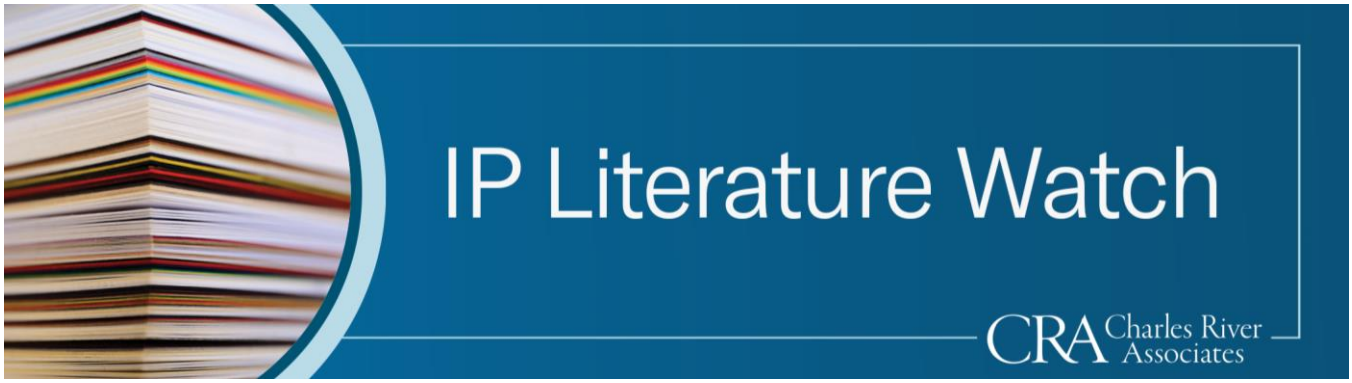

August 2025

This newsletter contains an overview of recent publications concerning intellectual property issues. The abstracts included below are as written by the author(s) and are unedited.

IP & Antitrust

Aligning the Competition Commission of India and Sectoral Regulators

Latika Choudhary (University of Petroleum and Energy Studies (UPES) - College of Legal Studies)
Hardik Daga (University of Petroleum and Energy Studies (UPES) - College of Legal Studies)
Australian Journal of Asian Law, Vol. 26, No. 2, Article 08: 123-137, 2025
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5386502

This article explores the jurisdictional overlaps and regulatory conflicts between sectoral regulators in India, with a specific focus on the Competition Commission of India and the Controller General of Patents. It examines the intricate challenges that emerge when legal issues simultaneously involve aspects of both competition law and patent law. Through an analysis of key judicial precedents, legislative frameworks and institutional mechanisms, the study aims to provide a comprehensive understanding of the existing challenges. Additionally, it offers solutions to harmonise the objectives of fostering innovation while ensuring a competitive market landscape, thus contributing to policy development and regulatory clarity.

IP & Licensing

Open Licensing, Hidden Costs: Survey Experiment Insights on Creative Commons and Copyright Infringement

Thomas Rousse (Northwestern University)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5379423

Since its inception, Creative Commons has introduced new ways for creators to grant licenses to the public without cost or the need for negotiation by breaking up rights provided by copyright and making a subset of those rights (as well as several rights and obligation beyond the scope of copyright itself) available to anyone willing to abide by the conditions of the license. Its widespread adoption has democratized open licensing for creators beyond the software context these licenses originated within. Although the success of Creative Commons as a community is plain, relatively little information is available about its perception by the general

public. Aggressive litigation by Creative Commons licensors has put the organization is a peculiar position: publicly clarifying that they would prefer licensors not enforce their rights when licenses are breached.

This stance raises questions about whether members of the public believe Creative Commons licensors are less likely to enforce their copyright. This Article presents insights from a novel, nationally representative survey experiment of over 1,200 participants applied to theoretical debates and prior cases dealing with the licenses. The survey evaluates the public's recognition of Creative Commons before dividing participants into three groups: a control group with a standard copyright notice, a treatment with an abbreviated Creative Commons license marking, and a treatment with a short primer on Creative Commons and a full text license caption. These three groups are presented with seven short scenarios presenting re-use in different contexts and asked about the likelihood of legal action, their estimate of the legal consequences under the current law, and their evaluation of what the consequence should be.

