that seems to be available to implement changes in the sector in a context of fiscal, healthcare and economic crisis.

2. The evidence on outcomes associated with PE in health related services

Despite the relatively short period of time since PE entered the health market significantly, the phenomenon has enjoyed a high profile in the academic literature (a vast majority in publications aimed at the medical profession as seen in the references). The sum of these papers adds up to reasonable evidence on the importance of regulatory imperfections in the context of the growing role of PE on health activities and on their sources. These are the main focus of this section.

Before discussing a selected number of these policy relevant insights, it may be useful to highlight that many of the disagreements across analysts, although clearly not all of them, can be traced back to differences on how the impacts of PE in healthcare are being measured. The coverage of outcomes indicators is quite broad, including mortality rates, survival rates, speciality or regional coverage, staffing levels, staff mix, equipment quantity and quality, financial performance (charge/cost ratios or profit margins), management techniques such as billing processes, pricing or referrals rates within vs outside of network and patient satisfaction ratings. The positive or negative assessments noted in the survey are often not strictly comparable because they do not always focus on comparable measures. There are also differences in the efforts made to account for the context in which the PE experiments are taking place, in the samples covered and in the statistical techniques used to treat the data (i.e. to include the right control variables for the econometric treatment). These difference can easily explain disagreements on the sign and sizes of impacts.

The broad average picture that emerges is however relatively consistent with theoretical predictions of what should happen in a sector in which a new entrant can impact market structure. Prices tend to be higher, quality tends to be less predictable, concentration increases, coverage becomes more selective and the management of staff and equipment is largely driven by financial concerns. The details, including the choices of sample and of control variables, offer some of the most useful policy insights on the costs and benefits of the opportunities associated with the entry of PE in the sector. These details lead to the following observations on the policy challenges.

Too much heterogeneity to have a simple policy picture. Maybe the main initial and most obvious policy relevant observation is that the heterogeneity of the sector matters to the assessment of the

desirability of PE. A "one size story" on the policy challenges associated with PE in healthcare does not work. The sector counts many sub-activities that have not been equally attractive to PE.[16] A majority of the papers focus on cases studies of hospitals or nursing homes and most analyse the US experience.[17] The few studies on the European experiences provide similar insights for these two sectors.[18] In the last few years, the literature has also started to develop detailed assessments of PE outcomes in a large number of medical specialties. These offer new complementary perspectives on some of the policy and regulatory biases but share many of the concerns covered in the early literature.[19]

The concerns for prices and quality are relatively predictable across papers as in any sector in which market power and alternative management approaches are part of the relevant characteristics to be monitored under common anti-trust rules. A central debate in this literature is about the size of the profit margins and the uses of cost cutting opportunities which in turn can impact service quality. The empirical research has not been able to deliver clear general conclusions so far on these two dimensions. For instance, Bloom et al. (2015)), Bos and Harrington (2017), Bruch et al (2020) or Lainoff (2020)) provide evidence that a more commercial management of hospitals can be associated with higher net income per bed, higher operating margins, total margins and total revenues, although they do not always agree on the associated quality outcomes. Others (Applebaum and Batt (2020), Gupta et al. (2021), Scheffler et al. (2020), Liu (2021)) focus instead on cost cutting strategies to save on costs, for instance, by cutting staffing, changing the staff skill mix or the duration of time spent in hospitals.

The fact that not all papers focus on the same quality measures in a particularly multidimensional industry makes it particularly challenging to reconcile what may be complementary perspectives rather than differences in perspectives.[20] Some of the papers critical of the role of PE focus on the hard evidence of loss of quality on some dimensions, ignoring other characteristics that may be relevant. Others, less critical, provide evidence of a change towards more expensive quality and in some cases explain that this reflects a reliance on better technology or more qualified staffing and improvements in staffing skills but ignore that quality may become unaffordable to some patients. Others yet argue that the changes in skills mix in the sector should be seen as cost effective improvements in quality. Harrington et al., (2000) for instance, showed early on that PE firms in the sample they covered tried to lower costs either by decreasing total nurse staffing or by substituting more expensive nurses for less expensive ones or nursing assistants.

[16] Zhu et al . (2020)

[17] On hospitals, see for instance Beaulieu et al. (2020), Bruch et al. (2020), Cerullo et al (2022), Gao et al. (2021), Hefner et a (2021), Liu (2019), Liu (2021) and on nursing homes, see Braun et al (2021a), Corlet Walker (2022),Gandhi et al. (2021), Gupta et al (2021), Huang & Bowblis (2021). Kruse et al (2021), Teno (2021)

[18] See for instance, Bayliss (2016), Horton (2021), Picard and Podaneva (2022) or Stavroulaki (2019) on the UK, Lindbom and Jost (2021) or Maun et al. (2015) on Sweden, Cordilha (2021), Delouette & Nirello (2017) on France or Buzek and Scheuplein (2022), Scheuplein (2020, 2022) on Germany.

[19] See for instance, Braun et al. (2021b) on dermatology, Casalino et al. (2019), Fuss Brown et al. (2021) or Singh et al. (2022) on physician practice acquisitions, Boddapati et al. (2022) or Herschman et al. (2020) on orthopaedic practices, Kickirillo et al. (2019) on gastroenterology, Konda et al. (2019) on dermatology, Kirsh et al. (2021) on urology or Patel et al. (2019) on ophthalmology, Khetpal et al. (2021) on dentistry and La Forgia et al.(2019) on anesthesiology.

