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University Research Commercialization in Vietnam after the 2025 Science, Technology and Innovation Law

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ABSTRACT: University research commercialization is increasingly important for converting publicly funded knowledge into marketable technologies, licensing transactions, spin-off firms, and broader economic value. Vietnam's 2025 Law on Science, Technology and Innovation substantially restructured the governance of publicly funded research outcomes by clarifying ownership, expanding institutional autonomy over commercialization, and strengthening benefit-sharing incentives. This study examines whether those legal changes are sufficient to improve commercialization in Vietnamese universities. It applies qualitative legal-institutional analysis to the 2025 Law and its implementing regulations, combines this with a critical review of the university technology-transfer literature, and uses recent institutional developments in Vietnam as illustrative evidence. The analysis identifies a central institution-capability gap. The new framework can reduce legal uncertainty and transaction delays, but commercialization performance remains conditional on universities' ability to evaluate technologies, manage intellectual-property portfolios, finance proof-of-concept activities, structure transactions, engage firms early, and align researchers' career incentives with application-oriented outputs. The paper therefore argues that Vietnam's post-2025 policy agenda should move from legal empowerment alone toward a commercialization-capability architecture that combines professional technology transfer offices, transitional finance, risk-based internal governance, market-facing university-industry mechanisms, and outcome-oriented performance data.

KEYWORDS: academic entrepreneurship, higher education, innovation policy, intellectual property, technology transfer

JEL Classification: I23, O32, O34

1. INTRODUCTION

Universities have become increasingly important institutions in innovation systems because they do more than educate students and produce academic knowledge. Their so-called third mission includes knowledge transfer, industry collaboration, entrepreneurship, and the conversion of research outcomes into social and economic value (Etzkowitz & Leydesdorff, 2000). Commercialization is one mechanism through which this mission is realized. It may take the form of licensing, assignment of intellectual property, contract research, joint development, consultancy, university spin-offs, or direct exploitation of research-based assets. The economic significance of commercialization lies in its ability to connect public and private investment in research with productivity, firm innovation, new venture creation, and knowledge-based growth (Markman et al., 2008; Siegel et al., 2007).

Commercialization is not a single transaction that occurs after a research project has ended. It is a sequence of decisions involving invention disclosure, intellectual-property assessment, technology maturation, market validation, partner search, valuation, contracting, and post-transfer support. These stages involve different forms of uncertainty and different actors. Technology transfer offices (TTOs) therefore operate not only as administrative units for intellectual-property protection but also as boundary-spanning organizations connecting scientists, university managers, firms, investors, legal specialists, and public agencies (Brantnell & Baraldi, 2022; Weckowska, 2015). Research from South Korea further shows that TTO capability is most effective when it is combined with sufficiently strong applied-research capability, underlining that formal organizational structures alone do not guarantee commercialization performance (Lee & Jung, 2021).

Vietnam has expanded university research and innovation activities, yet the conversion of research outputs into commercially exploited intellectual property remains uneven. Recent Vietnamese studies point to persistent limitations in technology-transfer organizations, market connectivity, commercialization finance, and the ability to connect research agendas with demand from firms (Dang, 2026; Long, 2025; Tran, 2026). These problems are economically important because the social return on publicly funded research depends not only on the production of knowledge but also on institutions capable of moving promising knowledge toward adoption, diffusion, and productive use.

The legal environment changed materially with Law No. 93/2025/QH15 on Science, Technology and Innovation, adopted on 27 June 2025 and effective from 1 October 2025. The Law automatically assigns to the host organization the management, use, and ownership rights corresponding to the state-budget share of eligible research outcomes, subject to statutory exceptions. It also gives owners or authorized organizations greater discretion over commercialization modes, pricing, and profit distribution. For state-funded outcomes, the Law requires that

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authors receive at least 30% of after-tax commercialization profits from specified forms of exploitation, and it recognizes the role of intermediaries and other direct contributors. Decree No. 267/2025/ND-CP of 14 October 2025 subsequently detailed the management and commercialization of research outcomes, profit sharing, and risk governance, while Decree No. 263/2025/ND-CP of the same date set out autonomy mechanisms for public science and technology organizations, including the establishment of, or capital contribution to, enterprises that commercialize research results (Government of Vietnam, 2025a, 2025b; National Assembly of Vietnam, 2025).