Survey results suggest about 7% of the U.S. adult population accurately recognizes the Creative Commons logo and about 25% have some knowledge of the organization. Using full-text license terms and a short primer on Creative Commons increased respondent estimates of the severity of legal consequences under current law as well as their estimate of preferred legal consequences for infringement. In sum, results suggest licensors who want the terms of their license respected should prioritize the use of full-text license descriptions that provide more information about the license terms and provide any opportunities available for potential licensees to understand Creative Commons.

The Case for Contextual Copyleft: Licensing Open Source Training Data and Generative AI

Grant Shanklin (Yale University - Digital Ethics Center; Yale University - Department of Computer Science)
Emmie Hine (Yale University - Digital Ethics Center; University of Bologna- Department of Legal Studies; KU Leuven - Centre for IT & IP Law (CiTiP))
Claudio Novelli (Yale University - Digital Ethics Center)
Tyler Schroder (The MITRE Corporation; Yale University - Digital Ethics Center)
Luciano Floridi (Yale University - Digital Ethics Center; University of Bologna- Department of Legal Studies)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5354897

The proliferation of generative AI systems has created new challenges for the Free and Open Source Software (FOSS) community, particularly regarding how traditional copyleft principles should apply when open source code is used to train AI models. This article introduces the Contextual Copyleft AI (CCAI) license, a novel licensing mechanism that extends copyleft requirements from training data to the resulting generative AI models. The CCAI license offers significant advantages, including enhanced developer control, incentivization of open source AI development, and mitigation of openwashing practices. This is demonstrated through a structured three-part evaluation framework that examines (1) legal feasibility under current copyright law, (2) policy justification comparing traditional software and AI contexts, and (3) synthesis of cross-contextual benefits and risks. However, the increased risk profile of open source AI, particularly the potential for direct misuse, necessitates complementary regulatory approaches to achieve an appropriate risk-benefit balance. The paper concludes that when implemented within a robust regulatory environment focused on responsible AI usage, the CCAI license provides a viable mechanism for preserving and adapting core FOSS principles to the evolving landscape of generative AI development.

IP & Litigation

The Origins of Patent Litigation Waves

Paul Rogerson (Chicago-Kent College of Law - Illinois Institute of Technology)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5391900

The U.S. patent system has experienced several large waves of litigation. However, their origins and implications remain incompletely understood. A particular challenge is the lack of detailed, long-term data.

This paper builds a new database of patent litigation spanning 1923–2002 by using a large language model to digitize decades of Patent Office records and linking them to a patent-level measure of innovation from Kelly et al. (2021) that scores patents based on novelty (over past patents) and influence (on future patents). A unique feature of this data is that it shows the individual patents asserted in litigation (rather than just the total number of suits).

There are two core results. First, technological revolutions have played a large role in explaining waves of patent litigation. Top-scoring, revolutionary patents account for a majority of the variation in litigation volume over time. Second, litigation of revolutionary patents in particular is driven by longevity. These patents continue to be heavily litigated even a decade or more after they leave the Patent Office.

These results help to explain why patent “thickets” emerge in particular decades—the accretion of basic patents during major technological waves creates clusters of long-lived rights that cover the next steps in the technology tree. They also help to explain (and justify) swings in judicial attitudes toward patents over time.

IP & Innovation

When Capital Crosses Borders, So Does Knowledge

Mengfan Liu (Erasmus School of Economics)
Roni Michaely (The University of Hong Kong; ECGI)
Zheng Wang (City University of Hong Kong)
Ray Zhang (Simon Fraser University - Beedie School of Business)
HKU Jockey Club Enterprise Sustainability Global Research Institute Paper No. 2025/131
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5384316

We explore the role of foreign institutional investors in promoting international knowledge diffusion, using cross-border patent citations as evidence. Our analysis reveals that greater holdings by foreign institutional investors are associated with an increase in their portfolio firms' citations of patents originating from the investors' home countries. To address endogeneity concerns, we exploit a US dividend tax treaty reform as a quasi-exogenous shock that boosted US institutional ownership in affected foreign firms. Treated firms exhibit significantly greater post-shock citations of US patents. Another identification strategy using MSCI index inclusions as an exogenous shift in foreign ownership yields consistent evidence. These findings highlight a novel channel through which financial globalization can enhance innovation spillovers, suggesting that policies shaping foreign investment flows may have important, unintended effects on the global transmission of ideas.

