CORPORATE CAPITAL AND (DE)MONOPOLIZATION OF PUBLIC HEALTH IN THE USA: AN INSTITUTIONALIST PERSPECTIVE

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Abstract: From the original institutional economics perspective, this article discusses the patent-driven R&D models and public support to the pharmaceutical industry that is linked to a rising monopoly power of corporate capital over public health in the USA. Using the U.S. historical health data, we analyse the effects of institutional changes, shaped by large corporate capital, on public health outcomes in terms of accessibility and affordability of the medical advances arising from R&D. The analysis reveals that private returns from publicly funded R&D is higher than its social returns, despite a growing public interest in providing more comprehensive medical coverage.

Keywords: Public health; Pharmaceutical industry; USA; Corporate capital; Original institutional economics

JEL: B52, H51, O30.

Introduction

The U.S. health care system stands in sharp contrast to the original institutional economics. From the perspective of institutionalists, heath care is not a consumer good but a public good for workers and society. Therefore, it is not surprising that institutional economists were among the first who strongly advocate for the reform of national health care system and for establishing universal health care (Fox 1979; Chasse 1994; Gonce 2006; Champlin and Knoedler 2008; Scott and Pressman 2021).

John R. Commons had played a leading role in creating the U.S. Social Security program in the 1930s and the 1940s (Fox 1979). He argued that the burden of costs of industrial progress should not be borne exclusively by workers. Since workers do not have the power to control the workplace, health insurance must be the joint responsibility of workers, employers and the state (Commons and Andrews 1964; Chasse 1994). Some similar ideas can be found in works of other early institutionalists, notably John Maurice Clark. As Stabile (1993) notes, J.M. Clark first applied the concept of social costs to labour problems. He recognized that laborer's health and working capacity have to be mainted, like capital, in order to remain useful. Otherwise, the community will suffer a loss through the deterioration of its working power.

More recently, many heterodox economists question the applicability of core institutional propositions to health care issues (for example: Champlin and Knoedler 2008; Paschall 2008; 2009; Friesner 2009; Spithoven 2011; 2016; Izhar Baranes 2016; 2017). Drawbacks of a health

system based on neoliberal principles became particularly noticeable during COVID-19 pandemic, and institutional economics provides not only deeper insights into the problems of the American health care system, but also indicates how to restore it (Scott and Pressman 2021). In this vein, the purpose of our paper is to summarize empirical data and main arguments in support of the institutionalist view on the U.S. health care system in general, and particularly in the case of pharmaceutical industry.

Overview: Health System

There is widespread agreement that the current U.S. health care system is inefficient, overpriced, inadequate and needs major change. This became painfully evident during the COVID-19 pandemic. The main problem lies in the fact that the U.S. health care system is developed on the neoliberal view on public health, according to which health care is an individual rather than public responsibility. In this framework, health care is treated as a consumer good (Champlin and Knoedler 2008) while institutions and policies that address health issues are designed around concept of consumer sovereignty and the rational decisions of "homo economicus" (Paschall 2008).

Therefore, it is not surprising that private health insurance in the United States is far more prevalent than public one. In 2020, the two-thirds of Americans are covered by private health insurance plans, mostly provided by employers to their workers. There is also possibility to buy private health insurance directly as an individual from an insurance company. This is the less common type of health insurance, covering just 10 percent of the population. The public health insurance (Medicare, Medicaid and the two smaller programs aimed at Veterans) account for about one third of the population. Given that some people may have private and public health insurance at the same time, the sum of these two coverage types technically can be greater than 100 percent. However, it does not mean that the whole population is covered by health insurance. Unlike the other developed countries, the United States does not have universal health care coverage. Consequently, almost 9 percent of the population, or 28 million Americans, did not have health insurance (Keisler-Starkey and Bunch 2021).

Heavy reliance on employment-based insurance makes the U.S. health system vulnerable to economic cycles. The data gathered at the beginning of the COVID-19 pandemic clearly indicates that a sudden increase in unemployment has caused many American families to lose their health insurance (Blumenthal et al. 2020). According to U.S. Census Bureau data, the number of the people without health insurance increased by 1.8 million in 2020 compared with 2019, driven almost exclusively by a decline in private health insurance coverage. Between 2019 and 2020, the number of people covered by employment-based insurance declined by 5.8 million. This increase was only partly offset by an increase in the number of people covered by public health insurance programs, leaving an additional 2 million of people uninsured. The impact of pandemic is also manifested in the increase in the number of workers who are under-insured. These people keep their jobs, but their health insurance is curtailed by employer and hence does not cover full health care service.

