Senior Individualized Project: A Multifaceted Study of the Similarities in the Healthcare and Pharmaceutical Market in Italy and the United States

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Introduction

The United States and Italy are relatively dissimilar countries culturally. However, the bond between the two is how their healthcare sectors operate. The American healthcare system is a powerful oligopolistic market structure. Accessible healthcare is integral to the structure of society because of the constant need for medical assistance. The industry presents itself in pharmaceuticals, insurance, health facilities, and patient care. Firms in the healthcare sector profit from hospital care, medications, and innovative advancement since healthcare is a lucrative industry. There are a few firms of varying size and influence that possess power in the market. Accessibility defines an oligopolistic structure because firms can then enter and exit the market.

Italy is a competitive monopoly, with four dominating firms negotiating prices with their respective agencies. Both the United States and Italy have healthcare sectors that are predominately ruled by four key players. Market caps show a large portion of market shares. Therefore, the market creates barriers to entry for new and independent firms trying to grow their influence. Large firms in Italy and the U.S. set a precedent for their competitors through their economies of scale and innovative capabilities. The healthcare industry can be considered an oligopoly or a monopoly depending on the economic state of the country. Many economic and legal factors affect how consumers and manufacturers interact with the market. The Italian pharmaceutical system is a monopolistically competitive market structure that also caters to consumers. The four primary firms that run the healthcare sector are based in pharmaceuticals. Italy, like many other healthcare systems around the world, has private and public healthcare.
Pharmaceutical companies hold the larger percentage of market power in the Italian sector. However, given that Italy is a smaller country, there are drawbacks to the level of innovation that it can produce. Nonetheless, both countries have comparable methodologies for handling policy regulation, economies of scale, and innovation.

Given their similarities, there is an emphasis on the two countries' established agencies that strive to combat anti-competitive behaviors that eliminate competition, harming the consumer. These agencies enforce policies to lessen the detrimental economic effect of anticompetitive activity. Legal ramifications for conglomerate firms illegally eliminating competition are not always automatically resolved with the asserted policies. Additionally, there are still overarching issues with expensive health services in the U.S. that contribute to this powerhouse industry in the economic market. It is fascinating exploring how two countries that appear to be dissimilar because of differing market structures engage with their respective economy.

**Oligopolistic Market Structure in American Healthcare and Pharmaceuticals**

The healthcare market is far from a monolithic structure with a primary specialty. The interdependent areas in the industry comprise patient care, surgery centers, pharmaceuticals, and service providers. However, the healthcare sector is dominated by a few firms that set prices, have large market shares, and function at an efficient level. These firms set prices collectively or under one firm, rather than taking prices from the market. Meaning that the companies do not have to accept the customary prices of the specific product or service being offered in their industry. (Higher Rock Education 2018)
As of April 2022, from Disfold's market cap documentation provided in the figure above, drug manufacturers and health planning firms are dominating the healthcare sector. Four of the largest firms in the healthcare division comprise UnitedHealth Group, Johnson & Johnson, Pfizer, and AbbVie Inc. (Disfold 2022) The four firms have billions in total value for their company, further emphasizing their prominence and wealth in the healthcare market. These imposing corporations provide diversified healthcare products and services for their consumers. The common attribute between most of these powerful companies is that their level of productivity is central to their firm. A firm's primary ambition is to uphold the core economic theory of efficiency. Many of these companies are horizontally integrated by researching, developing, producing, and manufacturing their products on the same level. The companies properly allocate their produced resources and inject energy into an efficiently manufactured outcome. (Mwachofi and Al-Assaf 2011) The company delegates all efforts to where it can provide the highest value to the producer. Through centralized production, firms like Johnson & Johnson produce a multitude of smaller firms that cater to their consumers' specific needs. These firms such as Aveeno, Neutrogena, and Tylenol go by their brand name but are under the Johnson & Johnson conglomerate. (Disfold 2022) However, many of these sub-firms produced

