Enabling Investment in Environmental Sustainability[†]

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INTRODUCTION

An extensive, public conversation about creating incentives for commercial actors to take more responsibility for environmental harm is underway. Very few participants, however, identify commercial finance law as a potential site for developing these types of incentives. This Article proposes an "environmental

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- 1. Carbon-credit systems and the "greening" of facilities or processes are two, frequent topics of this conversation. Proposals include both state measures such as tax incentives and private measures such as increasing energy efficiency to reduce costs or investing in carbon credits. In the realm of legal scholarship alone, there have been no less than six symposia surrounding this topic just in the last two years.
- 2. Many have recognized the connection between secured transactions and businesses' environmental impact. Legal scholars have argued for secured lender liability under the CERCLA and for priority in advance of secured creditors for environmental claims. *See infra* text accompanying notes 123–24. Institutional lenders have adopted both the Equator

practices money security interest" (EPMSI) that could be added to Uniform Commercial Code (UCC) Article 9³ to facilitate transactions that enable good environmental practices.

The concept of the "super-priority" security interest—a collateral-security device and priority rules designed to enable certain types of investments—is well established in commercial law. Article 9 contains rules governing two such interests: the purchase money security interest⁴ for acquisition of goods and the production money security interest in agricultural finance. The EPMSI would grant priority over earlier investors to financers whose extensions of credit enable debtors to invest in improving environmental impact.

Imagine a company that wants to renovate its manufacturing processes to reduce waste and utilize alternative fuels. Such renovation could require contracting with various experts, service providers, and engineers, as well as acquiring both tangible and intangible property. A company may want to undertake this type of improvement but be unable to do so because it lacks either internal funds or the capacity to issue low-risk debt to pay for the process. The company may lack the capacity to issue low-risk debt because an existing secured creditor has a floating lien on the company's asset and this creditor is unable or unwilling to fund the renovation process. The proposed EPMSI rules would create a collateral-security device that private parties could elect to use in this type of situation.

Principles and the Carbon Principles—industry commitments regarding the environmental impact of projects and activities financed with secured lending. *See infra* text accompanying notes 121–22. These approaches have not focused on the ways that UCC Article 9 itself might facilitate investment in improving the environmental sustainability of commercial activity.

- 3. U.C.C. art. 9 (2005). This is the article of the UCC that governs secured transactions. "Secured transactions" are transactions in which a creditor makes a loan and takes as collateral a lien on personal property of the debtor. A lien is a type of property interest. Secured transactions create "security interests" in the debtor's property. Security interests are liens created by contract. UCC Article 9 and bankruptcy laws, in tandem, govern the order of priority of property interests in companies' assets. The National Conference of Commissioners on Uniform State Laws (NCCUSL) drafted and periodically revises the UCC in conjunction with the American Law Institute (ALI). The model code created by the NCCUSL is submitted to the state legislatures for enactment. All U.S. jurisdictions have enacted UCC Article 9. Unless otherwise indicated, citations herein to the UCC are to the official text and comments of the ALI and NCCUSL.
 - 4. See U.C.C. §§ 9-103, 9-324 (2005).
- 5. See U.C.C. art. 9 app. 2 § 9-324A cmt. 2 (2005) (model section). Note that these provisions are not part of uniform UCC Article 9; they are model provisions on the enactment of which the drafters make no recommendation.
- 6. Priority refers to the order in which creditors may satisfy their claims out of a debtor's assets. The default rules rank secured over unsecured creditors. Among secured creditors, the general rule is "first in time, first in right."
- 7. "Internal funds" refers to funds or liquid assets that a company has to spend. Low-risk debt refers to the company's debt obligations that pose low risk of loss for the creditor either because the debtor has no (or few) other liabilities or because the creditor has a first-priority security interest in the assets of the debtor.
- 8. A "floating lien" is a security interest that attaches to property the debtor acquires after closing the original loan transaction—the creditor's lien "floats" along, attaching automatically to new assets as the debtor obtains them over the term of the transaction. *See also infra* text accompanying note 34.

The proposed EPMSI draws on provisions currently contained in the UCC. However, it is important to understand that although the provisions required to enact an EPMSI would follow existing templates, the EPMSI concept invokes larger questions that cannot be neatly resolved.

This proposal reflects an intuition that we should not rely exclusively on government subsidized loans and tax credits to induce investments in environmental sustainability when we could also enact commercial law devices that do so. Some may object to this approach on grounds that commercial law rules that allocate costs to secured creditors will cause a reduction in available credit. This objection raises the question: which is better, rules that maximize access to credit or rules that induce certain types of investment? Climate change presents unprecedented threats to our environment, response to which requires new types of investments to improve the environmental impact of business activity. Enacting EPMSI rules could increase costs of credit, but that is no reason to exempt secured transactions law from review as scholars and lawmakers seek multiple avenues through which to deal with costly environmental imperatives. Through making a concrete reform proposal, this Article intends to animate these issues in the context of UCC Article 9.

Current thinking about environmental law is steeped in conflicting concepts. Ethical environmentalism (focusing on limits grounded in moral obligation) coexists with instrumentalist environmentalism (focusing on tools like carbon credit trading and tax

- See infra Part II.B. As with many proposals involving costs to private actors, we must consider whether such actors would reallocate costs in a way that undermines the proposal's intended benefits.
- 10. For a summary of the current science on climate change, see, e.g., Intergovernmental Panel on Climate Change, Climate Change 2007: The Physical Science Basis (Susan Solomon, Dahe Qin, Martin Manning, Melinda Marquis, Krysten Avert, Melinda M. B. Tignor, Henry LeRoy Miller, Jr., eds. 2007), available at http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wgl_report_the_physical_science_basis.htm; Chris Wold, David Hunter & Melissa Powers, Climate Change and The Law 1–48 (2009).
- 11. For a survey of current approaches to the challenge of inducing market actors to internalize environmental costs, see WOLD ET AL., *supra* note 10, at 50–69 (concluding that "in the end, climate change is so complex and affects so many sectors that no one category of policy approaches will do").
- 12. Numerous studies have examined the costs of climate change. Among the most widely acclaimed is "The Stern Review." This report finds climate change to be "a unique challenge for economists: it is the greatest and widest-ranging market failure ever seen," and assesses costs of achieving necessary cuts in emissions of certain gases in terms of percentage of GDP. *Id.* Some scholars have contested the conclusion that cost-benefit analyses support large-scale investment in reducing emissions. *See, e.g.*, BJØRN LOMBORG, THE SKEPTICAL ENVIRONMENTALIST: MEASURING THE REAL STATE OF THE WORLD 306 (Hugh Matthews, trans., Cambridge Univ. Press 2001). But, Wold, Hunter, and Powers report that studies such as Lomborg's assume a net increase in temperature of up to two degrees Celsius and no significant sea level rise, and exclude categories of costs that are too uncertain to quantify. *See* WOLD ET AL., *supra* note 10 at 85.

incentives). ¹³ One could question the value from a moral, environmentalist perspective of the unitary security interest ¹⁴ and full-priority floating lien ¹⁵ structure of UCC Article 9. ¹⁶ I have argued elsewhere that aesthetic elements of commercial law deter engagement with moral questions about desirable volume and forms of commercial transactions. ¹⁷

Here, the task is to make a specific proposal of additional provisions for Article 9 that is in some ways highly discrete and in others quite transformative from a commercial law perspective. States are seeking new ways to encourage commercial actors to elect environmentally sustainable 18 practices. 19 Most states have enacted

- 13. See Douglas A. Kysar, *Law, Environment, and Vision*, 97 Nw. U. L. Rev. 675, 676–77 (2003) (arguing that devices like carbon-trading programs have failed to inspire deliberation over environmental goals because traditional cost-benefit analyses fail to account for absolute limits on environmental capacity).
- 14. Article 9 provides for a "unitary security interest," meaning that secured parties can take a security interest in the various types of personal property that a debtor has with one transaction. In addition, one article of the UCC governs all loans secured by personal property. This means that Article 9 treats "like" collateral alike regardless of how different two pieces of "like" collateral may be in practice—that is, both electronics components and timber are "goods" for Article 9 purposes, regardless of the vastly different consequences of their production and sale. Looking back at the original drafting of Article 9, the unitary security interest was not a given. The idea that different commercial sectors require distinct collateral security rules is an old one. See Allen R. Kamp, Downtown Code: A History of the Uniform Commercial Code 1949–1954, 49 BUFF, L. REV. 359, 443 (2001).
- 15. "Full priority" means that a secured creditor may recover the full value of its claim out of the debtor's assets before other creditors recover anything. In other words, an early secured creditor with a floating lien enjoys a "solitary feast" while others cannot recover at all.
- 16. See, e.g., Richard L. Barnes, The U.C.C.'s Insidious Preference for Agronomy over Ecology in Farm Lending Decisions, 64 U. COLO. L. REV. 457 (1993) (arguing that the unitary security interest and PMSI have aggravated environmental destruction of American farmland); Heather Hughes, Aesthetics of Commercial Law—Domestic and International Implications, 67 LA. L. REV. 689, 690, 729–35 (2007) [hereinafter Hughes, Aesthetics of Commercial Law] (arguing that aesthetic elements of commercial law deter meaningful examination of the desirability of certain forms of commercial transactions from an environmental standpoint); Heather Hughes, UCC Article 9 and Debtors' Environmental Impact (forthcoming).
 - 17. See Hughes, Aesthetics of Commercial Law, supra note 16.
- 18. It is important to make clear at the outset that the term "environmentally sustainable" does not mean perpetually sustainable by our environment. Many processes and activities are not indefinitely possible regardless of how diligently we refine them. The purpose of the EPMSI is to facilitate credit for practices that make activities more sustainable or more compatible with our natural environment. *See* DAVID HUNTER, JAMES SALZMAN & DURWOOD ZAELKE, INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 266 (2d ed. 2002) (observing that "[i]f sustainable development means anything in practical terms, it means that environmental protection cannot destroy the economic foundation of a community"). *See generally* RICK BASS, WHY I CAME WEST: A MEMOIR (2008).
- 19. These efforts are being undertaken by numerous state advisory groups, task forces, and commissions. *See*, *e.g.*, H.R. Con. Res. 30, 24th Leg., 2d Sess. (Alaska 2006) (a concurrent resolution to establish the Alaska Climate Impact Assessment Commission); H.B. 2460, 86th Gen. Assemb., Reg. Sess. (Ark. 2007) (establishing the Arkansas Governor's Commission on Global Warming); S.B. 888, 108th Reg. Sess. (Fla. 2006) (establishing the Florida Energy

legislation addressing climate change, much of which concerns investment in alternative energy use and waste or pollution management.²⁰ Enacting an EPMSI would add to these state efforts by making it possible for companies to issue high-priority debt to finance improvements in environmental sustainability.

Part I describes the purchase-money security interest (PMSI) and the production-money security interest (PrMSI). The PMSI is included in UCC Article 9 in all states. The current PrMSI rules appear in appendix II to Article 9; six jurisdictions have enacted these rules. The PMSI and the PrMSI are "super-priority" security interests: so long as PMSI and PrMSI creditors comply with the relevant notice provisions of Article 9, they enjoy priority in advance of earlier secured claims.

Drawing on the PMSI and PrMSI rules as templates, this Article presents provisions that would create an EPMSI. Generally speaking, interests that enjoy later-in-time priority present risk of dilution of earlier creditors' claims. Numerous scholars have observed that the tracing and identifiable collateral requirements that limit the scope of PMSIs, for example, temper this threat of dilution.

Commission, charged, inter alia, with developing recommendations in relation to climate change); S.B. 1134, Gen. Sess. 2005 (N.C. 2005) (establishing the North Carolina Commission on Global Climate Change); Ariz. Exec. Order No. 2005-02 (Feb. 2, 2005) (establishing the Arizona Climate Change Advisory Group); Cal. Exec. Order No. S-3-05 (June 1, 2005) (establishing the California Climate Action Team); Ill. Exec. Order No. 2006-11 (Oct. 5, 2006) (establishing the Illinois Climate Change Advisory Group); N.M. Exec. Order No. 2005-033 (June 9, 2005) (establishing the New Mexico Climate Change Advisory Group); Vt. Exec. Order No. 07-05 (Dec. 5, 2005) (establishing the Vermont Governor's Commission on Climate Change); Wis. Exec. Order No. 191 (Apr. 5, 2007) (establishing the Wisconsin Governor's Task Force on Global Warming).

20. For example, many states offer tax deductions for investment in alternative fuel vehicles or solar panels. *See*, *e.g.*, Colo. Rev. Stat. Ann. 31-20-101.3 (West Supp. 2008) (authorizing tax incentives for installation of "renewable energy fixtures" such as solar or wind systems on residential or commercial property). States also offer financing assistance such as loans, loan insurance, grants, and guaranty programs to assist with funding certain environmentally progressive practices. *See infra* text accompanying notes 127–30. The phrase "new energy economy" appears frequently in discussions of policies and ideas for improving industry's environmental impact. Lawmakers and politicians invoke this phrase in reference to the possibility that implementing environmentally friendly or innovative technologies will generate new jobs. *See*, *e.g.*, Jim Martin & Ginny Brannon, *A Colorado Perspective: The New Energy Economy*, 27 UCLA J. Envtl. L. & Pol'y 269 (2009); Alan B. Levin, *The Administration Speaks: Economic Opportunities in a Greener Delaware*, Del. Law., Summer 2009, at 17. For a critique of the promise of "green jobs," see Andrew P. Morriss, William T. Bogart, Andrew Dorchak & Roger E. Meiners, *Green Jobs Myths*, 16 Mo. Envtl. L. & Pol'y Rev. 326 (2009).

21. See ME. REV. STAT. ANN. tit. 9, § 1324-A (Supp. 2008); MISS. CODE ANN. § 75-9-324A (2004); N.C. GEN. STAT. § 25-9-324.1 (2003); W. VA. CODE § 46-9-324a (LexisNexis 2007); WISC. STAT. ANN. § 409.3245 (West 2003); WYO. STAT. ANN. § 34.1-9-324A (2009). Section 9-324A in Appendix II to Article 9 is a model provision. This means that it is not included in the uniform provisions that the drafters recommend for enactment. It is included as a model provision because the drafters did not reach consensus sufficient to recommend the section in the uniform provisions of the statute. See infra note 82. Prior to 2001, special priority rules for production-money interests were contained in uniform provision 9-312(2). Forty-five states enacted section 9-312(2) (three with variations) and five did not (Arizona, California, Nevada, New Jersey, and Washington). See infra note 56.

In the case of the EPMSI, service providers and providers of assets other than goods may be EPMSI creditors. Environmental practices money collateral may include assets to which earlier creditors are looking for security. In other words, the proposed EPMSI would present a greater risk of dilution than the PMSI because, unlike purchase-money collateral, environmental practices money collateral may not be limited to new goods and their identifiable proceeds. It is possible to formulate EPMSI rules that would limit EPMSI collateral to new assets acquired with new value, such as intellectual property acquired with environmental practices money credit. ²² But unless the EPMSI were crafted quite narrowly, EPMSI collateral would likely include previously assigned assets. This Article does not advocate for a broad, as opposed to a narrow, EPMSI. It presents the EPMSI concept with the hope of inspiring debate about the possibility of using innovative collateral security rules to facilitate investment in environmental sustainability.

