

Citation for published version:

Lacy-Nichols, J, Nandi, S, Mialon, M, McCambridge, J, Lee, K, Jones, A, Gilmore, AB, Galea, S, De Lacey-Vawdon, C, Maranhã Paes de Carvalho, C, Baum, F & Moodie, R 2023, 'Conceptualising commercial entities in public health: beyond unhealthy commodities and transnational corporations', *The Lancet*, vol. 401, no. 10383, pp. 1214-1228. [https://doi.org/10.1016/S0140-6736\(23\)00012-0](https://doi.org/10.1016/S0140-6736(23)00012-0)

DOI:

[10.1016/S0140-6736\(23\)00012-0](https://doi.org/10.1016/S0140-6736(23)00012-0)

Publication date:

2023

Document Version

Peer reviewed version

[Link to publication](#)

Publisher Rights

CC BY

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Lancet Series on Commercial Determinants of Health

Paper 2

Conceptualising commercial entities in public health: beyond unhealthy commodities and transnational corporations

Lacy-Nichols J, Nandi S, Mialon M, McCambridge J, Lee K, Jones A, Gilmore AB, Galea S, de Lacy-Vawdon C, de Carvalho CM, Baum F, Moodie R. Conceptualising commercial entities in public health: beyond unhealthy commodities and transnational corporations. *The Lancet*. 2023 Apr 8;401(10383):1214-28. doi: [https://doi.org/10.1016/S0140-6736\(23\)00012-0](https://doi.org/10.1016/S0140-6736(23)00012-0)

The full text is available at: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(23\)00012-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(23)00012-0/fulltext)

Jennifer Lacy-Nichols, PhD (corresponding author)
Centre for Health Policy, Melbourne School of Population and Global Health
Level 4, 207 Bouverie St
The University of Melbourne, Victoria 3010 Australia
ORCID: 0000-0002-5157-2098
E-mail: jlacy@unimelb.edu.au
Phone: +61 411 816 863

Sulakshana Nandi, PhD
Public Health Resource Network, Chhattisgarh, India
People's Health Movement, New Delhi, India
0000-0002-4366-4566

Melissa Mialon, PhD
Trinity Business School, Trinity College Dublin
Dublin, Ireland
0000-0002-9883-6441

Jim McCambridge, PhD
Department of Health Sciences, University of York
York, United Kingdom
0000-0002-5461-7001

Kelley Lee, PhD
Faculty of Health Sciences, Simon Fraser University
Burnaby, Canada
0000-0002-3625-1915

Alexandra Jones, PhD
The George Institute for Global Health, UNSW
Sydney, Australia

0000-0001-5039-144X

Anna Gilmore, PhD

Tobacco Control Research Group (TCRG), Department for Health, University of Bath
Bath, United Kingdom
0000-0003-0281-1248

Sandro Galea, MD

School of Public Health, Boston University
Boston, United States
0000-0002-7534-0945-00

Cassandra de Lacy-Vawdon, BHSc (Hons)

School of Psychology and Public Health, La Trobe University
Bundoora, Australia
0000-0001-5295-0751

Camila Maranhã Paes de Carvalho, PhD

Department of Social Nutrition, Fluminense Federal University (UFF)
Rio de Janeiro, Brazil
0000-0002-3659-140X

Fran Baum, PhD

Stretton Institute, University of Adelaide
Adelaide, Australia
0000-0002-2294-1368

Rob Moodie, PhD

Centre for Health Policy, Melbourne School of Population and Global Health, The University of
Melbourne
Melbourne, Australia
0000-0002-8425-7975

Summary

Most public health research on commercial determinants of health (CDOH) to date has focused on a narrow segment of commercial actors – transnational corporations (TNC) that produce so-called ‘unhealthy commodities’ – for example tobacco, alcohol, and ultra-processed foods. Further, as public health researchers, we often discuss the CDOH using sweeping terms such as ‘private sector’, ‘industry’, or ‘business’ – terms which lump together diverse entities whose only shared characteristic is their engagement in commerce. The absence of clear frameworks for differentiating among commercial entities, and understanding how they may promote or harm health, hinders the governance of commercial interests in public health. Moving forward, it is necessary to develop a much more nuanced understanding of commercial entities that goes beyond this narrow focus, enabling consideration of a fuller range of commercial entities and the features that characterise and distinguish them. In this second of three papers in a Series on Commercial Determinants of Health, we develop a framework that enables meaningful distinctions among diverse commercial entities through consideration of their practices, portfolios, resources, organisation and transparency. The framework permits fuller consideration of whether, how, and to what degree a commercial actor may influence health outcomes. We discuss possible applications for decision-making about engagement, managing and mitigating conflicts of interest, investment and divestment, monitoring, and further research on the CDOH. Improved differentiation among commercial actors strengthens the capacity of practitioners, advocates, academics, regulators and policy makers to make decisions about, better understand, and respond to the CDOH through research, engagement, disengagement, regulation, and/or strategic opposition.

Key messages

- Commercial determinants of health (CDOH) scholarship must look beyond a narrow focus on specific industries and their products such as tobacco, alcohol, and ultra-processed foods to how a broad range of commercial or quasi-commercial entities influence health outcomes.
- The Commercial Entities & Public Health Framework deepens our understanding of the diversity of the commercial world and the potential pathways to health harms or benefits.
- Our framework is intended to inform the development of more nuanced approaches to CDOH and suggest mechanisms for decision-making about engagement that carefully scrutinise the risks of interaction with commercial and quasi-commercial entities.

1. Introduction

The commercial world is diverse. It spans trans- and multinational corporations with revenues larger than the gross domestic product of some countries through to small-scale, locally-owned businesses. Commercial entities produce and sell an expansive range of goods and services and engage in many different practices that vary in the extent to which they promote or harm health. Furthermore, although commercial entities are generally defined as being in the private, for-profit sector, which excludes civil society and public service entities, these boundaries often overlap. For example, there are state-owned for-profit businesses, and some philanthropic organisations derive their resources from commercial activities.^{1,2} This diversity poses significant challenges for research and governance regarding the commercial determinants of health (CDoH), defined as “the systems, practices and pathways through which commercial actors drive health and health inequity” (**Paper 1**).

First, CDoH terminology is imprecise. Often, generic terms such as ‘private sector,’ ‘corporations,’ ‘industry,’ or ‘business’ are used to discuss the CDoH.³⁻⁵ This creates the impression that the public health community is against the entire commercial world when, in fact, concerns are directed at certain actors and forms of commerce harmful to health. Few commercial entities, if any, are wholly good or bad for public health. Imprecise or generic terms can also confuse the boundaries between commercial, non-commercial or quasi-commercial entities. For example, many public health organisations are legally incorporated, but these public health corporations may have different aims and responsibilities than other, for-profit corporations. It is important to identify the attributes and practices that allow us to differentiate amongst commercial and other entities and to understand their influence on health. An imprecise or vague understanding of the commercial sector may limit governments’ ability to find solutions given that regulating or restructuring commercial entities is one way forward.

Second, CDoH research is limited. To date, the conceptualisation and study of commercial determinants of health (CDOH) has primarily focused on a narrow selection of powerful transnational corporations (TNC) producing ‘unhealthy commodities’ – primarily tobacco, alcohol, and ultra-processed foods – generating robust evidence of their health harms.^{3,6} Less attention to date has been given to the influence of other commercial and quasi commercial actors and the broad range of practices through which they might influence on human health and health inequity, either positively or negatively. We recognise there are inherent risks with discussing health promoting elements of a commercial entity (the entity might claim these elements compensate for other, harmful behaviours, or use them as tools of distraction).⁷ Yet, we argue that it is essential to understand the diversity of commercial entities with nuance and granularity in

order to understand the complex pathways through which CDOH affect health and thus how these might be addressed.

Third, current approaches for managing conflicts of interest (COI) are inadequate for dealing with the complex range of commercial and quasi-commercial interests now involved in public health governance.^{8,9} While the Framework Convention on Tobacco Control seeks to exclude the tobacco industry from policy making, no such similarly comprehensive mechanism exists for other industry sectors.¹⁰ Instead, governments and international institutions regularly engage with commercial and quasi-commercial entities in the development and implementation of public policies, raising challenging questions about whether and how far powerful economic interests are being prioritised over global health and the public interest. Nuanced frameworks are required to differentiate between commercial actors and to analyse the extent and nature of their health impacts and the potential risks or benefits of engagement.

Building on the conceptual model set out in **Paper 1**, notably the categorisation of commercial practices, this paper introduces a framework of the key attributes and practices that are relevant to understanding how commercial entities differ, and how these differences shape the nature of their influences on health. The framework is organised into five categories: practices, portfolios, resources, organisation, and transparency. The paper then considers the practical application of this framework for engagement, research and monitoring of the CDOH.

Our aims for this paper are threefold. First, we hope to expand the practical ability of policy makers, public health practitioners, non-government organisations (NGOs), and other stakeholders to understand and speak with greater clarity about what, precisely, is meant by ‘commercial sector’ or ‘commercial actors’. Second, our framework offers a first step toward developing stronger and more consistent mechanisms for assessing and mitigating commercial COI, especially for entities that are less straightforwardly classified as ‘private sector.’ This informs public health approaches to partnerships, engagement, disengagement, regulation, and other interactions with commercial entities. Third, our framework aims to provide the conceptual foundations for future empirical research, including the development of monitoring programs or robust, quantifiable metrics for identifying commercial entities and practices that are health promoting to redesign systems in their favour (see **Paper 3**).