Because the reform has been in force for only a short period, a causal assessment of its economic impact would be premature. A more relevant research question is whether the new legal rights are matched by organizational capabilities that allow universities to use those rights effectively. This paper therefore asks: How does the 2025 reform alter the institutional conditions for university research commercialization in Vietnam, and which implementation bottlenecks may prevent legal autonomy from translating into market transactions and economic value?

The paper makes three contributions. First, it interprets the reform as a shift from administrative control of research assets toward institutional responsibility for value creation. Second, it develops the concept of an institution-capability gap to explain why removing legal barriers may expose, rather than eliminate, organizational bottlenecks. Third, it proposes a commercialization-capability architecture linking legal rights to TTO professionalization, proof-of-concept finance, university-industry engagement, internal governance, and researcher incentives. These contributions position the discussion within innovation economics and the economics of university technology transfer rather than treating commercialization solely as a legal-compliance issue. The remainder of the paper is organized as follows. Section 2 reviews the literature and develops the analytical framework. Section 3 describes the data and methodology. Section 4 presents and discusses the results, and Section 5 concludes.

2. LITERATURE REVIEW

The literature on university commercialization consistently shows that formal ownership rules matter, but their effects depend on complementary organizational and market institutions. International experience points in the same direction: in the United States, the Bayh–Dole Act, which assigned ownership of federally funded inventions to universities, was only one of several factors behind the growth of university patenting and licensing, alongside advances in biomedical research and the expansion of institutional technology-transfer capacity (Grimaldi et al., 2011; Mowery et al., 2001). A useful starting point for explaining this pattern is the transaction-cost perspective (Williamson, 1985). University inventions are difficult to price because their technical quality, future application space, market demand, and development costs are often uncertain. Clear property rights can reduce bargaining ambiguity, yet commercialization still requires a governance form capable of managing information asymmetry, technology-specific investments, and contracting risk. Shane (2002), for example, shows that the effectiveness of intellectual-property protection and the characteristics of the technology influence whether university inventions are licensed and successfully commercialized.

A second strand focuses on the diversity of commercialization channels. Markman et al. (2008) emphasize that research commercialization can occur through licensing, contract research, consultancy, research parks, incubators, corporate venture mechanisms, and academic spin-offs. The choice among these modes is not neutral. Licensing may be appropriate when a capable incumbent can absorb the technology, whereas a spin-off may be necessary when the invention requires a dedicated business model, further technological development, or specialized entrepreneurial effort. From an economic perspective, the commercialization channel is therefore a governance choice that should reflect technology maturity, appropriability, complementary assets, financing needs, and market structure.

A third strand examines TTOs. TTOs reduce search and transaction costs by identifying potentially valuable research, managing intellectual property, finding partners, structuring agreements, and coordinating inventor participation. However, the literature also cautions against equating the existence of a TTO with commercialization capability. Weckowska (2015) distinguishes transactions-focused and relations-focused approaches, showing that commercialization competence develops through organizational learning. Brantnell and Baraldi (2022) similarly describe the evolving involvement of TTOs from intellectual-property protection toward more proactive market-facing roles. Lee and Jung (2021) add that operational TTO capability produces stronger commercialization outcomes where universities possess substantial applied-research capability.

A fourth strand concerns incentives. Commercialization often requires continued inventor involvement after the formal completion of research because tacit knowledge cannot be fully transferred through patents, reports, or contracts (Jensen & Thursby, 2001). Benefit-sharing rules can therefore influence disclosure, cooperation with licensees, and willingness to engage in spin-off formation. Lach and Schankerman (2008), for example, find that universities offering inventors higher royalty shares generate more inventions and higher license income. Yet financial incentives operate alongside academic career incentives. If promotion, workload allocation, and prestige continue to reward publications almost exclusively, researchers may rationally allocate effort away from commercialization even where royalty-sharing arrangements are generous. The commercialization system thus requires alignment between monetary rewards and academic evaluation criteria.