The uninsured and the under-insured Americans receive less medical care. In addition, these groups are faced with higher costs for the same care than those with health insurance. Compared to the people with full insurance coverage, the uninsured and under-insured patients pay a larger share of health care costs out-of-pocket. Given that they are self-pay patients, their bills are higher than what most patients with insurance actually pay (Anderson 2007).

Constrained by low income and faced with higher prices, the uninsured and the under-insured are able to cover only a small fraction of the their health care bills (Hadley et al. 2008; Finkelstein, Mahoney, and Notowidigdo 2018). The rest is so called uncompensated care costs. These costs, although subsidized by various public and private funds, drive up the costs for medical providers. The net result is higher prices for the insured individuals. Uncompensated care costs are passed by hospitals to patients in the form of higher prices for medical services, or these costs are passed by government to the insured in the form of higher taxes needed to fund health care system.

Uncompensated care costs have a significant distributional effect on the U.S. health care system. A study by Coughlin (2014) estimated that the uninsured pay, on average, 20 percent of their costs. Most of the funds that serve to offset uncompensated care costs come from the federal government. The implication is that uncompensated care payments are actually "implicit insurance of the uninsured" and represent a classic example of cost sharing and shifting (Champlin and Knoedler 2008). Legal and ethical obligations of health professionals to provide medical care to patients with urgent needs make the implicit insurance in practice unavoidable. Given the higher costs of medical care for the uninsured and distributive effect of uncompensated care payments, the U.S. health care system is likely less efficient and certainly less equitable than universal health care coverage.

Focus: Pharmaceutical Industry

Empirical data strongly support the notion that U.S. heal care system might be more efficient. Health insurance is heavily subsidized by the federal government. In 2021, Medicare and Medicaid were the largest mandatory spending items in the federal budget, costing \$1.230 billion, which is 1.7 times more than the military budget. The federal government also subsidizes employment-based health insurance by tax exclusion, which is the single largest federal tax expenditure item. As a result, health expenditure as a percentage of GDP in the United States is the highest among the world's most developed countries (Figure 1) - almost two times higher than the OECD average (for more about health expenditure in the OECD countries, see: De Mello-Sampayo and De Sousa-Vale 2014). However, despite large expenditures devoted to health care, the United States notably lags behind in many health outcomes compared to the other developed countries. Thus, the United States is ranked worse than the OECD average in life expectancy, obesity rate and avoidable mortality (OECD 2021).

Figure 1.

Huge public expenditures and relatively poor results do mean that every actor in the health system is a loser. The U.S. institutional environment provides unique advantages for the pharmaceutical industry. The United States has the largest pharmaceutical market in the world, reaching 40 percent of the worldwide market, while health expenditure per capita is the highest spending per capita in the world. Accordingly, it is not surprising that the U.S. pharmaceutical industry is the largest in the world by production and revenue generation, and that five of the ten world's biggest pharmaceutical companies are located in the United States.

The economic records of pharmaceutical industry are better than that of the other industries in the United States. As evident in Table 1, the largest U.S. pharmaceutical companies are ranked at the very top in terms of market capitalisation, revenues, net income, and dividends. Furthermore, there is a strong trend towards concentration in the industry. Data from the table 1 show that value of acquisitions made in the pharmaceutical industry is ranked as the second largest in the U.S. economy. Many acquisitions in the pharmaceutical industry are speculative in

nature, given that it is usually cheaper for a big capital to buy a small innovative company, and thus be engaged in production and commercialization of new products, than to make risky investment in research and development (for more, see: Josifidis and Supic 2021).

Table 1.

It is worth noting that the high profitability of pharmaceutical industry does not mean high net income retained in business. The data on the dynamics of cash dividends charged to retained earnings and net income (Figure 2) suggest that the U.S. pharmaceutical companies are essentially financialized entities with the main purpose of maximizing shareholder value, even at the expense of company net income (for more, see: Tulum and Lazonick 2018).