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<td>3</td>
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<td>4</td>
<td>AbbVie Inc.</td>
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from the mother firm further eliminate competition and make it harder for smaller independent firms to enter the market, introducing barriers to entry. (Mwachofi and Al-Assaf 2011)

Executive Director of the American Institute for Healthcare Quality, Dr. Assaf Al-Assaf, and his research partner Dr. Mwachofi, expound on the oligopolistic healthcare system in their written piece, Healthcare Market Deviations from the Ideal Market. They detail,

Other market structures lead to sub-optimal resource allocation because some agents have enough power to set prices by shifting demand or supply. For example, if there are only a few large sellers in the market (oligopoly) the sellers have enough market power to set prices and the market fails to allocate resources efficiently. A good example of oligopolies is in the US health insurance industry, which is dominated by a few large companies. (Mwachofi and Al-Assaf 2011)

Dr. Assaf’s point contributes to the general conception that oligopolies have powerful large sellers in their market that efficiently allocate their resources. For Health-related companies, many of the major pharmaceutical firms and hospitals effectively implement efficient production.

Another key feature of an oligopoly is fixed costs. Since larger firms in the healthcare market have lower average costs due to mergers or successfully allocating resources, their increasing returns to scale are lower. Increasing returns to scale refer to production situations with large, fixed costs. So as the scale of production increases, the average cost of production decreases because they can reuse the same equipment. For the healthcare industry with expensive machinery such as MRI scanners, additional costs of production are not as high as the initial
Restrictive oligopolistic market structures affect the consumer in adverse ways, especially pharmaceutical companies overpricing their medications. The market’s lack of diversity eliminates a majority of competition within the industry. The defect with lack of competition can empower influential firms to practice predatory pricing. Companies can do so because consumers may not have an alternative option. Through these predatory practices, many non-profits and governmental agencies have been created to protect the consumer. Larry Levitt, the Senior Vice president of the health policy firm, Kaiser Family Foundation, states, "Insurance markets have long been highly concentrated...That was true before the Affordable Care Act, and it will likely be true after as well." (Bob Herman 2013) Levitt refers to the Affordable Care Act policy that integrated healthcare reforms to make insurance more obtainable for Americans. Many Americans around the time the government enacted the policy were uninsured due to exponentially high insurance costs. (Bob Herman 2013) This issue went rampant because there were limited available health insurance firms that were not price-gouging their clients. (Bob Herman 2013)

**Monopolistic Competition in Italian Pharmaceuticals**

The Italian pharmaceutical and healthcare industry is a monopolistic competitive market structure. Four major firms predominantly run the Italian Pharmaceutical and healthcare companies in the market. Which is similar to the United States’ healthcare sector. A competitive, monopolistic market is represented by many firms selling differentiated products.
As shown above through Disfold documentation of the Italian healthcare sector. Italy has become the leading producer of medical products in the European Union and is well known for its high productivity. (Italian Association of Pharmaceutical Companies 2018) For medicinal and pharmaceutical-related pricing, firms negotiate with the sector regulator, the Italian Medical Agency (AIFA). (Capobianco 2018) The Italian National Institute of Statistics has proclaimed that Italy’s pharmaceutical sector has been ranked as the market with the highest productivity. The Italian healthcare system has amassed thirty-one billion euros in revenue, roughly thirty billion and a half in American currency. (Italian Association of Pharmaceutical Companies 2018) Pharmaceuticals account for six percent of Italy’s total exports as the country has seen a one-hundred and seven percent increase in economic expansion. Many various firms in the economic sector sell relatively similar problems; however, these products or services are not identical. The Italian pharmaceutical and healthcare sector is founded upon the basis of monopolistic competition. Italian pharma firms with the highest market shares comprise Premantura S.p.A, Amplifon S.p.A, DiaSorin S.p.A., and Recordati Industria Chimica and Farmaceutica S.p.A. (Disfold 2022)

Two out of the four prominent healthcare firms in the sector are pharmaceutical. Many of these firms harbor the influence in the market to have smaller firms become price takers, which
are firms that have to follow the prices set by the top leaders. There is consistent competition in
the pharmaceutical sector because there are many firms that strive to endorse their product to the
general population for consumption. Many of the created or trademarked drugs from big pharma
companies are not direct or perfect substitutes for another company’s product. This feature in the
pharmaceutical sector is a definitive factor in a monopolistically competitive market. While these
companies are not perfect substitutes for one another, the drugs or vaccines flooding the market
provides a diverse selection for consumers.