One could argue at the outset that the potential dilution of earlier creditors' claims that an EPMSI would present is justified because improving the environmental impact of commercial activity is more important than protecting secured creditors' positions. A state legislature could certainly make this kind of value determination. The approach here, however, is to consider the EPMSI in the context of competing interests—the interest in protecting secured creditors' positions and the interest in stimulating investment in "green" practices.

Commercial law scholars Thomas Jackson and Anthony Kronman have stated that without clear rules limiting a later, super-priority interest creditor's claim to assets that are traceable to the new value the super-priority creditor provided, we would have a last-in-time, rather than a first-in-time, priority regime.²³ An EPMSI would likely involve later-in-time creditors with interests in assets to which earlier creditors are looking for security.²⁴ This would be at odds with a first-in-time priority scheme.

Article 9's blend of first-in-time priority rules and later-in-time interests that enjoy exceptions to these rules is ultimately about balancing the benefits and drawbacks of new money.²⁵ As we consider these benefits and drawbacks, two points about UCC Article 9 become important. First, legal scholars overstate the extent to which the purchase-money rules avoid dilution risk by limiting PMSI collateral to new goods. Second, scholars tend to overlook the existence of the production-money interest in agricultural finance in analyses of Article 9 and interests with later-in-time priority.

In practice, PMSIs do present risk to earlier secured creditors. As with any type of credit, a debtor can use PMSI credit to acquire new equipment or inventory that is risk altering—that takes the company's business in a new direction that ultimately hurts the company and its creditors. Further, the existence of the PrMSI, in appendix II to Article 9 and as enacted in six states, complicates the notion that Article 9's approach to priority is a coherent scheme in which interests with later-in-time priority are neatly contained to purchase-money situations in which debtors acquire new goods that are the later creditors' collateral.

^{22.} See infra Part III.B.

^{23.} Thomas H. Jackson & Anthony T. Kronman, *Secured Financing and Priorities Among Creditors*, 88 YALE L.J. 1143, 1179 (1979).

^{24.} See infra Parts II.A, III.B-C.

^{25.} See infra Part II.

Article 9 provides for a not entirely coherent mix of asset-based and debtor-based lending. Floating liens covering all assets of a given debtor can create a de facto debtor-based type of interest, while PMSIs are clearly asset-based. The PrMSI, in jurisdictions that enact it, enjoys later-in-time priority, but can be secured by assets to which earlier creditors are looking for security. The EPMSI, too, would be a superpriority security interest that relates to a type of credit, rather than to particular assets that debtors would acquire with environmental practices money credit. Article 9 already contemplates a mix of asset-based and debtor-based, first-in-time and later-in-time priority interests; the EPMSI is not beyond the range of possibility given Article 9's current structure.

Part II begins by exploring these contentions about the EPMSI and basic, structural facets of Article 9. It then goes on to discuss the issue that an EPMSI would allocate environmental costs to secured lenders and debtors. Part II ends by presenting UCC section 9-324B—draft EPMSI priority provisions for scholars and practitioners to consider.

Part III takes up logistical challenges to the EPMSI concept. It discusses how to define, in a draft section 9-103B, the "environmental practices" for which credit extensions would receive priority. The challenge here is to craft a definition that is concrete enough to define a particular type of credit extension and yet broad enough to refer to this type of credit as it may arise in diverse business contexts. The EPMSI's purpose would be to facilitate improvements in businesses' environmental impact. The purpose is not to leave companies that are in the business of developing "green" environmental technologies with last-in-time priority default rules. The ideas for defining "environmental practices" presented in Part III.A contemplate this issue.

Part III goes on to discuss how notice requirements and limitations on the scope of EPMSI collateral can contain the threat of dilution of earlier creditors' claims. Part III ends with a discussion of negative pledge clauses—contract provisions under which debtors agree not to assign security interests to later creditors.

Part IV discusses additional objections to and potential advantages of the EPMSI. Scholars have made a variety of arguments for alternative priority rules for Article 9, such as arguments to give priority to tort claimants. Part IV.A distinguishes the proposed EPMSI both conceptually and structurally from these other types of "priority-for-deserving-creditor" proposals. These arguments concern the status of unsecured creditors in relation to secured creditors under UCC Article 9. The proposed EPMSI would not alter Article 9's effects on unsecured creditors, except in that it could increase the number of secured creditors.

Part IV.B discusses the possibility of debtor abuse of the EPMSI that would harm creditors. The risk of debtor misbehavior in response to EPMSI rules would be no different from the risk of fraud or misbehavior under existing rules.

Part IV.C asks, if an EPMSI is desirable, why not also enact rules creating special priority for loans to enable enhancing employee benefits, acquiring assets produced domestically, or whatever other objectives we may deem worthy of incentivizing? In the abstract, it is easy to imagine numerous new super-priority security interests, but in

^{26.} See infra note 124. These discussions were especially heated in the years leading up to the 1999 version of the code; none succeeded in changing Article 9's full priority floating lien structure. See infra note 208.

^{27.} See infra Part IV.A.

practice each such interest would present a separate set of logistical issues and value determinations. The need for a multi-faceted approach to financing the costs of improving environmental impact is established and is unique.²⁸

Commercial actors are actively seeking ways to make environmentally sound practices economically feasible. States are actively considering how to allocate and bear costs of improving environmental impacts of commercial activity. Part IV.D raises issues surrounding both enactment of nonuniform provisions of the UCC and enactment of pro-environment initiatives at the state level.

I. ENABLING INTERESTS UNDER UCC ARTICLE 9

UCC Article 9 sets forth the order of priority in which various creditors take from an insolvent debtor's assets. Generally, these rules grant secured creditors priority over unsecured creditors. Secured creditors' priority ranks in the order in which each creditor came along—first in time, first in right.²⁹ However, some security interests enjoy later-in-time priority, meaning they have priority over earlier secured creditors. These "super-priority" security interests enjoy an exception to the general rule to enable or facilitate the type of credit they involve.

It is important to recognize the difference between the concept of enabling interests in general and super-priority security interests that arise under UCC Article 9. There are numerous examples of enabling interests in every U.S. jurisdiction's laws. Most enabling interests arise pursuant to state statutes that create liens in favor of parties who extend credit for various types of goods and services, such as mechanics' liens, agricultural liens, and artisans' liens. Such liens are, of course, property interests. They are not security interests under Article 9 because they arise by statute and not by assignment. Security interests are consensual liens—property interests that arise by contract, not by statute or judgment.

In the context of Article 9, the purchase-money security interest is by far the most widely discussed super-priority interest. The purchase-money security interest enables a debtor to issue low-risk (high-priority) debt to acquire new equipment or inventory even though all of the debtor's assets are encumbered by a lien in favor of an earlier secured creditor.

- 28. See infra note 209.
- 29. See U.C.C. § 9-322 (2005). Note that "first in time" here means first to file a UCC-1 financing statement or first to perfect.
- 30. See, e.g., Steve H. Nickles, Setting Farmers Free: Righting the Unintended Anomaly of UCC Section 9-312(2), 71 MINN. L. REV. 1135, 1150 (1987) (noting that there are many enabling interests and grouping them into three major types: purchase-money, production-money, and improvement-money interests). Some commercial law scholars and practitioners use the term "enabling interest" to mean, specifically, the interest of a bank that extends purchase-money credit. This Article adopts broader use of this term.
- 31. See, e.g., infra text accompanying notes 53-67 (discussing UCC Article 9 and agricultural liens).
- 32. Steve Nickles challenges presumptions about the distinction between consensual and nonconsensual liens, arguing that in practice many Article 9 security interests are nonconsensual. *See* Steve H. Nickles, *The Brendan Brown Lecture: Radical Reductionism in Debtor-Creditor Law*, 39 CATH. U.L. REV. 765, 789 (1989).

A second form of super-priority interest, presented in the model provisions in appendix II to Article 9, is the production-money interest in agricultural finance.³³ The production-money security interest enables a farmer to finance costs of producing a crop even though proceeds of prior years' crops were not sufficient to repay earlier secured creditors with interests that extend to the current year's crop.

Companies commonly finance operations and projects with loans secured by floating liens on the companies' assets. "Floating lien" is a short-hand (not a statutory) term for a security interest that attaches to after-acquired collateral and for which the code dates priority for future advances by the lender back to the date the lender first filed a UCC-1 financing statement or perfected its interest. A floating lien is a security interest that maintains its priority if enforced against property the debtor acquires after closing the transaction and, in many instances, after other creditors have come along. Floating lien creditors depend on the first-in-time, first-in-right rules to maintain priority over later creditors. Purchase-money and production-money creditors with later-in-time priority will defeat earlier floating lien creditors' claims, but only to the extent of the new value that the later creditor provided.

The reasoning or policies behind Article 9's special priority rules for certain security interests can be difficult to grasp. ³⁵ In essence, by permitting certain secured creditors to prevail over earlier secured creditors, the code, as Hideki Kanda and Saul Levmore explain, "compromises between the advantages and the disadvantages of new money." ³⁶

The structure of and policies behind the PMSI, and the special priority rules that pertain to it, offer a framework for thinking about the proposed EPMSI. Similarly, the evolution under Article 9 of production-money interests in farm products provides insight into super-priority security interests that is useful to consider when contemplating an environmental-practices-money interest. Parts A and B below describe these existing super-priority security interests. The EPMSI concept, in important ways, both draws upon and departs from the models provided by these interests.

^{33.} Creditors extending purchase-money or production-money credit are not the only later-in-time-interest holders that enjoy priority over earlier secured creditors under Article 9. Buyers in the ordinary course of business and parties with set-off rights are two examples of other interest holders who enjoy later-in-time priority. U.C.C. §§ 9-320(a), -340(b) (2005). These other types of interest holders would be important to consider in attempting a comprehensive explanation of later-in-time interests; they are not discussed here.

^{34.} *See* U.C.C. §§ 9-204 to -205, -323. On the creation of the floating lien, see Kamp, *supra* note 14, at 440–42.

^{35.} See infra Part II.

^{36.} Hideki Kanda & Saul Levmore, *Explaining Creditor Priorities*, 80 VA. L. REV. 2103, 2105 (1994) (arguing that the PMSI rules are justified because the first-in-time principle inhibits alteration of risk, whereas later creditors have better information than earlier creditors to determine which shifts in risk are efficient).

A. Purchase-Money Security Interest

A PMSI arises when a secured party's extension of credit enables the debtor to acquire new goods such as inventory or equipment.³⁷ The Official Comments to Article 9 elaborate that in order for a secured loan to qualify as a "purchase-money obligation,"³⁸ there must be a "close nexus between the acquisition of collateral and the secured obligation."³⁹

Again, PMSIs have the benefit of special priority rules that grant them priority in advance of earlier, perfected secured creditors with interests in after-acquired collateral (floating liens). Fecured creditors with interests that extend to assets acquired after the closing of their transactions have an advantage over other, later creditors. If a company's assets are encumbered by an interest in after-acquired property, then to obtain additional or new financing the company must find a creditor who will (1) lend despite holding a junior position, (2) refinance the earlier creditor's loan, or (3) negotiate a subordination agreement with the earlier creditor. The priority that Article 9 accords PMSIs enables debtors to acquire assets with financing from purchase-money lenders whose security interests in the assets are not subordinated to an earlier creditor's interest that extends to after-acquired property.

- 37. See U.C.C. § 9-103. Software acquired for use with goods that are PMSI collateral may also be PMSI collateral. U.C.C. § 9-103(c). Personal property other than goods and software cannot be PMSI collateral under revised Article 9. See 2 Grant Gilmore, Security Interests In Personal Property § 28.2 (1965) (explaining that a claim must be "directly" related to the debtor's acquisition of the collateral in order for it to be a purchase-money claim).
- 38. The code defines "purchase-money obligation" as "an obligation of an obligor incurred as all or part of the price of the collateral or for value given to enable to debtor to acquire rights in or the use of the collateral if the value is in fact so used." U.C.C. § 9-103(a)(2).
- 39. When the purchase-money creditor is the seller of the goods, it is not difficult, generally, to establish that the extension of credit enabled the acquisition. When the purchase-money creditor is a lender, however, the lender must show that its funds were used to acquire the collateral at issue. The loan in fact must be used to pay the purchase price. U.C.C. § 9-103 cmt. 3. In nonconsumer transactions, the secured party has the burden of proof in cases where it is unclear the extent to which a given interest is a purchase-money interest within the meaning of the code. See U.C.C. § 9-103(g). The code itself does not elaborate on what constitutes a "close nexus" between the collateral acquisition and the secured obligation for purposes of establishing a PMSI. The enabling requirement raises a question of fact for courts to determine. See Keith G. Meyer, A Primer on Purchase Money Security Interests Under Revised Article 9 of the Uniform Commercial Code, 50 U. KAN. L. REV. 143, 153 (2001). The gist of the requirement is that the loan and the purchase transactions are closely allied and that the debtor and creditor understood that the loan would enable the purchase. See 2 GILMORE, supra note 37, § 29.2.
 - 40. See U.C.C. § 9-324.
- 41. A junior creditor may be interested in extending credit if the junior lender has an interest in a broader pool of assets than originally secured the earlier, floating-lien creditor's loan. This type of lending typically entails higher monitoring costs than lending on a first-priority basis or against a smaller set of assets. See Bernard A. Burke, Preserving the Purchase Money Status of Refinanced or Commingled Purchase Money Debt, 35 STAN. L. REV. 1133, 1156 (1983).

PMSI "super priority" is a major exception to Article 9's general first-in-time, first-in-right priority rules. 42 PMSI holders will have this priority so long as they comply with the notice and perfection requirements set out in the code. 43

There are several different rationales behind the PMSI exception to the code's general priority scheme. One policy reason for the PMSI rules is that these rules enable a debtor to have some latitude in seeking new assets and new credit despite the presence of an existing secured creditor with substantial control over the debtor. In a nutshell, as Jackson and Kronman put it, the priority granted to PMSI creditors is "best thought of as a device for alleviating the situational monopoly created by an after-acquired property clause."

The fact that secured creditors can take a floating lien—an interest that attaches to property as the debtor acquires it going forward—gives a "situational monopoly" to the floating lien creditor (unless the debtor can refinance to remove this creditor). A debtor whose assets are encumbered by this type of lien is subject to the floating lien creditor's direction, and this creditor's interests may conflict with the debtor's or the debtor's other creditors' interests. The Article 9 grant of priority to the PMSI holder creates an incentive for PMSI creditors to supply debtors with new equipment, inventory, or other goods (and attendant software) despite the presence of an earlier secured creditor.⁴⁵

Nothing prevents a secured creditor from including provisions in its loan and security agreement that make it an event of default on the loan if the debtor obtains purchase-money credit. 46 Secured creditors can establish control over debtors through loan covenants that make it difficult for debtors to avail themselves of purchase-money credit. That some transactions create such a level of control may undermine some debtors' capacities to create PMSIs. This fact does not negate Article 9's objectives in enacting PMSI rules; these objectives include creating a device to enable debtors to "get out from under the thumb" of existing secured creditors in many contexts.