Sanctions Paradox: Do U.S. Export Restrictions Hurt Domestic Innovation?

Hao Gao (Tsinghua University - PBC School of Finance)
Nemit Shroff (Massachusetts Institute of Technology (MIT) - Sloan School of Management)
Pengdong Zhang (Sun Yat-sen University (SYSU))
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5373282

Yes. We find that U.S. export restrictions reduce innovation incentives among U.S. firms that export to sanctioned entities. These restrictions prompt targeted foreign firms to accelerate their own innovation efforts, ostensibly with increased support from their governments-including weakening enforcement of U.S. intellectual property rights (IPR). Weaker IPR diminishes the ability of U.S. suppliers to appropriate the returns from their R&D investments, leading them to reduce R&D spending by 13% and R&D-related hiring by 9%. Post-sanctions, suppliers to sanctioned firms also shift their IP protection strategy: patent filings decline by 10%, while mentions of trade secrets in regulatory filings rise by 47%. These effects are stronger when sanctioned entities are likely to reverse-engineer their suppliers' technology and weaker when domestic competition necessitates U.S. firms to innovate. The impact is most pronounced in patent-intensive industries and for suppliers who hold patents in sanctioned countries. Our findings suggest that export controls may unintentionally fuel foreign innovation and IP appropriation, prompting U.S. firms to scale back innovation and favor secrecy over patenting.

Patenting and Information Disclosure

Xizhao Wang (Northwestern University)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5387619

Invention disclosure facilitates knowledge spillovers, supporting future progress but potentially limiting appropriability for the inventor. In this paper, I examine invention disclosure behavior by analyzing the readability of patent texts, using both traditional and novel AI-based readability scores. Using two difference-indifferences analyses, I find that following the 1980 Bayh-Dole Act and the establishment of Technology Transfer Offices, university-affiliated inventors reduced the readability of patent detailed descriptions. This decrease in readability does not extend to patent summary texts, suggesting that university inventors strategically limit information on how to make and use the invention. The findings reveal the potential for strategic disclosure behavior not just in the decision of whether to patent or keep inventions as trade secrets, but also in the degree of patent language clarity. Institutional changes lead inventors to selectively adjust the information disclosed in their patents and obfuscate core techniques. Underlying mechanisms and effects on follow on-innovation are further explored.

Measuring New Quality Productivity with Large Language Model-based Agents: Evidence on Government Subsidies from China

Ruiqing Yan (University of New South Wales (UNSW))
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5388358

This study examines whether government subsidies enhance firm-level productivity and, through which mechanisms, leveraging a novel measure of New Quality Productivity (NQP) that combines AI-driven patent semantic scoring with an improved entropy-weighting method. Using a panel of 4,071 Chinese companies

listed on the A-share list from 2018 to 2022, we find that subsidies significantly increase firm-level NQP, with financing constraints acting as a partial mediator. This suggests that fiscal support policies directly promote resource allocation to technological innovation and digital transformation while easing financing frictions. The heterogeneity analysis reveals that the positive effect of subsidies is stronger in first-tier cities, reflecting differences in innovation ecosystems and resource endowments. By introducing an AI-based approach to patent evaluation, this study addresses the limitations of traditional innovation measures and provides new empirical evidence on the financial channel of industrial policy. The findings have policy implications for the design of region-specific subsidy programs and complementary institutional reforms.