Evidence from Vietnam is increasingly consistent with this capability-based perspective. Long (2025), using evidence from Vietnam National University, Hanoi (VNU), argues that commercialization of intellectual-property assets remains below potential and proposes an innovation-ecosystem approach rather than a narrow focus on protection. Tran (2026) identifies the gap between academic research outputs and market demand as a central obstacle to patent commercialization in Vietnamese higher education. Dang (2026), drawing on international comparisons, concludes that effective commercialization requires coherence among intellectual-property rules, intermediary capability, finance, researcher incentives, academic culture, and market demand. These studies suggest that the 2025 reform should be evaluated not only by what legal restrictions it removes, but also by whether universities can develop the capabilities required to use the new autonomy.

Building on this literature, the present study uses a four-layer analytical framework: (1) allocation of ownership and decision rights; (2) economic incentives for researchers and intermediaries; (3) intermediary and organizational capabilities; and (4) access to firms, investors, and commercialization finance. The first two layers are directly affected by legal reform. The latter two depend substantially on institutional implementation. Commercialization performance is expected to improve only when these layers are mutually reinforcing.

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3. DATA AND METHODOLOGY

This study uses a qualitative, document-based policy research design. The approach is appropriate because the 2025 reform is recent and the available post-reform period is too short for credible causal inference using commercialization outcomes such as licensing revenue, transaction counts, or spin-off formation. The purpose is therefore not to estimate an average treatment effect of the Law, but to identify the economic mechanisms created by the reform and the organizational conditions necessary for those mechanisms to operate.

The primary documentary corpus consists of Law No. 93/2025/QH15 on Science, Technology and Innovation and Decree No. 267/2025/ND-CP. The analysis focuses on provisions governing ownership and management of research outcomes, commercialization autonomy, pricing and benefit sharing, the role of intermediaries, accountability, and organizational arrangements for commercialization. The legal reading is complemented by peer-reviewed research on university technology transfer, TTO capability, licensing, academic entrepreneurship, and commercialization policy. Recent Vietnamese studies are used to situate the institutional analysis in the domestic higher-education context.

The study also uses purposively selected post-reform institutional developments as illustrative evidence rather than as a representative sample. In June 2026, VNU issued new internal regulations for the management of science, technology, and innovation programs and tasks, explicitly updating its framework in response to the new national legal environment and facilitating application and transfer of research outcomes (Vietnam National University, Hanoi, 2026). In September 2026, Hanoi University of Science and Technology (HUST) publicly discussed a sandbox mechanism for technology spin-offs, highlighting unresolved implementation issues such as intellectual-property valuation, scientists' participation, use of public assets, and divestment (Hanoi University of Science and Technology, 2026). These examples are used to illustrate how national reform is being translated into institutional practice. Legal documents and institutional materials issued up to September 2026 were considered.

Analytically, each major reform provision is examined through a transmission mechanism: the legal change is first mapped to its expected economic effect, then to the university capability required to realize that effect, and finally to the failure mode that emerges if capability is insufficient. This produces the institutional-capability matrix reported in Table 1. The same logic is then used to identify four implementation bottlenecks and corresponding policy instruments. Because the research is interpretive and policy-oriented, claims are limited to institutional mechanisms supported by the legal documents and literature; no causal claims are made about post-2025 commercialization performance.

4. RESULTS AND DISCUSSION

The documentary analysis identifies a substantial change in the governance logic of publicly funded research. The reform does more than simplify procedures. It reallocates decision rights toward host organizations, broadens the range of commercialization choices, strengthens benefit-sharing rules, and provides a clearer basis for intermediary participation. Economically, these measures can reduce transaction delays and uncertainty. Organizationally, however, they also raise the capability threshold that universities must meet. The central result of the analysis is therefore a shift in the principal constraint: as legal restrictions are relaxed, commercialization increasingly depends on the quality of institutional decision-making.