**Similarities in Economies of Scale: America and Italy**

The healthcare industry is one of the most expansive sectors of the economy. Healthcare
providers deliver multifaceted features that cater to the consumer's satisfaction. Therefore, firms
find it optimal to save production costs with increased productivity. Increased productivity can
come from economic concepts such as innovation and technological advancements.
Implementing new machinery into hospitals or facilities promotes fast and efficient procedures
that would not require as much labor. The hospital could scale back on the number of surgeons
needed or handle more patients, given the accelerated productivity rate. Economies of scale lead
larger firms in the healthcare field to have lower average costs because of the expensive initial
costs they invest in their companies. These initial costs are not recurring and in the long run, so
they have lower costs from repeated use of their resources. (Mwachofi and Al-Assaf 2011)

Denoting that larger firms are more efficient than the smaller ones in the healthcare
oligopoly. It is comprehensible that the industry has a few large firms producing lower costs per
unit rather than an abundance of small companies producing high per-unit costs. This is because
larger producers experience lower average costs and are less likely to have an astronomical
financial loss rather than small firms producing higher average costs. (Bob Herman)
Economies of scale can also dictate the influence larger firms have on the market. Suppliers may be more susceptible to larger firms negotiating lower prices given their impact and dominance. Through this relationship, the suppliers and firm can have a symbiotic relationship that benefits the firm in the long run. The built rapport between the company and manufacturer helps keep lower average costs per unit for future endeavors. (Given 1996). In a healthcare context, this is relevant for hospitals and facilities that have to purchase an array of medical instruments and machinery. Some of these machines could be surgical aid that helps surgeons with precise incisions during procedures. (Peltokorpi 2011 p.4) In the article, Economies of Scale: Volume in Health Care, written by Meghan Knoedler, senior clinician, and operational leader for Mayo Clinic, she expounds on how increased productivity has beneficial long-run effects on economies of scale for a large healthcare firm.

Researchers at the Mayo Clinic Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery, working with several clinical departments, have been finding that hospitals that perform the same procedure or treat the same condition repeatedly do it better than those who treat relatively few of the same condition or procedure. Increasing evidence also shows this relationship for some non-surgical therapies as well. There are better outcomes for patients, and fewer complications, which translates into a shorter length of stay, decreased mortality, and increased survival just to name a few. (Meghan Knoedler 2017)

America has made healthy advancements toward productivity and Knoedler acknowledges the long-term effects that investing in technology has for pharmaceutical and
medical purposes. Italy also has made its economic advancements with pharmaceuticals and health-based services.

Economies of Scale in Italy are not too dissimilar from the process in the United States. Production in Italy’s healthcare system is improving at an amazing rate. Within twenty years, the healthcare sector has improved productivity immensely by increasing the employment rate and increasing selectivity in their employees.

Good corporate performance depends on the excellence of the human resources employed. Ninety percent of the employees in the Italian pharmaceutical industry have a degree or a high-school diploma. They are also among the most productive in Italy (three times the average for the total economy) and in Europe. Whereas 20 years ago, productivity per head in our industry was lower than that in the other major European countries, now it is about 10% above the average. These results are the product of innovative, participatory, and cooperative industrial relations: a major tool for competitiveness and growth. (Italian Association of Pharmaceutical Companies 2018)