Figure 2.

Despite the fact that the U.S. pharmaceutical industry is highly concentrated and profitable, the U.S. government heavily supports pharmaceutical business. This support is manifested, above all, in government subsidies and programs that increase demand for new pharmaceuticals and encourage their supply. In 2019, the federal and state expenditures on prescription drugs on behalf of beneficiaries of Medicare, Medicaid and the other public health insurance programs make up more than 40 percent of the total prescription drug expenditures in the United States (Martin et al. 2021). At first glance, the fact that the federal government is the largest buyer of pharmaceutical products is not problematic by itself, given a key role that the government plays in health care system in every country. What is problematic, however, is the way in which prices of drugs are determined.

Unlike most developed countries, American drug prices are largely unregulated prices and set by market (i.e., producers). As a result, overall drug prices in the United States are considerably higher compared with other OECD countries. For example, in 2018, prices for prescription drugs in the United States were more than two times those of the other OECD countries (Mulcahy et al. 2018). Based on the neoclassical theory of competitive market, the pharmaceutical industry makes the argument that drug prices should be determined by the market, not by the government (Tulum and Lazonick 2018). In this vein, the high prices are justified by the high costs and risks associated with research and development of new drugs, which is widely accepted by U.S. legislators.

The free market (i.e., neoclassical) arguments are strongly disputed from the institutionalist perspective. The inappropriateness of free market model arises from the observation that health is not a market commodity that can be analyzed in a simple demand and supply framework (Ginzberg 1974; Schaniel and Neale 1999; Champlin and Knoedler 2008; Spithoven 2011). Unlike most commodities that can be freely bought and sold in a market, demand for pharmaceutical products usually is not matter of free will and choice of patients.

The demand for pharmaceutical products is derived demand in a sense that this demand is determined by the physicians or pharmacists rather than by the people in need of medical treatment. At the same time, for the average patient it is very difficult to make a critical judgment about a physician's expertise and service (Ginzberg 1974). Moreover, pharmaceutical companies spend a huge amount of money on drug advertisement, which affects not only the choice of patients for non-prescription drugs, but also prescription patterns of physicians. What also makes demand for pharmaceutical products different from typical market commodities is price inelasticity and income elasticity. Accordingly, the pharmaceutical industry is far less cyclical, in periods of economic downturn, and more profitable, in periods of economic boom, than most other industries. As confirmation, between 1960 and 1980, the price of medical

products followed general price movement. However, from the mid-1980's the price of medical products has increased significantly faster than average price of all other products (Figure 3). The beginning of this divergent trend coincides with the institutional changes in favour of big corporate capital in the pharmaceutical industry, suggesting that the price of medical products is largely determined by the factors other than free market forces.

Figure 3.

Similar to the demand for pharmaceutical products, market forces do not play an exclusive role in allocating resources and thereby determining the supply of pharmaceutical products. Pharmaceutical industry heavily relies on the findings from basic research in biomedical sciences, which are mostly funded by the federal government. The U.S. National Institutes of Health (NIH) is the largest single funder of biomedical research in the world, with annual budget that exceed \$40 billion in 2020. Much of NIH funding supported basic research that had been critical for the development of new drugs. Although NIH is designed with primary aim of improving the health of Americans, the biggest beneficiary is corporate capital which is, thanks to NIH, able to significantly reduce costs and risks associated with biomedical R&D.

NIH funding is supported by sets of laws and institutions designed to facilitate development and commercialization of new drugs. Certainly, the most important piece of legislation on this issue is the Bayh-Dole Act of 1980, which permits universities to patent and transfer discoveries resulted from research funded by NIH to commercial entities. The Act was initially passed to enable small businesses easier access to new federal-funded technologies developed in university laboratories. Later, the Act was expanded beyond universities and small businesses, including all research organizations and large companies. In practice, this means that the discoveries done with public funds ultimately can be transferred to corporate capital.

Pharmaceutical Research and Manufacturers of America (PhRMA), an association that represents the interests of U.S. pharmaceutical industry, persuaded U.S. legislators and regulatory authorities to extent patent protection and to get market exclusivity for certain types of drugs. Accordingly, pharmaceutical patents might be seen less as a tool to stimulate innovation and more as a tool that provides monopoly control over a great number of publicly supported and funded medical research and, thus, public health to corporate capital. This created the new business model in the pharmaceutical industry in which the uncertainty and risk associated with innovation has been socialized, while the gains have been privatized and largely concentrated in the hands of corporate capital.