2. Many and varied forms of commercial entities

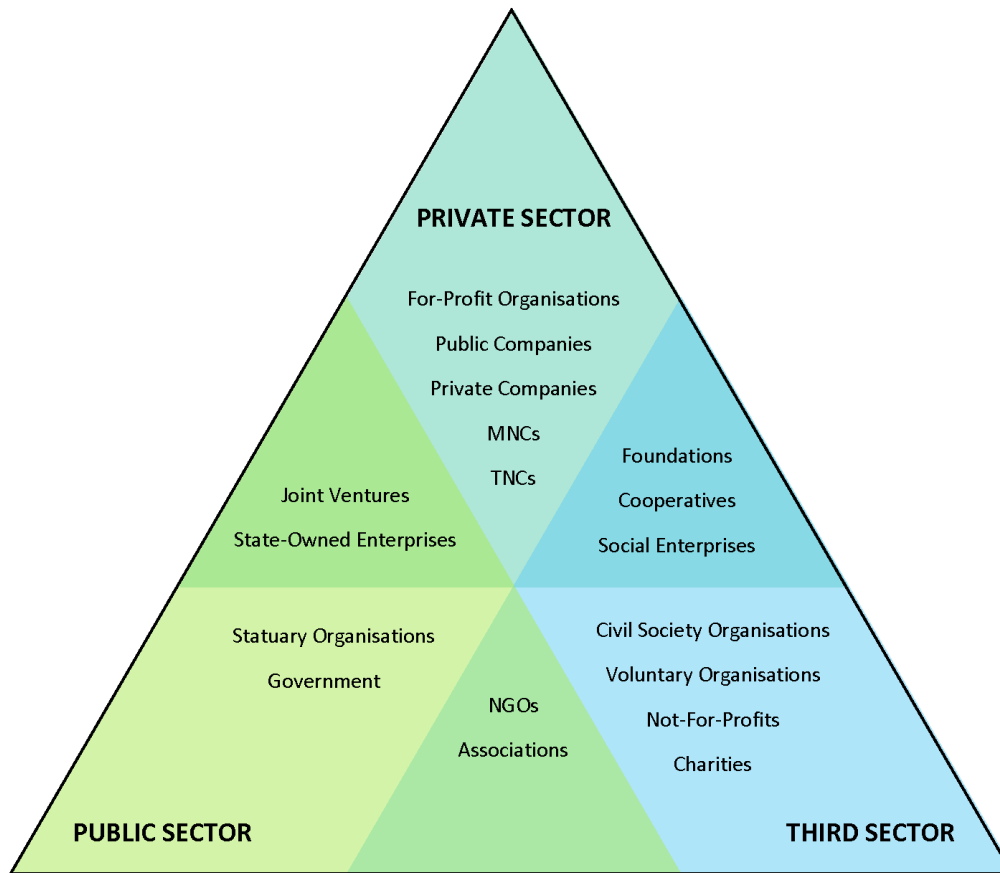
In seeking to provide nuance about the diversity of commercial entities, a first step is to consider the definition and scope of the term ‘commercial entity.’ Commercial entities are usually considered part of the private sector, which has been defined as “the part of a country's economy which is controlled by the State”

(Paper 1, **Panel 1**).¹¹ However, this definition misses the many quasi-commercial entities that exist and whose practices may influence health significantly. Some commercial entities possess qualities that overlap with the public sector (e.g., governments, the state) and/or ‘third sector’ of voluntary and civil society organisations and vice versa (see **Panel 1**). The boundaries between these three sectors are not always straightforward, and a rich body of scholarship has developed different frameworks to segment these sectors for the purposes of classification, data collection, national statistics and more.¹²⁻¹⁵

It is useful to conceptualise public, private and third sector organisations as made up of combinations of attributes. Some of the attributes discussed in the literature include ownership (e.g., rights and responsibilities concerning property), control (e.g., the ability to govern the policies and activities of an entity), income sources (e.g., taxes, donations, sales), the purpose of the entity (e.g., making profits, humanitarian aid) and the functions performed (e.g., providing services, engaging in advocacy).¹³⁻¹⁵ This approach highlights that many entities are hybrid in nature, with some attributes that are more commercial and market oriented in nature, and other attributes that are more public/governmental or third sector/civil society in nature (**Figure 1**).¹²

Recognising the porous boundaries between sectors, we take here a broad conceptualisation of ‘commercial entity,’ defined as actors “engaged in buying and selling of goods and/or services (i.e., commerce), primarily for profit or return on investment”, see **Paper 1**, Panel 1). This allows us to include a range of hybrid, quasi-commercial entities within the CDOH remit, which we elaborate on below. Illustrative examples are provided in **Panel 1**.

Figure 1. Hybrid entities in the public, private and third sectors



State-owned enterprises (SOE), which comprise some of the world’s largest companies, and the investment practices of sovereign wealth funds (SWF) overlap the traditionally defined public and private sector. SOEs are independent legal entities controlled by governments that engage in commercial activity for profit-making or strategic purposes – entities of this nature have existed for centuries.¹⁶ While SOEs are historically found in ‘natural monopoly’ sectors such as utilities and transportation, they are also found in sectors such as banking, mining, and agriculture.^{16,17} A form of institutional investor, SWF are owned and managed (directly or indirectly) by governments, often to provide long-term savings or pensions.¹⁸ SWF invest in a range of commercial entities that have varying impacts on health, and this impact should be considered in the health impact assessment of any given SWF.¹⁹

The ‘not-for-profit’ (NFP) sector includes a range of charities, social clubs, sporting organisations, churches, business associations, and foundations. These entities are legally different from ‘for-profit’ entities and often have a social purpose, working on issues of animal welfare, hunger, homelessness, public health and the like. Whilst many of these entities are purpose-driven, the practices of some entities have

more in common with TNCs, suggesting that ‘NFP’ status is more a legal loophole than a commitment to promote social good (**Panel 1**).²⁰ For example, many NFPs earn income by competing alongside ‘for profit’ entities and engage in market practices similar to other commercial entities.²¹ ‘For-profit’ commercial entities often donate to NFP, which may influence the agenda and actions of the NFP.²² Industry associations and think tanks that support business interests are often structured as NFPs, and some of the world’s largest corporations and wealthiest individuals have set up charitable foundations and trusts – the tax exempt status of these entities is effectively subsidised by taxpayers.^{20,23,24}

Finally, cooperatives and social enterprises (such as B Corporations) are simultaneously economically and socially oriented.²⁵ Cooperative organisations are member-owned and democratically controlled. They take a myriad of forms, including consumer-owned (e.g. credit unions, food, or health care co-ops), producer-owned (e.g. farmer-co-ops) or worker-owned (a wide range of industries).²⁶ B-corporations, in contrast, are for-profit companies (such as Patagonia, Kickstarter, and Ben & Jerry’s) certified by the NFP B Lab with a legal requirement to “balance profit and purpose”.²⁷ However, their success in actually embedding and pursuing pro-social goals and the extent of their difference to purely ‘for-profit’ companies needs further research.²⁸

Panel 1: Hybrid, boundary-spanning commercial entities

State-owned enterprises (SOEs)

In 2020, Sinopec (China’s largest SOE) was the second largest company on Fortune Global 500 list. Its revenue of \$407,009,000,000 was derived mostly from oil and gas products.²⁹ In 2014, SOEs made up 23 percent of Fortune Global 500 companies.³⁰ A 2017 OECD study found that governments were full or majority shareholders in 2467 ‘commercially-oriented enterprises’ that, along with the Chinese government’s 51,000 SOEs, were collectively worth over \$30 trillion dollars and employed more than 20 million people.³¹

Sovereign wealth funds (SWF)

The Norwegian Government Pension Fund is the world’s largest SWF, containing more than \$1.1 trillion in assets in January 2021.³² The fund (like others) has an explicit social responsibility mandates which guides investment and divestment strategies.^{33,34} In contrast, in 2021, Temasek (Singapore’s SWF) launched a joint venture with BlackRock (an investment company criticised for investments in military companies such as Lockheed, Boeing, and Airbus).^{35,36}

Not-for-profits (NFPs) and social enterprises

The Sanitarium Health and Wellbeing Company is a private food company operating in Australia and New Zealand that is wholly owned by the Seventh Day Adventist Church. As a subsidiary of a charitable organisation, its 2020-2021 revenues of over US \$355 million was tax exempt.^{37,38}

The National Collegiate Athletic Association (NCAA) is a multibillion-dollar NFP based on the unpaid labour of student athletes.³⁹ In a recent United States Supreme Court case, Justice Kavanaugh wrote that “the NCAA’s business model would be flatly illegal in almost any other industry in America”.⁴⁰

The Bill and Melinda Gates Foundation donates significant sums to improve health. However, there have been concerns that its founders use the foundation to avoid taxes.²⁴ There are also concerns that “philanthrocapitalism” shapes global policy agendas in ways that prioritise for-profit initiatives (such as pharmaceuticals and information technology systems) over, for example, non-profit national healthcare systems based on values of universal access and equity.⁴¹

CHS Inc., a member-owned agricultural cooperative, is the largest cooperative in the United States, with \$31.9 billion in revenue in 2019.^{42,43} It partially owns CF Nitrogen (a publicly traded fertiliser company) and has a joint venture with Mitsui & Co (a Japanese trading company primarily involved in oil and gas).⁴³

The UK-based Co-operative Group (the “Co-op”) has more than 100 subsidiaries in food, insurance, finance and funeral services. The Co-op is democratically managed by its over 4 million members, who help establish the goals and strategies of the organisation.⁴⁴

3. Qualities differentiating commercial entities

A focus on ‘unhealthy commodity industries’ (UCI – see panel 1, **Paper 1**) characterises much of the CDOH literature, yet these represent only some commercial entities. The label ‘commercial entity’ can be applied to a diverse range of actors and organizations, whose role in local, national and global markets varies considerably. While many features differentiate commercial entities, their products, size, and legal form are especially important dimensions to consider.

The diversity of commercial entities can be seen in the range of products and services they make, market and sell. Looking beyond those commercial entities that derive the majority of their profits from health-harming products, other commercial entities have the potential to affect health adversely in indirect ways. For example, technology companies have developed surveillance and military products linked to human rights abuses.⁴⁵ A wide range of commercial products and services have the potential to affect health and

health equity (both positively and negatively) including pharmaceuticals, automobiles, weapons, extractives, social media, banking, insurance, education, transportation, information technology, software, law, construction, healthcare, real estate, and utilities. The interests of these industries are often pursued with the support of business-friendly think tanks, lobbyists, law firms, public relations and advertising agencies, tax accountants, and other professional services. These and others can thus be conceptualised as commercial determinants of health, and their practices deserve scrutiny.

Although the world's wealth is now disproportionately concentrated in a small number of large companies and individuals (often owners of these companies), approximately 90 percent of the businesses worldwide are micro, small and medium enterprises, providing almost 72 percent of non-public sector employment.^{46,47} Further, the informal economy in low and middle income countries (LMICs), such as street vendors and village doctors, provides employment to around 60 percent of the world's employed population.⁴⁸ These small, formal and informal commercial actors are significant contributors to national incomes, especially in LMICs.⁴⁹ While the individual health impacts of each of these smaller commercial actors are decidedly less than that of a TNC or large national entity, through the provision of employment, generation of household incomes, and delivery of essential services (including healthcare), their collective impact on public health is substantial. This, when combined with their overall contribution to the national and global economy, makes these smaller entities particularly important for investigation as commercial determinants of health.

