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Regulating the Unregulated: Competition Law as a Tool to Combat High Drug Prices in Pakistan

Amir Nadeem[1], Shahzada Aamir Mushtaq[2] & Muhammad Ali Siddiqui[3]

[1]*Phd scholar, Department of Law, Times Institute, Multan, Pakistan. Email: amirnadeemawan@gmail.com*
[2]*Assistant Professor, Department of Law, Times Institute, Multan, Pakistan. Email: amirqureshi.adv@gmail.com*
[3]*Advocate Supreme Court of Pakistan/ Corporate Consultant. Email: muhammadalisiddiqui@gmail.com*

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Corresponding Author:
Shahzada Aamir Mushtaq
Email:
amirqureshi.adv@gmail.com

ABSTRACT

Current prospects of the industry indicate that Pakistan has considerable problems in controlling drug prices in the pharmaceutical industry that are thus potentially inaccessible to its population. It reveals that high price and anti-competitive behaviors are still endured by customers while competition law exists, especially due to monopoly, cartel and ineffective regulation. In the current research it has analyzed the function of competition law in relation to too high-priced drugs in the context of Pakistan. Using the data based on the analysis of the legal regulation, historical evolution, and cases, the study determines the shortcomings in existing legislation and regulation that facilitate the possibility of price manipulation. It also looks at the possibility of making competition law as the best way of enhancing fair price, market competition and consumers protection. The paper makes recommendations for improving the status of competition law enforcement in Pakistan and encourages policy changes, improvements in the institutional capacity of law enforcement agencies, and improved cooperation between the public and private sectors.

Introduction

It is an important sector of the economy as it also has a direct handle on the health of the masses. For many people in the world, affordable medicines are a human right and everyone has the right to health; however high drug prices have been a great concern in Pakistan. While there exist competition laws, the authorities' regulatory tools have failed to effectively deter or eliminate anti-competitive conducts, permit monopolization, cartels, and unjustified price increases Zhu, X., & Chen, Y. (2025). This does not create an efficient regulatory environment that is detrimental to consumers and limits availability of affordable treatments for essential diseases to the vulnerable

groups mainly the poor. The Pakistan competition law as a determinant of high drug prices: an empirical analysis is explained in this research article through the discussion of its application, problem identification, and resolution (Panda et al., 2025).

Origin and Historical Background

Competition law came into structure all over the world in order to provide efficiency in the market, avoiding monopolistic situations, and to shield the consumer from unfair consumptions. The historical background of competition law began with the Sherman Antitrust Act of 1890 in USA in an effort at restricting monopolistic activities and fostering a fair competition organization. This gradually developed framework spread across jurisdictions making up different systems influencing the world today (Du et al., 2025).

In Pakistan the competition law regime originally started with the passage of the Monopolies and Restrictive Trade Practices (Control and Prevention) Ordinance, 1970 which was aimed at containing the economic power and monopoly trade practices. Even so, the ordinance had neither sanctions nor provisions for adjusting to the continually shifting business environment. Although these measures have these limitations, the Competition Ordinance is launched in 2007 and later amended to be known as the Competition Act of 2010. Through this law, CCP was created, as an independent regulatory body that asserts to prevent anti-competitive practices, encourage fair competition and safeguard consumer welfare. However, these efforts have not eliminated the known problems related to the implementation of an effective system of price regulation in the pharmaceutical sector (Abraham & Balendran, 2025).

The pharmaceutical sector is one of the most important sectors of modern society due to its focus on the preservation and promotion of public health and welfare, as well as the production of affordable medicines for society, yet this important sector of the global economy remains one of the most hotly debated industries, fueled by ongoing regional and global concerns about its pricing strategies, competition, and conscientiousness with regard to consumer access to essential medications. Even in a country like Pakistan where every citizen has an unequal opportunity to treat sickness due to social and economic inequalities the problem of setting the prices of pharmaceutical products is too dangerous to our health systems (Ju & Li, 2025) this is through excessive pricing, cartel like behavior of competitors, and monopolistic behaviors that not only make healthcare expensive but are also irrationally accessible for a large population. Therefore, competition law has become an effective remedy to protect the interest of the public and provides and promotes a competitive environment within the pharmaceutical market (Blau et al., 2025).

Competition Laws that ban agreements that affect competition within the market, as a result of forming cartels, misusing dominant positions or engaging in concerted fixed price control agreements, seeks to balance the business incentives of pharmaceutical companies and the demand of society for cheap medicine. Yet the process of transformation from policy to practice in enforcing competition law in such a diverse and multi-layered sector is a quite challenging especially for cross-overs like Pakistan in terms of institutional strength, enforcement and legal systems (Briggs et al., 2025).

In Pakistan CCP or Competition Commission of Pakistan is responsible for ensuring the act passed in 2010 relates to eliminating anti-competitive practices for free competition. In essence, the legal setting provides a rather sound framework for countering anti-competitive practices than the practical implementation of such policies in the context of pharmaceutical sector has proven to be characterized by a number of constraints that emerge in the form of scarcity of resources, political interferences, / and the complex and rather obscure structure of the pharmaceuticals' pricing models. Also, the nature of the PHR market creates challenges which are different from those of

other industries; price fixing is not always overt and can be masked by cooperative agreements or the global economy supply chain. These structures make identification, enforcement, and prosecution of anti-competitive practices a very herculean task to the regulating authorities (Moon et al., 2025).

The empirical demonstration of the need for pharmaceutical price fixing in Pakistan is the primary subject of this research, and also considers the utility of competition law for a regulatory function. This work focuses on the issues that are of legal-institutional and economic character, describes the activities of the CCP, and evaluates the outcomes and potential consequences for public health and the stability of markets. Based on case law, regulatory experience, and comparative legal analysis of similar jurisdictions, the review attempts at highlighting the existing differences between the policy formulation as well as implementation pertaining to the anti-price fixing provisions of the Competition Act in the context of the Pakistani pharmaceutical industry. Therefore, the degree and frequency of the identified anti-competitive behaviors underlines the need for enhanced enforcement, more disclosure, and improved pan-stakeholder cooperation to counteract the negative consequences for healthcare affordability. (Scholte et al., 2025).

