

Unclassified

English - Or. English

20 August 2025

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE**

Cancels & replaces the same document of 18 August 2025

Latin American and Caribbean Competition Forum

**LATIN AMERICAN AND CARIBBEAN COMPETITION FORUM - SESSION II:
COMPETITION AND INTELLECTUAL PROPERTY**

- Contribution from Trinidad and Tobago -

7-8 October 2025

This attached document from Trinidad and Tobago is circulated to the Latin American and Caribbean Competition Forum (LACCF) FOR DISCUSSION under Session II at its forthcoming meeting to be held on 7-8 October 2025 in Asunción, Paraguay.

Mr. Marcelo Guimarães (Marcelo.Guimaraes@oecd.org).

JT03570128

Session II: Competition and Intellectual Property

– Contribution from Trinidad and Tobago –

Abstract

1. This paper examines the intersection between intellectual property (IP) rights and competition law within the developing economy of Trinidad and Tobago. While IP protections incentivize innovation through temporary monopolies, their strategic misuse can distort markets and hinder economic growth. Using the Aghion framework's inverted U-shaped relationship between competition and innovation, the paper proposes a strategy of targeted competition advocacy and international cooperation as ex ante regulatory tools to deter potential anti-competitive behavior without undermining innovation.

1. Introduction

2. The intersection of intellectual property (IP) rights and competition law represents a critical balancing act in modern economies. While IP protections incentivize innovation by granting temporary monopolies, unchecked exploitation of these rights can distort markets, suppress competition, and ultimately hinder economic growth. To address these concerns, competition law plays a vital role in ensuring that IP rights are exercised in a manner that does not undermine market fairness or consumer welfare.

3. Industries heavily reliant on research and development such as pharmaceuticals, biotechnology, manufacturing, and agriculture often leverage IP assets and engage in complex corporate consolidations, making the role of competition law even more consequential. While IP rights provide a necessary incentive structure by allowing innovators to recoup R&D investments, they also risk enabling anti-competitive behaviour when not properly regulated.

4. As Trinidad and Tobago seeks to reduce its dependence on energy exports, innovation-led sectors such as digital services, agritech, and pharmaceuticals have become focal points for diversification. These industries rely heavily on intellectual property and dynamic market engagement, heightening the importance of legal frameworks that balance innovation and competition. Yet, regulatory fragmentation and limited enforcement capacity often undermine efforts to manage IP-related market power. Across the globe, competition agencies work to uphold these principles, each operating under legal regimes tailored to their specific economic and regulatory contexts. Despite variations in scope and structure, they share a common objective: promoting and maintaining competitive markets. In Trinidad and Tobago, this role lies with the Trinidad and Tobago Fair Trading Commission (TTFTC) pursuant to the Fair Trading Act (FTA) of 2006. While the FTA provides a framework for fostering healthy competition, section 3 (1) (c) provides exemptions relating to agreements where the provisions are pursuant to the use, license or assignment of rights under existing copyright, patents (other than patent rings) or trade mark. Nevertheless, the Commission has the responsibility to intervene in cases involving unilateral abuse of intellectual property power. Section 21 of the FTA does not require an agreement, but instead requires actual or likely monopoly power. In this regard, firms may leverage IP protections in ways that facilitate anti-competitive practices, ultimately undermining the broader goals of innovation and economic efficiency. Institutions like the

TTFTC face challenges in mediating these tensions, making the intersection of IP and competition law a critical consideration in Trinidad and Tobago’s broader transformation agenda. In response, the ex-ante tools of competition advocacy¹ and international cooperation can safeguard consumer welfare and promote dynamic, innovation-driven markets.

5. Accordingly, this paper proposes a conceptual framework that integrates the inverted

U-shaped theory of competition and innovation, the dual role of IP rights, and the institutional constraints typical of small developing economies². Central to this framework is the role of competition advocacy and international cooperation as proactive regulatory tools in data-scarce environments, offering a pathway to build institutional credibility, encourage pro-competitive reforms, and foster a culture of compliance.