Beyond their products and size, commercial entities can take a number of different legal forms, each with their own structure and rules, such as sole proprietorships, partnerships, franchises, joint ventures, cooperatives, trusts, limited liability, and corporations.⁵⁰ Each of these have a myriad of variations. Corporations, for example, can take numerous forms, including publicly traded companies on stock exchanges, privately owned companies (e.g. family owned), incorporated associations (e.g. community or professional organisations), wholly owned subsidiaries (e.g. of a parent corporation), and incorporated cooperatives. Some of the largest global companies have thousands of branches, subsidiaries, sub-contractors, investments and shareholders, and untangling and identifying the complex network of connections presents an immense challenge. These complex organisational structures can be exploited to shield parent companies from liability for harms enacted by their subsidiaries.⁵¹ Depending on their legal jurisdiction, commercial entities are subject to different regulations concerning their rights and responsibilities (e.g. limited liability or tax obligations).⁵² The absence of agreed and enforceable global laws and regulations enables large companies (esp. TNCs operating across multiple jurisdictions) to venue shop for the most favourable tax, labour, environmental, or other regulation.⁵³ Understanding different

commercial forms and their consequences is complicated by unclear boundaries between the public, private and third sectors – notions of ownership and control are not always clear cut and may change overtime.

4. A framework for interrogating the diversity of commercial entities

This more nuanced appreciation of complexities of commercial and quasi-commercial entities necessitates more sophisticated tools to distinguish among them. To do so, we delineate the practices and attributes of different types of commercial entities. Our framework builds on the categorisation of commercial practices within **Paper 1** and is informed by existing academic and practitioner tools and frameworks to monitor and benchmark commercial entities.^{4,54-68} Its development and refinement was further informed by consultations with expert stakeholders from a range of fields, including public health, corporate accountability, marketing, consulting, human rights, sustainability, tobacco control, labour rights, law, investing, and tax reform. Participants included academic researchers, NGO representatives, civil society activists, consultants, lawyers, and representatives of intergovernmental organisations.

The framework encompasses commercial practices and four additional key attributes (portfolios, resources, organisation, and transparency) (**Figure 2**). While the commercial entity's environment also shapes its practices and attributes, we focus here at the level of the actual entity, as the model in **Paper 1** presents a detailed analysis of the upstream, system drivers of the CDOH. To support the real-world application of this framework, we develop a set of guiding questions for each category of the framework and indicate potential data sources (**Table 1**). This framework represents a first step towards developing a fuller understanding of commercial entities and their health impacts. We anticipate that future empirical applications or research to test its usability will lead to further refinement as people build on, expand, and adapt our framework to suit different needs or contexts (for example, developing metrics and other features to assess or evaluate specific entities).

Below, we elaborate on each element of the framework. While some aspects help to understand whether a commercial entity will have a more health promoting or health harming impacts (practices and portfolios for example), others help to understand the magnitude of impact (resources), and potential accountability mechanisms (organisation and transparency).

Figure 2: Commercial Entities & Public Health (CEPH) Framework

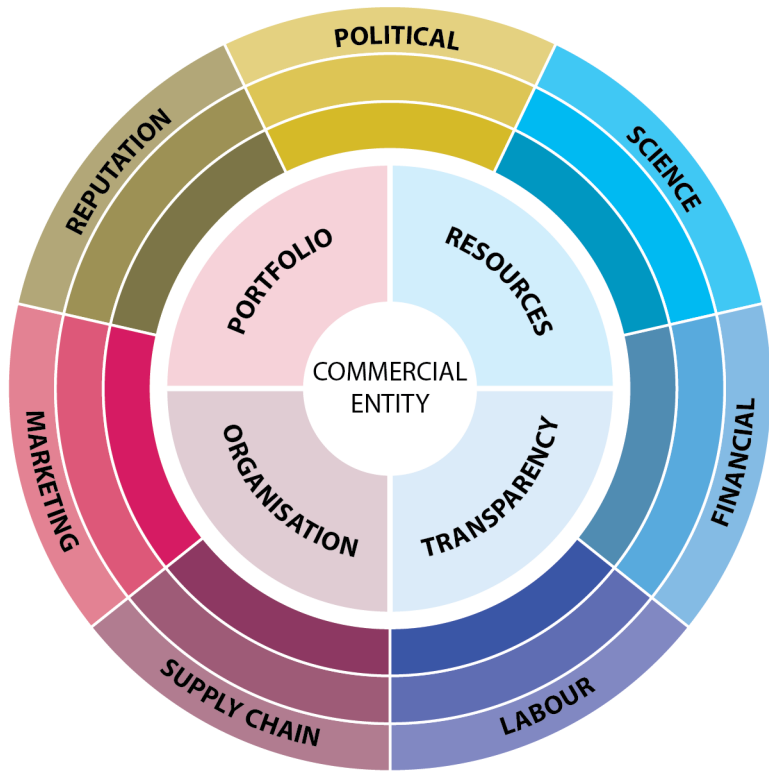


Table 1: Guiding questions and data sources to apply the CEPH Framework

Practices and Attributes	Category	Definition	Guiding questions	Potential data sources
Practices	Reputation management	<i>Efforts to shape legitimacy and credibility, reduce risk, and enhance corporate brand image</i>	Does the entity engage in reputation management efforts? What activities does it use (e.g. corporate social responsibility, brand messaging)? What mediums does it use (e.g. media, meetings with politicians)? What are its relationships with and influence over traditional and social media (e.g. ownership, board membership, marketing spends)?	Company websites and annual reports Media reports
	Political	<i>Practices to secure preferential treatment, prevent or favourably shape policies, and circumvent or undermine policies</i>	Does the entity attempt to influence global, supranational, national, or local policy development? Does it seek to circumvent, undermine, or roll back policies already in place? What activities does it use (e.g. lobbying, political contributions, litigation)? What is the nature and extent of the revolving door between it and government? What is its relationship with third parties (e.g. does it fund and operate through think tanks, business associations, lobby groups)?	International Institute for Democracy and Electoral Assistance [*] Open Secrets [†] Transparency International [‡] University of Bath's Tobacco Tactics [§] Lobbying and political donation registers
	Science	<i>Practices involving the production and use of science to alter products and/or otherwise secure industry-favourable outcomes</i>	Does the entity attempt to influence the production and use of peer-reviewed science? What activities does it use (e.g. ghost writing, disputing evidence, funding research)? Does the entity engage in research and development? Does the entity commercialise publicly funded research? Does (and if so how) the entity use science to increase sales? Does (and if so how) the entity use science to influence policy?	University of Bath's Tobacco Tactics Peer-reviewed literature, including funding and COI declarations on papers Policy submissions
	Marketing	<i>Practices to promote sales of products or services</i>	Does the entity engage in marketing practices? What is the nature of its activities (e.g. pricing, promotion)? How much does it spend on advertising? Do its marketing practices target communities or individuals in vulnerable circumstances? Does it use harassing communication methods?	Statista ^{**} Nielsen ^{††} Mintel ^{‡‡}
	Supply chain and waste	<i>Practices involved in the creation, distribution, retail,</i>	What is the nature of the entity's supply chain? What other commercial entities are involved in its supply chain? In what locations do these activities take place?	University of Bath's Tobacco Supply Chain Database ^{§§}

* <https://www.idea.int/>

† <https://www.opensecrets.org/>

‡ <https://openaccess.transparency.org.uk/>

§ <https://tobaccotactics.org/>

** <https://www.statista.com/>

†† <https://www.nielsen.com/au/en/>

‡‡ <https://www.mintel.com/>

§§ <https://tobaccotactics.org/supply-chain/>

		<i>and waste management of products or services</i>	What are the health or environmental impacts of its supply chain practices (e.g. pollution, waste, displacement of local populations)?	Carbon Disclosure Project ^{***}
	Labour and employment	<i>Practices to manage those employed directly within or under contract to the organisation within its supply chain</i>	What is the nature of the entity's employment contracts (e.g. wages, leave entitlements)? What are the working conditions (across all levels of supply chain)? What is the workplace culture? Does the entity provide access to remedy (e.g. complaint channels, grievance mechanisms)? Does the entity provide freedom of association? What is the ratio of CEO to median pay?	National bureaus of Labour Compustat Execucomp ^{†††}
	Financial	<i>Practices to support financial position of the organization</i>	What is the entity's effective tax rate? Does it engage in tax avoidance or evasion? What mergers, acquisitions or buyouts has it proposed or completed? Who are its investors? Does it receive funding from government? Does it have a financial stake in other entities?	Orbis ^{‡‡‡} Company annual reports National taxation agencies Tax Foundation ^{§§§}
Portfolio	Products	<i>All goods and services produced</i>	What products (goods or services) does the entity produce? What products does its subsidiaries or parent company produce? Are any products recognised risk factors for NCDs? Are any products deemed health harming (e.g. mental health, living conditions)? Are any products deemed essential or a human right? How much and what percent of sales and revenue comes from each portfolio segment?	MSCI Global Industry Classification System ^{****} IBIS ^{††††}
	Market concentration	<i>Degree and nature of horizontal and vertical integration</i>	What is the entity's market share for each of its portfolio segments? ^{‡‡‡‡} What is the degree and nature of horizontal and vertical integration for each of its portfolio segments? ^{‡‡‡‡}	Euromonitor ^{§§§§} Statista
Resources	Geographic range	<i>Countries where the entity engages in any of the seven practices</i>	Where are the entity's headquarters located? Where are its subsidiaries located? Any subsidiaries located in tax havens (if so where and how many)? In what countries does the entity (and its subsidiaries) engage in commercial practices?	Orbis Government agencies regulating investments (e.g. U.S. Securities and Exchange Commission) Company annual Reports
	Financial	<i>Annual revenue, profit margins, and other tangible and intangible assets</i>	What is the entity's annual revenue (at national, regional, and/or global levels)? What are its profits and/or retained earnings? What are its profit margins? What are its tangible and intangible assets? What are its (claimed) tax or other contributions?	Company annual Reports Statista Forbes lists (e.g. Global 2000) ^{*****}
	Employment	<i>Number and percent of people the entity employs in a country</i>	How many people does the entity employ in a country? How many people do its subsidiaries employ?	Company annual Reports IBIS

*** <https://www.cdp.net/en>

††† <https://wrds-www.wharton.upenn.edu/pages/grid-items/compustat-execucomp-basics/>

‡‡‡ <https://www.bvdinfo.com/en-gb/our-products/data/international/orbis>

§§§ <https://taxfoundation.org/>

**** <https://www.msci.com/gics>.

†††† <https://www.ibisworld.com/>

‡‡‡‡ Note these questions may be asked at different jurisdiction levels.