Conclusion

We have tried to summarize persuasive facts and arguments that support the institutionalist critique of the U.S. health care system in general and the pharmaceutical industry in particular. Despite the highest health expenditure in the world, the United States lags behind in many health outcomes compared to most other leading nations. The main problem lies in that the U.S. health care system is based on the neoliberal view on public health, according to which health care is an individual rather than public responsibility, supported by the institutional environment and fairly liberal rules that provides unique advantages for the pharmaceutical industry.

The U.S. pharmaceutical industry is highly financialized and dominated by big corporate capital which enjoy super-profits primarily through patent protection, market exclusivity, unregulated prices and public funding rather than through commodity production, research and development, competition and free market principles. In the context of original institutional economics, the current U.S. health care system may be seen as a reflection of the vested

interests of concentrated corporate capital in the pharmaceutical industry at the expense of common man, which ultimately leads to the establishment of monopoly control of corporate capital over public health. Given its continuous advocacy for universal health care and (de)monopolization of pharmaceutical industry, the original institutional economics provides a useful theoretical framework for assessing and reforming the U.S. health care system.

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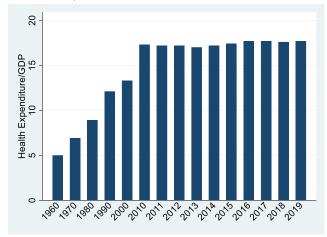
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Table 1. Dominant U.S. Pharmaceutical companies, 2020: Market Capitalization, Acquisitions, Revenues, Net income, Dividends

	MC	ACQ	RE	CAGR	EXGIR	NI	DV
	\$ b	\$ b	\$ b	%	%	\$ b	\$ b
Pharma	1,367.31	36.888	278.58	32.66	140.01	39.28	23.90
	(7)	(2)	(15)	(2)	(2)	(10)	(5)
All	41,995.7	367.67	15,892.60	8.86	11.64	803.21	572.73
industries							

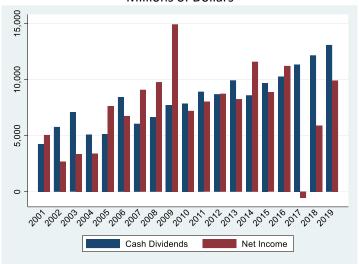
Note. The indicators were calculated using data from the 287 largest firms in the pharmaceutical industry, compared with data from same period in the other (94) industries (the 7582 largest firms). Rank out of 94 industries is in parentheses; MC = market capitalization (in \$ billions); RE = revenues (in \$ billions); CAGR = compound annual growth rate in revenues (last 5 years); EXGIR = expected growth in revenues (next 2 years); NI= net income (in \$ billions); DV = cash dividends (in \$ billions); ACQ = Acquisitions (in \$ billions). Source: Damodaran (2021). The data page. Retrieved from: http://people.stern.nyu.edu/adamodar/New Home Page/data.html (November, 2021)

Figure 1. Health Expenditures as a Percent of GDP, USA, 1960 – 2019.



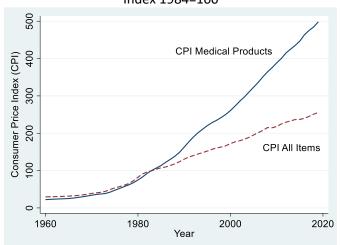
Source: CMS (2021). Centers for Medicare and Medicaid Services. National Health Expenditure Accounts (Historical). Retrieved from: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical (November, 2021)

Figure 2. Cash Dividends versus Net Income in the U.S. Pharmaceutical Industry, 2001-2019, Millions of Dollars



Source: FRED (2021). Federal Reserve Bank of St. Louis: Economic Data. Retrieved from: https://fred.stlouisfed.org (November, 2021)

Figure 3. Consumer Price Index: Medical Products versus All Items, USA, 1960-2019, Index 1984=100



Source: FRED (2021). Federal Reserve Bank of St. Louis: Economic Data. Retrieved from: https://fred.stlouisfed.org (November, 2021)