[20] This multidimensionality of quality and the need to consider all dimensions as a concern are a source of conflict between competition authorities and medical associations as discussed in detail in Stavroulaki (2019a). Medical professionals claim rights to discretion, freedom from non-professional lay interference and some degree of self-regulation for instance. These demands fail the traditional basic antitrust principles as they imply some degree of market power. She argues that the solution is to adopt a much more multi-dimensional definition of healthcare quality covering effectiveness, safety, trust and acceptability. This would allow the authorities to internalize healthcare markets' limits and specificities claimed by the medical authorities and deliver more encompassing views on quality.

The debate on how staffing decisions is impacting cost efficiency is as vivid as it has been in other sectors, but somewhat surprisingly, it generally does not deal with the impact of outsourcing of many services. This has long been a popular management technique to change the approaches to delivering and pricing quality in the infrastructure sector for instance. It is only now emerging in the healthcare efficiency literature as suggested by Picard and Podaneva (2022). Unless the cost and staffing data used to assess the impact accounts for this, it is likely to lead to biased results somehow. In infrastructure, this has a been a recurring concern when trying to assess cost efficiency for instance. Outsourcing covers critical costs items such as staffing decisions.

Some margin for ideological biases in diagnostics. The choices of performance indicators or the omissions of key dimensions could reflect an ideological dimension as in the case in infrastructure in the context of the privatization debates for over 30 years now.[21] There is indeed enough diversity of measures of quality to make it easy to decide to emphasize positive or negative dimensions. These voluntary or involuntary selection biases are part of the challenge of any effort to get a clear sense of the impact of PE. The pro-PE will predictably argue that if PE operated firms can lead to higher costs and hence prices, it is because they adopt better and more expensive technologies. The PE-doubters will just as predictably tend to highlight cases in which patients and taxpayers subsidize implicitly or explicitly the returns to PE through higher prices or lower quality. Beyond the possible ideological dimension, this diversity of partial studies available makes the case for sector wide assessments rather than activity or case specific diagnostics.

The general case to have a more encompassing view of the impact. The large number of cases and their specificities blurs the big picture. The partial studies are very effective at pointing at misses and hits or winners and losers but they do not give health ministries a sense of the total net impact of the entry of PE on key quality dimensions. This more encompassing view is particularly necessary to be able to get a precise set of the net fiscal effect of a change in the fiscal mode, in particular in view of the risks of a loss of margin for cross subsidies that may not be compensated by an increase in tax revenue from private profits. Until data gaps in the sector are addressed, it will be difficult to produce robust causal macro assessments or to conduct credible meta-analyses of the joint insights provided by the case studies.[22]

Until these data constraints are addressed, there is some margin to squeeze policy relevant information from the partial assessments. For instance, there is a case to use the data available to look more specifically into the interactions between context and in particular regulatory differences across regions and activities. Furthermore, in many ways, the activities and regional choices made by PE firms and their choices of management strategies and tools are rationally designed to make the most of regulatory weaknesses in their investment targets and this needs to be picked more systematically. Any omission to control for these differences in regulatory constraints and weaknesses can lead to misinterpretations of the impact of PE as it hides part of the story. Taking these additional steps can provide additional hints on the importance of context and in particular policy concerns relevant to each specific healthcare activity and those relevant to all of them.

The regulatory case to have an encompassing picture of the health sector market. Considered jointly, the many empirical assessments of the impact of PE in health activities already show that the regulatory context can impact market structure, market heterogeneity and in particular market

[21] See Estache (2021) for a detailed description of the biases.

[22] See Frimpong et al. (2022) and Estache and Litaj (2022) for papers delivering associations between macro measures of PE and health quality outcomes.

concentration in the industry in many different ways. They also show how much the interactions between finance and regulation impacts many of the PE firms choices and how much regulatory imperfection can explain some undesirable outcomes and the extent to which competition agencies can address some of these imperfections.

The discussions on the impact of PE on the health sector market structure often start with a concern for market concentration resulting from mergers associated with the PE takeover of health related activities. Gandhi et al. (2020), for instance, show how much the effect of PE can be influenced by the degree of local market concentration in the US nursing home market. The more competitive the market, the larger is the staffing in their sample. These and similar concerns are at least as complex to assess as those linked to prices and quality but they are just as important to analyse the extent to which there is a case to reform regulation and competition policy in any specific dimension.

Conceptually, these types of concerns motivate the explicit evaluation of the extent to which the optimal degree of unbundling has been considered by the sector regulators. Thinking through ex-ante the possible consequences of the market restructuring that seems to take place when sectors open up to PE may not have been as precise as necessary to avoid some of the undesirable outcomes noted by the empirical literature such as the loss of service coverage or the exclusion of some categories of patients or regions. Part of the improvement needed is the internalization in the design of regulation of the extent to which finance drives the desire to choose consolidation strategy adopted by PE firms (i.e. cream-skimming to use the regulation theory terminology).