4.1. Reallocation of Rights and Shorter Commercialization Decision Cycles

Article 25 of Law No. 93/2025/QH15 represents a foundational change. For eligible research tasks using state funding, the host organization is automatically assigned management, use, and ownership rights corresponding to the state-budget contribution, without a separate rights-assignment procedure and without reimbursement to the State, subject to statutory exceptions (National Assembly of Vietnam, 2025). This can shorten the time between the creation of a research result and the point at which the university can make protection or commercialization decisions.

The economic value of this change derives from reduced uncertainty and lower transaction costs. Firms are more willing to invest in technical due diligence, pilot testing, and negotiation when they can identify the party with authority to contract. Investors can assess a technology opportunity more credibly when ownership and exploitation rights are sufficiently clear. In this sense, early allocation of rights improves the conditions for exchange, not merely administrative convenience.

The reform nevertheless creates value only if internal university procedures are equally responsive. If a research result must sequentially pass through multiple faculties, administrative offices, valuation committees, and senior approvals without defined decision deadlines, the legal acceleration can be lost inside the organization. Universities therefore need time-bound invention-disclosure procedures, criteria for protection and abandonment, delegated decision rights, and documented pathways from technical assessment to market engagement. Otherwise, the reform may change the legal owner without changing the speed at which a commercialization decision is reached.

4.2. From Asset Administration to Technology-Portfolio Governance

The Law also changes how research outcomes can be managed after rights are assigned. It allows authorized organizations to track research outcomes separately rather than treating them as ordinary tangible public assets and grants discretion to continue research, development, application, and commercialization. Article 27 further gives owners and authorized organizations autonomy to select commercialization forms, plans, prices, and profit-sharing arrangements (National Assembly of Vietnam, 2025). These provisions are economically better aligned with the nature of intellectual assets, whose value depends on technical maturity, appropriability, application range, competitive conditions, and market timing.

This autonomy implies that universities should not process every research result through the same commercialization route. A platform invention with multiple potential users may support non-exclusive licensing. A technology requiring substantial complementary development may be better suited to joint development with a firm. A narrow but strategically important technology may justify exclusive licensing, while an invention that creates a new product category may require a spin-off capable of raising external capital. Commercialization therefore becomes a portfolio-governance problem in which universities allocate scarce patenting, development, and business-development resources across heterogeneous technologies.

Greater discretion also changes the nature of accountability. When universities can select partners, negotiate prices, and choose governance forms, the primary risk is no longer limited to procedural non-compliance. It includes poor commercial decisions: patenting

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technologies with little market potential, licensing too early on weak terms, choosing inappropriate exclusivity, or continuing to finance projects that have failed market validation. Effective autonomy therefore requires valuation protocols, conflict-of-interest rules, partner due diligence, documentation of decision rationales, and post-transaction monitoring.

4.3. Incentive Alignment for Researchers and Commercialization Intermediaries

Article 28 addresses the incentive structure surrounding commercialization. For the state-funded share of research outcomes, the Law requires that authors receive at least 30% of after-tax profits generated from specified forms of exploitation and recognizes remuneration for individuals directly contributing to commercialization. Intermediaries and brokers may also receive a share of commercialization gains under the legal framework (National Assembly of Vietnam, 2025). This is economically significant because commercialization depends on contributions that continue well beyond the formal completion of a research project.

Researchers frequently possess tacit technical knowledge needed to prepare invention disclosures, refine prototypes, respond to due diligence, adapt technologies to industrial settings, and support licensees during transfer. Clear ex ante benefit-sharing rules can increase willingness to disclose commercially relevant inventions and remain engaged in later development. Recognition of intermediary contributions can likewise support commercialization as a specialized professional function rather than an administrative task added to research-management workloads.