Note that there are reasons that a debtor may seek purchase-money credit that have nothing to do with constraints or risk aversion imposed by an existing creditor. A purchase money creditor may offer better loan terms than the debtor's current institutional lender, especially in situations where the purchase-money creditor is also the seller of the goods and has incentives to make a sale on credit.

For example, Alan Schwartz has observed that "some assets are sufficiently specialized that sellers have a comparative advantage over general-purpose lenders at

- 42. See U.C.C. § 9-322.
- 43. See U.C.C. § 9-324. For a summary of these notice rules, see infra Part III.C.
- 44. Jackson & Kronman, *supra* note 23, at 1167.
- 45. See Kanda & Levmore, supra note 36.
- 46. This type of contract provision—called a negative pledge clause—does not make it impossible to create a later security interest. It just gives the earlier creditor a breach of contract action if the debtor violates the clause. See U.C.C. § 9-401; see also infra Part III.D; cf. N.C. Gen. Stat. § 25-9-324.1 (West 2003) (overriding contractual provisions prohibiting creation of production-money security interests or making the creation of such interests a default or accelerating event); U.C.C. § 9-408 (rendering ineffective prohibitions on assignment of security interests in general intangibles, promissory notes, and healthcare-insurance receivables).
 - 47. James J. White, Secured Transactions: Teaching Materials 210 (3d ed. 2006).

maximizing the proceeds from resale after repossession. When this advantage exists, purchase-money loans have a higher expected value when made by sellers or specialized lenders than when made by banks."⁴⁸ In this scenario, the purchase-money credit, in theory, benefits the prior secured creditor because the debtor is getting assets on better terms than it otherwise could, creating savings that the debtor can apply to service the earlier debt, pay off the PMSI creditor more quickly, or invest to increase its asset base or returns.

Of course, debtors can also apply PMSI credit in ways that threaten the firm. While there will be the situations described above in which purchase-money credit benefits the debtor and the earlier secured creditor alike, there will also be situations in which the purchase-money credit (1) sinks a debtor deeper into debt when it cannot pay all of its obligations, or (2) enables the debtor to acquire assets to move in a new direction that hurts the debtor's financial performance and threatens its ability to repay all of its creditors. Some scholars point out that because the PMSI creditor comes later in time, it has better, more current information with which to determine whether its loan is too risky. While this observation may be true, it does not change the fact that the PMSI rules present risk to earlier creditors. So

Another justification for the PMSI is that the PMSI holder enables the debtor to obtain assets that are not part of the collateral pool to which prior creditors are looking for security. Prior creditors' funds were not used to acquire the new collateral—the PMSI holder's credit was—so it is fair to give priority in those specific assets to the PMSI holder and not the floating lien creditor.

Again, in many scenarios the PMSI holder's presence can benefit the earlier, floating-lien creditor because the total pool of collateral grows with the addition of the purchase-money collateral. The floating-lien creditor gets a junior interest in that collateral right away and a first priority interest in the collateral (or its proceeds) after the debtor pays off the PMSI creditor.

In any event, PMSI rules permit debtors some latitude and reflect a decision on the part of the code drafters and state legislatures to incentivize purchase-money credit. The code drafters did not create the concept of PMSI priority. It had been recognized in collateral security rules and in real estate transactions before Article 9 was enacted. This long-standing concept provides a framework with which to think about contemporary issues surrounding environmental sustainability and commercial activity. Innovative processes and equipment that improve environmental impacts of doing business are proliferating. Many of these innovations are expensive, and many are speculative in the sense that they are new and in the sense that it is unclear whether or not companies can internalize the benefits of investment in them.⁵¹

The PMSI rules are already in place to facilitate access to capital for debtors seeking to acquire new equipment. Of course, some equipment acquired with purchasemoney credit is equipment that improves environmental impact. Part II.C discusses

^{48.} Alan Schwartz, A Theory of Loan Priorities, 18 J. LEGAL STUD. 209, 243 (1989).

^{49.} See Kanda & Levmore, supra note 36.

^{50.} Again, Part II explores theoretical frameworks for understanding PMSIs and how they inform thinking about an EPMSI.

^{51.} See infra Part II.B (discussing internalized costs that yield externalized, environmental benefits).

how to treat extensions of credit that would qualify for both PMSI and EPMSI treatment.

The range of investments that companies are seeking to improve environmental efficiency is broader than investments in new equipment or other goods. Debtors cannot look to the PMSI rules if their assets are encumbered in favor of a floating lien creditor and what they need is secured credit to access, for example, services to improve energy efficiency, or consultation on new, environment-friendly technologies and processes. As the discussion in Part B shows, the notion that special priority rules should apply in certain contexts to service providers is not new.⁵²

B. Production-Money Security Interest

The purpose and history of the production-money security interest are less widely known than those of the PMSI. One topic of contention during the Article 9 revision discussions of the 1990s was how to treat agricultural liens and security interests in farm assets. Of central concern to many was the question of whether Article 9 should cover agricultural liens and whether it should provide special priority rules for lenders of "production money"—credit extended to enable a farmer to produce a crop.

The revised version of Article 9 does cover these liens in the sense that filing pursuant to Article 9 is now required to perfect agricultural lien holders' interests. ⁵³ However, Article 9 does not provide for when or how these liens arise or their scope; these liens are created by the various statutes that provide for agricultural liens in each state. ⁵⁴

Currently, in six states Article 9 offers enhanced priority for holders of "production-money security interests" (PrMSIs).⁵⁵ Before the revisions to Article 9 were enacted in 2001, forty-five states and the District of Columbia enacted an earlier form of the PrMSI that was contained in old section 9-312(2).⁵⁶

Generally speaking, agricultural liens are statutory liens on farm products that arise under state law in favor of parties that extend credit to farmers to enable production of

^{52.} Statutory liens arising in favor of a range of types of service providers, such as mechanics or artisans, are one type of example. In the UCC context, the production-money security interest in agricultural finance is an example of a later-in-time, super-priority security interest that can arise to secure extensions of credit for services.

^{53.} See U.C.C. § 9-109(a)(2) (2005).

^{54.} See id.

^{55.} These states are Mississippi, North Carolina, Maine, West Virginia, Wisconsin, and Wyoming. *See supra* note 21 and accompanying text. Minnesota has not enacted section 9-324A, but the Agricultural Lien Task Force recommended that Minnesota's crop-production input lien have priority over security interests. *See* Drew L. Kershen & Alvin C. Harrell, *Agricultural Finance: Comparing the Current and Revised Article 9*, 33 UCC L.J. 169, 194 (2000). Vermont enacts the definitional provisions in model section 9-103A but not the corresponding priority provisions in model section 9-324A, leaving the status of the PrMSI in Vermont unclear. VT. STAT. ANN. tit. 9A, § 9-103A (2001).

^{56.} For a state-by-state list of variations, see 1972 UCC Art. 9—Sec. 9-312, [Mar. 1989–June 2000] Secured Transactions Guide (CCH) ¶ 847 (June 20, 2000). Arkansas, Georgia, and North Carolina enacted section 9-312(2) with modifications. Arizona, California, Nevada, New Jersey, and Washington did not enact subsection (2) of section 9-312. *Id.*

a crop.⁵⁷ Under UCC Article 9, an "agricultural lien" is an interest in farm products that (1) secures payment or performance of an obligation for goods or services furnished in connection with a debtor's farming operation, (2) is created by statute in favor of a person that furnishes such goods or services in the ordinary course of its business, and (3) does not depend upon such person's possession of the personal property. 58 The Article 9 definition also includes interests in farm products in favor of landlords to secure payment of rent under an agricultural lease.⁵⁹

Typical agricultural-lien holders may include seed, fertilizer or feed suppliers, veterinarians, and other service providers. Holders of agricultural liens are "secured parties" within the meaning of Article 9,60 but agricultural liens themselves are not "security interests" within the scope of the article because they do not arise by contract. 61 They are nonconsensual liens that arise by state statute. Again, the rules determining the creation and scope of these liens are set forth in the statute pursuant to which they arise.⁶²

That revised UCC Article 9 covers agricultural liens means that the perfection and priority of these liens is now determined by Article 9 rules, unless the statute creating a lien provides for a different order of priority. 63 This revision to Article 9 is designed to clarify the relationship between security-interest holders and agricultural-lien holders when they have interests in the same assets. The general rule now is that an agricultural-lien holder must file a UCC-1 financing statement to maintain priority over later secured creditors or lien holders who perfect their interests.⁶⁴

Before 1972, the security interests of lenders who extended credit to farmers did not attach to crops produced more than one year after the parties' agreement. 65 This rule left future crops unencumbered by prior years' creditors.

The 1972 revisions to Article 9 eliminated this one-year limit on the effectiveness of the farm lender's security interest. Farm lenders can now take interests that attach to future crops as after-acquired collateral. 66 This 1972 reform presented a problem for agricultural-lien holders. Many agricultural-lien holders would be left in a position

- 57. The definition of "agricultural lien" under state law other than UCC Article 9 varies from statute to statute across the states. See Scott J. Burnham, Agricultural Liens Under Revised UCC Article 9, 63 MONT. L. REV. 91 (2002) (discussing the effect of revised Article 9 on agricultural liens in Montana).
- 58. See U.C.C. § 9-102(5). Commentators consider this definition broad enough to cover most interests regarded as agricultural liens under state law. See, e.g., James P. Nehf, The Effect of Article 9 on Agricultural Liens (May 2008), http://law.lexisnexis.com/practiceareas/ Commercial/The-Effect-of-Article-9-on-Agricultural-Liens.
 - 59. See U.C.C. § 9-102(5)(A)(ii), (B)(ii).
 - 60. See id. § 9-102(72)(B).
 - 61. See id. § 9-109(a)(1).
- 62. Many of these liens have existed in state law for many years. There is wide variation in their applicability and scope.
- 63. See U.C.C. §§ 9-310(a), -322(a), (g). For example, a statute creating a lien on crops could provide that the lien has priority over earlier, perfected security interests. It appears that most agricultural liens, however, would be subordinate to such interests.
- 64. See id. For examples of the kinds of complexities that can arise in applying the statutory lien and Article 9 rules, see Burnham, *supra* note 57, at 106–07.
 - 65. See Nickles, supra note 30, at 1193.
 - 66. Id. at 1193-95.

subordinate to secured farm lenders who extended credit in the past and took an interest in after-acquired collateral.

Agricultural liens are enabling liens because they are granted by statute to parties extending credit that enables a farmer to produce a crop. These liens can make credit available to farmers to produce new farm products even though proceeds of last year's products have not paid off a prior lender with a security interest that covers after-acquired collateral.⁶⁷

This function is very similar to the function of the purchase-money security interest. A purchase-money interest also can enable a debtor to acquire new inventory or equipment in an attempt to yield new revenues even when the debtor lacks the cash flow to pay off prior secured lenders. Observing this purpose and function of agricultural liens, the code drafters contemplated a super-priority security interest or "production-money" interest subject to special priority rules similar to those that apply to purchase-money creditors.

However, the first attempt at creating a production-money security interest with priority over earlier floating liens, expressed in old section 9-312(2), was not well executed and created uncertainty. The text of old section 9-312(2) created an exception to the first-in-time, first-in-right priority rules in favor of crop-production creditors. In the years following its enactment, cases and commentators interpreted this provision extremely narrowly. Specifically, the provision was interpreted to create priority for production-money lenders only to the extent that the earlier, floating interest secured obligations that were more than six months overdue when the crops began to grow. 69

Commercial law scholar Steve Nickles has argued that this narrow approach to production-money priority was in conflict with the intentions of section 9-312(2). Whether this provision was intended to enact production-money security interest priority rules that function like current model section 9-324A or not, the provision caused so much confusion that it was declared unworkable in the 1990s.

Section 9-312(2) was scrapped in the course of a vigorous debate over whether or not the code should enact a more explicit production money interest for agricultural finance that would have the benefit of priority rules similar to those that apply to the

^{67.} *See* Burnham, *supra* note 57; Nickles, *supra* note 30; Linda J. Rusch, *Farm Financing Under Revised Article 9*, 73 Am. BANKR. L.J. 211, 243–45 (1999).

^{68.} The text of old section 9-312(2) provided the following:

A perfected security interest in crops for new value given to enable to debtor to produce the crops during the production season and given not more than three months before the crops become growing crops by planting or otherwise takes priority over an earlier perfected security interest to the extent that such earlier interest secured obligations due more than six months before the crops become growing crops by planting or otherwise, even though the person giving new value had knowledge of the earlier security interest.

U.C.C. § 9-312(2) (1978).

^{69.} Nickles, *supra* note 30, at 1186.

^{70.} See Nickles, supra note 30, at 1180–1204 (discussing what became the conventional reading of section 9-312(2) in the 1970s and 1980s and arguing that this reading conflicted with code policies surrounding enabling interests and the language of section 9-312 itself).

PMSI. The drafters could not come to any consensus on whether the concept of the PrMSI ought to be included.⁷¹

The result is model section 9-324A in appendix II of the current version of Article 9 published by the National Conference of Commissioners on Uniform State Laws (NCCUSL). It gives parties lending to farmers to produce crops an interest in the crops that has priority over prior years' creditors, so long as the PrMSI holder complies with the relevant notice provisions.⁷²

Specifically, to have priority over earlier secured parties, the production-money lender—before extending credit—must notify all such parties who have filed financing statements.⁷³ Also, the production-money lender must have perfected by filing when it first gives new value to the farmer.⁷⁴ When a production-money secured party is also an agricultural-lien holder with respect to the same collateral securing the same obligations, the rules of priority applicable to the agricultural lien govern priority.⁷⁵

- 71. For further discussion, see *infra* text accompanying note 82.
- 72. See U.C.C. art. 9 app. 2 § 9-324A cmt. 2 (2005) (model section)
 [MODEL SECTION [9-324A]. PRIORITY OF PRODUCTION-MONEY SECURITY
 INTERESTS AND AGRICULTURAL LIENS.
 - (a) Except as otherwise provided in subsections (c), (d), and (e), if the requirements of subsection (b) are satisfied, a perfected production-money security interest in production-money crops has priority over a conflicting security interest in the same crops and, except as otherwise provided in Section 9-327, also has priority in their identifiable proceeds.
 - (b) A production-money security interest has priority under subsection (a) if: (1) the production-money security interest is perfected by filing when the production-money secured party first gives new value to enable the debtor to produce the crops; (2) the production-money secured party sends an authenticated notification to the holder of the conflicting security interest not less than 10 or more than 30 days before the production-money secured party first gives new value to enable the debtor to produce the crops if the holder had filed a financing statement covering the crops before the date of the filing made by the production-money secured party; and (3) the notification states that the production-money secured party has or expects to acquire a production-money security interest in the debtor's crops and provides a description of the crops.
 - (c) Except as otherwise provided in subsection (d) or (e), if more than one security interest qualifies for priority in the same collateral under subsection (a), the security interests rank according to priority in time of filing under Section 9-322(a).
 - (d) To the extent that a person holding a perfected security interest in production-money crops that are the subject of a production-money security interest gives new value to enable the debtor to produce the production-money crops and the value is in fact used for the production of the production-money crops, the security interests rank according to priority in time of filing under Section 9-322(a).
 - (e) To the extent that a person holds both an agricultural lien and a productionmoney security interest in the same collateral securing the same obligations, the rules of priority applicable to agricultural liens govern priority.]