It is important to note that the consolidation strategy favoured by PE in the sector is indeed quite rational since it follows basic valuations guidelines. The larger the firm, the larger its leverage ability and the larger the multiple of EBITDA it is able to be valued at. Since smaller firms have lower EBITDA, their acquisition leads to significant increases in their market valuation when they become part of a larger firm and this, before any improvement in management, quality or cost efficiency has been implemented as explained in Casalino et al. (2019) or Scheffler et al. (2021). Unless service, standard or investment obligations, such as those often found in regulated utilities or transport activities, are associated with the mergers and acquisitions motivated by these opportunities to increase value, the odds of consumers being left somewhat worse off can be quite strong. This is because it leaves the room to pick and choose and leave out less profitable activities (i.e. cream-skimming to use the regulation theory terminology) .[23]

The policy relevance of the evidence on how and how much regulation failed. The empirical research identifies a number of areas on which policy and regulation could focus better on quality and pricing concerns but also on service gaps and socially challenging management decisions resulting from consolidations efforts by PE firms.[24] This research has also produced subtler information making auditing, analysing or benchmarking specific activities performances quite difficult. Indeed, while these authors do not always agree on the choice of outcome indicators and hence on the conclusions to be drawn on M&A, they seem to agree that data availability is a challenge to conduct their assessments. The accounting standard are such that it is currently often difficult to distinguish quantity and value effects. For instance, using insurance claims data from privately insured individuals in the

[23] This is known as cream skimming in the academic literature and Cheng et al. (2015) offer an example in the case of hospitals.

[24] See for instance, Beaulieu et al. (2020), Bloom et al. (2015), Brand et al. (2019), Cicchiello and Gustafsson (2021), Feldman et al. (2022), Freshfields Bruckhaus Deringer LLP (2022), Ghandhi et al. (2020), Goodwin et al. (2021), King et al. (2017), Jiang et al. (2021), Prager and Schmidt (2021), Scheffler et al. (2021), Wang et al. (2022), Wollman et al. (2020) or Zhu (2020)).

US, Liu (2022) finds that if hospitals had not been allowed to rely on PE, healthcare spending in their markets would have dropped by 11%. But this would have been the result of public prices being lower than the PE negotiated prices with insurers rather than reflect changes in service quantity. [25]

The data limitations observation is relevant from a policy and regulatory perspective because it is linked to the extensive use of non-disclosure agreements that are commonly observed as part of the deals. These can become a concern when conflicts of interests are a potential issue. Ozerianski et al. (2021), for instance, argue, in the case of the European pharmaceutical industry, that the accessibility and quality of payment data disclosed are typically low, in particular when compared to the US standards.

Maybe because of the difficulty to compare results, and to some extent ideological biases on the perception of the relative effectiveness of publicly and privately managed and financed activities, there is no clear convergence of views on the specific regulatory challenges and what they mean for the assessment of the relevance of the regulatory context for PE in health. There are however efforts to try to reconcile the differences in conclusions. Recent one include Eickholt (2020) and Wang et al. (2022) who argue that part of the problem is that the mergers of services in the health sector have often failed to deliver full effective integration of services. It is this incompleteness that has resulted in multiple sources of operational failures or abuses. They argue that when integration works, quality improves. In sum, imperfections in the regulation and implementation of mergers are to be blamed for failing to deliver these improvements according to them. The key is to be able to produce an inventory of these imperfections to be able to address them as needed, accounting for the specificities of the activities and the various contextual characteristics in which they get implemented.

The debate is certainly not closed on the case for stronger or better regulation of the role of PE in health but there is enough of a case to lead to high level policy debates. In the US, for instance, Congress has consulted experts to discuss concerns with the number of M&A linked to PE that have been taking place in the sector and the evidence on their effects so far. Gaynor (2018), in a statement before the Committee on Energy and Commerce Oversight and Investigations Subcommittee of the US House of Representatives, is quite explicit on the risks of excessive consolidation in the sector and on the associated regulatory risks.

How the changing political view on risks associated with PE impacts competition policy decisions. The concerns voiced in the political arena are influencing the implementation of competition policy in the US already. The Federal Trade Commission (FTC) decisions and the speeches made by Ms. Khan, its chair nominated by President Biden, leave few doubts about this. [26] Between January 2021 and the summer of 2022, FTC has blocked four major hospital mergers. The four rejections are significant enough and their justification quite revealing on FTC's sources of concerns that would not have been addressed by existing health sector regulation in these states since this regulation influences the incentives to consider mergers or other forms of consolidations. Those decisions have so far only impacted mergers request within a specific region. Yet, FTC is also concerned with cases in which a major player in one region buys up a hospital in a different one. This additional concern reflects the growing share of cross-market transactions in the hospital sector but the current US guidelines omit

[25] The details of the composition of this change are also insightful and illustrate many of the dimensions regulators may want to focus on. PE investors' bargaining skills account for 43% of the price and spending increases, financial engineering and bankruptcy threats contribute 40%, changes in patient demand 10%, reduced focus on social objectives contributes 8% and operational efficiency gains 1%.

[26] Federal Trade Commission (2022),

to cover these cases.[27] These are often associated with the global growth of common ownership in multiple sectors (including hospitals and pharmaceuticals). In his recent survey, Schmalz (2021) has further fuelled the debate on the way these changes in the financial markets can limit within or across borders competition in activities in which PE is involved.[28]

Ms. Khan's joint statement as to why FTC was rejecting an hospital merger in Rhode Island (FTC (2022) makes some of the emerging concerns quite transparent. She explains that the merger would eliminate competition needed in these markets to help keep prices lower and quality of care higher. This is not news. However, the explanation adds a concern with the evidence that there a risk that the loss of competition from mergers in the health care sector can increase employer labour market power and lead to wage stagnation for skilled health care professionals.[29] This additional comment hints at the desire to add a social dimension focusing on workers in the sector to complement the concerns for patients. This concern has traditionally not been included in the mandate of competition agencies and typically addressed by regulatory or general policy.