IP Law & Policy

Information Property

James Grimmelmann (Cornell Law School; Cornell Tech)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5366669

Information Property is a textbook for a survey course in intellectual property law that emphasizes conceptual clarity and the structural unity of IP law. It provides a rigorous, systematic treatment of the way in which every IP field is characterized by its own distinctive versions of the same common concerns: the subject matter it protects, the source of ownership over particular material, the procedures required to secure protection, the zone of similarity around the plaintiff's information that it protects, the type of prohibited conduct that constitutes infringement, the conduct that can lead to secondary liability, and its significant defenses. In addition to the standard subfields—patent, copyright, and trademark—Information Property includes comparative coverage of trade secret, false advertising, right of publicity, and design patent. Extensive illustrations make the issues visually apparent, and numerous problems enable readers and students to deepen their understanding by applying important IP concepts to solve real-world problems. Extensively student-tested, Intellectual Property has been used for over a decade.

Methods of Medical Treatment and (Mis)Use of an Invention: Clarifying Grant Versus Scope Of Patent Protection

Wissam Aoun (University of Windsor Faculty of Law)
Caitlyn Massad (University of Windsor Faculty of Law)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5357572

The Supreme Court of Canada is set to decide whether methods of medical treatment constitute patentable subject matter. The concerns surrounding extension of patent protection to methods of medical treatment, argued almost entirely on the grounds of patentable subject matter, assumes that a physician carrying out such treatment is patent infringer. Canadian jurisprudence has largely taken this assumption to be true. Interrogating the historical jurisprudence supporting the prohibition on patentability of methods of medical treatment, this article demonstrates that this jurisprudence is far from clear as to whether the issue is, or should be, approached as a question of patentability or infringement. An analysis of the case law on both patentability of methods of medical treatment, and what constitutes infringing ‘use’ of an invention, demonstrates that both lines of jurisprudence share similar concepts and underlying concerns. This has generated uncertainty as to whether the issue of extending patent protection to methods of medical treatment has ever clearly been a question of patentability. Rather, examining both lines of jurisprudence side-by-side,

this piece demonstrates that concerns underlying extension of patent protection to cover methods of medical treatment have historically been categorized as scope of protection concerns, rather than patentability concerns. As such, the debate surrounding patent protection and methods of medical treatment is best characterized as an infringement issue.

Creative Labor and Platform Capitalism

Xiyin Tang (UCLA School of Law - UCLA School of Law; Yale Law School)
Forthcoming, UCLA Law Review, Volume 73 (2026)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5399407

The conventional account of creativity and cultural production is one of passion, free expression, and self-fulfillment, a process whereby individuals can assert their autonomy and individuality in the world. This conventional account of creativity underlies prominent theories of First Amendment and intellectual property law, including the influential “semiotic democracy” literature, which posits that new digital technologies, by providing everyday individuals the tools to create and disseminate content, results in a better and more representative democracy. In this view, digital content creation is largely (1) done by amateurs; (2) done for free; and (3) conducive of greater freedom.

This Article argues that the conventional story of creativity, honed in the early days of the Internet, fails to account for significant shifts in how creative work is extracted, monetized, and exploited in the new platform economy. Increasingly, digital creation is done neither by amateurs, nor is it done for free. Instead, and as this Article discusses, fundamental shifts in the business models of the largest Internet platforms, led by YouTube, paved a path for the class of largely professionalized creators who increasingly rely on digital platforms to make a living today. In the new digital economy, monetization—in which users of digital platforms sell their content, and themselves, for a portion of the platform’s advertising revenues—not free sharing, reigns. And far from promoting freedom, such increased reliance on large platforms brings creators closer to gig workers—the Uber drivers, DoorDash delivery workers, and millions of other part-time laborers who increasingly find themselves at the mercy of the opaque algorithms of the new platform capitalism.

This reframing—of creation not as self-realization but as work that is both precarious and exploited, most notably as surplus data value—demands that any framework for regulating informational capitalism’s exploitation of labor is incomplete without considering how creative work is extracted and datafied in the digital platform economy.