§§§§ <https://www.euromonitor.com/>

***** <https://www.forbes.com/lists/list-directory/#75fd97cb274d>

Organisation	Ownership & control	<i>Ownership and organisational structure of the entity</i>	<p>How is the entity legally classified (e.g. publicly traded or listed corporation, not-for-profit, private company, cooperative)?</p> <p>Does the entity have limited liability?</p> <p>Who owns the entity?</p> <p>Has the entity changed ownership (and if so why)?</p> <p>Who has the largest ownership stake?</p> <p>Who are the board or committee members, and what are their networks and potential COI?</p> <p>How are board members and management appointed, removed, held liable, and compensated?</p> <p>How independent are the board or committee members (e.g. relationship to the entity or other entities, to shareholders, to management)?</p> <p>What are the rights and responsibilities of its leadership and management (e.g. decision-making allocated to CEO or board of directors)?</p>	<p>Orbis</p> <p>Orbis</p> <p>Government agencies regulating investments (e.g. U.S. Securities and Exchange Commission)</p>
	Funding	<i>Source(s) and nature of funding</i>	<p>How and by whom is the entity funded?</p> <p>Who are the majority funders or investors?</p> <p>Does the entity receive government subsidies or grants?</p>	Annual reports
Transparency	Transparency & disclosure	<i>Breadth and depth of information provided by the entity</i>	<p>Does the entity provide transparent information about its products, resources and influence, ownership and funding, and practices?</p> <p>What is the consistency and quality of this data (e.g. accuracy, detail, timeliness)?</p> <p>Are possible health impacts arising from commercial practices presented to or discussed with external stakeholders?</p>	<p>Company websites & annual reports</p> <p>Transparency International</p>

Practices: A commercial entity influences human health and health inequities through its practices. As shown in **Paper 1**, commercial practices take many forms that can either promote or harm health. An initial step towards understanding commercial practices is to ask whether an entity engages in a specific practice. All commercial entities, even those in the informal sector, typically engage in some form of marketing, supply chain, labour, and financial practices.⁶⁹ However, reputation management, political, and science practices are more elective, and may indicate entities engaging in harmful practices or that have ‘unhealthy commodities’ in their portfolio (especially entities facing regulation or public backlash). Whether an entity engages in certain practices is mediated by its policy and regulatory environments that may incentivise some practices and disincentivise others (see **Paper 1**).

A second step is to consider how a commercial entity engages with a specific practice. The nature of the entity’s portfolio and the health implications of the range of products have a key bearing on how far the practices are beneficial and or deleterious to health. The entity’s resources can serve to amplify the extent and reach of its practices, whether for the benefit or detriment of health. Smaller entities may be precluded from certain practices, for example entities operating within only one jurisdiction lack the opportunity to ‘venue shop’ for favourable tax regimes, labour, or environmental standards, although that does not preclude the use of other financial, employment, or supply chain practices. Similarly, reputation management, political, and science practices tend to be limited to larger entities that are better resourced to distract from their harmful practices or shape policy and knowledge environments in their favour.^{23,55,70} An entity’s organisational structure may also determine some of its practices – whereas publicly listed companies are incentivised to generate profits to distribute to their shareholders, not-for-profits and non-distributing cooperatives use retained earnings to further the purpose of the entity and may display greater commitment to ethical employment practices.⁷¹ Through their practices, entities can enter into direct and indirect relationships with other entities (such as through investments, having a common board or committee membership, membership in a trade association, or using financial services which have harmful clients), and thus explicitly or tacitly endorse the other entity’s practices. While divestment from some companies is one response to this from the financial sector (see **Paper 3**), it is also important to consider other relationships.^{72,73}

Finally, as noted earlier, an acknowledgement that some commercial practices may benefit health should not be viewed as offsetting or compensating for harmful practices. Rather, interrogating the practices of specific entities provides an opportunity to inform strategies to foster health promoting forms of commerce and mitigate and ameliorate harmful practices (**Paper 3**).

Portfolio: The goods and services produced by an entity indicate whether its principal business activity may be directly health harming or whether any health impacts are more distal – both are important to consider in any assessment of a commercial entity. For entities that produce ‘unhealthy commodities’ (e.g. tobacco, alcohol, ultra-processed foods, gambling, coal, or weapons) health concerns often focus on their direct contribution to morbidity and/or mortality.^{3,6} Many goods and services have the potential to support human health and well-being, such as minimally processed foods, education, housing, and healthcare,⁷⁴ and at the same time impact adversely on health equity if access is not ensured (see **Panel 2**).⁷⁵ Unlike governments, commercial entities are not required to guarantee a right to these goods and services.^{75,76} Thus, it is important to interrogate how the practices of an entity producing essential goods and services shape the affordability, quality, and access to the product, particularly for communities in vulnerable circumstances. For entities with diversified portfolios, or with numerous subsidiaries, or those that hold equity in other entities, it is important to consider the full range of products within those portfolios and to question the sales and revenue each portfolio segment generates (as a proxy for its importance to the entity).^{54,77,78} Like their practices, beneficial products should not be seen as compensating for harmful products. Finally, whether an entity is upstream (producing raw materials and products) or downstream (engaged in consumer-facing distribution and marketing) within the supply chain may influence the extent it is subject to public and consumer scrutiny. In turn, this may signal its likelihood of engaging in reputation management or other defensive practices.⁷⁹

Resources: An entity’s resources enable or constrain its commercial practices and thus point towards the likely scale of its health impact. Commercial entities differ greatly in the nature and extent of resources they possess, including the number of employees, countries of operation, annual revenue, profit margins, market share, and other tangible and intangible assets.^{46,80} These resources indicate an entity’s relative influence over markets and political systems, both of which can have profound impacts on health outcomes (for example through blocking policies beneficial to health). While some entities are highly resourced across most (or all) resource metrics (for example, Forbes Global 2000 companies),⁵³ most commercial entities have fewer resources and are limited to more local impacts on health. For entities that operate across multiple jurisdictions or with complex ownership structures (for example, those with numerous subsidiaries and/or foreign affiliates), measuring their resources is more difficult.^{78,81} When analysing such an entity’s resources and practices, it will be important to clarify the scope of inquiry to determine the relevant geographical or organisational boundaries of that entity.⁸² While we focus mainly on economic resources here, a broader conceptualisation could include things like intellectual property arising from research or acquisitions or an entity’s access to government representatives (these are both considered in the practices section of the framework).

Organisation: An entity's legal and organisational structure shapes its rights, responsibilities, decision-making mechanisms, and purpose. A key question is how profits or retained earnings are distributed: are they distributed to shareholders, partners, and/or members, or must they be used to further the organisation's purpose? The answer helps to explain the incentives that drive the commercial entity's practices, including whether it prioritises financial goals or other more pro-social and health-oriented goals (such as employee well-being, paying a living wage, or offering secure employment).^{71,83} A second question considers the entity's governance: how are an entity's members or shareholders involved in its governance, including whether voting rights are equally distributed or reflect the voters' share ownership?^{84,85} A related question concerns the sources of income for the entity (including who the majority funders are), as ownership and funding present an important entry point for exerting influence over commercial activities, such as the shareholder action and divestment activities discussed in **Paper 3**.⁸⁶ A similar question can be asked about board or executive compensation, and whether this incentivises the pursuit of short-term profits above other business goals. Finally, analysis of an entity's organisational structure can reveal its relationship to other commercial entities (via subsidiaries, investments or supply chain) which should be included in analyses of the extent and nature of its practices.^{64,82}

Transparency: To understand the diversity of commercial entities and the different ways that their practices influence health, a high level of transparency is necessary. There can be obvious tensions between the commercial goals of entities and optimising health and well-being. Careful consideration of potential conflicts between goals is contingent upon transparency.⁸⁷ Timely, readily understandable, and accurate data about a commercial entity's attributes and practices are necessary to answer the questions within this framework.⁸⁸ For example, analysing portfolio makeup should allow for straightforward identification of entities with recognised health-harming products and the percent of revenue coming from those portfolio segments. Similarly, a list of an entity's owners and funders should be publicly available, and where relevant the majority funders or donors and the amount contributed. There are some examples of commercial transparency, such as within the financial sector, where the development of socially responsible investment indices have led to routine evaluations of publicly traded companies and their practices.⁸⁹ These exercises tend to be limited to issues companies perform well on, and more rigorous evaluations are needed. Although a health-focused investment index had yet to be developed, such an index could leverage investors' access to ensure that health-related questions (such as those within our framework) become part of routine evaluations of commercial entities.

5. Applications of the framework

The purpose of this framework is to deepen our understanding of CDOH as composed of a broader range of commercial entities. Here we discuss three key practical applications for this framework: decision-making about engagement, research, and monitoring of commercial entities.

Engagement

The framework is intended to support actors who are interacting (or considering interacting) with commercial entities. These actors include policy makers and regulators; public health practitioners and advisors; civil society, NGOs, and community organisations; academics and researchers; and other commercial entities (such as the investment community). The framework categories and guiding questions shed light on the characteristics of commercial entities that need to be considered if health is to be protected and promoted.

Future iterations of this framework can be used to inform decision-making about whether and how commercial entities participate in policy making relevant to health (particularly for policies outside the remit of the health department).⁹⁰ For example, it may be used to help navigate the tension between continued calls to progress ‘public private partnerships’ for health and the increasing evidence that commercial actors can use their influence to weaken implementation of WHO Best-Buys for NCDs.⁹¹ Conflict of interest (COI) refers to competing goals, and is intrinsically involved in health actor engagement with commercial entities whose primary purpose is not to advance health.⁹² Contributions to public consultations by commercial entities must be interpreted in light of COI considerations, which should be made explicit by the entity concerned. Where engagement proceeds, stringent governance is required.

While commercial involvement in agenda setting, policy development, decision-making and evaluation inherently risks blurring public and commercial interests (and should generally be avoided for this reason), the framework may be particularly valuable as an aid to decision-making about engagement on policy implementation.⁹³ Even though commercial involvement in policy implementation may carry with it discernible benefits, risks could remain, for example commercial entities may seize on political or technical issues to block, amend, or delay implementation.^{93,94} To add nuance to existing discussions about who should be engaged in national and international policy making, the framework could be used to provide clear evidence about which commercial or quasi-commercial entities may appropriately be ‘at the table’ on a specific issue and those whose involvement is not appropriate or should be limited at the most to implementation.