Id.

- 73. See id. § 9-324A(b)(2).
- 74. See id. § 9-324A(b)(1).
- 75. See id. § 9-324A(e).

However, creditors in this situation may avoid application of the agricultural-lien priority rules by waiving the agricultural lien.⁷⁶

The concept of the super-priority interest for production of crops is present as a model provision in Article 9, but not as a uniform or recommended provision. States have not widely enacted section 9-324A. In all but six states, agricultural liens are subject to the general priority rules—first in time, first in right (from time of filing, which Revised Article 9 requires for perfection of agricultural liens)—unless a state's agricultural-lien statute grants a special priority status.⁷⁷

The debate over whether Article 9 should contain PrMSI rules seems to have centered around the issue of whether lenders who provide funds enabling farmers to produce another "last chance" crop should trump earlier secured creditors who declined to provide such funds. ⁷⁸ These later lenders are frequently providing supplies on credit.

In assessing state responses to section 9-324A, Professors Drew L. Kershen and Alvin C. Harrell predicted that "states will decide as a matter of policy that Revised Article 9 should not encourage 'last chance' crop loans to farmers."⁷⁹ Further, they continue, "if a state does desire to encourage . . . [such loans], states can do so by creating an agricultural lien for input suppliers that explicitly grants priority to the agricultural lien over competing security interests."⁸⁰

Kershen and Harrell may be correct that many states make a policy decision against enacting the PrMSI that is grounded in opposition to "last chance" crop lending. If this is the case, however, it is curious that so many states enacted old uniform section 9-312(2), and now so few states enact model, nonuniform section 9-324A. It is curious that all but five states enacted old section 9-312(2), and now all but six states decline to enact section 9-324A. This movement may have to do with substantive differences between old uniform section 9-312(2) and model section 9-324A, or, as Kershen and Harrell say, with deliberate decisions among the states against production money credit. ⁸¹

It seems, though, that the movement of the production-money rules from uniform, recommended section 9-312(2) to model, nonuniform section 9-324A must have played a significant part in this shift. Before the revisions, states had to deviate from the uniform act to omit section 9-312(2) if they did not want production-money rules. After the revisions, states have to deviate from the uniform act to enact section 9-324A if they want to include production money rules.

According to a report on the meetings of the Drafting Committee for Revised Article 9: "The Draft does not take a position on whether to adopt [sections 9-103A and 9-324A]. The Reporters suggested moving the provisions into an appendix and the Drafting Committee agreed." If the official version of the code takes no position, and

^{76.} See id. § 9-324A cmt. 4.

^{77.} See, e.g., MINN. STAT. § 514.945 (2002) (providing special priority status for an agricultural producer's lien); see also Kershen & Harrell, supra note 55, at 194–95 (discussing Minnesota's crop production lien).

^{78.} See Kershen & Harrell, supra note 55, at 193.

^{79.} Id. at 194.

^{80.} Id.

^{81.} *Id.* at 193.

^{82.} Id. (quoting Steven O. Weise, UCC Article 9 Revisions: Report on March '98 Meeting

puts the PrMSI sections in an appendix so that they are nonuniform provisions in states that elect them, fewer states will adopt the provisions. To be enacted in any given state, the model provisions in the appendix must serve policy goals that outweigh the state's interest in uniformity of its UCC.

Note that even though most states do not enact the PrMSI, there remains, nonetheless, the PMSI, which can be used to acquire livestock or goods to produce crops. In several court cases, PMSI creditors who financed acquisition of seed for crops or feed for livestock have claimed purchase-money interests in farm products as proceeds of these goods. Article 9 security interests extend to proceeds of collateral. He definition of proceeds includes "whatever is acquired upon the sale, lease, license, exchange, or other disposition of collateral. Holders have argued that planting seeds and feeding grain to cattle constitute "disposition of collateral" within the meaning of this definition. Courts generally interpret these arguments against the PMSI holder, finding that ingestion of feed or planting of seed are not dispositions of collateral that would give the creditor an interest in the resulting farm products as proceeds.

There are several major differences between PMSIs and PrMSIs. Some of these differences fuel the lack of consensus over model section 9-324A. It is important to understand these differences in considering the concept of an environmental-practicesmoney security interest. In important ways, the proposed EPMSI has more in common with the production-money interest than with the more widely accepted purchasemoney interest.

One significant difference between PMSIs and PrMSIs is that the PMSI collateral constitutes new goods. The collateral securing the PrMSI, on the other hand, may be the same farm products to which a prior creditor is looking for its security. This can be the case, for example, when the PrMSI creditor provides services, seed, or fertilizer that is promptly used up in crop production. The proposed EPMSI would also differ from the PMSI in that EPMSI creditors may provide services (for example, to make facilities more energy efficient). The environmental-practices-money collateral, then, may include assets to which earlier creditors are looking for security.

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of Drafting Committee, at 5 (April 1, 1998)); see also U.C.C. art. 9 app. 2 § 9-324A reporter's cmt. 2 (Meeting Draft 1998) (stating that "[n]either the Drafting Committee nor the agricultural financing community has been able to reach a consensus on the desirability of including a special production-money priority rule in Article 9" such that "[t]he Sponsors of the UCC have taken no position on this priority rule").

^{83.} See, e.g., Searcy Farm Supply, LLC v. Merchs. & Planters Bank, 256 S.W.3d 496 (Ark. 2007) (holding that crops are not proceeds of the seeds from which they were grown); Farmers Coop. Elevator Co. v. Union State Bank, 409 N.W.2d 178 (Iowa 1987) (holding that ingestion of feed by cattle is not a type of "other disposition" of collateral within the contemplation of the definition of "proceeds" under UCC Article 9).

^{84.} U.C.C. § 9-315(a) (2005).

^{85.} U.C.C. § 9-102(a)(64)(A).

^{86.} See, e.g., Searcy Farm Supply Co., 256 S.W.3d at 502; Farmers Coop. Elevator, 409 N.W.2d at 180.

^{87.} See Burnham, supra note 57, at 105 (discussing this fact with respect to Montana agricultural liens and security interests).

^{88.} For comparison of the PrMSI and the proposed EPMSI, see infra Part II.A.

Parties that opposed the PrMSI cited this issue in the course of the Article 9 revision deliberations. ⁸⁹ Some creditors expressed concern that their interests would be diluted if production-money lenders were given priority. ⁹⁰ The California Bankers Association stated that the policy reasons that justify the PMSI should not be used to establish a PrMSI. ⁹¹ Goods acquired with purchase-money credit, they argued, are physically recoverable from the debtor, whereas goods and services acquired with production-money credit are not because they are assimilated into the crop. ⁹²

The California Bankers Association's argument is not so convincing when one considers how often PMSI holders seek to enforce their interests not against the goods financed, but against proceeds of these goods. In other words, the idea that PMSI collateral is physically recoverable but PrMSI collateral is not seems somewhat immaterial given that PMSI creditors often find themselves with competing claims to proceeds of the original goods acquired. This is often true in cases where the PMSI collateral is inventory. ⁹³ In how many cases PMSI creditors seek to satisfy claims out of proceeds presents an empirical question that is not readily answerable from case law

In any event, the issue that super-priority security interests pose a threat of dilution to earlier secured creditors is an important one. As stated above, one approach to this issue is to focus on requirements regarding identifiable collateral, tracing, and notice to earlier creditors that limit the threat of dilution to earlier creditors' claims. Part III discusses these types of requirements and how they might function in an EPMSI context.

In six jurisdictions, Article 9 contains PrMSI provisions that grant priority to production-money creditors despite the dilution issue. ⁹⁴ Before 2001, forty-five states enacted some version of these rules. This endorsement of the PrMSI concept, despite the dilution risk, indicates on some level a policy judgment in favor of making certain types of credit available to farmers even if this credit presents risk to earlier secured creditors.

II. ENVIRONMENTAL-PRACTICES-MONEY SECURITY INTEREST

The concept of the EPMSI presents numerous, complex questions. Would creating such an interest conflict with basic facets of Article 9's approach to priority? Why should the UCC allocate environmental costs to secured parties and debtors? This Part

^{89.} See Jason Finch, The Making of Article 9 Section 9-312(2) into Model Provision Section 9-324A: The Production Money Security Interest: Finally a Sensible "Superpriority" for Crop Finance, 5 Drake J. Agric. L. 381, 407–09 (2000); Meyer, supra note 39, at 184.

^{90.} *See* Finch, *supra* note 89, at 398–402 (citing to memoranda from banks to the Article 9 Task Force regarding production-money security interests).

^{91.} See id. at 398–99 (quoting from a memorandum from the California Bankers Association to the Article 9 Task Force regarding production-money security interests).

^{92.} Id. at 399.

^{93.} See, e.g., In re Vic Supply Co., 227 F.3d 928 (7th Cir. 2000); Mbank Alamo Nat'l Ass'n v. Raytheon Co., 886 F.2d 1449 (5th Cir. 1989).

^{94.} See supra note 21 and accompanying text. It may be worthwhile to conduct an empirical study to determine whether the PrMSI affects interest rates or availability of credit in jurisdictions that enact it.

takes on these questions in an effort to think through whether and how the EPMSI concept fits with the structure of Article 9.

After Part II.A and Part II.B explore how the EPMSI would relate to certain central qualities of the code, Part II.C presents EPMSI provisions in the form of a draft UCC section 9-324B. Logistical questions—such as how we could possibly define a concept as amorphous as "environmental practices" for UCC purposes—are discussed in Part III.

A. Priority Rules, Asset-Based Lending and the EPMSI

How does the EPMSI concept relate to Article 9's first-in-time, first-in-right priority system that grants later-in-time priority for purchase-money loans and, in some jurisdictions, for production-money loans?⁹⁵ The following discussion is meant to situate the EPMSI in relation to scholarly understandings of priority, not to settle the question of whether the threat of dilution or risk alteration that the EPMSI concept presents is justified.

Conventional wisdom holds that the limitation of interests with later-in-time priority to new assets acquired with new value is key to the coexistence of floating liens and super-priority security interests. As Kanda and Levmore put it, Article 9 limits later-in-time priority to creditors who are "virtually certain to be both value enhancing and non-risk-altering." George Triantis, Jackson, and Kronman also emphasize the idea that super-priority-security-interest collateral is limited to specific assets acquired with the new value that the later creditor provides. This limitation makes granting priority to purchase-money interests acceptable, these scholars find, because it makes risk of dilution of earlier creditors' claims negligible.

But this conventional wisdom about interests with later-in-time priority plays down both: (1) the reality that the purchase-money rules do present risk to earlier creditors, and (2) the existence of the production-money interest in agricultural finance (in which the later-in-time creditor's interest is not limited to new goods and their identifiable proceeds).

Much of the scholarly analysis of PMSI rules seems to assume an idealized form of purchase-money interest, rather than a reality in which purchase-money interests are

^{95.} We can describe Article 9 as accommodating parties who want hierarchical capital structures while still making nonhierarchical structures possible. The first-in-time, first-in-right rule, in combination with the rules that provide for floating liens, facilitate a hierarchical structure wherein creditors rank in the order in which they came with liens that cover the personal property estate of the debtor. At the same time, Article 9 allows for nonhierarchical capital structures wherein creditors' interests in the assets of a given debtor do not, in theory, conflict, but rather are secured by separate assets. Debtors may assign interests in different types of assets to different creditors. *See* Paul M. Shupack, *On Boundaries and Definitions: A Commentary on Dean Baird*, 80 VA. L. REV. 2273, 2291 (1994).

^{96.} Kanda & Levmore, *supra* note 36, at 2132.

^{97.} See Jackson & Kronman, supra note 23; George G. Triantis, Financial Slack Policy and the Laws of Secured Transactions, 29 J. LEGAL STUD. 35, 47–50 (2000). Triantis emphasizes that the ideal balance between manager constraint and discretion—optimal financial slack—is struck by limiting the purchase-money creditor's interest to the value of the collateral acquired with the new funds. Triantis, supra at 47–48; see infra note 115.

risk altering. Kanda and Levmore, for example, overstate the extent to which limitations on PMSI collateral actually eliminate the potential for risk alteration. They may be perfectly correct that this is the objective of the rules—that we can explain the rules in reference to a desire to avoid risk alteration. But the rules do not always succeed at this.

As Professor Paul Shupack puts it, "Most real world transactions will be further away from an ideal PMSI" and will create some risk for existing creditors. 98 He continues:

[A]lthough commercial debtors can be assumed to acquire goods in order to put them into enterprising activities, not all of these enterprises will be profitable. The PMSI, by giving the debtor leverage and thereby giving the debtor the opportunity to make purchases he or she would otherwise not have made, can increase risks to the general creditors. ⁹⁹

Even in a case where a company acquires one valuable piece of equipment with purchase money credit on good terms, this investment could be risk altering. The equipment could be used to make a new product or to alter the company's processes in a way that causes losses. New equipment could require retraining of workers that slows production and sales, lowering the levels of receivables or inventory to which earlier creditors can look for security.

Secured creditors are aware of these kinds of risks, of course, and respond in a variety of ways. Many secured credit contracts contain provisions that give floating-lien creditors latitude to protect themselves in the event of risk alteration. Creditors may overcollateralize a loan to insulate themselves from the dilution risk presented by PMSIs. Loan-to-value covenants and further assurances provisions can ensure this kind of protection. Loan-to-value ratio covenants and further assurances clauses obligate the debtor to keep the secured party collateralized to a certain level and keep the security interest perfected. Or, secured creditors may require debtors to report any PMSIs and call their loans in response. ¹⁰⁰ Negative pledge clauses prohibit debtors from assigning security interests other than those contemplated by the security agreement at issue.

These basic insulation strategies could be effective in an EPMSI context as well. Though previously encumbered assets may be assigned to an EPMSI creditor, this later creditor's interest will be limited to the extent of new value given. If an earlier creditor were sufficiently oversecured, an EPMSI claim could amount to a portion of the value of the collateral securing the earlier interest such that the earlier creditor is sufficiently secured despite an EPMSI. This potential response to dilution risk raises questions, of course, about the costs of overcollateralization. Whether the benefits of a collateral-security device like the EPMSI outweigh the costs it could create for debtors and secured creditors—and whether these parties should bear such costs—are separate questions presented below.