Hence, through this paper that looks at the interplay between competition law and pricing of medicines in a context of Pakistan this research aims at providing some fodder to the on-going debates on market regulation and consumerism in the country. It demonstrates how proper implementation of competition law can be an indispensable foundation for the task of making prices fairer, increasing the efficiency of markets, and therefore increasing access to these drugs for the population. These findings and recommendations will be valuable aids to policymakers, regulators, and other stakeholders seeking to determine how to adapt regulatory policies to reflect the current competitive reality of the pharmaceutical market. Thus, this paper aims at filling the lack of understanding between the policy intention on one hand and its implementation on the other so that healthcare sector gets a deserving chance to transform at equitable and competitive level in Pakistan.

Significance of the Study

Pharmaceutical companies are very important in the health of the populace worldwide but the expensive prices of the drugs in Pakistan make it difficult for everyone to be able to afford a drug he or she needs (Gulumbe et al., 2025). In consumer perspective it is important to tackle high drug prices not only for the consumers but also as key to economic stability and confidence in markets. This study is significant because it:

- This makes a good attempt to drawing attention to areas and practices that lacks enforcement of competition law in the pharmaceutical sector.
- Enumerates the breakdown of how anti-competitive practices lead to expensive drug costs.
- Provides specific policy, regulatory and industrial advocacy guidance to its readership base of policy makers and industry players.
- Covers brings into this discourse competition law as it applies to the topic Christian affordable healthcare.

Problem Statement

Currently the industry in Pakistan experienced high prices for medicines stemming from monopolistic conducts, cartelization and poor regulatory governance. Currently, the 2010 Competition Act is a legal tool available to control such behavior, but enforcement is relatively weak leaving room for anti-competitive behavior to prevail. None of these practices are merely a

threat to consumer welfare, but they are equally a threat to the overall structure of the healthcare sector. It is high time to identify shortcomings in the existing legislation and discuss possible uses of competition law to overcome problems.

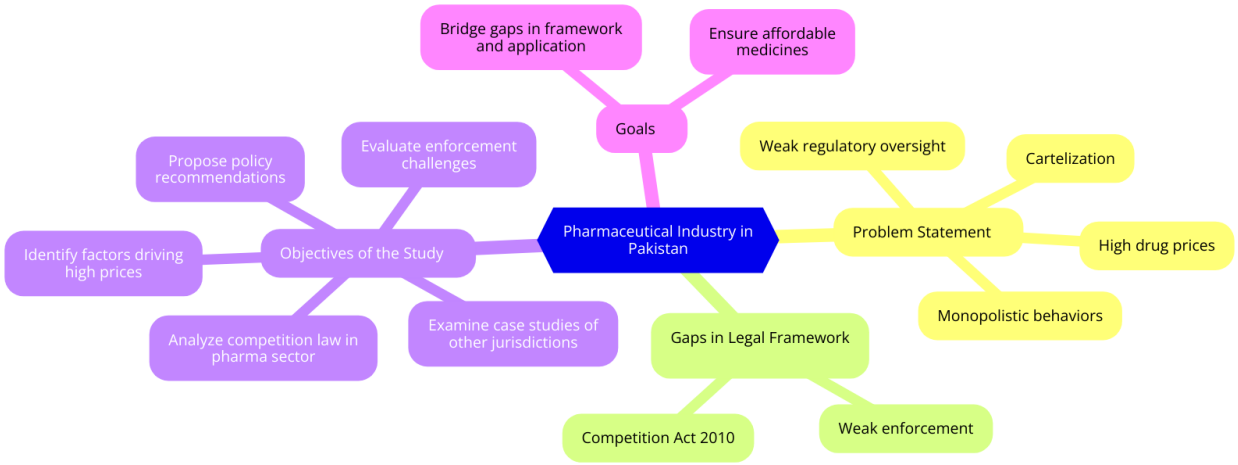

Figure 1: Diagram of Objectives and Goals

Objectives of the Study

This research aims to:

- Analyze the existing legal framework of competition law in Pakistan with a focus on its application in the pharmaceutical sector.
- Identify the key factors contributing to high drug prices and anti-competitive practices.
- Evaluate the enforcement challenges faced by the Competition Commission of Pakistan.
- Examine case studies and examples of successful competition law interventions in comparable jurisdictions.
- Propose policy recommendations to strengthen competition law enforcement and ensure affordable access to medicines.

By addressing these objectives, the study seeks to bridge the gap between theoretical frameworks and practical applications of competition law in Pakistan's pharmaceutical industry, ultimately contributing to fairer and more accessible healthcare markets.

Literature Review

The role of competition law in controlling pharmaceutical price fixing represents a central meeting point of the interaction among public health, market regulation and economic policy. In addressing the problems of price fixing in the pharmaceutical sector in Pakistan, this literature review examines its conceptual, legal and practical dimensions of competition law enforcement. It is a study of previous existing global and local scholarship on competition law, the particularities of the pharmaceutical industry, and the difficulties in applying these frameworks to facilitate fair pricing (Adekola, 2025).

Competition Law and Its Core Principles

Competition law in its foundations is based on promoting free market dynamics, to benefit consumer welfare and deter anti-competitive behaviors like collusion, abuse of dominance or price

fixing. Motta (2004) and Whish and Bailey (2021) have written extensively on the economic rationale of competition law of which one of its functions in fostering innovation, efficiency and consumer access has been extensively supported by scholars. In particular, these principles are of special relevance in the area of the pharmaceutical sector, where information asymmetry, market failure and high barriers to entry are the norm (Manzanelli & Amoretti, 2025).

Pakistan competition act 2010 is the main legal instrument for dealing with the anti-competitive practices. It is a reflection on international best practices suitably adapted to the unique socio-economic context of the country. The Competition Commission of Pakistan (CCP) can investigate and penalize such anti-competitive behavior as price fixing. As Khan and Bhutta (2019) point out, however, this law's practical enforcement is limited by the institutional and resource constraints and legal ambiguities.