Emerging Technologies and the Public Order/Morality Exception for Patents: A Legal Tightrope

Fathima Rena Abdulla (National University of Advanced Legal Studies, Kochi)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5370819

As artificial intelligence and emerging technologies reshape our world, patent law faces a critical challenge: how to balance innovation with ethical considerations through the public order/morality exception. This paper examines how different jurisdictions wrestle with this legal tightrope, from Europe's values-driven approach to America's utilitarian stance. Through analysis of landmark cases and regulatory frameworks, we uncover the key challenges of applying traditional moral exclusions to cutting-edge technologies. Beyond identifying problems, we propose practical solutions including a "helpful and not harmful" test, enhanced stakeholder involvement, and an internationally harmonized approach. The findings suggest that while the morality

exception remains vital for responsible innovation, its application must evolve to meet the unique challenges of the AI era without stifling technological progress.

Copyright Law

AI and Doctrinal Collapse

Alicia Solow-Niederman (George Washington University - Law School)
78 Stanford Law Review __ (forthcoming 2026)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5384965

Artificial intelligence runs on data. But the two legal regimes that govern data—information privacy law and copyright law—are under pressure. Formally, each regime demands different things. Functionally, the boundaries between them are blurring, and their distinct rules and logics are becoming illegible.

This Article identifies this phenomenon, which I call "inter-regime doctrinal collapse," and exposes the individual and institutional consequences. Left unchecked, the data acquisition status quo favors established corporate players and impedes law's ability to constrain the arbitrary exercise of private power. Through analysis of pending litigation, discovery disputes, and licensing agreements, this Article exposes two dominant exploitation tactics enabled by collapse: Companies "buy" data through business-to-business deals that sidestep individual privacy interests, or "ask" users for broad consent through privacy policies and terms of service that leverage notice-and-choice frameworks. Both tactics systematically reward a cadre of well-resourced actors.

Doctrinal collapse also poses a fundamental challenge to the rule of law. When a leading AI developer can simultaneously argue that data is public enough to scrape—diffusing privacy and copyright controversies—and private enough to keep secret—avoiding disclosure or oversight of its training data—something has gone seriously awry with how law constrains power. To manage these costs and preserve space for salutary innovation, we need a law of collapse. This Article offers institutional responses, drawn from conflict of laws and legal pluralism, to create one.

Plagiarism, Copyright, and AI

Mark A. Lemley (Stanford Law School)
Lisa Larrimore Ouellette (Stanford Law School)
University of Chicago Law Review Online, forthcoming 2025
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5399463

Critics of generative AI often describe it as a "plagiarism machine." They may be right, though not in the sense they mean. With rare exceptions, generative AI doesn't just copy someone else's creative expression, producing outputs that infringe copyright. But it does get its ideas from somewhere. And it's quite bad at identifying the source of those ideas. That means that students (and professors, and lawyers, and journalists) who use AI to produce their work generally aren't engaged in copyright infringement. But they are often passing someone else's work off as their own, whether or not they know it. While plagiarism is a problem in academic work generally, AI makes it much worse, because authors who use AI may be taking the ideas and words of someone else without knowing it.

Disclosing that the authors used AI isn't a sufficient solution to the problem, because the people whose ideas are being used don't get credit for those ideas. Whether or not a declaration that "AI came up with my ideas" is plagiarism, it is a bad academic practice.

We argue that AI plagiarism isn't—and shouldn't be—illegal. But it is still a problem in many contexts, particularly academic work, where proper credit is an essential part of the ecosystem. We suggest best practices to align academic and other writing with good scholarly norms in the AI environment.

Observations on the Role of Copyright in Shaping Music Industry Use of Large Language Models

Daniel J. Gervais (Vanderbilt University - Law School)
Intellect Handbook of Global Music Industries (Chris Anderton, editor)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5388435

This chapter examines three issues in copyright law that may affect the future of music creation and distribution. The first is whether it is legal to mine (or "scrape") music databases in order to teach an AI machine to make music. The second is whether a machine's output, in the form of a new song or composition, can infringe someone else's copyright. The third is whether an AI machine's output can be protected by copyright even if it is far removed from any human input. How courts and legislatures answer these three questions will profoundly affect the pace and depth of the use of AI to create new music, and thus not only who will create commercially distributed music, but what kind(s) of music will be created.