Financial incentives, however, are not sufficient. Commercialization often requires long periods of uncertain effort, whereas academic promotion and reputation may continue to be driven primarily by publications and citations. Where applied outcomes receive little formal recognition, researchers face an opportunity cost when choosing between another paper and a multi-year commercialization process. The reform will therefore be more effective if universities integrate licensed patents, adopted technologies, industry-sponsored development, spin-off participation, and verifiable socio-economic impact into workload and career-evaluation systems, with appropriate differentiation across disciplines.

4.4. A Broader Commercialization Architecture: Licensing, Co-Development, and Spin-Offs

The post-2025 framework broadens the strategic space in which universities can commercialize. Decree No. 267/2025/ND-CP provides implementation mechanisms for collaboration, commercialization, benefit sharing, and related organizational arrangements, while Decree No. 263/2025/ND-CP permits public science and technology organizations, including public universities, to establish or contribute capital to enterprises that commercialize research results (Government of Vietnam, 2025a, 2025b). This matters because many university technologies cannot move directly from laboratory completion to a conventional transfer agreement. Some require co-development with an industrial user; others require a dedicated venture to continue development and mobilize investment.

A broader range of channels increases the importance of TTOs as transaction architects. In addition to intellectual-property administration, TTOs need to identify market segments, evaluate freedom to operate, locate prospective licensees, structure licensing terms, connect projects to development finance, and support negotiation. This shift corresponds to the literature's movement from passive protection toward proactive market development and relationship building (Brantnell & Baraldi, 2022; Weckowska, 2015).

Recent implementation signals illustrate both the opportunity and the remaining complexity. VNU's 2026 internal reform explicitly updated science, technology, and innovation management in response to the new legal environment, while HUST's 2026 spin-off sandbox discussion highlighted unresolved questions regarding valuation, scientist participation, public assets, and divestment (Hanoi University of Science and Technology, 2026; Vietnam National University, Hanoi, 2026). These developments suggest that national reform has opened commercialization space, but university-level governance mechanisms are still being constructed.

Table 1. Transmission from the 2025 institutional reform to university commercialization capability

Institutional change	Economic transmission mechanism	Required university capability	Failure mode if capability lags
Automatic allocation of rights over eligible state-funded research outcomes (Art. 25)	Reduces legal uncertainty and waiting time before protection, testing, and negotiation.	Time-bound invention disclosure; IP and market screening; delegated decision authority.	Rights are assigned quickly but internal decisions remain slow; protection or market windows are missed.
Autonomy over commercialization mode, pricing, and exploitation plan (Art. 27)	Allows licensing, co-development, equity, spin-off, or direct exploitation to match technology characteristics.	Technology-portfolio governance; valuation; partner due diligence; risk and conflict-of-interest management.	Autonomy becomes decision risk: weak valuation, inappropriate channel choice, or continued investment in low-potential technologies.
Benefit sharing for inventors and commercialization contributors (Art. 28)	Aligns researcher and intermediary incentives with realized commercialization outcomes.	Transparent sharing rules; contribution recognition; academic evaluation of application-oriented outputs.	Financial rewards exist, but academic career incentives continue to favor publication over commercialization.
Broader intermediary and spin-off arrangements under implementing regulations	Expands commercialization beyond one-off transfers toward professional intermediation, co-development, and venture formation.	Business-development capable TTOs; investor and industry networks; proof-of-concept finance; spin-off governance.	Legal channels exist but transactions stall because projects lack market-facing intermediaries, development capital, or venture-management capacity.

Source: Authors' synthesis based on Law No. 93/2025/QH15, Decree No. 267/2025/ND-CP, and the analytical framework of this study

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4.5. The Institution-Capability Gap

Taken together, the reforms shift the system from managing rights over research outputs toward governing the economic value of those outputs. This shift creates what this paper terms an institution-capability gap: the legal framework may authorize action faster than universities can build the organizational capabilities required to make high-quality commercialization decisions. Four bottlenecks are particularly important.