Pharmaceutical Price Fixing: Global and Local Context

There is extensive evidence of price fixing on the pharmaceutical market in developed and developing countries. For example, studies by Leemore Dafny and David Dranove (2017) demonstrate globally that pharmaceutical companies have market power to use collusive practices to overcharge for medicines and limit access. However, these practices are masked with complex pricing mechanisms – rebates, discounts, multi-tiered supply chains among them.

Research by Saeed et al. (2020) and Malik et al. (2022) has shown that regulatory deficiencies, lack of transparency in pricing, and lack of monitoring of market practices compound pharmaceutical price fixing in the Pakistani context. Out of pocket spending is high in Pakistan's healthcare system making consumers more susceptible to the harms from price manipulation. However, despite regulatory efforts, cartelization and price collusion continue to occur broadly, as the CCP has continued to investigate pharmaceutical pricing practices periodically.

Challenges in Applying Competition Law to the Pharmaceutical Sector

Application of competition law in the pharmaceutical sector presents ineluctable complexities stemming from multiple industries specific elements. Hemphill and Sampat further note (2012) that high costs of R&D, and the role of intellectual property rights (IPRs) can often justify monopolistic pricing. Second, the transaction costs of price transparency combined with the global nature of the pharmaceutical supply chains make it more onerous still for regulators.

Khan (2018) mentions that in Pakistan these challenges occur at a time of weak institutional capacity. The resources, technical expertise and support from the judiciary, as are available to the CCP, place strong constraints on its ability to prosecute price fixing cases. Moreover, enforcement ambiguity is also present due to confusion between Drug Regulatory Authority of Pakistan (DRAP) and the CCP (Akhtar et al., 2021). The regulatory landscape of the pharmaceutical sector is complicated partially by the influence of the pharmaceutical sector on political decision making, which often has lenient penalties or delayed enforcement actions.

Policy and Enforcement: Bridging the Gap

Although Competition Act, 2010 the basic legal framework is good, the divergence between the legal policies and implementation is a major problem. Continued by the discussion made by Saleem and Ahmed (2020) this study shows that there is a weak coordination between the regulatory authorities in fixing the pharmaceutical prices and required more openness in the pricing strategies, as well as need of the capacity building at the CCP level to stop the price fixing of the medicine effectively. A literature review of the European Union's competition enforcement

involving the United States and other scholars including Ginsburg and Wright (2013) indicate an insight on the effectiveness of proactive enforcement, severe penalties and stakeholders' participation in the elimination of anti-competition practices.

The other important influence is public concern and consumer protection in as far as the eradication of fake drugs is concerned. Unfortunately, there is little consumer activism and a scant understanding of competition law in Pakistan that weakens its enforcement. According to Zafar (2022), competition law education needs to be introduced into public awareness and social institutions could improve the effectiveness of regulation.

Comparative Insights: Lessons from Other Jurisdictions

Certain countries have applied competition law effectively in combating pharma price fixing exercise and Pakistan can well learn from such examples. For example, EU Competition policy has focused on pharmaceutical cartels and abuse of dominance through enforcement and case-laws, Stated by Ezrachi 2016. On the same note, Ameri wanted the Federal Trade Commission (FTC) of the United States to be more aggressive in the protection against anti-competitive practices in the pharmaceutical industry particularly in patent settlements and reverse payments.

India is the nearest jurisdiction to Pakistan in term of economy and problems, which Pakistan also faced. The Competition Commission of India (CCI) has recently made important strides in combating price setting Initially CCI was slow and passive in enforcing laws but has intensified measures in compliance to fix failing prices and make medicines affordable for everyone According to Mehta et al., (2020). These examples show that institutional independence matters just as technical expertise and highly deterring fines do when it comes to enforcing competition law rigorously.

Theoretical and Practical Gaps in Existing Literature

Despite a huge body of literature available on competition law and its use in relation to the working of the pharmaceutical sector, little is still known about its operational enforcement in the Pakistan context. While there is much written about the dynamics of regulation, there remains very little enforcement treatment for discussion, including specific cases and comprehensive assessments of CCP's enforcement efforts. Furthermore, the use of technology, including data analytics and artificial intelligence, in identifying and combating techniques of conspiracy formation in price fixing still lacks research coverage in the literature.

Scholars emphasize the coherence of competition law in regulating pharma price fixing especially in the developing world as in Pakistan. However, there are still many barriers to effective implementation of policy into practice. This involves issues such as; institutional vulnerabilities, duplicated policies, and the special characteristics of the drug industry. Through reference to global trends and solving the related local issues, Pakistan can improve the efficacy of competition law enforcement in ensuring fair and reasonable prices, making greater market transparency and raising public access to vital medicines. Substantial recommendations for future research are presented to shift from theory-based analyses, inter-jurisdictional comparisons, and applications of new forms of regulation to make policy to practice gap closing more productive (Portuese, 2025).

Theoretical, Conceptual, and Legal Framework

Pharmaceutical price fixing is the classic problematic that is compounded in the Pakistani health care system; theoretically, conceptually, and legally the challenge is therefore complex and demands a matching theoretical, conceptual and legal framework to address the problem. This section looks at theories of competition law on the conceptual Analysis of price fixing

pharmaceutical industry and legal remedies available under Pakistan law. Economic theory, legal consideration, and policy development relativity were used to achieve the purpose of presenting a structural framework regarding anti-competitiveness in Pakistani pharmaceutical industry.

Theoretical Framework

The permissible consideration for the analysis of the application of competition law to pharmaceutical price fixing is based on economic theories of regulation, principles of market regulation and public interest. Amy Kapczynski, J. D. (2024).