2. Literature Review

6. The relationship between competition and innovation has long been a subject of economic inquiry, revealing a complex and often bidirectional dynamic. Traditional economic theory suggests that competition serves as a catalyst for innovation, compelling firms to develop new products, processes, or technologies to maintain or improve their market position. However, more recent theoretical developments have challenged this linear view, emphasizing that the relationship is contingent on market structure, firm size, and the nature of innovation itself.

7. Intellectual property rights play a dual role in shaping market dynamics. On one hand, they provide essential incentives for innovation by granting temporary exclusivity, allowing firms to recoup their R&D investments. This legal protection encourages risk-taking and long-term planning, particularly in sectors with high upfront costs and uncertain returns, such as pharmaceuticals, biotechnology, and advanced manufacturing. On the other hand, IP rights can be manipulated to suppress competition. Practices such as patent thickets, evergreening, and strategic litigation can delay the entry of competitors, inflate prices, and reduce consumer welfare. Empirical studies, such as those by Boldrin and Levine (2008), have questioned the net benefits of strong IP regimes, particularly in markets where competition enforcement is weak or inconsistent.

8. Joseph Schumpeter, in his seminal theory of “creative destruction,” contends that large firms wielding market power are often well-positioned to spearhead innovation. Their scale affords them the financial muscle to pursue long-term research and development (R&D), absorb risk, and drive technological progress. From this vantage, a degree of monopoly power—frequently underpinned by intellectual property (IP) protections—is viewed not as a barrier, but as an enabler of innovation. Schumpeter’s framework thus challenges the conventional wisdom that equates competition with dynamism, suggesting instead that concentrated market structures can catalyze inventive activity.

9. However, this optimistic appraisal of monopoly-led innovation is tempered by Kenneth Arrow’s “replacement effect,” which introduces a critical asymmetry in incentive structures. Arrow argues that monopolists, already reaping substantial profits from existing technologies, have diminished motivation to innovate—doing so might cannibalize their own advantage. In contrast, firms operating within competitive environments view

¹ <https://www.internationalcompetitionnetwork.org/working-groups/advocacy/>

² https://unctad.org/system/files/official-document/ciclpd58_en.pdf

innovation as a strategic necessity, a mechanism to differentiate and capture market share. Thus, Arrow’s perspective raises doubts about the reliability of market concentration as a consistent driver of progress.

10. Together, these two contrasting views—the Schumpeterian rationale for monopolized innovation and Arrow’s cautionary “replacement effect”, underscore the complexity of the competition– innovation nexus. Rather than a linear relationship, innovation emerges from a dynamic tension between entrenched power and market pressure. This interplay has inspired more nuanced theoretical and empirical inquiries, prompting economists to reassess the optimal balance between regulation, IP policy, and competition law in fostering sustainable innovation.

11. These contrasting views laid the foundation for more sophisticated models, notably Aghion et al. (2005), who proposed an inverted U-shaped relationship between competition and innovation. Anchored within the endogenous growth framework, this model departs from earlier linear assumptions by internalizing innovation as a function of firm behavior and market structure. It emphasizes that competition shapes innovation incentives not uniformly, but conditionally: when competition is too weak, firms grow complacent; when it is too intense, the anticipated returns from R&D diminish, dissuading investment. Innovation peaks at moderate levels of competitive pressure, where firms—particularly those neck-and-neck with rivals—are driven to innovate to escape the threat of being overtaken. This approach offers a dynamic refinement to endogenous growth theory and stands in sharp contrast to exogenous models, which treat technological progress as external and policy-invariant.

12. The dynamics of innovation also differ markedly between developed and developing economies. In advanced economies, innovation is often driven by frontier R&D, supported by robust institutional frameworks, well-developed capital markets, and strong enforcement of IP and competition laws. These conditions create an environment where firms can pursue high-risk, high-reward innovation strategies. In contrast, developing economies typically engage in adaptive or incremental innovation, often focused on localizing existing technologies to suit domestic needs. Weak enforcement of IP and competition laws in these contexts can lead to market distortions, rent-seeking behavior, and underinvestment in innovation. Moreover, the absence of strong regulatory institutions may allow dominant firms to entrench their market positions through strategic use of IP protections, thereby stifling competition and limiting the diffusion of new technologies.