Especially for entities who are quasi-commercial or affiliated with commercial entities (such as many charitable foundations), decision-making about engagement requires careful consideration of the attributes and practices of the entity (and affiliated entities) to balance possible risks and benefits.^{24,95} The framework categories can be used to refine existing COI mechanisms, such as WHO's Framework of Engagement with Non-State Actors, or develop new tools to capture the wider breadth of commercial entities involved in governance relating to health. It can also inform decision-making about risks and benefits of different forms of engagement with commercial entities, such as government funding and grants, entering into public-private partnerships, or outsourcing to consultants for technical advice.^{45,96} Often it may simply be that the conditions do not yet exist to justify engagement with a given entity, and where these conditions can be met, the CDoH perspective suggests that we should usually be seeking a much greater resource contribution from the entity, and not infrequently, alterations to existing practices.

The framework could also assist investors, such as public pension funds, sovereign wealth funds, and asset management funds, to incorporate a health perspective into their decision-making. While there are more than 125 tools to classify and evaluate commercial entities, health is commonly excluded from benchmarking schemes.^{60,97} Although the present framework does not rank or attach values to any of the categories, future iterations could include the development of metrics that weigh the potential health harms and benefits of specific commercial practices or attributes. For example, steps to operationalise the framework may include the development of specific quantitative thresholds (e.g., levels of market concentration) or models to analyse the interplay between category questions (e.g., the extent to which an entity's revenue or geographic footprint may amplify its health impact). This could support the development of robust, objective benchmarking tools or the extension of existing indices to address more holistic impacts of corporations on both human and planetary health; the latter approach could help to overcome some of the practical challenges of scaling up this exercise. The framework could also help to inform the expansion of the current 'exclusion lists' of companies whose products or practices are deemed irredeemably harmful (e.g. tobacco), to consider the inclusion other practices justifying censure.⁹⁸ While many of these exclusion lists have been developed for the financial sector, they could also be applied to decision-making about other forms of engagement, such as partnerships or joint ventures. A parallel and complementary use could be to identify entities whose practices contribute to beneficial health outcomes for proactive investment (see **Paper 3**).¹⁹

To ensure rigour and avoid any real or perceived conflicts of interest, it is important that metrics and indicators are established independently (the development of the Global Health Score offers a useful precedent for measuring the impact of public corporations on health).⁹⁹ Noting that benchmarking commercial entities entails the risk of gaming and commercial co-option for the purpose of public relations,

it will be important to clarify that health promoting practices should not be seen as compensating for harmful practices. Rather, harmful practices must be minimised or ideally halted.

Research

This framework can advance future CDOH research by deepening our understanding of how key characteristics of commercial entities influence health. The framework's primary aim is to identify the many ways that commercial entities differ, and thus its unit of analysis is the individual entity. Future iterations could use different units of analysis, such as the industry sector or the type of entity (e.g., publicly listed corporations), or develop archetypes of entities based on clusters of their attributes and practices. This will enable more systematic and comparative studies of the CDOH, such as how different sectors compare on specific practices or how an entity's organisational structure influences its practices. By fostering a deeper understanding of commercial entities, this framework also helps researchers to understand how the upstream commercial forces outlined in **Paper 1** (e.g. policies, systems, ideologies) incentivise some forms of commercial activity over others, and how some, but not all, commercial entities benefit from the present status quo.

The framework also highlights three key areas of research where the current literature on CDOH falls short, and where there is potential for future work.

First, there is a need to expand the scope of commercial entities under investigation to consider the health impacts of other sectors which have received limited attention within the field (such as finance, technology, transport, weapons, housing, energy, healthcare, security, incarceration, and education). Analysis of the products, resources, organisation, transparency and practices of actors in those sectors will expand our understanding of how different commercial entities influence health and patterns of behaviour. It is also important to expand the type of commercial entities under investigation and to look beyond transnational corporations. This could include other commercial entities, including (but not limited to) cooperatives, micro, small or medium enterprises, social enterprises, mutual organisations and investors. However, it could also include quasi-commercial entities such as state-owned enterprises or not-for-profit organisations with business interests. **Panels 2** and **3** briefly illustrate the application of selected elements of the framework to two sectors: the food industry (in Brazil) and the healthcare industry (in India). These case studies also highlight the importance of studying commercial entities within the systems and contexts in which they operate.

Second, although the framework was designed to be globally applicable, it is based on a preponderance of literature from high-income countries. A fuller understanding of the role of commercial entities in different

LMIC contexts is needed to make this framework more generalizable and to inform future iterations of this framework.^{100,101} One way to do this could be to start applying the current framework in LMIC contexts and keep incorporating newer evidence. For instance, the Indian case study uses elements of the framework to illustrate increasing commercialisation of healthcare as a CDOH which is particularly relevant both in LMIC contexts and in the context of the growing global health care market.¹⁰² In addition to analysing how the practices of commercial entities differ between contexts, it would be useful to consider how different regulatory contexts shape commercial attributes (for example their legal form).

Finally, whereas existing CDOH research primarily focuses on generating knowledge, a key aim of this framework is ensuring that the academic knowledge about CDOH is translated into practical tools and frameworks for policy makers, civil society, investors, and others who are interested in how commercial forces affect health and want to enact change. This framework was developed in consultation with stakeholders and continuing and expanding this engagement is crucial to ensure this framework is fit for purpose. Expanded engagement also creates the opportunity to develop sectoral or cross-sectoral adaptations of the framework.

Panel 2: Commercial healthcare and the right to health: Indian case study

Healthcare is considered a public good and a human right. Yet, its commercialisation has made it one of the largest and fastest growing industries with significant implications for equitable, ethical, and comprehensive healthcare in LMICs.¹⁰³

In India, the lack of investment in the public sector combined with pro-commercial policies have created opportunities for provider and regulatory capture by the private sector.^{104,105} Profiteering by the for-profit sector has led to catastrophic health expenditures for households.¹⁰⁶ Acknowledging the diversity of Indian healthcare providers, our framework can help to assess how their practices influence health. Below we consider five elements of the framework.

Organisation: Commercial health providers in India consist of informal and formal entities.¹⁰³ Informal providers lack formal qualifications, operate illegally, and provide out-patient care to rural regions and the urban poor.¹⁰⁷ The formal for-profit sector is urban-centric with services unaffordable for the poor and includes individual clinicians, small and medium and corporate hospitals.¹⁰⁴ A majority of formal for-profit healthcare enterprises are sole proprietorships or partnerships, yet large corporate hospitals catering to wealthier clients are growing rapidly in big cities and absorbing smaller entities.^{103,108} In contrast, non-profit and public hospitals cater to rural and marginalised communities.^{104,109}

Resources: Public resources are increasingly diverted to the for-profit health sector. This has grown following the introduction of publicly funded health insurance schemes, of which 75% flows to commercial hospitals.^{109,110} Foreign investment in corporate chains has increased exponentially since the early 2000s, with the commercial hospital industry's worth expected to exceed US \$132 billion by 2022.¹¹¹

Marketing: Commercial hospitals flout regulations and over-charge patients, with especially corporate hospitals making profit margins as high as 1737 percent.^{112,113} Corporate hospitals have set unethical revenue targets wherein doctors are incentivized to offer unnecessary and costly drugs, diagnostics, and procedures (such as hysterectomies, c-sections).^{109,114,115}

Political: Conflicts of interest abound in healthcare governance, where officials and politicians often have commercial interests in private hospitals and corporate hospital representatives occupy policy positions.^{109,116} Commercial hospitals and their associations have lobbied to promote policies for foreign investment in health and privatisation of public healthcare and to oppose legal provisions for patients' rights and capping of treatment prices.^{108,109,117}

Labour and employment: Health workers in the for-profit health sector face precarious working conditions, including low wages and insecure tenure.¹¹⁸ The decline in public jobs and the prohibitive cost of establishing clinics leave young medical professionals with few alternatives.¹¹² A shift from self-employed to corporate-employed practitioners has exacerbated commercial interests outweighing patient well-being.¹¹²

Applying the framework, we can observe differences between healthcare entities in terms of their resources, organisation and practices. This helps to understand the diverse attributes and practices of various actors constituting the healthcare sector in India, and those elements we may want to support, and those that necessitate a strong regulatory response.

Panel 3: Big Meat vs little meat: the need to protect peasant and diversified food systems in Brazil

Critics of the food industry as a whole should consider that the vast majority of food businesses – including farmers, growers, manufacturers, distributors, sellers, and caterers – mostly (if not exclusively) deal in minimally processed foods.¹¹⁹ These entities and the food systems to which they belong should be protected and promoted.

Brazil provides an example of the crucial importance of small producers in ensuring the human right to adequate and healthy food and the challenges they face from policies promoting powerful economic

interests at the expense of small family farmers.¹²⁰ The case of the Brazilian meat sector highlights the importance of taking a systems perspective and recognising the direct and indirect health benefits arising from diversified food systems (e.g., genetic diversity increases ecological resilience and reduces disease transmission) and the harms arising from intensive consolidation (e.g., antimicrobial resistance, unsafe working conditions and increased risk of zoonosis, foodborne and other diseases).¹²¹⁻¹²³ It also highlights the intersections between human health, and our society, culture, economy and environment.

Organisation: There are more than 10 million family farmers and rural family entrepreneurs in Brazil. This group is broadly defined as people who practice activities in rural areas, predominantly use labour from their family, derive a minimum percentage of family income from their enterprise, and own a small area of land.^{124,125} This includes foresters, aquaculturists, extractivists, fishermen, indigenous people, and members of remnant communities of rural quilombos. Brazil is also home to JBS S.A. (the largest meat processing company in the world). JBS S.A. is a public limited company with 30 shareholders including the Brazilian Development Bank.¹²⁶

Portfolio: JBS S.A. has a diversified product portfolio, with options ranging from fresh and frozen meats to ultra-processed, ready-to-eat dishes (often acquired via mergers and acquisitions).¹²⁷ Products produced by family farmers include fresh meats, but also some processed products, such as artisanal sausages.