Is there a case to take a broad social perspective on the impact of PE in health? The idea is that anti-trust and regulators should have a broader view of the winners and losers of PE in health is also being picked up and harshly debated by some academics and health specialists.[30] The debate results from the observation that when regulation allows the consolidation of activities and the excessive reliance of intra-networks referrals, it will not only make an expected difference to prices and quality outcomes across context but it can also have sometimes underestimated yet significant "quantity" impacts such as a reduction of health care options for patients to pick from. The type of rationing is one of the key insights provided by Gondi and Song (2019) or Lainoff (2020) for instance. Loss of access for some is a social issue. The evidence also suggests that when rationing takes place, it can lead to higher costs and billing to patients under current regulatory practices (Appelbaum and Batt (2020), Cooper et al. (2022) or Gudiksen and Murray (2022)). Loss of affordability is a social issue.

These observations bring the policy and regulatory debates back to some of the most basic commitments the medical profession as suggested by Asamani et al. (2021) in their discussion of the risks of creating efficiency-equity trade-offs. Ensuring equity in the treatment of patients is central to the ethical commitments of the profession and this cannot be ignored by the economic and legal specification of the rules of the game.

The observations also lead lawyers and economists to start wondering whether there isn't a strong scope to get competition/anti-trust agencies to start dealing with these types of trade-offs explicitly in any sector. The "old school" represented by Brennan (2018), Capps et al. (2020), Schinkel (2021) or Shapiro (2017) argues that competition policy should focus on efficiency and/or consumer welfare and that it impacts equity or fairness concerns indirectly when needed. They add that social concerns are better dealt with through other tools such as taxes and subsidies. The "new school" is more open to consider change to competition policy to account for social concerns in addition to the traditional concerns and is represented by Baker and Salop (2015), Ducci and Trebilcock (2019), Dunne (2020), Fox and Bazenov (2021), Gal (2019), Gerard (2018), Khan and Vaheesan (2017), Jenny (2019), Lianos

[27] Stavroulaki (2022)

[28] Common ownership, also known as horizontal shareholding, describes the situation in which institutional investors invest in more than one company competing in the same sector, raising concerns for the margin to impact on the scope to coordinate pricing, quality or other decisions across firms since the same investor can sit at or influence the board of various firms expected to compete with each other.

[29] See for instance Prager and Schmitt (2021) for detailed evidence of this risk.

[30] See for instance, Baker & Salop (2015), Stavroulaki (2019b)

(2018), Stavroulaki (2019a, 2022) or Waked (2020). They all argue in different ways and with different contexts in mind that there are cases in which competition policy also needs to address social concerns. Most of these papers (with the notable exception of Khan and Vaheesan (2017) and Stavroulaki (2019a, 2022)) hardly mention the health sector explicitly in their discussion of equity concerns but all of them discuss situations that are relevant to the sector.

This relevance is seen in the specific suggestions to improve the social component of the regulatory context in which PE needs to operate that are directly relevant to the health sector. Consider for instance the detailed suggestions made by Leigh and Triggs (2016). They do so in the context of their diagnostic of the Australian competition law weaknesses. Their suggestion, for instance, include a case for stronger penalties for conduct that impacts disadvantaged Australians and milder one when adequate compensation is offered to those affected. They also suggest that subnational governments should take these concerns in planning and zoning legislation to protect disadvantaged communities. Both suggestions could easily be adopted in evaluations of merger in most countries.

Some authors are more cautious than others in their support of the "new school". These nuanced authors include Baker and Salop (2015), Gal (2019) or Lianos (2020) who argue that there are circumstances under which it may make sense to revisit the old school view but also explain implementation is likely to be a challenge. Baker and Salop (2015), for instance, argue that in a context in which labour unions and consumer associations do not have enough leverage to offset the growing bargaining power of shareholders and top executives in firms with strong market powers, competition agencies could consider taking action to restore some balance and reduce the risks of increasing inequality. This is consistent with Lianos (2019) idea that competition law should not just focus on "market power" but also cover other sources of power, re-habilitating concepts such as difference in bargaining power to ensure a fair distribution of the surplus. This raises however the need to address the difficulty of coming up with specific definitions of fairness as Marco Colino (2019) argues in his useful survey of the various ways in which fairness has been handled in competition policy, reminding the strong commitment of the medical profession to universal health coverage (UHC). [31]

What does betting on PE mean specifically to the commitment to UHC? The debates on how to achieve UHC have a long history in health economics and PE adds a new twist that deserve a closer look. In practice, it has often boiled down to ensuring that the healthcare system delivers accessible and affordable service to all citizens. In the context of restructuring designed to ease the entry of PE in the sector, a number of cracks have now emerged to that societal contract.[32]

The main one is linked to the fact that PE firms are not interested in some specialities, some regions or some medications, for instance in the case of orphan pathologies.[33] This implies the risk of losing universal coverage. Cerullo et al. (2021), for instance, shows that hospitals controlled by PE have discontinued less profitable activities (psychiatric services). This implies a loss of access to certain crucial services for some patients if the public institutions are not able to pick up these activities or to subsidize their delivery by private providers. An alternative is to do what public institutions have long been doing, that is to allow PE managed service with a strong demand to charge more to cross-subsidize across activities when direct subsidies to less profitable activities are not available. But this

[31] The concept of fairness and equity in the health sector is itself subject to debates in the medical profession. See for instance, Braveman, P. & Gruskin, S. (2003), Braverman (2022) or Lane et al. (2017) for various reviews.