Economic Theories of Competition

Competition law is grounded on classical and neoclassical theories of economics which assume that competition in free markets is the most efficient in that it increases efficiency, innovation and consumer blessing. Key concepts include:

- **Adam Smith's Invisible Hand:** Since markets are self-regulated, resources are efficiently supplied if there is free competition among the industries. It prevents such a mechanism, and instead offers artificially high prices and inefficiencies.
- **Market Failure Theory:** They hold that price fixing amounts to market failure because it eliminates competition, interferes with markets and is allocatively inefficient. Such failures are endemic in the structure of the pharmaceutical industry because of its reliance on patents, monopolies, and information deficiencies between buyers and sellers.
- **Game Theory and Collusion:** Pharmaceutical companies may collude inadvertently or deliberately through what modern economic theories like game theory explicate, especially in the oligopolistic markets, to keep high prices. These theories are important in explaining strategic interactions and motives in cartel like behavior.

The Public Interest Doctrine

When establishing the public interest doctrine, the primary focus is made on the fact that such markets should provide the best public interest such as the availability of basic goods and services at reasonable prices. In the realm of pharmaceuticals, this doctrine corresponds with the aspiration of keeping drugs to be healthy affordable and available to everyone. This theoretical paradigm sanctifies intervention by the state through competition law to emancipate the society from anti-competitive conducts that cause harm to the interest of the public. Hilmola, O. P., Li, H., Hilletofth, P., & Fjellström, D. (2025)

Conceptual Framework

In connection with this, the conceptual framework seeks to explain the specific issues concerning price fixing in the context of the pharmaceutical industry and the function of competition law. Cherecheș, M. C. (2024).

Price Fixing in the Pharmaceutical Sector

This paper defines price fixing in the pharmaceutical industry as cartelization, which occurs when competitors conspire to set, maintain or control prices, either overtly or implicitly. This practice can take various forms, including:

- **Horizontal Collusion:** Multilateral, bi-lateral and unilateral111 agreements amongst competitors to keep high prices or customer niches.

- **Vertical Price Fixing:** Conspiracy by manufacturers, wholesalers and retailers of adjusting their prices in a certain manner.
- **Abuse of Dominance:** Big fishes using their abilities to set unreasonable prices in the market.

Key factors that facilitate price fixing in the pharmaceutical sector include:

- **Opaque Pricing Mechanisms:** Such a system of pricing requires comprehensive studies of multiple agents that are involved in delivery of pharmaceuticals, including manufacturers, distributors, insurers, and customers, and opens more opportunities for price manipulation.
- **Global Supply Chains:** Multifaceted production and distribution of pharmaceuticals put multinational companies in a strategic position to dictate the pricing strategy at different market destinations.
- **Regulatory Gaps:** A lack of supervision and firms' compliance with the law means that efficiencies cannot check or prevent cartels.

Role of Competition Law

Competition law is perceived in terms of its purpose of making markets work efficiently, preventing anti-competitive practices and safeguarding the consumer interest. In the context of pharmaceutical price fixing, its objectives include:

- **Deterring Anti-Competitive Practices:** The ban together with penalties and sanctions against perpetrators of price fixing can be seen as a way.
- **Ensuring Market Transparency:** Such as by requiring various corporations to reveal pricing and supply chain information.
- **Promoting Accessibility:** Through measures that ensure that activities that could be contributors to the emergence of high price ceilings and restricted people's access to the drugs are avoided.

Legal Framework

The legal measures to address the issue of pharmaceuticals price fixing in Pakistan stem from Competition Act, 2010 accompanied by the distinctive set of rules and regulation of the Drug Regulatory Authority of Pakistan (DRAP) domain. This section looks at the provisions of these laws and the difficulties encountered in their implementation.

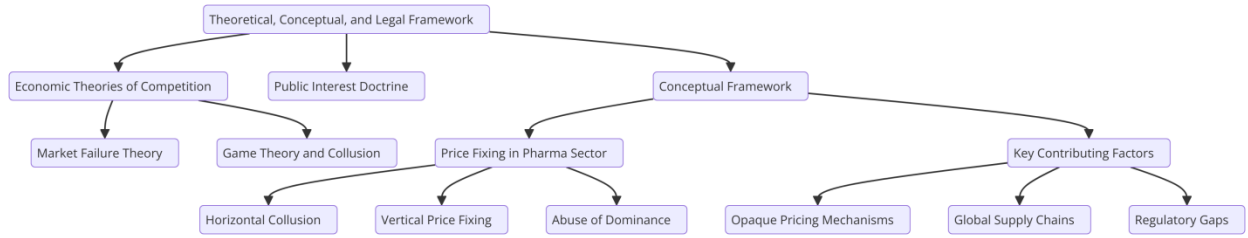

Figure 2: flow chart of Theoretical and Conceptual Framework

The Competition Act, 2010

The Competition Act, 2010 is the principal legalization in Pakistan for the control over the anti-competitive practices. Key provisions relevant to pharmaceutical price fixing include:

- **Section 4:** Control of Agreements: Section 4 specifically prohibits agreements that either may substantially lessen competition or that have the object of preventing or lessening competition: price fixing, market sharing and cartels amongst others. These include price-fixing agreements which are whether express or implied between manufacturers, producers, sellers or purchasers of drugs.
- **Section 3:** This section focuses on firms that engage in unfair changes to the price of goods or restrict the supply and hurts competition. The industries where companies depend on patents along with exclusive marketing rights tend to experience abuse of dominance.
- **Section 34:** The power to Protect the law: The CCP can investigate, prosecute and sanction any organization that violates this law. The CCP can penalize companies, order them to halt business practices, and/ or require the companies to take actions to reverse anti-competitive activities.

Drug Regulatory Authority of Pakistan (DRAP)

Though the CCP supervises the competition law, the DRAP regulates the prices of medicine through the Drug Regulatory Authority of Pakistan Act 2012. It also establishes the maximum retail prices of goods each year and enforces the set prices on medicines. Nevertheless, there is a clear overlap between DRAP's pricing regulations and the CCP's competition mandates which leads to a state of obscurity and /or lacuna in enforcement. Gonzalez, A., & Weber, F. (2024).