Monastic Moral Rights

David A. Simon (Northeastern University School of Law)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5375334

Copyright law grants authors special non-economic "moral rights" to prevent others from using their works in certain ways. Unlike economic rights, which protect the author's ability to generate returns, non-economic rights protect the author's "special relationship" with her work—a relationship that arises from investing one's personality into the work by creating it. In its strongest "monastic" form, moral rights give the author the absolute power to prevent any use that offends her sensibilities. While the monastic view of moral rights exists in only a few countries, the sentiment underlying it is pervasive in moral rights theory: an author's claims are superior to all others because only the author knows when harm occurs, regardless of others' views. In other words, certain uses of works result in the author experiencing harm that no one else can experience and that does not depend on what others think. This Article asks and evaluates the following question: can this type of internal harm—based only on the author's subjective experience—justify a monastic version of moral rights?

It argues that the answer is probably not—and that, if supported, monastic moral rights will be tightly limited. Drawing on literature in science fiction and philosophy, this Article contends that the best justification for the monastic view is also the most implausible: authors have moral rights only when another's use causes the author to experience an inconsistency between her perceived use of the work and her memories of creating the work. In short, an author's rights are contingent on her ability to remember creating her work. This is the best justification because the author's memories of creating the work satisfy all the requirements for authorial harm: it identifies discrete psychological states that are tied directly and only to the author's acts of creation, independent of others' perceptions. It is the least plausible, however, because it conditions important rights on one's ability to remember past actions. Despite its seeming implausibility, the author's memories of creation

provide the best support for grounding monastic moral rights. As a consequence, the case for monastic moral rights, if it can be made, is tightly limited to cases where another's use of an author's work causes a negative psychological response directly tied to the author's memories of creating the work.

IP & Trade

Tariffs, Corporate Cash Holdings, and Innovation

Konrad Adler (University of St. Gallen - School of Finance; Swiss Finance Institute)
JaeBin Ahn (International Monetary Fund (IMF))
Mai Dao (International Monetary Fund (IMF))
Swiss Finance Institute Research Paper No. 25-71
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5398881

We study how trade liberalization affects financial and innovation decisions of large firms across major G7 countries. We document how firms increase their cash holdings when their country's trading partners lower their import tariffs, while we find no effect of a decrease in the country's own import tariffs. Specifically, we find that the increase in cash holdings occurs before tariff cuts by trading partners and is associated with higher R&D spending and patent filing after the cuts. Our results are consistent with the predictions of a model in which higher expected returns to innovation from enhanced export market access lead to higher cash buffers.

The impact of digital technological innovation on high-tech industry exports in China

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Jie Liu (School of Economics, Guangdong Ocean University, Zhanjiang, Guangdong, China)
PLOS One
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0330494

The high-tech industry exports represent a critical breakthrough for China in securing a leading position within the upper echelons of the global value chain, and digital technological innovation (DTI) serves as the primary driving force for enhancing export competitiveness. We conducted an empirical analysis focusing on 31 provinces in China from 2009 to 2022, utilizing patent data related to the digital economy to examine the impact of DTI on high-tech industry exports. Empirical results demonstrate that the DTI significantly enhances the scale of high-tech industry exports, and this positive effect is primarily observed in eastern regions and non-Belt and Road Initiative provinces. The impact channels of DTI primarily involve an increase in the number of high-tech industry firms and the stimulation of innovative behavior within these sectors. The findings provide empirical support for the pivotal role of DTI in the development of a trade powerhouse.