[32] See O'Connell et al. (2014) for a detailed discussion of the concept and Lee et al. (2021) or Montagu (2021) for recent updates on the debates on the concepts and Wagstaff and Neelsen (2020) for a diagnostic of coverage for 111 countries

[33] See Yates and Hinckle (2022) on the issues faced by patients victim of orphan pathologies.

is often a matter of concern for competition agencies since it can distort some markets and they usually do not consider the relevance of the fiscal context in which these measures were taken.

This risk of loss of coverage has been particularly serious in rural areas when services were too costly to operate. This is what O'Hanlon et al. (2019) found when they compared affiliated rural hospitals in the US to non-affiliated ones between 2008 and 2017 focusing on twelve measures of structure, utilization, financial performance, and quality. Service was comparable for readmissions and emergencies, but access to on-site diagnostic imaging technologies, obstetric and primary care services, and outpatient nonemergency visits dropped while operating margins increased (by 1.6–3.6 percentage points from a baseline of −1.6%). Similar conclusions of rural rationing were reached by Mosher Kenke et al. (2021). However, some case studies did not reach the same conclusions. For instance, Jiang et al. (2021) focused on the impact on in-hospital mortality resulting from rural hospital mergers in the US and found that they were associated with a decrease, illustrating once more the difficulty of coming up with consistent diagnostics on similar issues. [34] These differences once again illustrate the need to be cautious in comparisons across case studies. These do not cover the same context. The policy may have worked well in some but not in others. The challenge is to figure out the sources of the policy failure in each specific context.

From a regulatory perspective, these examples lead to possible sources. The first is that unless the UHC needs are spelled out explicitly in the mandates assigned to operators of healthcare activities, they may not be delivered if they are not financially sustainable somehow. The second is unless regulators can rely on solid data to track the extent to which complying with UHC commitments to price and finance the activities fairly under any healthcare model, it will be difficult to achieve the expected universal coverage.

First is the possibility that PE can lead to de facto rationing of access to some specialities or some regions. raises questions in terms of the impact of PE on commitments to UHC without any obligation to do so. The policy difficulty is that unless PE managed activities are not subject to service obligations, it will be rational for them not to care if these activities are not profitable. In other words, regulation has to be involved ex-ante in the specification of the rules of the game for PE entry. If these rules are to deliver on universal health access, regulation also needs to be concerned with the affordability of health related services. And this in turn needs to be clarified upfront for PE investors and the regulator has to have the tools to monitor compliance.

This is where the data quality issue comes up again. Unless the sector regulators can rely on regulatory accounting rules that are clear to all parties involved and accounts that are transparent, the margin to optimize costing and pricing while complying with service obligations will be significant. Here also, the infrastructure sector experience is relevant. When accounting rules, including cost allocation rules are not transparent, there is a risk that pricing could actually be done in such a way that more competitive activities end up being subsidized by less competitive one. In the telecoms sector for instance, in the early days of the deregulation wave, fixed lines operators enjoying monopolies for those lines subject to regulated prices were billing all common costs and sometimes more to those lines to subsidize mobile services and cut their prices in these more competitive business lines. Similarly, cost

[34] The US insights are useful to inform some of the debates on medical deserts in Europe. Zarbib and Marschang (2021) argue that medical deserts have become a recognised problem in many countries and in particular in Europe. The number of healthcare workers (e.g., doctors, nurses, physiotherapists, speech therapists, carers, etc.) willing to work in rural, vulnerable population or low density areas has dropped in the last 20 years. in relation to ever-increasing needs in both public and private healthcare settings, which in turn results in inadequate access to healthcare and the exacerbated health inequalities.

accounting rules have often been used to charge phone shops to regulated service costs rather to split the cost between regulated and competitive activities. It is only progressively that cost accounting rules have been improved in the sector to avoid these biases, even if the rules are still far from perfect. There is a margin to do better in the healthcare sector as discussed in section 3.

3. A few necessary steps in the direction of better regulation

The evidence reviewed shows that there is still too little convergence across researchers on the impact of the decision to rely on PE in healthcare. Moreover, there are too many unexplained sources of divergence on the costs and benefits of the role of PE in this sector. Health is politically and humanly sensitive and there are too many cases for which PE is correlated with statistically significant higher mortality rates than under business as usual scenarios. This implies that digging more on the relevance of context and details is needed to have a more concrete and realistic approach to define the rules of the game under which PE in health can become a reliable asset to deliver health policy goals and PE investors have an incentive to contribute and those under which it is not desirable solution.

More generally, the evidence also argues for a case to rethink sector policies and regulations. It is beyond the purpose of this paper to try to deliver a global view of a possible reform agenda but there are a few low hanging fruits that are easy to identify. This section focuses on a few improvements revealed by the various types of impacts revealed by the entry of PE in health that would allow regulatory and competition to better contribute to the efficiency, equity and financial viability of a healthcare system. Most suggestions are relevant to high income countries with an already well system but some probably have a much broader relevance since they are intended to also clarify mandates and improve accountability for the delivery of these mandates.