Resources: While Brazil has a rich and diverse food industry, its small producers face a range of challenges from the implementation of the federal government's policy of 'national champions,' which encourages the development of large companies capable of competing as leaders in the global market. This policy led the animal protein sector to consolidate into groups such as JBS S.A., which in 2017 controlled 22% of all beef and 19% of all pork processing globally.¹²⁸ While most family farmers sell locally, JBS S.A. is export-oriented, with more than 400 branches operating in 15 countries.¹²⁷ The company has 437 subsidiaries spread across 25 countries, including 24 in Luxemburg (a recognised tax haven).¹²⁶ It's 2020 operating revenue was US \$52.2 billion.¹²⁶

Labour and employment: JBS declares itself as "the largest employer in the country" with more than 145 thousand employees.¹²⁷ Yet family farmers and rural family entrepreneurs account for the largest share of jobs in rural areas.¹²⁰

Supply chain: Family farmers and rural family entrepreneurs practices are more suited to production on a sustainable and diversified basis.¹²⁰ While JBS S.A. claims to support the Sustainable Development Goals, the company has been linked to cases of suppliers involved in deforestation, mistreatment of animals, and human rights violations.¹²³ Pressures to integrate small farmers into industrial supply chains impose strict

production models (designed to favour industrial production), which penalises and burdens local societies, small enterprises, and small producers. These disregard and endanger artisanal, traditional, and family farming food production systems.^{120,121}

There are currently no government bodies that recognise and advocate for the millions of small food producers. This was historically done by the National Food and Nutrition Security Council which was dissolved when President Bolsonaro took office. This illustrates the progressive weakening of food and nutrition security policies through budget cuts to and disbanding of programmes that promote and support family agriculture, which has been reinforced by the COVID-19 pandemic.^{129,130}

Despite recent events, there are signs of hope for small producers in Brazil. A recent collaborative map identified over one thousand examples of ‘Comida de Verdade’ (real food) merchants and collectives, including organic or agroecological fairs, organic partner trades, and responsible consumption groups.¹³¹ Some new political initiatives have been explicitly directed to these vibrant and diverse food businesses, including a certification that makes it possible for handcrafted food to be sold throughout the country, support to access markets and short supply chains, institutional purchases from family farming, and other instruments for generating demand for family farming production.¹³²

Monitoring

A key contribution of this framework lies in the stimulus it can provide to monitoring efforts. Currently, there is little systematic monitoring of commercial entities and their practices, despite strong evidence that some make significant contributions to the global burden of disease.^{6,65} While a range of frameworks, mechanisms, and tools currently exist to monitor commercial practices, these typically focus on specific sectors or practices and are often run by dedicated but under-resourced NGOs or research teams.¹³³⁻¹³⁵ There is little systematic monitoring of commercial entities as a whole, and virtually none at the level of national public health surveillance.

This framework will assist in the development of monitoring programs by offering a comprehensive and holistic framework for categorising commercial entity practices and attributes across sectors. Existing monitoring efforts can apply this framework to expand their data collection targets. This framework could also be used to link existing datasets focused on specific industries, such as by identifying entities whose portfolios transverse multiple industries (for example companies selling both food and alcohol). By offering a method to classify commercial attributes and practices, the framework could guide the development of a global databank of commercial actors and their practices.¹³⁶ This would provide a publicly available repository of information for policy makers and other end users.¹³⁷ A consistent and systematised approach

to monitoring CDOH is crucial to generating a strong evidence base on commercial entities and their practices (and subsequently linking this to health outcomes).¹³⁸

6. Conclusions

This paper expands the existing conceptualisation of CDOH by looking beyond the traditionally selected industries producing health harming products, dominated by TNCs, to consider a full range of commercial entities relevant to public health. It argues for a comprehensive understanding of CDOH that includes micro, small and medium entities, entities that produce and sell goods and services that are not ‘unhealthy commodities’ (and those that do), and quasi-commercial entities. This paper has developed a framework that captures this breadth and offers guiding questions to interrogate commercial entities based on their practices, portfolios, resources, organisation, and transparency. Next steps for the framework will include testing its application across a range of contexts and commercial entities, identifying relevant datasets, and refining and expanding the guiding questions to ensure that they are suitable for the specific context or stakeholder.

With the establishment of the Sustainable Development Goals, we witnessed a forceful push to further entrench the commercial sector in global development and health governance via multi-stakeholder engagement.^{50,139,140} These developments, combined with the growing influence of the commercial sector in public policy at the national level, including in the direct provision of services, calls for a strengthened capacity for health (and non-health) stakeholders (including government) to possess and use existing knowledge, tools, and resources to reduce health-harming commercial practices and support health promoting practices. By fostering a deeper understanding of what, precisely, is meant by ‘commercial entity’ and which other quasi-commercial entities also require scrutiny, we hope to inform how policy makers, regulators, NGOs, civil society actors, and academics engage with, research, and monitor commercial entities – including opportunities to envision different forms of commercial entities.

Authors' contributions: Conceptualization: JLN, MM, JM, AJ, AG, SG, FB & RM contributed to the conceptualization of the paper and its aims. Methodology: JLN, MM, JM, AJ, SG, FB & RM contributed to the design of the project. Funding acquisition: RM sourced funding from the Victorian Health Promotion Foundation and the University of Melbourne to support a .4FTE position for JLN to lead this paper and manage the overall series. Investigation: JLN & CLV synthesized literature and consulted with expert stakeholders to inform the development of the framework. Project administration: JLN & RM. Supervision: RM. Writing – original draft: JLN, MM, JM, AJ, SG, CLV, FB & RM contributed to the original manuscript. SN and CC contributed original case studies to a subsequent draft. Writing – multiple subsequent drafts, review & editing: All authors contributed to subsequent drafts including substantive commentary and revision.

Declaration of interests: JLN was supported by the Victorian Health Promotion Foundation. KL was supported by the Canadian Institutes of Health Research.

References

1. Maier F, Meyer M, Steinbereithner M. Nonprofit organizations becoming business-like: A systematic review. *Nonprofit voluntary sector quarterly* 2016; **45**(1): 64-86.
2. Schouten P, Miklian J. The business–peace nexus: ‘business for peace’ and the reconfiguration of the public/private divide in global governance. *Journal of International Relations Development* 2020; **23**(2): 414-35.
3. Moodie R, Stuckler D, Monteiro C, et al. Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *Lancet* 2013; **381**(9867): 670–9.
4. Madureira Lima J, Galea S. Corporate practices and health: a framework and mechanisms. *Global Health* 2018; **14**(1): 21.
5. Lacy-Nichols J, Marten R. Power and the commercial determinants of health: ideas for a research agenda. *BMJ Global Health* 2021; **6**: e003850.
6. Stuckler D, McKee M, Ebrahim S, Basu S. Manufacturing epidemics: the role of global producers in increased consumption of unhealthy commodities including processed foods, alcohol, and tobacco. *PLoS Medicine* 2012; **9**(6): e1001235.
7. Lacy-Nichols J, Williams O. "Part of the Solution": Food Corporation Strategies for Regulatory Capture and Legitimacy. *Int J Health Policy Manag* 2021; **10**(2): 845-56.
8. Berman A. Between Participation and Capture in International Rule-Making: The WHO Framework of Engagement with Non-State Actors. *European Journal of International Law* 2020; **32**(1): 227-54.
9. Michéle L, Prato S, Rundall P, Valente F. When the SUN casts a shadow, The human rights risks of multi-stakeholder partnerships: the case of Scaling up Nutrition (SUN). Heidelberg: FIAN International, 2019.
10. McCambridge J, Morris S. Comparing alcohol with tobacco indicates that it is time to move beyond tobacco exceptionalism. *Eur J Public Health* 2019; **29**(2): 200-1.
11. Oxford English Dictionary. Definition of Private Sector. 2021. <https://www.oed.com/> (accessed 9 September 2021).
12. Billis D. Hybrid organizations and the third sector: Challenges for practice, theory and policy. London: Palgrave Macmillan; 2010.
13. Salamon LM. Putting the civil society sector on the economic map of the world. *Annals of Public and Cooperative Economics* 2010; **81**(2): 167-210.
14. Salamon LM, Anheier HK. In search of the non-profit sector. I: The question of definitions. *Voluntas* 1992; **3**(2): 125-51.
15. Lienert I. Where does the public sector end and the private sector begin? Washington, D.C.: International Monetary Fund, 2009.
16. McLaughlin M. Defining a State-Owned Enterprise in International Investment Agreements. *ICSID Review* 2019; **34**(3): 595–625.
17. Richmond CJ, Benedek D, Cabezon E, et al. Reassessing the Role of State-Owned Enterprises in Central, Eastern and Southeastern Europe. Washington, D.C.: International Monetary Fund, 2019.
18. Hammer C, Kunzel P, Petrova I. Sovereign wealth funds: current institutional and operational practices. Washington, D.C.: International Monetary Fund, 2008.
19. Carson SG. Dirty Hands, Clean Conscience? Large-Scale Land Acquisitions and the Ethical Investment Strategy of the Government Pension Fund–Global. In: Köhn D, ed. Finance or Food? Toronto: University of Toronto Press; 2020: 108–23.
20. Bertrand M, Bombardini M, Fisman R, Trebbi F. Tax-exempt lobbying: Corporate philanthropy as a tool for political influence. *American Economic Review* 2020; **110**(7): 2065-102.
21. Kerlin JA, Pollak TH. Nonprofit Commercial Revenue: A Replacement for Declining Government Grants and Private Contributions? *The American Review of Public Administration* 2010; **41**(6): 686–704.
22. Stuckler D, Basu S, McKee M. Global Health Philanthropy and Institutional Relationships: How Should Conflicts of Interest Be Addressed? *PLoS Medicine* 2011; **8**(4): 1-10.
23. Steele S, Ruskin G, Sarcevic L, McKee M, Stuckler D. Are industry-funded charities promoting “advocacy-led studies” or “evidence-based science”? a case study of the International Life Sciences Institute. *Global Health* 2019; **15**(1): 1–8.
24. Birn AE. Philanthrocapitalism, past and present: The Rockefeller Foundation, the Gates Foundation, and the setting(s) of the international/global health agenda. *Hypothesis* 2014; **12**(1): e8.
25. Levi Y, Davis P. Cooperatives as the “enfants terribles” of economics: Some implications for the social economy. *Journal of Socio-Economics* 2008; **37**(6): 2178–88.