Many pharmaceutical companies as referenced by Farmaindustria, many pharmaceutical companies understand the value of quality of life. (Italian Association of Pharmaceutical Companies 2018) Therefore, to aid in increased productivity that enables economies of scale, these companies provide their workers with corporate resources to help their sustainability. The consensus of these firms is that tending to the welfare of their employee base will overall benefit their company and help overall morale for increased productivity. Additionally, they ensure that they provide support for traditionally underrepresented demographics such as women.
Innovation in Both Countries

Innovative practices in the healthcare and pharmaceutical industries are necessary to provide adequate and exceptional care to consumers. Italy and the United States both have their strengths when engaging with the healthcare sector. Italy values pharmaceuticals since more of...
its revenue comes from drug corporations. The U.S. focuses on privatized healthcare, nonetheless, big pharma has a large role in innovation for the States. Engineers, researchers, and physicians proactively try to advance the medical field with profound discoveries. Healthcare providers advancing their companies with inventive technology and pharmaceutical research, effectively impact economies of scale. For example, if a surgeon performs an intricate procedure every day with a surgical machine, efficiency increases because the hospital can get more patients into its facilities. Patients being worked on at a faster rate and receiving adequate care increases revenue because the company properly allocated its resources.

Certain detriments to oligopolies in healthcare are that they can sometimes hinder or improve innovation. The various forces that affect healthcare innovation comprise funding, public policy, and technology. These forms of innovation may work together to impede progress or advance the system toward reformation. Regarding funding, many hospitals and facilities have to garner financial support for their research-based endeavors for retailed drugs. Sometimes, these efforts are temporarily blocked because of legal regulations and policies ensuring that the products are safe for the public. The approval traditionally has to go through the Food and Drug Administration (FDA) to have their product move forward. Moreover, a good deal of biotechnological research firms have to wait an extensive amount of time before releasing their drug or vaccine because it may take up to ten years for the product to be approved for use. (Herzlinger 2014)

Regina Herzlinger, a Harvard business administration professor, argued in her article, Why Innovation in HealthCare Is So Hard, that the healthcare industry is inefficient in generating incentives for innovative progress. (Herzlinger 2014) Primarily because many providers seek to charge fees for service and operate against payment reform policies. Some of these implemented
acts in recent years have been the Affordable Care Act and the Anti-Kickback Statute. (Herzlinger 2014) Firms then have decreased incentives to lower costs and provide accessible healthcare for their clientele. Tying back to America’s oligopolistic nature, competition between hospitals is far and wide. Given the four aforementioned firms dominating market shares, diversity in the market is increasingly lessening. So, the firms have limited companies to compete against therefore there is no motivation to improve conditions. Weakened competition can also enable firms to reduce maximum efficiency that would have remained at a higher level if there were more competitors. Unfortunately, other healthcare systems around the world are not experiencing some of the same difficulties present in the United States’s system (Bronsoler, Doyle, and Van Reenen 2020) Impeded innovative progress is not exclusive to the U.S.

Italian innovation has made advancements in their innovative field and apart from high levels of productivity, innovation has been immensely attributed to medical innovation. Many of the technological advancements in the healthcare sector are based on the competitiveness of individual firms. As mentioned in the economies of scale section, productivity in the Italian healthcare sector is remarkably high compared to other European nations. Therefore, competitiveness in this sector drives innovation. The current state of the Italian pharmaceutical industry’s innovation depends on the country’s ability to perform on a global scale with imports and exports. (Garattini and Cornago 2006) Since innovation is driven by competition the market is still being stimulated to improve methodologies in drug creation and technological exploration. Italian firms such as Pharmantura S.p.A. are top performers regarding productivity and efficiently allocating their resources. (Garattini and Cornago 2006)

The "lane" for innovative drugs is still under construction. The first attempt dates from 2001 when the government introduced a 'premium
price to launch a new industrial policy and turn Italy into an attractive
country for industrial investment. The budget (originally 0.1% of total
pharmaceutical expenditure) should have been distributed to
manufacturers of newly approved innovative drugs who invest in R&D in
Italy. However, there is still no trace of this strategy since premium prices
have not been recognized so far. (Garattini and Cornago 2006)