First, intermediary capability remains a binding constraint. A modern TTO must simultaneously understand intellectual-property strategy, technology maturity, market structure, valuation, business development, and negotiation. The relevant question is therefore not whether a university has a TTO, but whether the TTO can convert a research portfolio into credible market opportunities. TTO performance should be assessed through process and transaction indicators such as screening time, number of qualified industry engagements, negotiation conversion rates, licensing outcomes, and follow-on development, rather than merely patent counts. This is consistent with international evidence showing that TTO capability is effective when embedded in broader applied-research and commercialization capacity (Lee & Jung, 2021).

Second, universities face a transition-finance gap. Research grants commonly finance scientific validation, while firms and investors prefer technologies that have already demonstrated technical robustness, regulatory feasibility, cost structure, and customer relevance. The activities needed to close this gap—industrial prototypes, pilot trials, certification, product engineering, customer discovery, and techno-economic assessment—are neither conventional academic research nor full commercial investment. Without dedicated proof-of-concept or translational finance, intellectual property may be legally protected but remain economically uninvestable.

Third, commercialization is constrained by weak demand integration. A linear model in which universities complete research, file intellectual property, and only then search for a buyer assumes that market requirements can be added late in the process. In practice, adoption depends on compatibility with production systems, standards, switching costs, supply chains, and expected returns. Earlier industry participation can provide market signals before technical choices become costly to reverse. This does not require universities to abandon long-horizon research; rather, it creates a parallel pathway in which application-oriented projects incorporate prospective users, co-development partners, or test sites from earlier stages.

Fourth, autonomy creates new governance risks. Valuation, exclusive licensing, contribution of research assets to a spin-off, and use of public facilities may generate conflicts among researchers, universities, investors, and firms. Reintroducing multiple approval layers would undermine the purpose of reform, but weak governance would expose institutions to opportunistic or poorly justified transactions. The appropriate response is risk-based governance: routine transactions should be delegated within defined limits, while high-value, long-term exclusive, equity, or spin-off transactions receive enhanced review. Decision records, conflict-of-interest disclosure, and clear responsibility allocation can substitute for indiscriminate procedural control.

4.6. Policy Architecture for Converting Legal Autonomy into Economic Value

The institution-capability gap implies that policy should now focus less on adding new legal permissions and more on the infrastructure needed to use existing autonomy productively. At the national level, a commercialization data system should track the full conversion chain: invention disclosures, technologies screened, protection decisions, proof-of-concept projects, industry evaluations, licensing and transfer agreements, spin-offs, private capital mobilized, revenue, and time from disclosure to transaction. Such data would allow policymakers to distinguish between universities that accumulate intellectual property and universities that systematically convert research assets into use and economic value (Dang, 2026).

At the university level, internal rules should translate broad legal autonomy into predictable operational decisions. These rules should specify screening deadlines, patenting criteria, delegation thresholds, valuation procedures, exclusivity principles, conflict-of-interest management, use of university facilities, treatment of multi-inventor cases, and post-commercialization reporting. A central design principle should be proportionality: not every transaction warrants the same approval architecture.

Professionalization of TTOs should be accompanied by transitional finance. Universities with insufficient scale to maintain full in-house expertise may use shared regional or sectoral TTOs, specialist service providers, or pooled networks. Proof-of-concept funds should operate as portfolios with staged milestones and termination rules rather than as extensions of conventional research grants. TTOs and proof-of-concept finance should be designed jointly: the former identifies which uncertainties need to be reduced, while the latter finances evidence generation.

Finally, university-industry relations and researcher incentives should be reconfigured around the full technology lifecycle. Industry engagement should move beyond ceremonial memoranda toward participation in problem definition, pilot testing, co-financing, and milestone evaluation. Researcher evaluation systems should recognize commercialization-relevant outputs in addition to publications, without treating all disciplines identically. These measures can align legal ownership, organizational capability, market demand, and individual incentives—the four layers required for a sustainable commercialization system.