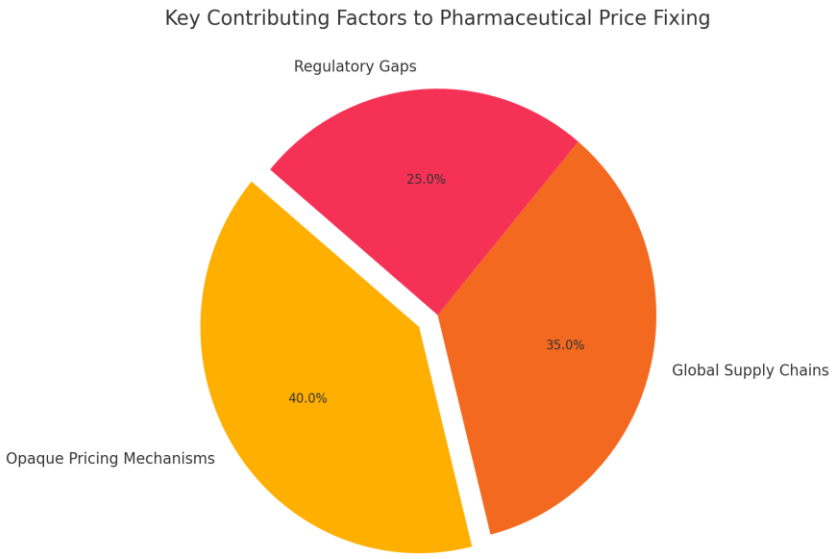

Figure 3: Pie chart of various factors involved in pharmaceutical Price Fixing

International Legal Instruments

The legal framework is also informed by international practices and guidelines, such as:

- **The European Union's Competition Law (Articles 101 and 102 of the TFEU):** The extra provisions introduced ban anti-competitive agreements and abuse in dominance in the EU pharmaceutical market.

- **The United States' Sherman Act and FTC Regulations:** They have been applied when seeking to prosecute price-fixing cartels and to encourage the publication of transparent price and sale information from major pharmaceutical companies respectively.

As illustrated by experiences from these jurisdictions, respect for the enforcement tools, consumer protection regimes, and cooperation between authorities aiming at pharma are crucial rudiments to fight pharma price fixing.

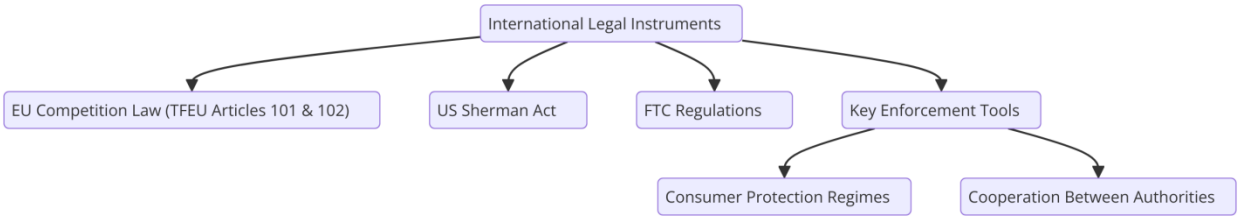

Figure 4: flow chart of European Provisions on Competition Law

Integration of Theory, Concepts, and Law

The theoretical, conceptual and legal perspectives are used in combination to give an all-round perspective of the issue. Market efficiency and public welfare constitute practical rationalisms for the requirement for regulation, while the theoretical concepts of price control provide the particularities of the difficulties in the context of the pharmaceutical industry. The legal aspects, based on anti-competitive principles and enforcement measures ought to serve as the legal instrument for implementing these principles.

However, the practical application of this framework in Pakistan faces several challenges, including:

- **Institutional Weaknesses:** The CCP's limited resources and technical expertise remain key reasons why this enforcement is not effective.
- **Regulatory Overlaps:** The blurred difference between the policies and responsibilities of the CCP and DRAP makes clarification difficult and causes inefficiencies.
- **Lack of Transparency:** Inflexible pricing and supply chain behavior makes it difficult to detect collusion.

It is clear that there is a need to have adequate theoretical, conceptual and legal foundation to tackle the issue of pharmaceutical price fixing in Pakistan. This framework combines economic theory, market factors, and legal mechanism to build a base for examining and preventing anti-competitive behavior in the sector. However, implementation of this framework from policy perspective to practice needs improvement of the institutional capacity, more regulatory provisions and improved stakeholders' engagement. The future work has a greater responsibility in closing these gaps to enable competition law to provide the intended goals set including impartiality on pricing, consumer protection, and market efficiency. Emmanouilidou, E. (2024).

Research Methodology

The research design adopted in the study includes doctrinal, empirical as well as comparative methodology in review of the application of competition law in regulating pharmaceutical price fixing in Pakistan. The combination of primary and secondary data ensures the protection of theoretical, legal, and practical perspectives to provide policy makers with key recommendations to address the gap between policy and practice.

The purpose of this research is to assess the effectiveness of competition law in regulating the pharmaceuticals' price fixing in Pakistan through quantitative and qualitative research design. To this end, the need is seen to review competition law in terms of its effectiveness, define gaps between policy and its implementation and come up with practical suggestions to enhance competition law practice. Primary data, therefore, shall be gathered through face-to-face/telephonic interviews conveniently conducted with the representatives of CCP, DRAP, local legal personalities specializing in competition law and drug regulation, and respondents drawn from the pharmaceutical industry.

A preliminary convenience sample of secondary data has been gathered from legislation and regulation, journal articles and policy papers, case laws, industry related data, and cases of pharmaceuticals price fixing in Pakistan. The study has employed doctrinal legal research methodology to assess the legal rules underpinning competition law and pharma pricing regulation in Pakistan, empirical research to determine the real-life issues facing the regulators and market players or participants, and comparative analysis to compare Pakistan's competition law regime to best practices or standards that are prevalent in the rest of the developed world.

Thematic analysis will has been used in order to explore patterns and themes from interviews, focus groups and case study data; while legal analysis involved a consideration of the adequacy of current legal frameworks and enforcement measures. Quantitative research has employed descriptive statistics to support qualitative conclusions on trends about the pharmaceutical pricing and CCP enforcement actions, further backing the conclusions by quantitative data regarding penalties, market dominance, and price volatility.