3. Methodology

13. This paper relies primarily on secondary research but also includes primary data relative to the ex-ante tools utilized at the Trinidad and Tobago Fair Trading Commission. Prevalent theories on the relationship between IP and competition laws are discussed, and used as a strategic guide to the TTFTC’s advocacy efforts and plans for the future.

4. Competition Law and Intellectual Property

4.1. Global Comparisons:

14. Jurisdictions have adopted varied approaches to managing the relationship between IP protection and competition. The European Union, for instance, combines strong merger control with active antitrust enforcement, including the use of compulsory licensing and scrutiny of patent settlements. The United States, while traditionally more IP-friendly, has become increasingly vigilant in addressing monopolistic behaviour in the tech sector. India offers a compelling example of balancing access and innovation, particularly in the pharmaceutical industry, where compulsory licensing has been used to ensure affordability of essential medicines.

4.2. Local Realities and Challenges:

15. Within the Caribbean Community (CARICOM), legal and institutional frameworks remain uneven, though regional cooperation through the CARICOM Single Market and Economy (CSME) offers a platform for harmonization. Trinidad and Tobago, as a CARICOM member, has the opportunity to draw lessons from these international models while tailoring its approach to local conditions.

4.3. Conceptual Framework

16. The Aghion et al. (2005) inverted-U framework posits a non-linear relationship between product market competition and innovation, where innovation initially rises with competition due to stronger incentives to “escape competition,” but eventually declines as excessive competition erodes post-innovation rents. This dynamic hinges on several key assumptions: firms innovate incrementally; industries vary in technological proximity (i.e., “neck-and-neckness”); and innovation incentives are driven by rent differentials between pre- and post-innovation states. Crucially, the framework distinguishes between two effects—an “escape-competition” effect that dominates in technologically close sectors, and a “Schumpeterian” effect that suppresses innovation in laggard-dominated sectors (Aghion et al., 2005).

17. Innovation outcomes across the Caribbean mirror the dynamics of Aghion et al.’s inverted U-shaped curve, where both weak and excessive competition suppress innovation. According to the 2020 IDB Invest and FinDev Canada study of over 1,000 firms, only 20% introduced notable innovations, despite clear benefits: firms that innovated saw higher productivity, wages, and up to 74% gains in sales per worker. However, barriers like limited financing, small market size, and a shortage of skilled labor make innovation risky, especially in highly competitive environments with uncertain returns. Strengthened intellectual property law could help firms secure gains from innovation, lowering risk aversion and attracting investment. Likewise, well-calibrated competition law can prevent market stagnation and excessive rivalry, guiding firms into the mid-zone of the inverted U—where innovation is most likely to thrive.

18. Applying this framework to Trinidad and Tobago offers a compelling lens through which to understand the country’s innovation dynamics. The local economy is characterized by concentrated industries such as energy, telecoms, and finance, where competition is relatively low and innovation incentives may be muted. However, emerging sectors like fintech, agritech, and the creative industries exhibit conditions conducive to neck-and-neck competition, suggesting that moderate increases in competition could spur innovation. Given the small market size and limited R&D infrastructure, innovation

responses to competition are likely to be highly sensitive, making the inverted-U framework particularly relevant.

19. This rationale is reinforced by evidence from Mauritius, a similarly small island developing economy, where strategic liberalization³ and targeted investment in ICT and financial services led to a surge in innovation. Empirical studies found that innovation peaked at intermediate levels of competition, consistent with the inverted-U hypothesis (Zafar, 2011). Mauritius's experience underscores the importance of sectoral targeting and policy calibration—lessons that Trinidad and Tobago can apply to aid policymakers, regulators and analysts to better anticipate how competition reforms will shape innovation outcomes.

4.4. Advocacy and International Cooperation

20. Unlike ex post enforcement, which relies on historical data and legal proceedings, targeted advocacy allows younger competition agencies to shape market behavior through stakeholder engagement, policy guidance, and public education. Put simply, advocacy holds critical importance for an emerging competition agency.

21. As part of its broader mandate to promote competitive markets, the TTFTC—since full proclamation of the FTA in February 2020—remains in the early stages of institutional development and in its enforcement journey, however it has laid a strong foundation through targeted advocacy and international cooperation efforts which have served as strategic mechanisms to signal the agency's commitment to safeguarding consumer interests and promoting market fairness. These early efforts are not merely awareness-building exercises; they are strategic investments in the Commission's future enforcement capacity.