Table 2. Capability bottlenecks, policy instruments, and commercialization performance indicators

Capability bottleneck	Mechanism of failure	Priority policy instrument	Illustrative performance indicator
Intermediary/TTO capability	Research is protected but not translated into market opportunities or bankable transactions.	Professional TTO staffing, shared TTO networks, specialist market and valuation services.	Screening time; qualified industry leads; negotiation-to-deal conversion rate.
Proof-of-concept finance	Technologies remain scientifically valid but too immature for firms or investors to absorb.	Stage-gated proof-of-concept and translational funds linked to technical and market milestones.	Share of projects reaching pilot/validation milestones; follow-on private finance.

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Capability bottleneck	Mechanism of failure	Priority policy instrument	Illustrative performance indicator
University-industry integration	Market requirements enter too late, increasing redesign costs and reducing adoption probability.	Co-development, sponsored research, testbeds, industry participation in milestone reviews.	Industry co-funding; pilot partners; proportion of projects with identified end users.
Governance and researcher incentives	Autonomy is slowed by internal approvals, conflicts of interest, or academic rewards that favor publication only.	Risk-based delegation, conflict-of-interest rules, transparent benefit sharing, recognition of commercialization outputs.	Decision time; licensing/spin-off outcomes; researcher participation after disclosure.

Source: Authors' synthesis.

5. CONCLUSION

Vietnam's 2025 Law on Science, Technology and Innovation represents an important institutional shift in university research commercialization. By assigning rights more directly, broadening discretion over commercialization modes and pricing, and strengthening benefit-sharing rules, the reform reduces several sources of legal uncertainty and procedural delay. From an innovation-economics perspective, these changes lower transaction frictions and strengthen the institutional conditions for turning publicly funded knowledge into productive use.

The analysis nevertheless shows that legal empowerment is a necessary but insufficient condition. The principal constraint is likely to move from a shortage of formal rights to a shortage of capabilities for using those rights. TTO competence, proof-of-concept finance, market-facing research relationships, risk-based internal governance, and aligned researcher incentives are mutually dependent. Weakness in one part of the system can interrupt the conversion of research into licensing, technology adoption, or spin-off formation even when ownership is clear.

The central policy implication is therefore a shift from control of research assets toward governance of research value. National policy should support commercialization data infrastructure and scalable intermediary networks; universities should build portfolio-based technology governance, translational finance, market-engagement mechanisms, and incentive systems that recognize application-oriented outputs.

This study has several limitations. First, its evidence base is documentary and interpretive; the analysis identifies mechanisms and bottlenecks but does not measure their magnitude. Second, the institutional illustrations are drawn from two leading universities in Hanoi and may not reflect the situation of specialized, regional, or smaller universities, where capability constraints are likely to be more severe. Third, implementing guidance and university regulations are still evolving, so conclusions about specific provisions should be revisited as further documents are issued. As post-reform data accumulate, future research should test whether the 2025 institutional changes measurably reduce time-to-transaction, increase licensing and spin-off activity, mobilize private development finance, and improve the economic returns to publicly funded university research.

Declarations

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Conflict of Interest: The authors declare no conflict of interest.

Ethics Approval: Not applicable. The study did not involve human participants, animals, or personal data.

Data Availability: The study relies on publicly accessible legal documents, institutional materials, and published literature cited in the manuscript; no primary dataset was generated.