With respect to the PrMSI, perhaps scholars regard this device as an anomaly limited to agricultural finance that does not disrupt theories about purchase-money

^{98.} Paul M. Shupack, *Defining Purchase Money Collateral*, 29 IDAHO L. REV. 767, 773 (1992).

^{99.} Id.

^{100.} See infra Part III.D.

credit as the exception of note to the general first-in-time priority rules. But the current PrMSI, though enacted in only six states and as model provisions in the appendix to the uniform provisions of Article 9, nonetheless: (1) exists, (2) was a subject of debate during the 1990s revision process, and (3) followed movement in the law of suppliers' liens towards legislatures providing for filing and enforcement of these liens as if they were Article 9 security interests. ¹⁰¹ This reality disrupts the notion that the coexistence of first-in-time and later-in-time interests under Article 9 can be explained completely in reference to the PMSI's strict, asset-based nature.

Again, the PrMSI is a collateral-security device with which suppliers of agricultural goods or services acquire a security interest in a debtor's assets apart from any statutory liens these suppliers enjoy that might be trumped in a priority dispute with an earlier Article 9 creditor. ¹⁰² The PrMSI enjoys priority in advance of earlier creditors.

Under EPMSI rules, an EPMSI holder could provide services or goods that are quickly consumed in processes such that there are not specific assets added to the debtor's property from which the EPMSI creditor would recover in advance of others. So, the EPMSI functions more like the PrMSI than the PMSI in terms of the effects it could have on the earlier secured creditors' positions.

Steve Nickles has written thoroughly about production-money interests in agricultural finance. In his view, that a production-money creditor enjoys later-in-time priority that could harm other creditors is not a reason to oppose enacting PrMSI rules. He has argued that old section 9-312(2) did enact such rules and that it became of negligible scope only through erroneous interpretation. ¹⁰³

For purposes of the proposed EPMSI, the background of the PrMSI rules provided in Part I.B is important. The evolution of old section 9-312(2) and current model section 9-324A shows that we cannot conclude that only six states have enacted the PrMSI because state legislatures have, necessarily, an aversion to later-in-time interests with priority in debtors' assets that is not limited to new goods and their identifiable proceeds. ¹⁰⁴ The story of how super-priority security interests come to be, and whether and how they should be part of Article 9, is complex. We cannot simply conclude that first-in-time priority among secured creditors must hold in all situations except the special case of purchase money in which collateral is limited to new goods because, otherwise, we will have some fundamental breakdown of an otherwise coherent Article 9 priority scheme.

Of course there are some obvious major differences between the PrMSI and the proposed EPMSI. It is important to understand these differences when thinking through the PrMSI's relevance to the proposed EPMSI.

For one thing, the proposed EPMSI is not borne of a history of special priority for the type of credit that it contemplates. The concepts of the PMSI and PrMSI were present in the common law and in state statutes before enactment of UCC Article 9. ¹⁰⁵ The type of extension of credit contemplated by the EPMSI does not have the kind of

^{101.} See Nickles, supra note 32, at 784.

^{102.} For a description of the production-money security interest, see *supra* Part I.B.

^{103.} See Nickles, supra note 30, at 1190.

^{104.} See supra text accompanying notes 79–82.

^{105.} For example, the PrMSI rules were formulated in reference to state agricultural production liens such as those adopted in Arkansas, Kansas, and Minnesota. *See* Kershen & Harrell, *supra* note 55, at 193–94.

commercial law pedigree that we associate with agricultural finance. The EPMSI takes the established super-priority security interest concept and applies it to introduce environmental-practices-money credit, which is novel.

But novelty should not deter consideration of the EPMSI. Efforts to encourage commercial actors to bear costs of improving environmental effects are of recent vintage. States may want to consider enacting EPMSI provisions to the extent that they are seeking new ways to create incentives for commercial actors to fund and undertake new practices and processes to minimize environmental harm.

Production-money creditors tend to be agricultural input suppliers or "amateur creditors". Nothing in the PrMSI rules prevents institutional lenders from making production-money loans. But the fact that production money creditors tend to be suppliers can affect, in the eyes of some, the equity of their claim in relation to earlier institutional secured creditors. ¹⁰⁶ The term amateur creditor does not mean a creditor that is unsophisticated. This term arises in discussions of PrMSI creditors to refer to suppliers, and it could apply as well to suppliers of environmentally progressive services. These suppliers may have ample experience with credit arrangements in particular and commercial contracts in general. In the case of agricultural suppliers, one can assume they lobbied effectively in states that enact the PrMSI.

EPMSI creditors also may be amateur creditors—parties who are in the business of providing environmentally progressive technologies and services and will do so on credit. They may also be institutional creditors—banks or other financers who make loans to engage in environmental practices.

Both the PrMSI rules and the proposed EPMSI rules limit the super-priority security interest to the extent of new value that the creditor provides. In the PrMSI context, this new value is supplies or services to yield new farm products. Though the PrMSI is not limited—like the PMSI—to new goods and their identifiable proceeds, there is a relationship between production-money credit provided and the farm products that the debtor then produces.

In the EPMSI context, a creditor that enables environmental practices may not, in many cases, assist the debtor in developing or acquiring discrete new property. The new value an EPMSI creditor provides may create savings in energy or waste management costs, reduced liabilities under environmental regulations, new intellectual property, or enhanced goodwill, for example. In some instances the benefits of investment in environmental practices may be externalized entirely. Part III below discusses how to define EPMSI collateral. Depending on tolerance for risk of dilution of earlier creditors' claims, EPMSI collateral could be as broad as all the debtor's personal property, or as narrow as, for example, specific intellectual property acquired with environmental-practices-money credit. 107

Paul Shupack considers Nickles's position on agricultural suppliers' liens in an assessment of justifications for PMSI priority. He writes that Nickles's argument suggests, among other things:

Either interest group politics are strong enough in state legislatures to outweigh a rational scheme of creditor priority or legislatures have persistently responded to a felt sense that something is wrong with a financial structure that permits the first in

^{106.} See Nickels, supra note 32, at 792-93; Shupack, supra note 98, at 778.

^{107.} See infra Part III.B.

time creditor to have complete priority over the debtor's assets. In either event the suppliers' lien protection, to the extent that it exists, will provide a basis for PMSI lenders to describe themselves as being of the same character. ¹⁰⁸

Shupack is not claiming that we can justify PMSI priority based on the fact that interest-group politics or inclinations about equity may explain the special priority state legislatures accord agricultural suppliers. ¹⁰⁹ He is pointing out that to the extent the law recognizes super priority for seller financing, it must also do so for institutional lenders financing the same type of investment. ¹¹⁰

Nevertheless, perhaps some creditors will enjoy later-in-time priority simply because interest group politics are strong enough in state legislatures to outweigh a rational priority scheme. Note that the question of what is or would be a "rational priority scheme" is a contentious one in the field of secured transactions law. Whatever such a scheme looks like, to the extent that it does not contemplate later-intime interests with priority, such interests may nonetheless appear in Article 9 because of successful interest-group lobbying. This may or may not be bad, depending on how one views the possibility and value of rationality in law and the results of interest-group politics.

We could imagine EPMSI rules enacted in Article 9 if environmental interests groups successfully lobbied for these rules in state legislatures. This enactment scenario could be a politically engineered departure from some rational priority structure that Article 9 seeks to implement, or it could be, simply, how interests with later-in-time priority generally come into existence.

We could attribute the PrMSI's enactment in six states to the power of the agricultural suppliers' lobby in those states. And we could speculate that, were EPMSI provisions ever proposed for enactment in state legislatures, jurisdictions in which environmental technology and service providers successfully lobby for them would see passage of the rules. The project here is not to analyze or judge legislative processes, but to explore whether the concept of the super-priority security interest makes sense in the context of incentives for investment in improved environmental impact.

Alternatively, perhaps it is not interest-group politics that generate interests with later-in-time priority, but a sense among lawmakers that something is wrong with a scheme in which the earliest secured creditor has complete priority in virtually all of

^{108.} Shupack, supra note 98, at 777.

^{109.} Again, he was building on work about the later-in-time priority that the law sought to afford to suppliers' liens. At the time his work was published, old section 9-312(2) was of little effect (and, of course, the contemporary PrMSI rules did not exist).

^{110.} Also, he is responding to Alan Schwartz's argument that, given parties' apparent contracting preferences, Article 9 should be more strongly committed to first-in-time priority rules. *See* Schwartz, *supra* note 48, 249–50. He is pointing out that considerations of equity call into question the desirability of Schwartz's position. *See* Shupack, *supra* note 98, at 776.

^{111.} See, e.g., Lucian Ayre Bebchuck & Jesse M. Fried, The Uneasy Case for the Priority of Secured Claims in Bankruptcy: Further Thoughts and a Reply to Critics, 82 CORNELL L. REV. 1279 (1997) (questioning whether the full-priority floating lien is rational given that it can permit secured creditors and debtors to externalize costs to unsecured creditors); Schwartz, supra note 48, at 210 (arguing that a rational set of priority rules would reflect the order of priority that contracting parties elect). These articles are part of a larger debate over what would be a rational priority scheme and what rationality means in this context.

the debtor's personal property. This sense has a long history in secured transactions law. ¹¹² Over the years, scholars and legislatures have made various proposals in response to a felt sense that certain kinds of creditors—usually unsecured—should not be left without recourse because an earlier secured lender has a lien on all of the debtor's assets. ¹¹³ EPMSI creditors would be secured, not unsecured. An exception to first-in-time priority for EPMSI creditors would involve a legislative determination that, when companies seek financing for environmental practices, they should have the capacity to issue high-priority debt.

Many discussions of super-priority security interests express a felt sense that debtors should be able to "get out from under the thumb" of a floating lien creditor in certain instances. Supporters of the production-money security interest argue that farmers should be allowed to produce a new year's crop even if prior years' creditors are unwilling to extend additional funds. In the purchase-money context, commentators note that there may be many instances in which a company's secured creditor is unable or unwilling to fund acquisition of new equipment or inventory to enable the company to expand, renovate, move in new directions, or stay afloat. Floating-lien creditors can be risk averse. They have already calculated their returns based on the debtor's assets and projected activities at the time of their transaction. They can, therefore, be adverse to new activities. Super-priority security interests offer relief from secured creditor risk aversion. The proposed EPMSI would offer exactly this kind of relief in scenarios where a company needs financing to undertake improvements in environmental impact, but neither its existing secured lender nor a refinancing lender will fund the investment in doing so.

Numerous commercial law scholars have attempted to craft positive theories to explain why the law permits certain secured creditors to have priority over earlier secured creditors. For example, Triantis argues that UCC Article 9's textured mix of first-in-time and later-in-time interests reflects sensitivity to optimal levels of financial slack—the discretion managers have as a function of a firm's internal funds and its

^{112.} Secured transactions law scholars and practitioners have long noted concerns for equity and fairness that surround granting priority to secured lenders as a matter of first in time, first in right. During discussions of early drafts of UCC rules for secured transactions, commentators bemoaned rules that would give secured lenders priority ahead of amateur creditors such as service providers. The drafters in 1949 proposed a resolution that some creditors be allowed to reach a percentage of a debtor's inventory in advance of earlier secured creditors. See Kamp, supra note 14, at 436; see also Grant Gilmore, The Good Faith Purchase Idea and the Uniform Commercial Code: Confessions of a Repentant Draftsman, 15 GA. L. REV. 605, 615–18 (1980). The notion that a first-in-time, first-in-right floating lien structure is problematic from a fairness (and also an efficiency) standpoint persisted during the Article 9 revision debates of the 1990s. During the revision process, concerns centered on the expanding scope of the Article 9 security interest, and the effects of Article 9 on unsecured creditors. See, e.g., Bebchuck & Fried, supra note 111, at 1284–85; Elizabeth Warren, Making Policy with Imperfect Information: The Article 9 Full Priority Debates, 82 CORNELL L. REV. 1373 (1997). But see Steven L. Schwarcz, The Inherent Irrationality of Judgment Proofing, 52 STAN. L. REV. 1 (1999).

^{113.} See Kamp, supra note 14, at 437 (finding that leaving unsecured creditors without recourse was unworkable).

^{114.} See supra note 47 and accompanying text.

capacity to issue low-risk debt.¹¹⁵ Kanda and Levmore argue that Article 9's priority rules manage tension between deterring risk alteration on the one hand, and encouraging efficient marginal lending on the other.¹¹⁶ First-in-time interests protect early creditors from risk alteration, but later-in-time interests can enable profitable ventures that later creditors can better identify.¹¹⁷

As Kanda and Levmore observe, Article 9's priority rules "have proved difficult material from which to generate positive theories of creditor priorities." Their analysis focuses, again, on the first-in-time general priority rules and the exception presented by the PMSI rules. Positive theories attempt to find coherence or logic in these rules when, at the end of the day, there may be little coherence. It is unclear the extent to which the positive theories referenced here intend to relate to the PrMSI, or would relate to an EPMSI. Positive theories are designed to explain the law as is—they are not justificatory theories. ¹¹⁹ We cannot know without a separate project's worth of analysis how the proposed EPMSI might comport with or disrupt the coherence in Article 9's priority rules that these scholars find. ¹²⁰

115. See Triantis, supra note 97, at 35. "The objective of secured credit," Triantis argues, "is the management of financial slack." Id. at 37. Assigning a security interest to a creditor that enjoys priority in the debtor's assets, he argues, limits managers' discretion and thereby prevents self-interested actions that impair the firm's value. However, if the first creditor to finance the debtor's operations takes a floating lien on the debtor's assets, and there is not an opportunity to renegotiate or obtain relief from this creditor's lien, then the debtor may be forced to forego profitable opportunities. The later-in-time priority rules that Article 9 contains—specifically, the purchase-money rules—can be understood as a solution meant to balance the debtor's need to issue low-risk debt to finance profitable new projects and the first-in-time creditor's positive effects on managerial discretion.

116. Kanda & Levmore, *supra* note 36, at 2105–06. Without the capacity to take a first-priority security interest in the debtor's assets, first-in-time creditors would suffer exposure to risk alteration. At the same time, however, aversion to risk alteration, and the first-priority interest that reigns in debtors' latitude to fund new projects, can result in debtors' incapacity to fund profitable future ventures. "Efficient marginal lending" refers to later-in-time lending for specific projects that is efficient and increases the value of the firm. So, Article 9's exceptions to the first-in-time priority rule facilitate efficient marginal lending while protecting first-in-time creditors from risk alteration. Later-in-time creditors, they argue, enjoy an informational advantage over earlier creditors. When creditors are considering whether or not to invest, they have more recent, and arguably better, information about the debtor—information that was not available to the first creditor who fears, perhaps irrationally, risk alteration.

- 117. Id.
- 118. Id. at 2104.
- 119. Kanda and Levmore recognize:

Even a perfect positive theory does not justify a set of rules, but it does suggest the presence of a coherent theme. Where there is such a theme, the burden ought to shift to reformers either to show how their proposals fit within, or improve upon, this theme or to demonstrate that the system as a whole does more harm than good.

Id. at 2154.