Agree on realistic health policy goals to associate PE. The lack of clarity, transparency or specification of detailed specific health policy goals at the national level is one the reasons why it is difficult to come up with the type of fair performance assessments expected from regulatory and competition agencies. Most current political goals focus on very broad qualitative statements such as the promise to deliver health care to all and most fail to deliver credible time tables and detailed assessment of the extent to which financing constraints matter to the timing of delivery.

Note that if the goals are not to boil down to cheap talk, they need to address jointly not only the financial, efficiency, and accountability criteria expected from public policy commitments but also the equity concerns. Of particular interest in sensitive political context is the explicit discussion of what the authorities mean specifically by universal access to healthcare.[35] And this implies being explicit on what it means in terms of affordability, both to patients and taxpayers. This is needed to define a transparent and accountable commitment in terms of timing of delivery, irrespective of the delivery and financing mode adopted, i.e. with or without PE for instance.[36]

[35] These commitments need to be much more precise than the very general statements used by the World Bank (2019) or WHO (2010) who focus on the commitment to prevent diseases, deliver high-quality treatment and eventually palliative treatment without exposing patients to financial difficulties and to achieve this by allocating sufficient resources in an equitable way.

[36] Gudiksen and Murray (2022) provide a useful overview of the ways in which in the US context improvements in healthcare affordability can be achieved. Some are likely to be quite relevant to any country opening up the sector to PE. But the debate on affordability in the sector has proven to be quite complex identifying a multiplicity of concerns to be accounted for to be able to deliver specific upper bounds on the cost of health care normalized to income or consumption expenditures (see Estache (2023) for a brief survey of this literature.

Quantitative goals are much more realistic than sometimes argued by politicians concerned with this sector. Here again the experience of the infrastructure sector is useful. Concepts such as energy, water or transport poverty expressed in financial terms have now become mainstream with specific upper limits on what is reasonable for people to spend on this component of their total expenditures. In the case of energy for instance, the usual assumption for high income countries is that energy poverty kicks in when people have to spend more than 10% of their income on it.

The concept of health poverty has recently been enjoying some interest but it focuses more on the impact on disease risk, life expectancy and quality of life of a lack of access to treatment for various pathologies for different income classes than on a financial measure of affordability. [37] A proxy for a financial version of the concept would be to focus on the share of people spending more than 10% of their income on health expenditure. According to the World Bank, in high income countries, in 2017, 16% of the population was in that situation.[38] If affordability is one of the policy goals, its implementable version could be to focus on reducing the share of population considered to be health poor both in medical and in financial terms. This would make it easier to get a sense of the extent to which price negotiations with privately operated healthcare and insurance companies need to be improved. But to get to these negotiations a lot more information is needed as discussed next.

More generally, the reforms need to address the informational and analytical gaps that limit the ability of regulators and competition agencies to deliver on the opportunities to make the most of the interest of PE in the sector in a politically and policy realistic way. Taking on these gaps seems to be a necessary condition to be able to define reform agenda and set up the monitoring of its implementation over time. What does not get measured often does not get done or leads to subjective interpretations. The following few steps would be in the right direction.

Measure outputs, inputs and financing margins. Many of the informational gaps revealed by the empirical papers at decisions levels are reasonably easy to tackle. Better financial, accounting and technical data is needed to assess whether the sector is working as it should or not. The data gaps identified cover outcomes in terms of: (i) prices, pricing, costing and explicit and implicit direct subsidies to specific activities or regions or cross-subsidies across them; (ii) quality defined along all the dimensions that matter from both a pure health related perspective to cater to the very concerns of the health services professionals but also from a financial perspective to cater those concerned with financing constraints, (iii) ownership information to assess the extent to which it may distort competition, including as a result of the growing presence of common ownership, and (iv) the ability to develop tools that allow a quantification of the trade-offs to better inform decisions jointly from an efficiency, an equity and a financial and fiscal viability perspective. This is clearly not an exhaustive list, but it is a start substantive enough to launch a debate on the optimal market structure of the sector according to context and on the changes needed to allow regulators and competition agencies to deliver on their monitoring and enforcement mandates. It is also necessary to document the extent to which the complementarity between inputs to deliver a wide range of outputs needs to be picked when restructuring the sector to maximize the attractiveness of specific activities to potential PE investors. Hospitals with beds but without matching staff and vice versa are part of the problem induced by a failure to account explicitly for this type of complementarity in the (re-)packaging of activities to attract private financing. Similarly negative outcomes are linked to the failure to track

[37] See Clark and Erreygers (2020) for a detailed discussion of the concept of health affordability and health poverty.
[38] https://data.worldbank.org/indicator/SH.UHC.OOPC.10.ZS

likely changes in relative input and output prices that changes in ownership and sector structure can induce.

Review health specific reporting and accounting standards. The improvement in measurement has to go through changes in reporting standards in the sector and an increase in the transparency of data collected (without violating the patients right to privacy) to be able to monitor the extent to which PE can or not be associated with health and financial performance. In many countries, the standards have been designed historically to focus on medical dimensions without a clear match with financial, pricing or insurance informational needs. This concern for improvement in measurement has been a topic in the health accounting literature for some time now, including in the context of debates on the case to move value based pricing (see for instance Porter et al. (2016)).