REFERENCES

1) Brantnell, A., & Baraldi, E. (2022). Understanding the roles and involvement of technology transfer offices in the commercialization of university research. *Technovation*, *115*, 102525. https://doi.org/10.1016/j.technovation.2022.102525
2) Dang, T. D. (2026). Policies for the commercialization of university research: International experiences and implications for Vietnam. *VNU Journal of Science: Policy and Management Studies*, *42*(2). https://doi.org/10.25073/2588-1116/vnupam.4569
3) Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: From National Systems and "Mode 2" to a Triple Helix of university–industry–government relations. *Research Policy*, *29*(2), 109–123.
4) Government of Vietnam. (2025a). *Decree No. 263/2025/ND-CP of 14 October 2025 detailing and guiding the implementation of certain articles of the Law on Science, Technology and Innovation on the autonomy of public science and technology organizations, human resources, talent, and awards*.
5) Government of Vietnam. (2025b). *Decree No. 267/2025/ND-CP of 14 October 2025 detailing and guiding the implementation of certain articles of the Law on Science, Technology and Innovation on science, technology and innovation programs and tasks and on the promotion of research, technology development and innovation*. https://vanban.chinhphu.vn/?pageid=27160&docid=215664
6) Grimaldi, R., Kenney, M., Siegel, D. S., & Wright, M. (2011). 30 years after Bayh–Dole: Reassessing academic entrepreneurship. *Research Policy*, *40*(8), 1045–1057.
7) Hanoi University of Science and Technology. (2026, September 14). *HUST proposes sandbox pilot for tech spin-offs*. https://hust.edu.vn/en/news/news/hust-proposes-sandbox-pilot-for-tech-spin-offs-654179.html
8) Jensen, R., & Thursby, M. (2001). Proofs and prototypes for sale: The licensing of university inventions. *American Economic Review*, *91*(1), 240–259.
9) Lach, S., & Schankerman, M. (2008). Incentives and invention in universities. *RAND Journal of Economics*, *39*(2), 403–433.

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10) Lee, K., & Jung, H. J. (2021). Does TTO capability matter in commercializing university technology? Evidence from longitudinal data in South Korea. *Research Policy*, *50*(1), 104133. https://doi.org/10.1016/j.respol.2020.104133
11) Long, L. H. (2025). Building an innovation ecosystem to support the commercialization of intellectual property at Vietnam National University, Hanoi. *VNU Journal of Science: Policy and Management Studies*, *41*(4), 63–73. https://doi.org/10.25073/2588-1116/vnupam.4587
12) Markman, G. D., Siegel, D. S., & Wright, M. (2008). Research and technology commercialization. *Journal of Management Studies*, *45*(8), 1401–1423. https://doi.org/10.1111/j.1467-6486.2008.00803.x
13) Mowery, D. C., Nelson, R. R., Sampat, B. N., & Ziedonis, A. A. (2001). The growth of patenting and licensing by U.S. universities: An assessment of the effects of the Bayh–Dole Act of 1980. *Research Policy*, *30*(1), 99–119.
14) National Assembly of Vietnam. (2025). *Law No. 93/2025/QH15 on Science, Technology and Innovation*. https://vanban.chinhphu.vn/?pageid=27160&docid=214603
15) Shane, S. (2002). Selling university technology: Patterns from MIT. *Management Science*, *48*(1), 122–137. https://doi.org/10.1287/mnsc.48.1.122.14281
16) Siegel, D. S., Veugelers, R., & Wright, M. (2007). Technology transfer offices and commercialization of university intellectual property: Performance and policy implications. *Oxford Review of Economic Policy*, *23*(4), 640–660. https://doi.org/10.1093/oxrep/grm036
17) Tran, V. H. (2026). The "academic–market hybrid" model: Unblocking the bottlenecks in patent commercialization at higher education institutions. *VNU Journal of Science: Policy and Management Studies*, *42*(1). https://doi.org/10.25073/2588-1116/vnupam.4616
18) Vietnam National University, Hanoi. (2026, June 26). *VNU issues new regulations on the management of science, technology and innovation programs and tasks*. https://vnu.edu.vn/dhqghn-ban-hanh-quy-dinh-moi-ve-quan-ly-chuong-trinh-nhiem-vu-khoa-hoc-cong-nghe-va-doi-moi-sang-tao-post40191.html
19) Weckowska, D. M. (2015). Learning in university technology transfer offices: Transactions-focused and relations-focused approaches to commercialization of academic research. *Technovation*, *41–42*, 62–74. https://doi.org/10.1016/j.technovation.2014.11.003
20) Williamson, O. E. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting*. Free Press.

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