22. For instance, over the years the TTFTC has utilized both reactive and proactive tools to continue to assist in identifying and fighting anti-competitive agreements and practices by enterprises. Some reactive tools include, a simplified TTFTC complaints procedure and the TTFTC hotline and proactive tools include, TTFTC Advocacy Campaigns through social media⁴ and newspaper articles⁵, the use of economic data gathered through industry reports/studies⁶ and National, Regional and International agency cooperation⁷.

23. For fiscal year 2024/2025 the TTFTC has hosted and played significant roles in targeted advocacy and international cooperation efforts in the areas of competition law and intellectual property. Such exchange of information between agencies—both small and large, across regional and international boundaries—serves as a vital resource to foster

³ <https://www.ecosciences.edu.az/jfddownloads.php?url=TVRnME9nPT0=>

⁴ Refer to the newspaper article advertisement titled 'Tacit collusion' going on among supermarkets- <https://www.guardian.co.tt/business/tacit-collusion-going-on-among-supermarkets-6.2.2028693.3b9ecc7451>

⁵ Refer to the advertisement titled 'The Deleterious Effects of Price Fixing,' published on page 26 of Issue 2 of the Trinidad and Tobago Chamber of Industry and Commerce's Chamber Magazine, Contact Business- <https://chamber.org.tt/contact-magazine/2024-issue2>

⁶ The details of which have not been publicized in the public domain.

⁷ Annual Regulators Meeting 2025 -<https://www.facebook.com/ttftc/posts/ftc-to-host-fifth-annual-meeting-of-key-regulators-in-trinidad-and-tobago-under-/922085100104601/>

mutual learning, and the open exchange of ideas which can meaningfully inform legal policymaking and support ongoing regulatory refinement. These include:

1. Introductory Seminar on Intellectual Property and Competition Policy for The Government of Trinidad and Tobago, October 8th, 2024;
2. Fifth Annual Regulators Meeting, January 30th 2025; and
3. Hosting the Sub-Regional Workshop on IP and Competition Policy for Caribbean Competition Agencies, June 30th to July 1st 2025.

24. The TTFTC's advocacy efforts do more than foster awareness, they serve as critical building blocks for future enforcement. Through public education campaigns, the Commission elevates legal literacy and promotes voluntary compliance, while stakeholder engagement helps shape regulatory priorities and establish trust in institutional processes. Meanwhile, international cooperation enables the TTFTC to benchmark global best practices and continuously refine its enforcement strategies. These activities are not simply preliminary steps; they are intentional strategies that equip the agency with the credibility, visibility, and analytical capacity required to address anti-competitive behavior decisively and legitimately.

25. As the Commission matures, it will likely encounter increasingly complex matters, including instances where IP-protected firms engage in anti-competitive practices or abuse dominance. In such scenarios, the groundwork laid through early advocacy—whether through public outreach, strategic stakeholder relations, or multilateral cooperation—will become indispensable. By investing in these areas now, the TTFTC ensures it can respond to future regulatory challenges with legal clarity and strategic confidence, reinforcing the legitimacy and effectiveness of its interventions.

5. Conclusion

26. Successfully integrating competition law and intellectual property rights (IPR) requires thoughtful policy design that balances their complementary roles while managing inherent tensions. The inverted-U framework offers a useful lens to identify strategic points where advocacy can be most impactful. It also serves as a foundation for empirical research and collaborative efforts among agencies such as the TTFTC, TTIPO, and their regional counterparts. As a relatively young authority, the TTFTC is still shaping its institutional identity and operational scope, making this an opportune moment to align its growth trajectory with innovation-driven policy objectives. Trinidad and Tobago's evolving experience provides valuable insights for other developing economies seeking to harmonize competition and IP frameworks in the context of market concentration and emerging innovation ecosystems.