120. For example, if Article 9's objective is to balance exposure to risk alteration and efficient marginal lending, we could ask whether the EPMSI induces efficient marginal lending that justifies the threat of risk alteration that it presents. An EPMSI creditor in the business of helping companies to improve environmental sustainability, or to clean up sites or processes, may very well have superior information about both the value of these investments and

B. Secured Parties, Debtors, and Environmental Costs

The proposed EPMSI would put secured lenders in the position of either funding costs of improvements in environmental impact, or risking subordination to a financer who will. In some instances, engaging in environmental practices may yield very tangible returns for debtors; in others, the value of these practices may be harder to calculate or may be externalized. EPMSI rules would allocate to secured parties the costs of creating environmental benefits that could accrue to society at large.

The issue of creating costs that yield externalized benefits pervades thinking about responsibility for the environment. Why enact limits on carbon emissions that constrict businesses in one country or region when the benefits of reduced emissions are global? Why offer a tax credit that reduces revenue in one state to create environmental benefits that accrue across borders?

One could argue that the government subsidy approach to inducing "green" investment is better than an approach like the EPMSI because the tax base is the best available proxy for the beneficiaries of improvements in environmental impact. This work in no way argues against tax credits, subsidized financing (a couple examples of which are described below), or other government initiatives. This Article proposes collateral security rules that would complement these public initiatives.

The notion that costs of inducing "green" investment should accrue to the public because the public is the primary beneficiary of these measures raises a fundamental question in the context of environmental programs. Who should bear costs of improving the environment? If costs are always imposed on the public because the public benefits, then private actors have no incentive to reduce the harm they inflict—short of civil or criminal liability. On its own, a top-down regulatory approach has proven inadequate to remedy and deter environmental harm—hence the widespread focus in recent years on alternative mechanisms. At the same time, if certain private actors bear costs the benefits of which are externalized, and cannot stay solvent while doing so, then other costs to the public that we must consider are created. The EPMSI concept animates this tension in the context of commercial finance.

Institutional lenders recognize the connection between secured transactions and the environmental impact of debtors' activities. A long list of project financers has adopted the Equator Principles—standards for secured lending that include a commitment to fund only projects that meet certain environmental criteria. ¹²¹ Other major institutional

economic risks to the debtor from declining to undertake them. An earlier creditor may view investment in environmental practices as risk altering, but lack the information to understand why the investment is not, in fact, risk altering, or why the risk of failing to invest is greater than the risks associated with doing nothing. Also, risk alteration may be happening with respect to environmental costs whether debtors issue later-in-time security interests or not. Cf. Perry E. Wallace, Climate Change, Fiduciary Duty, and Corporate Disclosure: Are Things Heating Up in the Boardroom?, 26 VA. ENVTL. L.J. 293, 294 (2008) (probing whether United States corporations and securities laws impose duties on American corporations and fiduciaries with respect to climate change).

121. The Equator Principles: A Financial Industry Benchmark for Determining, Assessing and Managing Social & Environmental Risk in Project Financing (July 2006), http://www.equator-principles.com/documents/Equator_Principles.pdf. [hereinafter Equator Principles] ("The Equator Principles Financial Institutions (EPFI's) have consequently adopted these principles . . . to ensure that the projects we finance are developed in a manner that is socially responsible . . . and reflect sound environmental practices."). Numerous major U.S. and

lenders have adopted the Carbon Principles—commitments to encourage borrowers to invest in energy efficiency and reduce carbon emissions. 122 It is unknown, at the moment, what the Equator Principles' and the Carbon Principles' effects will be. For example, though the Equator Principles require subscribing banks to include covenants in project loan documentation under which the borrower agrees to maintain compliance with articulated environmental (and other) standards, lenders are not obligated to call an event of default if any such covenant is breached.

One could argue that secured parties are an ideal group to target for internalizing environmental costs because they are in a strong position to control companies' activities, and therefore, are in a strong position to control environmental impact. Legal scholars have advocated for secured lender liability under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 123 and for priority under Article 9 for environmental claims. 124

The EPMSI differs in important ways from proposals for CERCLA liability for secured lenders and for priority in advance of secured lenders for environmental claimants. Generally, a secured lender is not liable under the CERCLA unless the lender controls activities on a site to such an extent that it is effectively an owner or operator of the business on the site. 125 When a debtor pollutes, if the debtor's secured lender was participating in the management of the debtor's activities to a sufficient extent, then liability for cleanup extends to the secured lender.

Note that CERCLA liability relates to specific polluted sites. A lender can assess particular sites used by a debtor to gauge the risk of environmental liability. Also, a lender can use its monitoring power to prevent debtors from polluting a given site in a way that would create liability. In this sense, lenders have some power to determine

foreign lenders such as Bank of America, ABN AMRO, and Wells Fargo are Equator Principles financial institutions. Equator Principles: Institutions Which Have Adopted the Equator Principles, http://www.equator-principles.com/.

122. See, e.g., Press Release, Bank of America, Bank of America to Announce Adoption of Carbon Principles at Natural Res. Def. Council Tenth Annual Award Event (Apr. 1, 2008), http://bankofamerica.mediaroom.com/index.php?s=press_releases&items-8124.

123. 42 U.S.C. §§ 9601–9675 (2006). The CERCLA was enacted originally in 1980. The Superfund Amendments and Reauthorization Act, Pub. L. No. 99-949, 100 Stat. 1613 (1986) (codified at 42 U.S.C.), amended the CERCLA on October 17, 1986, and the Small Business Liability Relief and Brownfields Revitalization Act, Pub. L. No. 107-118, 115 Stat. 2356 (codified at 42 U.S.C. § 9628 (2006)), amended it further in 2002.

124. See, e.g., Kathryn R. Heidt, Cleaning Up Your Act: Efficiency Considerations in the Battle for the Debtor's Assets in Toxic Waste Bankruptcies, 40 RUTGERS L. REV. 819 (1988) [hereinafter Heidt, Cleaning Up]; Kathryn R. Heidt, Corrective Justice from Aristotle to Second Order Liability: Who Should Pay When the Culpable Cannot?, 47 WASH. & LEE L. REV. 347 (1990) [hereinafter Heidt, Corrective Justice]; Lynn M. LoPucki, The Death of Liability, 106 YALE L.J. 1 (1996) (arguing for priority for tort claimants generally).

125. See United States v. Fleet Factors Corp., 901 F.2d 1550, 1557–58 (11th Cir. 1990); Guidice v. BFG Electroplating & Mfg. Co., 732 F. Supp. 556, 560-62 (W.D. Pa. 1989); Bruce P. Howard & Melissa K. Gerard, Lender Liability Under CERCLA: Sorting Out the Mixed Signals, 64 S. CAL, L. REV. 1187, 1188 (1991); Susan M. King, Lenders' Liability for Cleanup Costs, 18 ENVTL. L. 241, 266-74 (1988); Roslyn Tom, Note, Interpreting the Meaning of Lender Management Participation Under Section 101(20)(A) of CERCLA, 98 YALE L.J. 925, 943-44 (1989); Envtl. Prot. Agency, CERCLA, Brownfields, and Lender Liability, http://www.epa.gov/brownfields/aai/lenders factsheet.pdf.

whether they are at risk for CERCLA liability. The EPMSI presents a different type of risk. Under the proposed EPMSI rules, a secured lender's position could face dilution by a later, environmental-practices-money creditor to an extent that the lender could not assess in advance. The extent to which this is true in practice would depend in part on the formulation of EPMSI definitional provisions, the quality of debtors' disclosures, and the nature of the loan covenants that transactions contain.

Academic proposals to grant environmental claimants priority under Article 9 also seek to allocate environmental costs to secured lenders. Under this approach, environmental claims would be satisfied out of the debtor's assets before secured lenders' claims are satisfied. The basic proposal is that secured lenders' claims be subordinated to the claims of state actors that incur toxic waste cleanup costs, regardless of whether or not the secured lenders were owners or operators as defined in the CERCLA. Both this idea and CERCLA liability are, essentially, about ensuring that environmental claims get paid. They are about preventing scenarios in which environmental costs that are a company's responsibility are transferred to the public because the company cannot pay after its secured creditors satisfy their claims.

The point here is to recognize that others have sought to allocate environmental costs to secured lenders and to contrast the EPMSI to these liability-driven approaches to such allocation. Again, the concept of the EPMSI asks: why look exclusively to government subsidies to induce investment in environmental sustainability when commercial law devices also could do so? Proposals for CERCLA liability and environmental claimant priority, in theory, should incentivize better practices. If secured lenders could be liable for cleanup costs, then they should use their monitoring and directive power to ensure that debtors do not incur these types of liabilities.

The EPMSI is about incentivizing better practices in a more direct way. If a secured lender is unwilling to finance better environmental practices, then it will risk subordination to a financer who will. The EPMSI is not a measure to deal with costs of environmental liability after they arise. It is a measure to incentivize funding for new activities and investments to improve environmental impact going forward. It is a collateral-security device that companies and creditors could elect to use to fund activities that are environmentally progressive. Secured parties would have some choice under the EPMSI rules. They could figure out how to fund environmental practices themselves, attempt to contract around or minimize exposure to EPMSI creditor risk, ¹²⁶ or accept subordination to EPMSI creditors.

Many states currently incentivize investment in better environmental practices by offering tax credits. 127 States offer tax deductions for investments in, for example, switching to solar power. Additionally, the federal government and state governments offer assistance with financing environmental practices. 128 This assistance includes loan insurance, guaranty, grant, and low-interest loan programs to help businesses fund various investments in improved environmental sustainability. For example, California's Integrated Waste Management Board provides direct loans to businesses that use postconsumer or secondary waste materials to manufacture new products, or

^{126.} See infra Part III.D.

^{127.} See supra note 20.

^{128.} See, e.g., Cal. Dep't of Energy, Funding Opportunities: Environmental Technology, http://www.calepa.ca.gov/EnviroTech/money.htm#State (providing links to various California, federal, and nongovernment financing-assistance programs for environmental technologies).

that undertake projects to reduce the waste resulting from the manufacture of a product. 129 It also provides loans to California tire manufacturers and processors for the purchase of equipment that will be used to produce tire-derived material and products. 130

These types of programs assist with funding of investments in improved environmental impact, but they do not negate the potential value of a device like the EPMSI. These programs commit public resources in contexts where, with a measure like the EPMSI, private funding might become available. The proposed EPMSI could induce private financers to fund more environmental initiatives. Also, government financial assistance programs are especially important for activities that may not receive private funding regardless of whether or not debtors can issue high-priority debt to financers. The EPMSI may cause some of the activities currently undertaken with government financing assistance to become viable without government help. Government resources could then be devoted elsewhere, towards more funding of efforts for which private funds will be hard to procure in any event, or towards environmental cleanup and protection.

Government subsidies for "green" investment allocate the costs of inducing such investment to the public. One could argue that a device like the EPMSI that allocates costs to private parties is not as desirable as public subsidies because, if an EPMSI were enacted, secured lenders would charge more for credit and lend less, passing costs on to companies in ways that hinder growth. Allocating costs of environmental impact to secured creditors would cause secured creditors to restrict credit, which would hurt companies and could also hurt the environment.

The threat of credit constriction is a common refrain that secured creditors make in response to any proposal that involves reducing the scope of secured creditors' claims.¹³¹ The extent to which EPMSI rules would result in a level of credit constriction that would reduce available capital and value-adding investments presents a chain of unanswered questions.

We can assume that creditors, to some extent, will lend less if EPMSI rules were enacted. This fact does not justify rejecting consideration of the EPMSI concept. It just complicates fundamental questions surrounding the idea of an EPMSI. What is better: maximum access to credit or the capacity to issue high-priority debt to fund improvements in environmental impact? Responding to imminent environmental problems will be costly; failing to adequately respond would be much more costly. The

^{129.} See Recycling Mkt. Dev. Zones (RMDZ): Revolving Loan Program, http://www.ciwmb.ca.gov/RMDZ/Loans/#Use.

^{130.} See California Integrated Waste Management Board: Tire Equipment Loan Program, http://www.ciwmb.ca.gov/Tires/Loans/Equipment/Default.htm.

^{131.} See Hughes, Aesthetics of Commercial Law, supra note 16, at 735–36; Warren, supra note 112, at 1378–79; see also Symposium, Meeting of OAS-CIDIP-VI Drafting Committee on Secured Transactions, 18 ARIZ. J. INT'L & COMP. L. 311, 453–63 (2001) (participants voice concerns about absolute priority and are met, in several instances, with statements of the necessity of full priority for cheapening access to credit).

^{132.} Fundamental questions include inquiries about socially and economically desirable levels of growth. *See generally* JAMES GUSTAVE SPETH, THE BRIDGE AT THE EDGE OF THE WORLD: CAPITALISM, THE ENVIRONMENT, AND CROSSING FROM CRISIS TO SUSTAINABILITY (2008).

perennial threat of credit constriction does not exempt UCC Article 9 from being a potential site for innovation as lawmakers search for ways to induce private investment in environmental sustainability.

This Article does not set out to establish that a collateral security device like the EPMSI is better than or should supplant government subsidies to induce investment in environmentally sound practices. Rather, it seeks to show, in a concrete way, how we could enact commercial finance rules to induce "green" investment.

Some may consider any proposal that would result in credit constriction to be bad or unjustified unless and until its benefits were proven to outweigh the costs associated with credit constriction. This type of proof is extremely difficult, if not impossible, to make. The difficulty of measuring in advance the benefits of a proposal like the EPMSI does not eliminate the proposal's value. Questions about how best to induce desirable modes and levels of investment are precisely what this work hopes to invoke.

C. Proposed Section 9-324B

The PMSI and PrMSI rules provide a template for provisions that could create an "environmental-practices-money security interest." The code could define a range of extensions of credit that would be "environmental-practices" credit, and then encourage this type of investment by enacting priority rules that enable the investor to have priority in advance of the debtor's earlier secured lenders. The purpose of presenting draft provisions 9-324B and 9-103B in this Article is to make the EPMSI concept as concrete as possible.

EPMSI rules would include provisions defining "environmental practices" and "environmental-practices-money collateral" as well as provisions specifying notice and priority rules for these interests. Part III.A below discusses how to craft the requisite definitions. Proposed sections 9-324B and 9-103B track, without substantive modification, the provisions contained in uniform sections 9-324 and 9-103, and model sections 9-324A and 9-103A, that govern ancillary matters, such as the order of application of payments in section 9-103(c). Where the EPMSI concept does not call for departure from current formulations, they are kept and imported into the draft EPMSI provisions.