The topics of this research are Pakistani pharmaceutical industry while focusing only on the contribution of the competition law in the management of price control. Some of the risks include; restricted access to actual price data and other sensitive info of pharma firms, constrained primary data collection focus, and context-specific outcomes. Issues of ethical nature include issues of informed consent, issues of confidentiality/ anonymity and other set down ethical practices touching on collection, storage and analyses of data.

Evaluating the methodology, it is saw that the research is going to adopt doctrinal, empirical and comparative approaches for giving a good picture about how competition law is being applied to control the issue of pharmaceutical price fixing in Pakistan. Thus, theoretical and practical perspectives are disclosed in parallel according to the excerpt of primary and secondary data, providing practitioners with a collection of measures to fill the identified gap between policy and practice.

Analysis, Results, and Discussion

Analysis

Competition in new regulations of Law Framework of Pakistan

- Pakistan follows the Competition Act 2010 that is against anti-competitive agreements, the policy of restricting competition through fixing prices and cartelization.
- The law is enforced by the Competition Commission of Pakistan (CCP) and the latter has fined pharmaceutical companies for engaging in cartel and engaging in the act of change of prices in the past.

Key challenges in Pakistan's pharmaceutical sector include:

- Weak enforcement mechanisms.
- The adverse influence of key influential players in the regulation process.
- Lack of enforcement of laws on consumer protection for medicine accessibility.

Comparative Analysis of Laws

- **European Union (EU):** The EU employs **Article 101 TFEU** as a basis to ban price-fixing and other anti-competitive agreements. It is implemented by the European Commission and non- compliant pharmaceutical firms face severe measures.

EU laws also have measures provided under the **Pharmaceutical Pricing Directive** and these provide for maximum flexibility comfortable with the idea of charging high prices for the drugs so as to encourage innovation help protect consumer affordability.

- **United Kingdom (UK):** From the time the UK left the EU the country applies the **Competition Act 1998**, which contains the EU competition law. **The Competition and Markets Authority (CMA)** pursues and sanctions cases of pharmaceuticals prices manipulation.

As in the fine for hiking the price of epilepsy drugs by Pfizer and Flynn Pharma, the UK showed itself capable of enforcement.

- **China:** China deals with price-fixing under the categories of anti-competitive practices under the **Anti-Monopoly Law** enacted in 2008. The **State Administration for Market Regulation (SAMR)** supervises and prosecutes cases.

Pricing control is central to China's reform policies to ensure a sustainable stock of essential drugs; exploitative prices are contained by its **Essential Drugs List policy**.

Region	Anti-Competitive Framework	Enforcement Body	Key Features
Pakistan	Competition Act 2010	Competition Commission of Pakistan (CCP)	Weak enforcement, gaps in consumer protection
European Union	Article 101 TFEU	European Commission	Significant penalties, flexible pricing for innovation
United Kingdom	Competition Act 1998	Competition and Markets Authority (CMA)	Strong enforcement, landmark cases
China	Anti-Monopoly Law 2008	State Administration for Market Regulation (SAMR)	Price regulation for public health access

Figure 5: comparative chart of competition law statutes

Sector-Specific problems in Pakistan

- Unlike models such as that of the EU and UK, the Pakistani pharmaceutical market is imprecise in terms of price transparency and lacks state oversight to regulate overpricing.
- Solving this problem requires policy changes however pharmaceutical companies frequently take advantage of loopholes to argue for increased prices citing high costs of imported raw materials.
- The penalties are severe when delivered by the CCP but serve little as a deterrent because of slow enforcement and long drawn legal processes.

Results

Some facts from comparative analysis

EU's active regulation enhances the disclosure of price bargaining between the regulator and the business entity. A balance like this safeguard's innovation as well as affordability.

- Latest developments of the fines in the UK have been deterrence based and have effectively dealt with price-fixing activities.
- Through extensive supervision of essential medicine, China's regulatory interventions also maintain a connection between the price and public interest.
- CCP enforcement is comparatively weaker in Pakistan and the deterrent effect is much less when compared with the other jurisdictions.

Pharmaceutical Industry Behavior:

In Pakistan major pharmaceutical firms operate together for some of the times to direct a high price for their products by arguing that they do not receive any subsidies from the government and costs are high. Other reasons include inadequate measures in enforcing antitrust policies, lack of clear pricing policies that would also allow cartelization. Tejomurti, K., & Silalahi, U. (2024).

Consumer Impact

The present practices on price fixation in Pakistan have impacted the lowest poverty segment hard through making essential drugs unaffordable. In the EU and the UK, similar behavior has been brought under check by stronger enforcement, thus improving consumers' access to affordable drugs.

Discussion

Best practices from EU, UK & China

- EU sheds light on innovativeness, and the affordability model developed by EU gives a balanced approach to controlling the price for pharmaceutical products. Pakistan could employ exact policies that entail elements of developing price-negotiation mechanisms in addition to escalating the levels of transparency.
- Deterrent based enforcement through steep fines which is followed by the UK must be highlighted for Pakistan. It is important to enhance the CCP's authority to fine and to reduce trial congestion.
- China demonstrates the integrated frameworks of competition law with reforms in health care that appear to be sustainable for countries with limitations on resources such as Pakistan (Dutt, 2024).

Recommendations for Improving Pakistan's Competition Law Framework

In order to effectively address the anti-competitive practice of price fixing in the pharmaceutical industry in Pakistan, there is need to bolster the competition law of Pakistan in the following ways adopted by the European Union (EU), United Kingdom (UK) and China. The following recommendations focus on enforcement, transparency, and public welfare:

Strengthen the Enforcement Mechanism

Empower the Competition Commission of Pakistan (CCP):

- Sadly, funding and resources for the CCP must be increased to conduct effective probes and quicker enforcement.
- Improve CCP's decision-making power in order to minimize political intervention and achieve objective decisions.
- Accord CCP the power of auditing with creativity to search and seizure the likely cartel operations as being done by the European Commission.