26. Utting P. Social and solidarity economy: Beyond the fringe. London: Zed Publishing; 2015.
27. B Corporation. About B Corps. 2021. <https://bcorporation.net/about-b-corps> (accessed 8 September 2021).
28. McDonnell D. The Co-operative Model in Practice: International Perspectives. Glasgow: Co-operative Education Trust Scotland; 2012.
29. Fortune. Global 500. 2020. <https://fortune.com/global500/2020/> (accessed 9 September 2021).
30. PWC. State-Owned Enterprises: Catalysts for public value creation? London: PWC, 2015.
31. OECD. The size and sectoral distribution of state-owned enterprises. Paris: OECD, 2017.
32. Buchholz K. The world's biggest sovereign wealth funds – in one chart. 2021. <https://www.weforum.org/agenda/2021/02/biggest-sovereign-wealth-funds-world-norway-china-money/> (accessed 8 September 2021).
33. Tobacco Free Portfolios. The Pledge. 2021. <https://tobaccofreeportfolios.org/the-pledge/> (accessed 8 September 2021).
34. Norges Bank Investment Management. Equities. 2020. <https://www.nbim.no/en/the-fund/investments/#/2020/investments/equities> (accessed 8 September 2021).
35. Velezmoro S. How Temasek and BlackRock are using VC for sustainability. 15 April 2021. <https://www.asianinvestor.net/article/how-temasek-and-blackrock-are-using-vc-for-sustainability/468981> (accessed 9 September 2021).
36. Rügemer W. The Capitalists of the 21st Century: An Easy-to-Understand Outline on the Rise of the New Financial Players. Cologne: Tredition; 2019.
37. Australian Charities and Not-For-Profit Commission. Seventh-Day Adventist Church in Australia. 2021 (accessed 8 September 2021).
38. Ibis World. Australian Health & Nutrition Association Limited Financial. 2021. <https://my.ibisworld.com/au/en/company-reports/9056/financials> (accessed 8 September 2021).
39. Garthwaite C, Keener J, Notowidigdo MJ, Ozminkowski NF. Who Profits From Amateurism? Rent-Sharing in Modern College Sports. 2020. <https://www.nber.org/papers/w27734> (accessed 8 September 2021).
40. Millhiser I. The Supreme Court's unanimous decision on paying NCAA student-athletes, explained. 21 June 2021. <https://www.vox.com/2021/6/21/22543598/supreme-court-ncaa-alston-student-athletes-football-basketball-sports-antitrust> (accessed 9 September 2021).
41. Levich J. The Gates Foundation, Ebola, and Global Health Imperialism. *The American Journal of Economics and Sociology* 2015; 74(4): 704–42.
42. National Cooperative Bank. The NCB Co-op 100® Reports Top Producing Cooperatives with Revenues of \$228.2 Billion. 2020. <https://www.ncb.coop/press-releases/the-ncb-co-op-100-reports-top-producing-cooperatives-with-revenues-of-228.2-billion> (accessed 8 September 2021).
43. CHS. 2020 CHS Annual Report. 2020. <https://www.chsinc.com/-/media/micrositesv2/other%20files/annual-meeting/chs-annual-report.ashx> (accessed 9 September 2021).
44. Baum F. Governing for health: advancing health and equity through policy and advocacy. Oxford: Oxford University Press; 2019.
45. Poulson J. Reports of a Silicon Valley/Military Divide Have Been Greatly Exaggerated. 2020. <https://techinquiry.org/SiliconValley-Military/> (accessed 9 September 2021).
46. International Labour Organization. Small matters – Global evidence on contributions to employment by the self-employed, micro enterprises and SMEs. Geneva: International Labour Organization, 2019.
47. SME Finance Forum. Micro, Small and Medium Enterprises - Economic Indicators (MSME-EI) Analysis Note - December 2019. Washington, D.C.: SME Finance Forum, 2019.
48. International Labour Organization. Women and men in the informal economy: A statistical picture. Geneva: International Labour Organization, 2018.
49. World Bank. Small and Medium Enterprises (SMEs) Finance. 2021. <https://www.worldbank.org/en/topic/sme/finance> (accessed 9 September 2021).
50. UNDP. UNDP Private Sector Strategy 2018-2022. New York: UNDP, 2020.
51. Dearborn M. Enterprise Liability: Reaviewing and Revitalizing Liability for Corporate Groups. *California Law Review* 2009; 97(1): 195-261.
52. Davies P. Introduction to company law. Oxford: Oxford University Press; 2020.
53. Mikkler J. The Political Power of Global Corporations. New York: Wiley; 2018.
54. Baum FE, Sanders DM, Fisher M, et al. Assessing the health impact of transnational corporations: its importance and a framework. *Global Health* 2016; 12(1): 27.
55. Ulucanlar S, Fooks GJ, Gilmore AB. The Policy Dystopia Model: An Interpretive Analysis of Tobacco Industry Political Activity. *PLOS Medicine* 2016; 13(9): e1002125.

56. Wiist WH. The corporate play book, health, and democracy: the snack food and beverage industry's tactics in context. In: Stuckler D, Siegel K, eds. *Sick societies: Responding to the global challenge of chronic disease*. Oxford: Oxford University Press; 2011: 204–16.
57. Carbon Disclosure Project. The A List 2020. 2020. <https://www.cdp.net/en/companies/companies-scores> (accessed 9 September 2020).
58. S&P Global. *CSA Companion 2021: Corporate Sustainability Assessment* (DowJones Sustainability Index). New York: S&P Global, 2021.
59. Oxfam. *Company Score Cards*. 2016. <https://www.behindthebrands.org/company-scorecard/> (accessed 7 September 2021).
60. OECD. *OECD Guidelines for Multinational Enterprises*. Paris: OECD, 2011.
61. SDG Compass. *Inventory of Business Indicators*. 2021. <https://sdgcompass.org/business-indicators/> (accessed 13 September 2021).
62. World Benchmarking Association. *Corporate Human Rights Benchmark*. 2020. <https://www.corporatebenchmark.org/download-benchmark-data>. (accessed 9 September 2021).
63. Jahiel RI. Corporation-induced Diseases, Upstream Epidemiologic Surveillance, and Urban Health. *Journal of Urban Health* 2008; **85**(4): 517–31.
64. Knai C, Petticrew M, Mays N, et al. Systems Thinking as a Framework for Analyzing Commercial Determinants of Health. *Milbank Q* 2018; **96**(3): 472–98.
65. McCambridge J, Coleman R, McEachern J. Public Health Surveillance Studies of Alcohol Industry Market and Political Strategies: A Systematic Review. *J Stud Alcohol Drugs* 2019; **80**(2): 149–57.
66. Trochim WMK, Stillman FA, Clark PI, Schmitt CL. Development of a model of the tobacco industry's interference with tobacco control programmes. *Tobacco Control* 2003; **12**(2): 140–7.
67. Wiist W. Public health and the anticorporate movement: rationale and recommendations. *Am J Public Health* 2006; **96**(8): 1370–5.
68. Sacks G, Swinburn B, Kraak V, et al. A proposed approach to monitor private-sector policies and practices related to food environments, obesity and non-communicable disease prevention. *Obes Rev* 2013; **14**: 38–48.
69. United Nations. *International Standard Industrial Classification of All Economic Activities (ISIC), No. 4*. United Nations: New York, 2008.
70. Popiel P. The Tech Lobby: Tracing the Contours of New Media Elite Lobbying Power. *Communication, Culture & Critique* 2018; **11**(4): 566–85.
71. Sacchetti S, Tortia E. Social responsibility in non-investor-owned organisations. *Corporate Governance* 2020; **20**(2): 343–63.
72. Ajdacic L, Heemskerk EM, Garcia-Bernardo J. The Wealth Defence Industry: A Large-Scale Study on Accountancy Firms as Profit Shifting Facilitators. *New Political Economy* 2021; **26**(4): 690–706.
73. Collin J, Plotnikova E, Hill S. One unhealthy commodities industry? Understanding links across tobacco, alcohol and ultra-processed food manufacturers and their implications for tobacco control and the SDGs. *Tobacco Induced Diseases* 2018; **16**: A80.
74. Rao ND, Min J. Decent Living Standards: Material Prerequisites for Human Wellbeing. *Soc Indic Res* 2018; **138**(1): 225–44.
75. Bayliss K, Mattioli G. *Privatisation, inequality and poverty in the UK*. Sustainability Research Paper No. 116. Leeds: Sustainability Research Institute, University of Leeds, 2018.
76. Coote A. Universal basic services and sustainable consumption. *Sustainability* 2021; **17**(1): 32–46.
77. Knai C, Petticrew M, Capewell S, et al. The case for developing a cohesive systems approach to research across unhealthy commodity industries. *BMJ Glob Health* 2021; **6**(2): e003543.
78. Garcia-Bernardo J, Fichtner J, Heemskerk EM, Takes FW. Uncovering Offshore Financial Centers: Conduits and Sinks in the Global Corporate Ownership Network. *Science Reports* 2017; **7**: 6246.
79. Falkner R. *Business power and conflict in international environmental politics*. Basingstoke: Palgrave Macmillan; 2008.
80. Vanek J, Chen M, Carré F, Heintz J, Hussmans R. *Statistics on the informal economy: Definitions, regional estimates and challenges*. Manchester: WIEGO, 2014.
81. Turban S, Sorbe S, Millot V, Johansson Å. *A set of matrices to map the location of profit and economic activity of multinational enterprises*. Paris: OECD; 2020.
82. Phillips R, Petersen H, Palan R. Group subsidiaries, tax minimization and offshore financial centres: Mapping organizational structures to establish the 'in-between' advantage. *Journal of International Business Policy* 2021; **4**(2): 286–307.