Notice and priority provisions could be drafted as follows:

- 9-324B. Priority of Environmental Practices Money Security Interests.
- (a) Except as otherwise provided in subsections (c), (d) and (e), if the requirements of subsection (b) are satisfied, a perfected environmental-practices-money security interest in environmental-practices-money collateral has priority over a conflicting security interest in the same collateral and, except as otherwise provided in Section 9-327, also has priority in their identifiable proceeds.
- (b) An environmental-practices-money security interest has priority under subsection (a) if:
- (1) the environmental-practices-money security interest is perfected by filing when the environmental-practices-money secured party first gives new value to enable the debtor to engage in environmental practices;

- (2) the environmental-practices-money secured party sends an authenticated notification to the holder of the conflicting security interest not less than 10 or more than 30 days before the environmental-practices-money secured party first gives new value to enable the debtor to engage in environmental practices if the holder had filed a financing statement before the date of the filing made by the environmental-practices-money secured party; and
- (3) the notification states that the environmental-practices-money secured party has or expects to acquire an environmental-practices-money security interest in the debtor's property and provides a description of the environmental-practices-money collateral.
- (c) Except as otherwise provided in subsection (d) or (e), if more than one security interest qualifies for priority in the same collateral under subsection (a), the security interests rank according to priority in time of filing under Section 9-322(a).
- (d) To the extent that a person holding a perfected security interest in environmental-practices-money collateral that is the subject of an environmental-practices-money security interest gives new value to enable the debtor to engage in environmental practices and the value is in fact so used, the security interests rank according to priority in time of filing under Section 9-322(a). 133
- (e) To the extent that environmental-practices-money collateral is also purchase-money collateral [or production-money collateral], ¹³⁴ the notice and priority rules applicable to purchase-money security interests under Section 9-324 [or production-money security interests under Section 9-324A] ¹³⁵ shall govern. ¹³⁶

These provisions track, structurally and conceptually, the provisions regarding priority of PMSIs in uniform section 9-324 and of PrMSIs in model section 9-324A.

Sections 9-324 and 9-324A specify when the holder of a super-priority security interest will have priority in advance of earlier secured creditors. In other words, these sections specify when the super-priority-interest exceptions to the first-in-time, first-in-

133. This subsection (d) tracks 9-324A(d), which, according to the official comments, is designed to "make explicit" the idea that the notice provisions of subsection (b) enable secured creditors to avoid subordination by funding new activities. Official comment 2 to UCC model section 9-324A reads:

[T]o qualify for priority under this section, the production-money secured party must notify the earlier-filed secured party prior to extending the production-money credit. The notification affords the earlier secured party the opportunity to prevent subordination by extending the credit itself. Subsection (d) makes this explicit. If the holder of a security interest in production-money crops which conflicts with a production-money security interest gives new value for the production of the crops, the security interests rank according to priority in time of filing under Section 9-322(a).

- U.C.C. art. 9 app. 2 § 9-324A cmt. 2 (2005) (model section).
 - 134. To be included if the state has enacted U.C.C. model section 9-324A.
 - 135. To be included if the state has enacted U.C.C. model section 9-324A.
 - 136. See infra Part III.C for discussion of notification requirements.

right rules in section 9-322 apply. Proposed section 9-324B specifies when the exception to the first-in-time, first-in-right priority rule should apply to environmental-practices-money creditors. Part III.B below discusses the scope of environmental practices money collateral. Part III.C discusses in greater detail the notice rules in proposed section 9-324B(b).

As proposed subsection 9-324B(e) contemplates, some extensions of credit that qualify as environmental-practices-money credit would enable debtors to acquire equipment or other goods such that they would also be purchase-money credit. In these cases, subsection 9-324B(e) makes clear that the notice and priority provisions applicable to PMSIs will control. When purchase-money credit is available for a debtor to acquire new goods, the fact that these goods will improve the environmental impact of the debtor's business does not necessitate recharacterization of a PMSI as an EPMSI.

The same is true under the proposed provision with respect to the PrMSI in jurisdictions that have enacted section 9-324A. Existing PrMSI notice and priority rules prevail under draft 9-324B(e) if an extension of production-money credit also fits the definition of environmental-practices-money credit. Again, the idea is that when production-money credit is available for a debtor to invest in the production of farm products, the fact that a farmer uses environmentally progressive methods does not necessitate recharacterization of a PrMSI as an EPMSI.

Of course, states could choose to go with EPMSI treatment in these scenarios. This could make sense if a state wanted to give EPMSIs priority over later arising PMSIs or PrMSIs, for example. A more expansive approach to using the super-priority interest concept to create incentives to extend credit for environmentally progressive investments may well be desirable from an environmental standpoint. But it may require revisions to Article 9 that go beyond adding the new provisions 9-324B outlined above and 9-103B below to the existing statutory structure.

Enacting a preference for following the PMSI and PrMSI rules would facilitate clarity given that commercial actors are already operating with the PMSI and PrMSI rules. It seems that the EPMSI rules would be most clear and useful if they open up a new class of super-priority credit without disrupting the rules pertaining to existing classes of such credit. The issue of priority among conflicting claims by multiple super-priority interest holders is not daunting so long as the code treats all super-priority interests equally.

III. LOGISTICS

There are two main challenges to defining the scope of an EPMSI. The first challenge is defining the range of credit extensions that would give rise to this type of interest. The second challenge is determining to what assets an EPMSI should attach, given that environmental-practices-money creditors may be providing services or other value and looking to the same assets as earlier creditors for security.

Part A presents options for defining "environmental practices." Part B discusses EPMSI collateral and how different EPMSI definitional provisions would affect the potential for dilution of earlier creditors' claims. Part C explains the proposed notice-to-earlier-creditors rules and how they would help to contain the threat of dilution. Part D considers the potential effects of negative pledge clauses on the implementation of EPMSI rules.

A. Defining Environmental Practices

UCC Article 9 currently contains definitions of "purchase-money collateral" and "purchase-money obligation" in section 9-103. These definitions are relatively straightforward; the code permits PMSIs only in goods. 139

Appendix II to Article 9 contains definitions of "production-money crops" and "production-money obligation." Under these provisions, the range of extensions of credit that yield production-money interests include all obligations "incurred for new value given to enable the debtor to produce crops." Production of crops includes "tilling and otherwise preparing land for growing, planting, cultivating, fertilizing, irrigating, harvesting, and gathering crops, and protecting them from damage or disease." The definition contemplates many different types of extensions of credit. PrMSI holders may extend credit for a debtor to acquire goods such as seed and fertilizer. At the same time, a wide range of service providers could be PrMSI holders.

As mentioned above, both the PMSI and PrMSI rules under Article 9 stem from older commercial law doctrines and statutes that give them shape. The concept of environmental practices, on the other hand, is new. This magnifies the need to craft careful and appropriate definitional provisions. On some level, a proposal that could yield uncertainty regarding the scope of security interests seems anathema to the objectives of Article 9. 144 At the same time, Article 9 has potential as a site for rules meant to induce private investment in environmental sustainability. Drawbacks to and costs of potential uncertainty surrounding the scope of security interests are factors to consider in assessing the desirability of an EPMSI. For example, if the range of investments that qualify as "environmental-practices" investments is uncertain, then secured creditors would likely assume a broad range, while EPMSI creditors, conversely, would likely assume a narrow range. In this way, uncertainty in the scope of an EPMSI could add to secured credit's costs in a way that does not produce corresponding benefits to the debtor, the environment, or an EPMSI creditor. The discussion of definition and notice provisions below concerns both containment of uncertainty and mitigation of its effects.

The most difficult provisions to craft are subsections defining "environmental practices" and "environmental-practices-money collateral." For purposes of an EPMSI, "environmental practices" should generally refer to practices, processes, or projects that businesses undertake to improve the impacts that their activities have on natural resources. This is a broad and potentially amorphous category of undertakings. People

^{137.} U.C.C. § 9-103(a)(1).

^{138.} Id. § 9-103(a)(2).

^{139.} *Id.* § 9-103(b), (c). Difficulties in determining whether or not an interest is a PMSI can stem from vagueness about what constitutes a close nexus between the loan transaction and the purchase transaction. The collateral itself is always goods (or proceeds of goods) acquired with funds from a creditor.

^{140.} U.C.C. art. 9 app. II.

^{141.} Id.

^{142.} *Id*.

^{143.} See id.

^{144.} Cf. Heather Hughes, Counterintuitive Thoughts on Legal Scholarship and Secured Transactions, 55 Buff. L. Rev. 863, 878–79 (2007).

commonly invoke the concept of "environmental sustainability" to refer to the goals of these kinds of practices. But defining "environmental sustainability" is complicated such that defining environmental practices as practices that improve environmental sustainability compounds the challenge.

Nonetheless legislatures, industry groups, international organizations, and others have engaged in defining the concepts of "environmental sustainability," "sustainable development," "renewable energy," and other similar concepts for purposes of lawmaking and for defining best practices. 145 One approach to formulating a workable definition of "environmental practices" for purposes of the EPMSI is to explore these efforts. The task is to cull a working definition of "environmental practices" from existing definitions of "environmental sustainability" and "renewable energy." This working definition must be concrete enough to define a particular type of extension of credit, yet broad enough to refer to this type of credit as it may arise in diverse contexts, as a wide range of industries, debtors, and creditors could benefit from an EPMSI.

A second approach to defining "environmental practices" is to forego articulating a substantive definition in Article 9 itself and instead cross reference other, existing statutory provisions that concern environmental impact. Though this approach may make EPMSI definitional provisions easier to draft, it may raise concerns in contexts where the cross-referenced provisions contain definitions that are broad, imprecise, or that were not drafted with secured transactions in mind.

The following proposed provisions present alternatives reflecting these potential approaches to defining environmental practices. Subparts1 and 2 below discuss the alternatives in turn. Definitional provisions could be structured as follows:

9-103B. ENVIRONMENTAL-PRACTICES-MONEY SECURITY INTEREST; APPLICATION OF PAYMENTS; BURDEN OF ESTABLISHING

- (a) Definitions. In this section:
- (1) "environmental-practices-money collateral" means [ALTERNATIVE 1: personal property that secures an environmental-practices-money obligation] [ALTERNATIVE 2: intellectual property acquired or developed with environmental-practices-money credit] [ALTERNATIVE 3: deposit accounts of the debtor containing cash derived from savings in energy costs]; 146
- (2) "environmental-practices-money obligation" means an obligation of an obligor incurred as all or part of the price of goods or services or for value given to

^{145.} See generally DANIEL A. FARBER, JODY FREEMAN, ANN E. CARLSON & ROGER FINLEY, CASES AND MATERIALS ON ENVIRONMENTAL LAW 32 (7th ed. 2006) (observing that "[t]he literature attempting to define what sustainable development means and how to implement it as a coordinating policy principle is burgeoning").

^{146.} These three alternatives are proposals for consideration. There may be other formulations that make sense depending on the tolerance for risk of dilution of earlier creditors' claims, and the particular types of environmental practices in which companies in any given jurisdiction are likely to engage. Each of these three alternatives is discussed below.

enable a nonconsumer¹⁴⁷ debtor to engage in environmental practices if the value is in fact so used; and

- (3) "environmental practices" means [ALTERNATIVE 1: practices, processes, or projects undertaken to improve environmental impact or sustainability] [ALTERNATIVE 2: engagement of services or acquisition of personal property for the purpose of improving energy efficiency, reducing carbon emissions, increasing use of renewable energy, retaining ecosystem services, or minimizing loss of plant or animal habitat] [ALTERNATIVE 3: An investment is one in environmental practices if it improves the environmental impact of the debtor's activities. An investment does this if it reduces carbon emissions made by the debtor or caused by the debtor's products. An investment does not improve the environmental impact of the debtor's activities if it is not used to make a material change 148 in the debtor's processes, practices, or property intended to improve the environmental impact of debtor's business.] [ALTERNATIVE 4: engagement of services or acquisition of property [that entitles the debtor to a tax benefit authorized pursuant to Colo. Rev. Stat. 31-20-101.3] or [to effectuate a "direct emissions reduction," "emissions reduction measure," or "market-based compliance mechanism" as defined in California Health and Safety Code §§ 38505(e), (f), and (k), respectively].
- (b) Environmental-practices-money security interest. A security interest is an environmental-practices-money security interest to the extent that property is environmental-practices-money collateral with respect to that security interest.
- (c) Application of payment. If the extent to which a security interest is an environmental-practices-money security interest depends on the application of a payment to a particular obligation, the payment must be applied:
- (1) in accordance with any reasonable method of application to which the parties agree;
- (2) in the absence of the parties' agreement to a reasonable method, in accordance with any intention of the obligor manifested at or before the time of payment; or
- (3) in the absence of an agreement to a reasonable method and a timely manifestation of the obligor's intention, in the following order:
- (A) to obligations that are not secured; and
- (B) if more than one obligation is secured, to obligations secured by environmental-practices-money, purchase-money, or production-money security interests in the order in which those obligations were incurred.

^{147.} This EPMSI proposal is limited to the commercial context. EPMSIs might make sense in the consumer context, but the analysis in this Article is rooted in—and limited to—understandings of commercial credit and how Article 9's priority and notice rules function in the commercial loan context.

^{148.} See infra Part III.A.1.

- (d) No loss of status of environmental-practices-money security interest. An environmental-practices-money security interest does not lose its status as such, even if:
- (1) the environmental-practices-money collateral also secures an obligation that is not an environmental-practices-money obligation;
- (2) collateral that is not environmental-practices-money collateral also secures the environmental-practices-money obligation; or
- (3) the environmental-practices-money obligation has been renewed, refinanced, consolidated, or restructured.
- (e) Burden of proof. A secured party claiming an environmental-practices-money security interest has the burden of establishing the extent to which the security interest is an environmental-practices-money security interest.

This proposed set of definitional and related provisions is modeled on the definitional provisions for the PrMSI contained in section 9-103A as enacted in several states. The provisions of 9-103A appear modeled on definitional provisions for purchase-money credit.

Proposed section 9-103B(c) provides rules for situations in which the extent of an EPMSI needs clarification based on application of a payment. The extent of an EPMSI would be limited to extensions of credit that are actually used for environmental practices. If determination of the amount outstanding on any such obligation—and therefore the extent of the interest at any given point in time—requires classification of a payment by the debtor, the parties follow these rules. The rules allow for agreement of the parties or for application in accordance with the obligor's intention. In the absence of these, payments are applied to unsecured obligations, and then to superpriority security interests in the order in which they arose. 149

1. Definitions in Reference to a Set of Concepts

There is a range of concepts—some more vague than others—to which the term "environmental practices" could refer. The first three alternatives provided in proposed section 9-103B(a)(3) reflect this approach. This subpart discusses them in turn. The safe-harbor provisions in Alternative Three could be enacted along with the definitions in Alternatives One or Two.

Alternative One is obviously very broad, and it may be the least desirable of the proposed rules in terms of clarity. However, a state legislature may nonetheless want to take this kind of approach for reasons discussed below.