Innovation has made progress in the healthcare sector; however, there has been a slow
development in medicinal and drug-related advancements. Italy is a smaller country even though
its economies of scale are high compared to other European countries. (Garattini and Cornago
2006) As shown in the quote above, the Italian government was making improvements in
investment that could improve innovation. However, efforts have proven to be futile because
there were no documented results from their endeavors. (Garattini and Cornago 2006)

The authors propose that Italy’s healthcare and pharmaceutical innovation is notable
because expenditures and productivity are high. Yet, they feel that the country’s overall efforts
have been lacking in comparison to their European counterparts. The solution to the lack of
extensive progress in innovation can be remedied by big pharma and healthcare firms expanding
overseas. (Garattini and Cornago 2006) Italy would have to seek financial and innovative
investment from foreign investors. Economic participation from another country within Europe
or the United States would bridge the gap that Italy has with health-based innovation.

American Healthcare Regulation Through Policy and Suggested Improvements

The United States’ oligopolistic market structure has proven to gatekeeper many of the
market shares and reduce the diversified corporations for consumers. Through these
anti-competitive behaviors, many independent and governmental agencies have regulated the industry through governmental policy. The most prominent agencies can be identified as the Federal Trade Commission (FTC) HIPAA, the Anti-Kickback Statute, the Affordable Care Act (ACA), and the Department of Justice. Policies such as the Affordable Care Act (2010) for example have instituted several provisions to prevent players from capitalizing on any lack of competition besides the Sherman Antitrust Act of 1890. In 2014, The FTC blocked anticompetitive behavior between one of the biggest market share firms, AbbVie Inc. with their partner Besins Healthcare Inc. The two companies in the market structure up charge their testosterone drug for their consumers. This was to monopolize their consumers' inability to pay the exorbitant fee to gain more profit. The summarization is as follows,

The FTC filed a complaint in federal district court in September 2014 charging that AbbVie Inc. and its partner Besins Healthcare Inc. illegally blocked American consumers’ access to lower-cost alternatives to Androgel by filing baseless patent infringement lawsuits against potential generic competitors. In a June 2018 decision, the U.S. The District Court for the Eastern District of Pennsylvania ruled that AbbVie used sham litigation to illegally maintain its monopoly over the testosterone replacement drug Androgel and ordered $448 million in monetary relief to consumers who were overcharged for Androgel as a result of AbbVie’s conduct. The FTC’s lawsuit centers on two main allegations of anticompetitive conduct: AbbVie and Besins filed baseless patent infringement lawsuits against generic drug marketers Teva and Perrigo Company to delay FDA approval of a generic version of AndroGel and
extend the monopoly profits for the branded version. The complaint charges AbbVie and Besins with monopolization. After counter-suing AbbVie and Besins and alleging that the infringement suit was baseless, Teva subsequently accepted illegal payments from AbbVie to drop its patent challenge and refrain from bringing its competing testosterone gel product to market. The complaint charges AbbVie and Teva with illegally restraining trade. (Federal Trade Commission 2014)

The AbbVie v. et al case is an example of policy regulations highlighting the ramifications of firms’ attempts at taking advantage of limited competition. As shown in this case, the current legal policies in place have proven to be effective; however, there is still an abundant disparity between healthcare firms and their patients. Senior policy analyst of the ACA, Nisha Kurani, and program director of the ACA, Cynthia Cox partnered together on their piece What Drives Health Spending in the U.S. Compared to Other Countries? detailing how reformed policies can improve the economic state of the healthcare and pharmaceutical system. The duo has recommended various improvements or remedies that can be made for the betterment of the healthcare system and the consumer. They state,

To encourage providers to deliver better care, eliminate unnecessary services and waste, and operate more efficiently [tying back to economies of scale]. These options include pay-for-performance initiatives, alternative payment arrangements for patient care such as bundled payments and accountable care organizations, and expanded use of capitated payments to Medicaid’s long-term care beneficiaries…Reducing federal healthcare subsidies such as Medicaid. These options would
continue to make the programs available but would limit federal costs. For Medicare, options include raising the eligibility age, increasing premiums, or increasing taxes on benefits, which would reduce the level of financial assistance provided to higher-income beneficiaries. Federal costs could also be limited by imposing caps on spending for Medicaid and subsidies for health insurance. (Kurani & Cox 2020)

Ideally, increased reformation in the healthcare system with incentivizing firms would have beneficial effects on consumers. At the least, it could prevent consumers from paying an inflated fee for their medications and healthcare services.