83. Bekkum OV, Bijman J. Innovations in Cooperative Ownership: Converted and Hybrid Listed Cooperatives. In: Rajagopalan S, ed. *Cooperatives in 21st Century The Road Ahead*. Hyderabad: Ifcai University Press; 2007: 34–56.
84. Marsden D. Patterns of organizational ownership and employee well-being in Britain. *British Journal of Industrial Relations* 2021.
85. Cheney G, Cruz IS, Peredo AM, Nazareno E. Worker cooperatives as an organizational alternative: Challenges, achievements and promise in business governance and ownership. *Organization* 2014; **21**(5): 591–603.
86. Guay T, Doh JP, Sinclair G. Non-Governmental Organizations, Shareholder Activism, and Socially Responsible Investments: Ethical, Strategic, and Governance Implications. *Journal of Business Ethics* 2004; **52**(1): 125-39.
87. Fyke JP, Buzzanell PM. The ethics of conscious capitalism: Wicked problems in leading change and changing leaders. *Human Relations* 2013; **66**(12): 1619-43.
88. Schnackenberg AK, Tomlinson EC. Organizational transparency: a new perspective on managing trust in organization-stakeholder relationships. *Journal of Management* 2016; **42**(7): 1784–810.
89. Esterhuysen L. Towards corporate transparency: The link between inclusion in a socially responsible investment index and investor relations practices. *The Bottom Line* 2020; **32**(4): 290–307.
90. Friel S, Hattersley L, Townsend R. Trade Policy and Public Health. *Annu Rev Public Health* 2015; **36**(1): 325–44.
91. Allen LN, Wigley S, Holmer H. Implementation of non-communicable disease policies from 2015 to 2020: a geopolitical analysis of 194 countries. *The Lancet Global Health* 2021; **9**(11): e1528-e38.
92. Thompson DF. Understanding financial conflicts of interest. *N Engl J Med* 1993; **329**(8): 573-6.
93. Hawkins B, McCambridge J. 'Tied up in a legal mess': The alcohol industry's use of litigation to oppose minimum alcohol pricing in Scotland. *Scott Aff* 2020; **29**(1): 3-23.
94. Lesch M, McCambridge J. Waiting for the wave: Political leadership, policy windows, and alcohol policy change in Ireland. *Soc Sci Med* 2021; **282**: 114116.
95. Ralston R, Hill SE, Gomes FdS, Collin J. Towards Preventing and Managing Conflict of Interest in Nutrition Policy? An Analysis of Submissions to a Consultation on a Draft WHO Tool. *International Journal of Health Policy and Management* 2021; **10**(5): 255-65.
96. Roehrich JK, Lewis MA, George G. Are public–private partnerships a healthy option? A systematic literature review. *Soc Sci Med* 2014; **113**: 110–9.
97. Huber BM, Comstock M, Polk D, Wardwell LLP. ESG Reports and Ratings: What They Are, Why They Matter. 2017. <https://corpgov.law.harvard.edu/2017/07/27/esg-reports-and-ratings-what-they-are-why-they-matter/> (accessed 9 September 2021).
98. Hoepner AGF, Schopohl L. On the Price of Morals in Markets: An Empirical Study of the Swedish AP-Funds and the Norwegian Government Pension Fund. *Journal of Business Ethics* 2018; **151**(3): 665–92.
99. Global Health Score. About us. 2020. <https://globalhealthscore.squarespace.com/> (accessed 9 September 2022).
100. Mialon M, Gaitan Charry DA, Cediell G, Crosbie E, Baeza Scagliusi F, Perez Tamayo EM. 'The architecture of the state was transformed in favour of the interests of companies': corporate political activity of the food industry in Colombia. *Global Health* 2020; **16**(1): 97.
101. Williams SN. The incursion of 'Big Food' in middle-income countries: a qualitative documentary case study analysis of the soft drinks industry in China and India. *Critical public health* 2015; **25**(4): 455–73.
102. Mackintosh M, Koivusalo M. Commercialization and globalization of health care: Lessons from UNRISD research. UNRISD Research and Policy Brief 7. Geneva: UNRISD, 2007.
103. Mackintosh M, Channon A, Karan A, Selvaraj S, Zhao H, Cavagnero E. What is the private sector? Understanding private provision in the health systems of low-income and middle-income countries. *Lancet* 2016; **388**(10044): 596–605.
104. Hooda SK. Health System in Transition in India: Journey from State Provisioning to Privatization. *World Review of Political Economy* 2020; **11**(4): 506–32.
105. Sanders D, Nandi S, Labonte R, Vance C, Van Damme W. From primary health care to universal health coverage-one step forward and two steps back. *Lancet* 2019; **394**(10199): 619–21.
106. Nandi S, Schneider H. When state-funded health insurance schemes fail to provide financial protection: An in-depth exploration of the experiences of patients from urban slums of Chhattisgarh, India. *Glob Public Health* 2020; **15**(20): 220–335.
107. Gautham M, Shyamprasad KM, Singh R, Zachariah A, Bloom G. Informal rural healthcare providers in North and South India. *Health Policy Plan* 2014; **29**(S1): i20–i9.

108. Chakravarthi I, Roy B, Mukhopadhyay I, Barria S. Investing in health. *Economic Political Weekly* 2017; **52**(45): 51.
109. Nandi S. Case study of the impact of public-private partnerships through publicly-funded insurance schemes in women in India, with special reference to Chhattisgarh state. In: Development Alternatives with Women for New Era (DAWN), ed. DAWN informs on public private partnerships and women's human rights: Feminist analysis from the global south. Suva: Development Alternatives with Women for New Era (DAWN); 2021: 53-8.
110. Garg S, Bebarta KK, Tripathi N. Performance of India's national publicly funded health insurance scheme, Pradhan Mantri Jan Arogya Yojana (PMJAY), in improving access and financial protection for hospital care: findings from household surveys in Chhattisgarh state. *BMC Public Health* 2020; **20**(1): 949.
111. Chakravarthi I, Marathe S, Shukla A. Research Brief: Growing Corporatisation of Private Healthcare in India and its Implications. Pune: Support for Advocacy and Training to Health Initiatives (SATHI), 2021.
112. Marathe S, Hunter BM, Chakravarthi I, Shukla A, Murray SF. The impacts of corporatisation of healthcare on medical practice and professionals in Maharashtra, India. *BMJ Glob Health* 2020; **5**(2): e002026.
113. Bhuyan A. Private Hospitals, Including Fortis, Making Profits up to 1737%: Drug Price Regulator's New Study. 21 February 2018. <https://thewire.in/health/private-hospitals-including-fortis-making-profits-up-to-1737-drug-price-regulators-new-study> (accessed 9 September 2021).
114. Chatterjee P. Hysterectomies in Beed district raise questions for India. *Lancet* 2019; **394**(10194): 202.
115. Kay M. The unethical revenue targets that India's corporate hospitals set their doctors. *BMJ* 2015; **351**: h4312.
116. Nandi S, Schneider H. Using an equity-based framework for evaluating publicly funded health insurance programmes as an instrument of UHC in Chhattisgarh State, India. *Health Res Policy Sys* 2020; **18**(1): 50.
117. Shukla A, Pawar K, More A. Analysing regulation of private healthcare in India: With focus on Clinical Establishments Acts Current status, challenges and recommendations. New Delhi: Oxfam India, Undated.
118. Jan Swasthya Abhiyan, All India People's Science Network, Public Services International India National Coordination Committee. Health workers' rights in the time of COVID-19: Position Paper - 21 April 2020. 2020. http://phmindia.org/wp-content/uploads/2020/04/Position-Paper-Health-Worker-Rights_Final.pdf (accessed 8 September 2021).
119. Monteiro CA, Lawrence M, Millett C, et al. The need to reshape global food processing: a call to the United Nations Food Systems Summit. *BMJ Global Health* 2021; **6**(7): e006885.
120. CONSEA. Relatório Final CNSAN. 2015. http://ecos-rednutri.bvs.br/tiki-download_file.php?fileId=1412 (accessed 8 September 2021).
121. FASE. Cadeia Industrial da Carne. Rio de Janeiro: FASE, 2016.
122. Willett W, Rockström J, Loken B, et al. Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *The Lancet* 2019; **393**(10170): 447-92.
123. Heinrich Böll Stiftung. Meat Atlas - Facts and figures about the animals we eat 2021. Berlin: Heinrich Böll Stiftung, 2021.
124. Ministério da Agricultura Pecuária e Abastecimento. Agricultura Familiar. 2019. <https://www.gov.br/agricultura/pt-br/assuntos/agricultura-familiar/agricultura-familiar-1> (accessed 8 September 2021).
125. Presidência da República Casa Civil. Lei Nº 11.326, De 24 de Julho de 2006. 2006. http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/lei/111326.htm.
126. Orbis. Orbis. 2021. <https://orbis4-bvdinfo-com.eu1.proxy.openathens.net/version-20211028/orbis/1/Companies/report/Index?format=0772465A-0D3D-EC11-80E7-00155D124506&BookSection=PROFILE&seq=0> (accessed 4 November 2021).
127. JBS. Alimentamos o mundo com o que há de melhor. 2019. <https://jbs.com.br/sobre/jbs/> (accessed 8 September 2021).
128. IPES-Food. Too big to feed: exploring the impacts of mega-mergers, consolidation and concentration of power in the agri-food sector. 2017. https://www.ipes-food.org/_img/upload/files/Concentration_FullReport.pdf (accessed 9 September 2021).
129. Carvalho CA, Viola PCdAF, Sperandio N. How is Brazil facing the crisis of Food and Nutrition Security during the COVID-19 pandemic? *Public Health Nutr* 2021; **24**(3): 561–4.
130. de Castro IRR. The dissolution of the Brazilian National Food and Nutritional Security Council and the food and nutrition agenda. *Cad Saude Publica* 2019; **35**(2): 1–4.
131. IDEC. Onde encontrar Comida de Verdade durante a pandemia do coronavírus? 2021. <https://feirasorganicas.org.br/comidaverdade/> (accessed 8 September 2021).

132. National Articulation of Agroecology. Municípios agroecológicos e políticas de futuro. Rio de Janeiro: National Articulation of Agroecology, 2021.
133. ETC Group. ETC Group Homepage. 2021. <https://www.etcgroup.org/> (accessed 9 September 2021).
134. University of Bath. Tobacco Tactics. 2021. <https://tobaccotactics.org/> (accessed 9 September 2021).
135. Corporate Accountability. Home Page. 2021. <https://www.corporateaccountability.org/> (accessed 9 September 2021).
136. Atkins D, Boughtwood T, Chediak L. This system unleashes the power of data to transform health outcomes for millions of patients. 2020. <https://www.weforum.org/agenda/2020/07/value-of-genomic-data-with-global-data-consortia-governance-model-precision-medicine/> (accessed 9 September 2021).
137. Buse K, Mialon M, Jones A. Thinking Politically About UN Political Declarations: A Recipe for Healthier Commitments—Free of Commercial Interests; Comment on “Competing Frames in Global Health Governance: An Analysis of Stakeholder Influence on the Political Declaration on Non-communicable Diseases”. *Int J Health Policy Manag* 2021.
138. Lee K, Freudenberg N, Zenone M, et al. Measuring the Commercial Determinants of Health and Disease: A Proposed Framework. *Int J Health Serv* 2021: 207314211044992.
139. United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development. New York: United Nations, 2015.
140. World Bank. World Bank and Private Sector. 2021. <https://www.worldbank.org/en/about/partners/the-world-bank-group-and-private-sector> (accessed 9 September 2021).