Other Topics

When AI Sets Wages: Biases and Labor Discrimination in Generative Pricing

Maxime C. Cohen (Desautels Faculty of Management, McGill University)
Eddy Hage-Youssef (McGill University)
Warut Khern-am-nuai (McGill University - Desautels Faculty of Management)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5404966

We examine potential biases and discrimination in wage recommendations by analyzing how large language models (LLMs) assign hourly rates to online freelancers. Using 60,000 freelancer profiles from the top six categories in one of the leading online platforms, we prompt seven leading LLMs (GPT-4o, GPT o4-mini, Gemini 1.5 Flash, Claude 3.7 Sonnet, GPT-5 Mini, DeepSeek-R1, and Llama 3.1 405B), generating 420,000 price recommendations. Our analysis yields three key findings. First, LLMs systematically recommend higher rates than humans (mean human rate: $23.60; LLMs: $30.72-$44.51). Second, while no evidence of gender-based discrimination emerges, we observe substantial disparities by geography and age: geographic price gaps range from 19.5% to 130.4%, and age premiums reach up to 31.49%. Third, we test whether prompt interventions can mitigate these disparities. We find that geographic biases can be significantly mitigated through prompt design, while age-related disparities persist even under strong corrective instructions, suggesting that age-related biases are deeply embedded in the LLM training process. In total, our study generated approximately four million AI-generated price recommendations through API queries. We conclude by discussing the implications of these findings for labor markets, emphasizing that prompt design has clear implications for fairness and that regulatory oversight, including prompt transparency, may be warranted.

Technology Spillovers from the Final Frontier: A Long-Run View of U.S. Space Innovation

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Stefano Grassi (University of Rome, Tor Vergata, Faculty of Economics, Department of Economics and Finance)
Aldo Paolillo (University of Rome Tor Vergata)
CEIS Working Paper No. 609
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5382579

Recent studies suggest that space activities generate significant economic benefits. This paper attempts to quantify these effects by modeling both business cycle and long-run effects driven by space sector activities. We develop a model in which technologies are shaped by both a dedicated R&D sector and spillovers from space-sector innovations. Using U.S. data from the 1960s to the present day, we analyze patent grants to distinguish between space and core sector technologies. By leveraging the network of patent citations, we further examine the evolving dependence between space and core technologies over time. Our findings highlight the positive impact of the aerospace sector on technological innovation and economic growth, particularly during the 1960s and 1970s.

Patent Collateralization and Entrepreneurship

Yanke Dai (Shanghai University of International Business and Economics)
Huasheng Gao (Fudan University)
Na Li (Chinese University of Hong Kong)
Yujia Si (University of Toronto - Rotman School of Management)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5349951

This study examines the effects of patent collateralization on entrepreneurship by exploiting policy changes in China that allow firms to use patents as collateral for financing. Our findings indicate that enhanced patent collateralization significantly stimulates startup activity, particularly within high-tech sectors. We identify three key mechanisms: (1) facilitating access to debt and equity financing in the primary capital market; (2) enhancing liquidity in the secondary market for intellectual property; and (3) incentivizing talented individuals to become entrepreneurs in the labor market. These results demonstrate the economic benefits of patent collateralization, highlighting its potential to foster the growth of high-tech startups.

The Impact of Working Hours on Innovation: Lessons from the 2018 Korean Working-Hours Reform

Hyejin Park (Hanyang University ERICA Campus, School of Economics)
Jiyoon Lee (Yonsei University)
Juho Kim (Yonsei University - School of Business)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5366039

We investigate the effects of working hours on innovation. Theoretically, while shorter working hours may constrain the time available for innovative activities, it could also foster innovation by improving employees' work-life balance, thereby creating an environment that is favorable for innovation. For our empirical analysis we exploit the 2018 Korean Working Hours Reform-which capped weekly working hours at 52-as an exogenous shock to working hours. We find that the quantity of innovation either increased or remained stable, as indicated by the rise in patent applications and the steady number of granted patents following the reform. However, there is a significant increase in rejected patent applications, along with decreases in both patent citations and the number of patents ever cited, suggesting a decline in innovation quality. Moreover, this effect is more pronounced in firms that undertake significant R&D investments. These results suggest that restrictive working-hours policies, while maintaining quantitative innovation output, may impede the development of more radical and groundbreaking innovations. Our findings broaden our understanding of how working hours, a key aspect of the work environment, influences innovation and offer important insights with organizational and regulatory implications.

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