**Italian Public Policy and Potential Improvements**

Excessive anti-competitive behavior is not exclusive to American firms. The Italian healthcare and pharmaceutical sectors have centralized regulation because Europe implemented universal healthcare. The structure of accessible healthcare has been managed through strict prices and continual reviews of reimbursable drugs. Like the United States, Italy has issues with firms overcharging for pharmaceuticals. (Garattini and Cornago 2006) Italian Economists Livio Garattini and Dante Cornago expound that the pharmaceutical sector has become a two-lane approach. These approaches are centered on increasing competition for medications in the market. Competition is promoted in oligopolistic markets similarly to monopolistic ones. While they acknowledge the helpful structure of universal healthcare, the two feel that there are setbacks in the management of the “two-lane” market. Similarly, to the United States, Italy has had instances with price-gouging clients in their healthcare sector.

An unfortunate example of this is the pharmaceutical firm Essetifin S.p.A., Leadiant Biosciences (Essetifin) case with the Italian Medical Agency (AIFA). The Essetifin firm had a
predominant position in the market for production and sales in the pharmaceutical market. (Balestra and Antonazzi 2022) The company used the active ingredient, chenodeoxycholic acid for their medication that treated Cerebrotendinous xanthomatosis, an extraordinarily rare disease. (Balestra and Antonazzi 2022) Inherently, the core of the issue is that the firm knew they were providing consumers with a rare drug, Xenbilox. They proceeded to up charge the drug for seventy-eight times more than they initially charged when Xenbilox was released for consumption. AIFA enforced their conduct regulations on Essetifin because for over ten years they engaged in anti-competitive behavior to eliminate their competitors. They raised the price from thirty-seven euros (roughly thirty-six American dollars as of 2022) to two-thousand and nine-hundred euros (which is two-thousand and thirty-six USD). (Balestra and Antonazzi 2022)

To avoid persecution from AIFA, the company pulled Xenbilox from retailers and re-named the drug Leadiant. Through a thorough investigation on behalf of AIFA and the Italian competition authority, they were liable for anti-competitive behavior. The company was fined three and a half million euros for their activities. (Balestra and Antonazzi 2022) The article, Excessive Pricing in Pharmaceutical Markets, written by Ph.D. candidate Antonio Capobianco, expounds on healthcare and pharmaceutical regulation. He found that increasingly over the years, agencies meant to combat anti-competitive behavior have been pushed to enforce policy and regulation more than usual.

In this context, the Authority has been active, in recent years, in the pharmaceutical sector considering its importance, not only economically but also in terms of access to healthcare and medicines and impact on public expenditure... Enforcement has concerned exclusionary behaviors aimed at delaying generic drug entry and a market partitioning conduct, as
well as excessive prices, practiced towards the National Health System.

(Capobianco 2018)

Capobianco asserts that the law frequently abused by anti-competitive firms is article 3.1.a- the competition law. He details the law as follows. “In Italy, exploitative price abuses fall within the scope of article 3.1.a of Law 287/90 (the Competition Law) on abuses of dominant position or Article 102. a of the Treaty on the Functioning of the European Union (TFEU) if they may affect trade between the Member States of the European Union.”(Capobianco 2018)

Interestingly, Italy and the United States can glean from one another regarding the regulation of anti-competitive behavior. While both countries are based upon two different market structures, they still have comparable issues with competition. The Italian healthcare sector, like America, could immensely benefit from incentivizing firms to prevent price-gouging clients.