Regulatory accounting guidelines equivalent to those used in the utilities sector for instance would allow policymakers to better match the medical concerns with the interest of all patients and taxpayers.[39] They should be designed to cater both to the quality and the financial/costing/pricing concerns. They will also make it easier and more transparent to inform on the trade-offs increase the basic transparency of trade-offs. Accounting journals and in some cases official agencies working on the health sector have been making this case quite explicitly (see, for instance, Australian Health and Hospitals Association (2019), Teisberg et al. (2019) or Vesty et al. (2022))). The implementation of these recommendations is still quite incomplete considering the data quality issues still frequently reported in the recent literature.

Bet on quantitative regulatory tools to track trade-offs transparently. The trade-offs between treatment volume, coverage, quality and financial/viability nicely revealed by the many case studies covered by the empirical literature need to be better assessed quantitatively at the sector level and not just at the project level. This means relying on analytical tools able to account for budget constraints both at the activity and at the sector level and to track distortions in incentives that may have been underestimated in the early stages of the sector restructuring. This is needed to increase the transparency of the costs and benefits of betting on the complementarity across financing sources (public vs private, and across government levels).

These tools should also be able to track the evolution over time and the relevance of risks associated with incentives built-in the demand, the supply and the financing side. Financial models delivering at the sector and at the firm level are quite common in the utilities sector and are available on the website of the regulators. While quite imperfect, they have proven to be quite useful in contracts negotiation and renegotiation to increase the transparency of the decisions as diverse as the price effects of changes in equipment or staffing for instance. It is not clear how many of these models are being used by healthcare regulators since the external access to that information is more limited. The lack of transparency in the sector has been a recurring issue in activities in which the public and the private sector try to partner as discussed in Agyenim-Boateng et al. (2017) in a case study of the UK's programme of investment in primary healthcare.

Unless financial and economic models commonly used in other regulated industries are developed to guide the decisions and/or their access shared, it seems likely that there will be some degree of apparent randomness to the decision to favour or reject the case for PE entry and any request to

[39] This should not underestimate the particular complexities of the accounting challenges of the health sector. The multiple sources of complexities include the need to reconcile patient and hospital accounting systems and sorting out the intricacies associated with multiple sources of patient payments, such as private insurance and government-backed programs and cost allocation sources across specialities.

restructure the sector or specific activities to favour that entry if so desired.[40] Addressing this concern will also ensure a much better coherence between ex-ante and ex-post evaluations and in particular in help in the sorts of conflicts during implementation that competition and regulatory agencies end up having to deal with. Addressing this concern also requires a global sectoral vision of the interactions between accounting and accountability for the health policy commitments made. [41]

Think through the games between stakeholders allowed by the institutional arrangements. It may also be useful to clarify more explicitly the institutional responsibilities of the various public sector actors in the definition of a health sector vision. Because that vision is somewhat incomplete, it can end up being fine-tuned by the PE investors as part of their entry negotiation. This may be useful but in some cases, it can be constraining on what would be a reasonable societal goal. Just as importantly, it can explain the apparent incoherencies of decisions taken by different public institutions in the same country. For instance, that some US states can feel comfortable with mergers that can then be rejected by the FTC reveals that something is not clear enough to at least some of the parties. It can also mean that the rules are incomplete and that there is a margin to negotiate. The desirability of this margin would probably benefit from a detailed assessment and, if needed, re-framed in an accountable way. Similar concerns are likely to happen in Europe as the role of PE in the sector keeps increasing and where tensions between national authorities and the European Commission Competition Directorate could take place.

The design of the institutional dimension also needs to account jointly for the sometimes very different viewpoints of the key stakeholders of the sector. For instance, the medical profession is concerned with the risks that the PE managers are keen to take over the control of essential operational decisions, leaving them in the role of advisors. They are also concerned with the possible changes to the standard health approaches to prioritize patients when resources are constrained as happened during the Covid crisis for instance. The public sector health authorities want to emphasize the fiscal risks associated with the increased financial risks taken by private managers in a system in which financing gaps end up in bankruptcies with a possible closing of the facilities or a de facto nationalization when the taxpayer is being asked to pick up the tab for private management failures. The "consumers" want to be able to voice their concerns with lack of access, long delays or excessive costs. Each of these groups wants to be able to engage with the potential PE investors.

Revisit the mandates given to competition and regulatory agencies. Regulation covers efficiency, equity and financial/fiscal viability. Competition has generally focused only on efficiency and to a lesser extent on financial/fiscal viability when state aids are an issue. In a business environment in which the border between the type of government interventions to address market failures increasingly cover overlapping concerns, it may make sense to rethink the traditional division of labor and mandates to simplify the policies. But it is also an opportunity to consider adding the coverage of social issues to their mandates and this in turn is likely to imply much more detailed involvement in monitoring operational decisions by PE managed firms before the deals are signed and while the deals are being implemented. This is what is implied in the new school of thoughts championed in policy circles by L. Khan in the US and M. Verstager in Europe.

The option is currently hotly debated in academic circles as mentioned earlier. It demands a broadening of the topics these agencies need to monitor jointly. If the FTC current approach becomes a model, the mandate of regulators and competition agencies would also include and evaluation of

[40] Auriol et al. (2021) discuss these models in the context of infrastructure public services.
[41] Vesny et al. (2022) produced an encompassing view on the topic.

labour markets impacts, including wage-fixing, no-poach arrangements, abusive referrals approaches or non-solicitation agreements. It would also lead to these agencies increasing their interest in a number of financial decisions.