Introduce Deterrent Fines and Penalties:

- Introduce high penalties on firms involved in the plotting of drug prices, as have the UK's CMA (e.g., Pfizer-Flyn Pharma).
- Other measures may be to extend criminal responsibility for the managers directly involved in the violation of anti-competition laws as practiced in some Member States of the European Union.

Reduce Delays in Legal Proceedings:

- Approved and implement quick reference courts or tribunals to address the competition law issues in a shorter time to save long duration of the case and to delay penalty.

Foster Pricing Transparency

Mandate Cost Disclosure:

- Mandate drug manufacturers to publicize cost constructions of the drugs in terms of the price of the raw materials used in making the drug, cost of manufacturing the drugs and the profit the manufacturers intend to make from the selling of the drugs.
- It is suggested go for the periodic review of pricing strategies similar to the EU's Pharmaceutical Pricing Directive with a view to ruling out unwarranted price increase.

Standardize Pricing Models:

- Introduce price-control categorization of essential medicines as done by the Chinese E List policy on Essential Medicines.
- Place appropriate upper limits to profit margins for essential drugs, so that no company can monopolize the regulation loopholes.

Enhance Consumer Protection

Introduce a Public Interest Test:

- By way of conditionality, it would relevant to demand that before engaging in the process of increasing prices, the participating pharmaceuticals must successfully complete a "public interest test."
- The model to follow consists in the UK formula of affordable prices interlinked with the stimulation of new generation development.

Establish Affordable Medicine Schemes:

- Pilot cost sharing programs for essential medicines with the pharmaceutical manufacturing industry.
- Devise individualized price ceilings for medicaments for sensitive categories of the population, as China did with it subside for low-income individuals.

Foster International and Regional Cooperation

Collaborate with Global Competition Authorities:

- Formulate collaborations with agencies such as the EU's European Commission as well as China's SAMR and exchange data on transnational cartel conduct and anticompetitive conduct.
- The Commission should learn from EU sector inquiries and investigations on pharmaceuticals pricing in relation to avoiding global cartels.

Adopt Harmonized Practices:

- Thus, bring regional regulation of Pakistan's pharmaceutical sector to the EU standard of GDPR and the Pharmaceutical Pricing Directive to create common market mechanisms.

Integrate Competition Law with Healthcare Policy

Develop a Unified Pharmaceutical Policy:

- Coordinate competition law with public care objectives to meet the needs of quality medicines for all.
- Develop a CCP supervised National Drug Pricing and Availability Framework that also involves the healthcare regulators.

Promote Generic Drug Manufacturing:

- Promote the manufacture of this type of medicine so as to increase competition in the market, as well as has already done the European Union.
- Politically support local producers of cheap medicine through providing them legal incentives and subsidies.

Enhance Monitoring and Surveillance

Implement Data-Driven Tools:

- Implement tools of big data to tracks prices of drugs and identify changes in price that are suggestive of conspiracy.
- Automate the process of tracking the behavior of cartel which is used by EU and Chinese authorities.

Conduct Market Inquiries:

- Source From the literature Conduct at least annual surveys aimed at understanding the anti-competitive practices that have an impact on the pricing of pharmaceuticals, with an objective of addressing them.
- Get out the findings of inquiries to ensure the people are aware of what is being done and why.

Promote Public Awareness and Advocacy

Launch Awareness Campaigns:

- Increase competition awareness among the public and specifically encourage them to report anti-competition conducts.
- Engage the consumers and CSOs in order to achieve trust and more committed participation.

Introduce Whistleblower Incentives:

- Pay bounties or offer legal immunity to whoever visits your business and report of the price manipulation and collusion just like in UK and EU.

Develop Capacity and Expertise

Train CCP Personnel:

- Offer competition law enforcement training, with focus on the pharmaceutical industry issues.

- Engage the international organizations to enhance on technical knowledge and identify on the best practices.

Engage Experts and Academics:

- Collaborate with academic institutions and policy institutions to produce research about pricing of pharmaceuticals and suggestion for policy changes.
- Enhance the dialogue and cooperation between the industry participants, policy makers and scholars to find integrated approaches.

Strengthen Public and Stakeholder Engagement

Consult Stakeholders on Pricing Policies:

- Encourage the pharmaceutical manufacturers together with consumers and other appropriate stakeholders in developing a general and acceptable policy on drug-pricing regulation.
- Utilize China's method of engaging its stakeholders in order to improve its drug-pricing approaches.

Encourage Voluntary Compliance:

- Encourage the adoption of voluntary code of ethical behavior for the pharmaceutical firms to address anti-competitive behavior.

Benchmark Against Global Best Practices

Learn from the EU's Comprehensive Framework:

- Continue to follow EU model of having two main objectives – affordable prices regulated through price transparency while promoting research and development.

Follow the UK's Enforcement Successes:

- Make reference to the ability of the UK'S authorities to conduct fast investigations while effecting high profile fines to other similar institutions as a way of discouraging other similar institutions from engaging in similar conduct in the future.

Incorporate China's Public-Interest Approach:

- Develop policies that make it possible for all to access medicines but at the same time this has to support the government control of prices in the market.

Conclusion

Integrating with GPC and enhancing the competition law tools ultimately can help Pakistan buildup and enforce the competition law to eliminate anti-competitive practices particularly in pharmaceutical sectors, to serve the life-saving need of the population in the country. These reforms have been presented to defend consumers and at the same time promote a fair and a long-term future for the pharma sector. This issue has significant impact on public health, stability of the economy and equity in the society. The drug industry, essential in fulfilling human health needs, continues to experience market failures, monopolization and regulatory failure. In this study, the focus, and scope of the analysis of the competition law's implications are envisaged as a strategic tool for addressing these challenges and promoting a fairer drug pricing structure (Pitteloud & Donzé, 2024).

The article also emphasizes that owing to weak laws and regulations anti-competitive practices including cartel like price fixing, market sharing and abuse of dominant position practices run rife

in Pakistan's pharma industry. Consequently, the Competition Commission of Pakistan (CCP) holds a significant function of checking similar machinations. Thus, the very ability of the CCP to enforce penalties and deter equals shall depend on its authority to work autonomously, meaning independently from the other parts of the given legal space. Promoting institutional capacitating of the CCP and ideally positioning it to be autonomous of political and industrial pressures is a critical intervention in positioning PLA for advocacy against exploitative pricing.