**Conclusion**

The American and Italian healthcare sectors are considerably similar even though they do not have identical economic markets. The American healthcare system has four primary firms that dominate the market, making it an oligopoly. Italy’s healthcare system is a monopoly that also has four dominant firms. These powerful companies set prices and hold the influence in the market, reducing viable or accessible options for their consumers. They are two countries that value innovation and progress in the medical field. However, there are gaps in both systems that can be shown through price gouging and impeded progress in innovation.

The American healthcare system has higher expenses in contrast to other countries but can provide insufficient and expensive services. Nonetheless, in recent years, large companies have primarily focused on solutions to reduce long-term average costs. These methods comprise innovation and technology that can reduce long-term costs and increase efficiency. Italy, while
having the highest productivity for healthcare out of its other European counterparts, still is not hyper-advanced with its technological and pharmaceutical progress. Partially, this is due to the country’s relatively smaller size. Nonetheless, both countries have also experienced issues with overly competitive firms that aspire to expunge competition from their sector. Of course, the issue with the lack of competition in these sectors is that consumers are gravely affected by aggressive price influxes and a lack of product differentiation. Both countries have dealt with companies that overcharge their clients for insurance or pharmaceuticals and have no incentive to improve the system. However, the respective agencies present in both countries endorse integrity by defending the consumer population. They combat firms that are actively working against their consumers for monetary gain to create a competitive environment. Furthermore, both countries would be beneficially impacted by providing their healthcare firms with incentives to fairly price their clients. Italy and the United States are an unlikely match regarding healthcare development. Even if their economic structures are not identical, they can learn from one another how to improve their overall healthcare sector with innovation and public policy.
Bibliography

"AbbVie Inc., et Al." Federal Trade Commission, 8 Sept. 2014,

www.ftc.gov/legal-library/browse/cases-proceedings/121-0028-abbvie-inc-et-al

"Antitrust Enforcement in Health Care: A Risky and Evolving Landscape." InVivo

www.lw.com/thoughtLeadership/antitrust-enforcement-health-care

Modern Healthcare, 10 June 2013,


Antonio Capobianco. DIRECTORATE for FINANCIAL and ENTERPRISE AFFAIRS
COMPETITION COMMITTEE “Excessive Pricing in Pharmaceutical Markets” -Note by Italy.
2018,


"Definition of a Price Taker | Higher Rock Education." Higher Rock Education

www.higherrockeducation.org/glossary-of-terms/price-taker

Federico Marini Balestra and Lucia Antonazzi. “Pharmaceutical Company Fined by the Italian Competition Authority for the Sale of a Lifesaving Drug at Excessive Prices - Antitrust, EU Competition - Italy.”


Masayuki, Morikawa. "Economies of Scale and Hospital Productivity: An Empirical Analysis of Medical Area Level Panel Data". October 2010,  
www.rieti.go.jp/jp/publications/dp/10e050.pdf=

Meghan Knoedler "Economies of Scale: Volume in Health Care."
https://advancingthescience.mayo.edu/2017/04/20/economies-of-scale/

Mwachofi, Ari, and Assaf F. Al-Assaf. "Health Care Market Deviations from the Ideal Market."
Sultan Qaboos University Medical Journal, vol. 11, no. 3, Aug. 2011, pp. 328–37,
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3210041/#:~:text=A%20good%20example%20of%20oligopolies

Nisha Kurani & Cynthia Cox. "What Drives Health Spending in the US Compared to Other Countries." Peterson-KFF Health System Tracker. 2020
www.healthsystemtracker.org/brief/what-drives-health-spending-in-the-u-s-compared-to-other-countries/#Healthcare%20spending%20per%20capita


https://disfold.com/united-states/sector/healthcare/companies/

“Top Companies in the Healthcare Sector in Italy by Market Cap.” Disfold Data. April 1, 2022
https://disfold.com/italy/sector/healthcare/companies