The growing role of PE in the sector is indeed impacting decisions on leverage, dividend payments and investment that have been often overlooked in regulatory assessments and more often than not deal with ex-post in conflict situations in the context of competition policy. Yet, the management changes associated with PE have concrete operational implications, including on the composition of operating expenditures, the balance between operating and capital expenditures and the sustainability and the equity of some financial decisions.

Adopting enhanced disclosure requirements on the investments, operating and financing activities of PE firms in regulated activities is an option.[42] The opponents to this expanded agenda argue that it would often boil down to a shadow monitoring by regulators of corporate financing strategies and could possibly lead to micro-management. The problem is that under the current hands-off supervision, there is enough evidence of problems associated with short term views on the healthcare needs. In a sector as sensitive as health, it may make sense to find a better balance between ex-ante and ex-post supervision, including those concerning corporate financing decisions favoured so far by PE managed health activities. It also requires better coordination of tools between regulation and competition agencies to avoid the temptation of micro-management. [43]

Think through how attracting PE influences universal health access and its financing. A final concern that could be tackled early on in any health sector reform aiming at scaling up the role of PE is the clarification of what the commitments to universal service coverage implies to all parties. It should matter to any decision to restructure the sector to be able to maximize the interest of PE investors.[44] It will matter to the specific definition of the contractual or legal service obligations to all parties involved. And depending on how these obligations are defined, they will matter to the definition of the financing options. This is not a minor task since the strong preference of investors for high profit activities or regions implies that they are unlikely to be interested in low profit activities or regions and that these will either have to be picked up by public providers or subsidized if left to private providers. It is essential to keep in mind that cream skimming is a rational option for investors but that it is also a fiscal risk easy to underestimate and that, in the worst case scenario, it leads to the drop in access to services.

An anecdote from the water sector may make this quite concrete.[45] In the 1990s, Uruguay considered what it would take to attract private investors and operators into its water sector. The country had three obvious high profit zones, the capital city, a rich large cattle raising region and a few coastal regions with strong touristic activities. The provision of water and sanitation in the rest of the country, mostly poor rural areas, was (and still is) largely subsidized by these three richer zones. If the government had decided to unbundle the sector in 4 zones, in the best case scenario, private investors

[42] The sort of concerns regulators could have to be involved in include the monitoring of dividend pay-outs and leveraging levels. In the OECD, the dividend pay-outs of many regulated industries have been dominating the rankings of pay-outs across sectors. This has been correlated with the growing role of institutional investors. This role has also been correlated with significantly higher leverage levels in regulated industries. In a context of low interest rates, this seems relatively easy to justify and had little impact of the delivery of service obligations. However, when interest rates are high, retained earnings and limits on dividends may be needed to finance the service obligations, if these are to be delivered as scheduled.

[43] For a review of ongoing debates on the extent to which the US competition agency may need to adjust to the growth of PE in health, see the various papers in the Antitrust Chronicles (2022).

[44] Note that the risk of exclusion is also present in value-based pricing systems (see for instance Fuse-Brown et al. (2021).

[45] Bascan et al. (2022) offer a longer description of the referendum and its context.

would have taken over the three high margin zones and the public sector would probably have been in charge of the high cost, low margin rural zone. This would have implied replacing the historical cross-subsidies that characterized the financing of the sector by subsidies in a context in which fiscal constraints were a concern. The government ran a referendum and decided to stick to the traditional model, partially to avoid having to raise taxes to fund the subsidies to rural areas. This situation is not very different from the one health authorities need to decide on how to cater to rural populations or to low income communities.

4. Concluding comments

While the economic case to consider the costs and benefits of relying on PE to help finance and manage healthcare needs is relatively simple and attractive conceptually, in practice, it has proven to be more challenging than expected. Healthcare activities are so diversified and so many of them are so complementary that identifying the sources of risks of policy failures and designing regulation and competition policies that can minimize those risks seems to be an impossible task. Adding to the complexity is the diversity to regulatory, insurance and subsidization contexts and the atomization of policy mandates across agencies and government levels. No two countries follow the same rules and a similar heterogeneity can be observed across states or regions within countries. This means that there are limits to how much specific policy and regulatory experience can be exported to other countries in a simple way.

The literature on the experiences of the last 5 to 10 years has however produced enough evidence to identify a large number of common regulation and competition policies constraints or weaknesses that limits their effectiveness in dealing conflicts with PE in the sector. Adding more regulation is unlikely to be popular among investors or many members of the health community and will often simply add loopholes to be exploited by investors. As explained by Sorensen and Yasuda (2022), from the perspective of PE investors, the healthcare sector is perceived as already being quite highly regulated. Reforming or fine-tuning regulation may be a better option.

If the issues to address under a reform or fine-tuning agenda are reasonably well documented now, the challenge for policymakers is that the empirical research so far has not been as effective at analysing and testing solutions and many of the solutions discussed tend to be focusing on the US context. Yet, differences across experiments within the US and across countries have produced new knowledge on what works when in what context. Moreover, some of the case studies have enough data to produce new counterfactuals or other forms of simulations. This, in itself, is very relevant to start much more detailed empirical research on solutions.

At this stage, the main final message may be that there is a strong case to make the most of the opportunities to improve the financing and the operation of the sector, including through a collaboration with PE investors. But there is also a strong case to develop a more encompassing agenda to get to a menu of solution options to address the issues already identified. This menu needs to include the possibility that no deal with PE investors is the most desirable option, in particular if the regulatory and competition policies are unable to address the efficiency, equity and fiscal risks of the desire to diversify the financing options of the sector.

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