Moreover, the research also recognizes that competition law should always be supported by other complementary frameworks. Addressing these bottled-necks will require building mechanisms that aim at improving the transparency of the drug pricing structures, fostering production and uptake of generic forms of the drugs and facilitating public-private partnerships. The final principle of pharmaceutical policy reform should also carry on the contested task balancing innovation with affordability. Furthermore, creating consumers' awareness and providing citizens with tools for informing abusive actions can also support legal and regulative measures. It also outlines the requirement in translating competition law and policy into relationships with other relevant legislation including the Drug Regulatory Authority of Pakistan (DRAP). Through harmonizing these frameworks, gaps in the regulatory approaches can be closed to create an optimal regulatory structure in the provision of affordable, accessible and available essential medicines.

Therefore, in its final analysis, this article contends that due implementation of competition law and a sound legal and institutional environment make it possible to fight high drug prices in Pakistan. But this entails lobbying and commitment by the policymakers, the regulatory authorities, and judiciary in obviating institution related challenges and compelling performance. Analyzing Pakistan's progress in completing its Doha Round obligations in the light of consumer welfare and dismantling the barriers to market access show that there is much that can be done to achieve the objective of affordable health care for people of Pakistan, and, therefore, improve health, social and economic development goals of the society. This research has helped in mapping the reforms that need to be done, stressing the consistency in political will and multi actor stakeholder cooperation for taming the untamed and establishing reasonable and equitable pharma mart.

References

1. Panda, S., Kumar, R., & Tomar, R. S. (2025). Evaluation of Blockchain and IoT Technology's Impact on the Pharmaceutical Sector. Blockchain-Enabled Solutions for the Pharmaceutical Industry, 81-96.
2. Du, K., Jia, F., & Chen, L. (2025). Better safe than sorry? The effect of asymmetric cost management on firm resilience in manufacturing firms. Industrial Management & Data Systems, 125(1), 143-167.
3. Blau, B. M., Griffith, T. G., & Whitby, R. J. (2025). Financial development and mortality rates. Applied Economics, 57(3), 338-352.
4. Briggs, A. H., Doyle-Connolly, A., Schneider, J., Podkonjak, T., Taylor, H., Roffe, E., ... & Rabin, N. (2025). An attribution of value framework for combination treatments. Value in Health, 28(1), 72-80.
5. Ju, H., & Li, M. (2025). Object and Effects Tests in Resale Price Maintenance Cases in China. Journal of Competition Law & Economics, nhae021.
6. Abraham, J., & Balendran, G. (2025). The Political Sociology of NICE: Investigating Pharmaceutical Cost-Effectiveness Regulation in the UK. Sociology of Health & Illness, 47(1), e13878.

7. Zhu, X., & Chen, Y. (2025). Does price negotiation in China bring high-value novel drugs to the national medical insurance beneficiaries?. Health Policy and Technology, 14(1), 100963.
8. Moon, S., Ruiz, A. A., Vieira, M. C., Large, K. E., & Slovenski, I. (2025). Reforming the innovation system to deliver affordable medicines: a conceptual framework of pharmaceutical innovation as a complex adaptive system (forest) and theory of change. Journal of Pharmaceutical Policy and Practice, 18(1), 2436899.
9. Scholte, M., Grimm, S. E., Pauly, B., Verbeeck, F., Pasmooij, A. M., Bouma, B., ... & Joore, M. A. (2025). Revising EU pharmaceutical legislation: will it foster drug repurposing?. Drug Discovery Today, 104286.
10. Gulumbe, B. H., Abdulrahim, A., & Ibrahim, M. N. (2025). Rising antibiotic costs as a potential driver of antimicrobial resistance in Nigeria. Discover Public Health, 22(1), 1-7.
11. Adekola, T. (2025). Intellectual Property and Local Pharmaceutical Production: Defining the Need and Meeting the Challenge. In Contemporary Issues in Intellectual Property Law in Africa (pp. 84-102). Routledge.
12. Manzanelli, P., & Amoretti, L. (2025). The role of oligopolies and economic groups in accelerating inflation in recent Argentina. Revue de la régulation. Capitalisme, institutions, pouvoirs, (37).
13. Portuese, A. The Battle for the Future of Antitrust.
14. Hilmola, O. P., Li, H., Hilletofth, P., & Fjellström, D. (2025). Evaluation of EU-27 countries as manufacturing location: strengths and weaknesses model. Operations Management Research, 1-14.
15. Amy Kapczynski, J. D. (2024). Federal Trade Commission Oversight of the Pharmaceutical Industry. JAMA, 331(23), 1995-1996.
16. Cherecheș, M. C. (2024). Pharmaceutical Industry: Good and Bad. In The Invisible Hand of Cancer: The Complex Force of Socioeconomic Factors in Oncology Today (pp. 61-81). Cham: Springer International Publishing.
17. Gonzalez, A., & Weber, F. (2024). The deadweight loss in competition litigation seen from compensation and deterrence perspective: lessons from a Chilean price-fixing cartel. Journal of Antitrust Enforcement, jnae005.
18. Emmanouilidou, E. (2024). Drugs Pricing Methods and Comparison Worldwide: How They Affect National Economies.
19. Tejomurti, K., & Silalahi, U. (2024). Digital market and its adequacy of merger assessment in Indonesian business competition law. International Journal of Law and Management.
20. Dutt, P. K. (2024). Digital Competition Law Issues and Interrelated Aspects of Law. In E-Governance in the European Union: Strategies, Tools, and Implementation (pp. 149-171). Cham: Springer Nature Switzerland.
21. Pitteloud, S., & Donzé, P. Y. (2024). Swiss Multinationals versus the French Welfare State? The Social Security Deficit, European Integration, and the Battle for 'Fair'Drug Prices (1970–1990). Contemporary European History, 1-20.