6. Recommendations for the Future

27. Building on the TTFTC’s evolving role and the broader institutional landscape in Trinidad and Tobago, a strategic pathway is recommended to strengthen its mandate and enhance its analytical capabilities. To advance the integration of competition and innovation policy, the TTFTC should actively pursue collaborative frameworks with key public agencies—such as the: TTIPO, Ministry of Planning and Development, the Telecommunications Authority of Trinidad and Tobago and the Central Statistical Office — as well as private sector actors including trade associations, university research centers, and industry innovators. These partnerships will help legitimize and operationalize target market studies that are better aligned with real-world policy needs.

28. Such studies could include price elasticity modeling to evaluate how consumers in IP-intensive sectors—such as pharmaceuticals, digital services, or publishing—respond to price changes, thereby gauging the extent of market power and consumer impact. Market concentration indices like the Herfindahl-Hirschman Index (HHI) and Lerner Index could be used to assess structural competitiveness in sectors where dominant firms leverage IP rights. Meanwhile, dynamic efficiency models could simulate the trade-off between short-term competition and long-term innovation, offering insights particularly relevant to Trinidad and Tobago’s emerging sectors such as agritech and creative industries.

29. By partnering with entities that hold specialized data and domain expertise, the TTFTC can overcome resource constraints while bolstering stakeholder engagement, analytical rigor, and institutional credibility. This collaborative and ecosystem-driven approach will support the authority’s transition from enforcement-centered regulation to a more proactive, evidence-based policy model, especially in areas where intellectual property and competition law intersect.

References

- Aghion, Philippe, Nick Bloom, Richard Blundell, Rachel Griffith, and Peter Howitt. 2005. "Competition and Innovation: An Inverted-U Relationship*." *The Quarterly Journal of Economics* 120 (2): 701–28. <https://doi.org/10.1093/qje/120.2.701>
- Berlingieri, G., *et al.* 2020. "Laggard Firms, Technology Diffusion and Its Structural and Policy Determinants." OECD Science, Technology and Industry Policy Papers, No. 86. OECD Publishing, Paris. <https://doi.org/10.1787/281bd7a9-en>
- First Citizens Economic Research Unit. 2022. "Trinidad and Tobago's Energy Sector: Economic Activity." First Citizens Group. <https://www.firstcitizensgroup.com/tt/news-insights/trinidad-and-tobagos-energy-sector-economic-activity/>
- 'Innovation Boosts Productivity, Wages, and Sales in the Caribbean | IDB Invest'. Accessed 25 July 2025. <https://www.idbinvest.org/en/blog/development-impact/innovation-boosts-productivity-wages-and-sales-caribbean>
- Ministry of Finance, Republic of Trinidad and Tobago. 2024. State Enterprises Investment Programme 2025. <https://www.finance.gov.tt/wp-content/uploads/2024/09/SEIP-2025-for-web-letter-size.pdf>
- One FinTech Avenue. 2025. "AgriConnect." One FinTech Avenue News, March 25, 2025. <https://onefintechavenue.com/index.php/2025/03/25/agricconnect/>.
- Peneder, Michael. 2012. "Competition and Innovation: Revisiting the Inverted-U Relationship." *Journal of Industry, Competition and Trade* 12 (1): 1–5. <https://doi.org/10.1007/s10842-011-0123-4>
- Shapiro, Carl. 2012. "361Competition and Innovation: Did Arrow Hit the Bull's Eye?" In *The Rate and Direction of Inventive Activity Revisited*, edited by Josh Lerner and Scott Stern. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226473062.003.0011>.
- Telecommunications Authority of Trinidad and Tobago (TATT). 2024. Market Information and Reports. <https://tatt.org.tt/market-information/market-reports/>
- United Nations. "Competition Advocacy During and in the Aftermath of the COVID-19 Crisis." Report. United Nations Conference on Trade and Development, April 28, 2021. https://unctad.org/system/files/official-document/ciclpd58_en.pdf
- Wilson, Sarita, Radhaka Maharaj, and Satyendra Maharaj. 2020. "Formalising the National Innovation System in a Developing Country: The Case of Trinidad and Tobago." *The West Indian Journal of Engineering* 42 (2): 4–13. http://www.uwi.tt/eng/wije/vol4202_jan2020/Documents/M01-SWilsonJan2020.pdf.
- Zafar, Ali. 2010. "Mauritius: An Economic Success Story." Chapter 5. <https://www.un.org/esa/socdev/egms/docs/2016/AliZafar.pdf>