General definitions of sustainability tend to be stated very abstractly. They articulate general standards that, if breached, may result in liability. They are not

It is "development that meets the needs of the present without compromising the ability of

^{149.} Again, where the EPMSI concept does not require departure from existing formulations of section 9-103 or section 9-103A rules, proposed section 9-103B tracks them. 150. One commonly cited, general definition of sustainable development comes from the World Commission on Environment and Development (the Brundtland Commission) in 1987.

necessarily designed to define a set of practices that result in sustainability. Conversely, the concrete definitions of environmental sustainability that exist tend to be industry specific. These definitions are so detailed that they tend to be useful only for companies involved in the particular industry for which the standards are articulated. Many commentators have discussed the vagueness of "sustainability" and have worked to make it more precise. 152

Though definitional problems persist, businesses have used the concept of sustainability to create strategies and processes that promote responsibility for the environment. Since 1999, Dow Jones has published what it calls "sustainability indexes" that rate corporations pursuant to a "Corporate Sustainability Assessment." Dow Jones defines "corporate sustainability" as "a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments." This definition is abstract, but for purposes of creating a sustainability index it may be perfectly serviceable. It relies on an assessment to identify sustainable practices where they exist.

Section 9-103B(a)(3) requires a definition that references a category of practices that is specific enough for commercial actors to know when they are creating an EPMSI, yet general enough to refer to the potentially broad and diverse set of business practices that improve environmental impact. Under the draft rules presented here, an EPMSI creditor is required to give notice to earlier creditors before the EPMSI is established. Debtors and creditors need to be able to know whether they are creating an EPMSI in advance of the extension of credit that finances the qualifying practice.

future generations to meet their own needs." Encyclopedia of the Atmospheric Environment, http://www.ace.mmu.ac.uk/eae/english.html (follow "Sustainability" hyperlink; then follow "Sustainable Development" hyperlink); Bruntland Report, http://www.ace.mmu.ac.uk/eae/english.html (follow "Sustainability" hyperlink; then follow "Brundtland Report" hyperlink).

151. For examples, see the industry-specific standards articulated by the International Finance Corporation and the World Bank that are cross referenced as standards for Equator Principles institutions. *See* Equator Principles, *supra* note 121.

152. See, e.g., David R. Hodas, The Role of Law in Defining Sustainable Development: NEPA Reconsidered, 3 Widener L. Symp. J. 1, 1–2 (1998) (discussing "[s]ustainable development's persistent definitional problem" and noting that "[i]t is much easier to identify practices that are not sustainable than to define what sustainable development is"); Matthew F. Jaksa, Note, Putting the "Sustainable" Back in Sustainable Development: Recognizing and Enforcing Indigenous Property Rights as a Pathway to Global Environmental Sustainability, 21 J. ENVTL. L. & LITIG. 157, 179 (2006) (noting that the Brudtland definition is "notorious for its vagueness" and that "many have tried to improve it or infuse it with specific operational standards"); Nancy J. King & Brian J. King, Creating Incentives for Sustainable Buildings: A Comparative Law Approach Featuring the United States and the European Union, 23 VA. ENVTL. L.J. 397, 400–01 (2005) (observing that "sustainable development is a process rather than an outcome . . . [e]ven without a precise definition, businesses and governments can use the concept of sustainability to generate strategies that promote economic development in a socially responsible manner while protecting the environment.").

153. See Dow Jones Sustainability Indexes, http://www.sustainability-index.com; Dow Jones Sustainability Indexes, Corporate Sustainability Assessment, http://www.sustainability-index.com/07_htmle/sustainability/corpsustainability.html [hereinafter Corporate Sustainability].

154. See Corporate Sustainability, supra note 153.

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The Dow Jones Sustainability Index suggests that, even though sustainable practices are hard to define in the abstract, perhaps commercial actors know them when they see them. A legislature could determine that if earlier creditors receive notice of EPMSIs before they arise, the burden should be on the earlier creditors to contest the impending investment's EPMSI status. If there is no challenge, and the super-priority creditor's funds are in fact applied by the debtor to invest in practices or processes intended to improve sustainability, then an EPMSI arises.

This approach allows private actors to work out among themselves, to a large extent, what would constitute "environmental practices." If disputes arise, then courts would participate in the process of delineating what constitutes "environmental practices" for purposes of section 9-103B(a)(3). While clarity at the outset could be an issue (and lack of clarity itself has costs) this approach would create an expansive range of contexts in which private actors could utilize the EPMSI.

Alternative Two presents the same general considerations as Alternative One, except that it refers to a set of concepts that is more specific than "environmental impact or sustainability." By reigning in the definition of "environmental practices," Alternative Two clarifies the kinds of activities that could give rise to an interest with later-in-time priority, if they are undertaken with EPMSI credit. If a legislature finds clarity to be more important than creating a security device with broad applicability, more specific formulations that also contain substantive definitions of concepts like "renewable energy" or "reducing carbon emissions," could be appropriate.

Again, earlier creditors could contest EPMSI status upon receiving the notice required by proposed section 9-324B, leaving the debtor and the later-in-time creditor to work out whether they believe that the later-in-time credit will finance activities that are clearly within the contemplation of section 9-103B(a)(3). This approach raises the questions of (1) whether the rules should require an objection notice within a certain time after receipt of section 9-324B notice from the debtor, and (2) whether failure to object should constitute a waiver of rights in a priority dispute.

If the UCC drafters themselves were to consider adding sections 9-324B and 9-103B to NCCUSL's version of Article 9, they could provide official commentary as to what activities are or are not "environmental practices." State legislatures considering 9-103B could create a regulatory board that comments on, or certifies in response to inquiries, what constitutes "environmental practices."

This approach has drawbacks, of course. Shupack points out that looking to the state to provide difficult UCC definitions "has the consequence of . . . constant state supervision of entrepreneurial activity or a set of rigid statutory definitions." The former creates extensive state involvement in commercial affairs. But the latter, he continues, "stands in contradiction to the one lesson we have learned from our generation's experience with Article 9: the extent of entrepreneurial innovation." He observes that "[a]ny statutory reform process risks institutionalizing the status quo." ¹⁵⁷

Shupack's observations are relevant to proposed section 9-103B. If commercial actors needed to look to the state for a continually evolving definition of

^{155.} Shupack, *supra* note 98, at 2279 (responding to a 1994 proposal by Douglas G. Baird that large pieces of capital equipment be given electronic titles). The "rigid statutory definition[]," *id.*, he refers to would be of property, specifically capital equipment.

^{156.} *Id*.

^{157.} Id.

"environmental practices" for EPMSI purposes, that would create a lot of state involvement in commercial affairs. However, defining "environmental practices" entirely within the four corners of 9-103B could institutionalize the status quo. This institutionalization could codify a conception of environmental practices based on dominant practices today, when approaches to improving environmental impact are rapidly evolving.

One response here could be to craft a definition of "environmental practices" that includes safe-harbor provisions. Such provisions could offer clear instructions to parties engaging in activities that currently fall squarely under "environmental practices," and yet leave open the possibility of new practices. Alternative Three in proposed section 9-103B(a)(3) presents an example of such a provision. A safe harbor could enable debtors and creditors to transact with certainty about the security interest's EPMSI status. At the same time, it would not prohibit debtors and investors with a greater appetite for risk from entering into transactions that they believe are EPMSI transactions, even though the investment at issue does not fall into previously contemplated categories of "green" investment.

The objective of EPMSI rules would be to facilitate improvements in businesses' environmental impacts. EPMSI rules should not leave companies that are in the business of developing "green" environmental technologies or products with last-intime priority default rules. The safe-harbor provisions in Alternative Three in section 9-103B(a)(3) presented above exclude from "environmental practices" activities that are "not used to make a material change in debtor's processes, practices, or property intended to improve environmental impact." An environmental technology or products business could avail itself of EPMSI financing if it were investing in alterations to its own practices of developing green technologies or products. Such a business could not avail itself of EPMSI financing simply to continue its course of business in which it makes environmentally progressive products or technologies, because, in that case, there would be no "material change" to the debtor's activities.

2. Definition by Cross-Reference to Statutory Provisions

A majority of states in the United States have enacted legislation addressing the issue of climate change. These statutes include definitions of terms such as "renewable resource," "renewable energy," or "alternative fuel." These existing statutes may provide a structure with which to define "environmental practices" for purposes of an EPMSI. Instead of drafting a substantive definition to be stated in subsection 9-103B(a)(3) itself, this subsection could cross-reference definitions laid out in other state statutory provisions.

As mentioned above, this approach has limitations. It may make EPMSI definitional provisions easier to draft, but the definitions cross-referenced may be broad, imprecise, or not drafted from a secured transactions perspective. These other statutory definitions may have been promulgated in a context in which a state agency exists to elucidate the meanings of terms. Parties to secured transactions could perhaps seek clarification

158. See Pew Ctr. on Global Climate Change, U.S. States & Regions, http://www.pewclimate.org/states-regions (providing a state-by-state survey of this legislation).

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from agencies regarding whether particular practices meet statutory definitions, but this too can be problematic. 159

The proposal discussed here contemplates a situation in which a state legislature considering enactment of EPMSI rules drafts the section 9-103B definition of "environmental practices" by cross-referencing definitions found in a statute enacted in the state. ¹⁶⁰ A state could consider cross-referencing definitions contained in federal or other states' legislation, but this approach raises issues regarding delegation of lawmaking that are beyond the scope of this project. ¹⁶¹

Also, definitions enacted in state climate change statutes may evolve over time or be elucidated by case law or regulation. Lawmakers and commercial actors would need to be sensitive to this kind of evolution if a definition of "environmental practices" for UCC purposes were tied to definitions in other statutes.

In any event, the proposed Alternative Four contains two examples of how cross-referencing for purposes of defining "environmental practices" might be done:

[ALTERNATIVE 4: engagement of services or acquisition of property [that entitles the debtor to a tax benefit authorized pursuant to Colo. Rev. Stat. 31-20-101.3¹⁶²] *or* [to effectuate a "direct emissions reduction," "emissions reduction measure," or "market-based compliance mechanism" as defined in California Health and Safety Code §§38505(e), (f) and (k), ¹⁶³ respectively].

The statutory provisions referenced in Alternative Four are just two of many possible examples. States have enacted a wide variety of provisions in conjunction with their respective approaches to climate change legislation.

The Colorado code section referenced here authorizes governing bodies in the state to offer, notwithstanding any law to the contrary, incentives "in the form of a municipal property tax or sales tax credit or rebate, to a residential or commercial property owner who installs a renewable energy fixture on his or her residential or commercial property." A "renewable energy fixture" means "any fixture, product, system, device, or interacting group of devices that produces energy . . . from renewable resources, including, but not limited to, photovoltaic systems, solar thermal systems, small wind systems, biomass systems, or geothermal systems."

^{159.} See supra notes 154-56 and accompanying text.

^{160.} Enacting a provision in UCC Article 9 that cross-references definitions in another statute enacted by the same legislature could, potentially, raise delegation issues depending on the processes by which UCC and other legislation are introduced and enacted. But the issue is not as prominent, obviously, as in situations involving cross-reference to another jurisdiction's law

^{161.} See generally Harold J. Krent, Delegation and Its Discontents, 94 COLUM. L. REV. 710, 723 (1994) (reviewing DAVID SCHOENBROD, POWER WITHOUT RESPONSIBILITY (1993)).

^{162.} COLO. REV. STAT. § 31-20-101.3 (West Supp. 2008) (authorizing tax incentives for installation of "renewable energy fixtures" such as solar or wind systems on residential or commercial property).

^{163.} These are provisions of the California Global Warming Solutions Act of 2006, CAL. HEALTH & SAFETY CODE §§ 38500–01, 38505, 38510, 38530, 38550–51, 38560–62, 38564–65, 3870–71,38580, 38590–99 (West Supp. 2009). *See infra* notes 166–69 and accompanying text.

^{164.} COLO. REV. STAT. § 31-20-101.3(1).

^{165.} Id. § 31-20-101.3(2).

"Environmental practices" for purposes of an EPMSI could be defined as engagement of services or acquisition of property that entitles the debtor to a tax deduction authorized by these provisions. The proposed EPMSI rules apply only to nonconsumer debtors, so any tax benefits for consumers relating to residential property could not (at least under the rules presented here) be financed with environmental-practices-money credit.

A cross-reference to these Colorado provisions would require revisiting section 9-334 of the UCC regarding priority of interests in fixtures. Section 9-334(d) could be amended to include EPMSIs along with PMSIs as interests that, in accordance with section 9-334, can have priority in advance of an encumbrancer or owner of real property.

Acquisition of goods—the actual solar panels or wind turbines, et cetera—in conjunction with an investment that would give rise to a tax benefit could be financed with purchase-money credit. The environmental-practices-money creditor, in this context, would be important to the extent that a debtor must invest in services or assets other than goods to make an investment in a "renewable-energy fixture." A creditor that both provides services and finances the acquisition of a renewable-energy fixture would have a purchase money interest in the fixture itself and an environmental-practices-money interest in the fixture and any other related environmental-practices-money collateral.

The California Global Warming Solutions Act of 2006¹⁶⁶ offers another example of state climate change legislation that EPMSI provisions could cross-reference. This Act authorizes the State Air Resources Board to promulgate regulations and programs to reduce greenhouse gas emissions. The State Air Resources Board is "a state agency charged with monitoring and regulating sources of emissions of greenhouse gases that cause global warming in order to reduce emissions of greenhouse gases." ¹⁶⁷

This board is authorized, among other things, to issue regulations creating "market-based compliance mechanisms" to reduce greenhouse gas emissions. ¹⁶⁸ Under the statute, "market-based compliance mechanism" means either of the following:

- (1) A system of market-based declining annual aggregate emissions limitations for sources or categories of sources that emit greenhouse gases.
- (2) Greenhouse gas emissions exchanges, banking, credits, and other transactions, governed by rules and protocols established by the state board, that result in the same greenhouse gas emission reduction, over the same period, as direct compliance with a greenhouse gas emission limit or emission reduction measure adopted by the state board pursuant to this division.¹⁶⁹

These provisions contemplate an emissions credit or trading system. As the State Air Resources Board issues its regulations, companies must comply with emissions

^{166.} Cal. Health & Safety Code §§ 38500–01, 38505, 38510, 38530, 38550–51, 38560–62, 38564–65, 3870–71, 38580, 38590–99.

^{167.} Id. § 38510.

^{168.} Id. § 38570(a).

^{169.} Id. § 38505(k).

standards. They may comply by engaging in a market-based compliance mechanism. For purposes of an EPMSI, "environmental practices" could be defined as engagement of services or acquisition of property to effectuate an emissions reduction or a market-based compliance mechanism within the meaning of the climate-change statute.

If California, for example, were to consider EPMSI rules that cross-reference this Global Warming Solutions Act, the result could be, essentially, a type of purchase-money interest in emissions credits or "carbon credits." This possibility raises the question of whether EPMSI rules should be geared towards funding compliance with existing requirements, or, on the other hand, facilitating funding for investments that companies might not otherwise make—investments that are not required. Speaking hypothetically, if compliance with emissions caps were required by law, and the relevant emissions credit system in place permitted purchase of credits as a means of compliance, then EPMSI credit to facilitate such purchasing would allocate to secured parties costs that companies are required to incur anyway. At the same time, debtors, perhaps, could benefit from the capacity to issue low-risk debt to finance costs of compliance in situations where existing secured lenders will not do so. EPMSI credit could give companies access to a wider range of financers and a wider range of options for effectuating compliance. The appropriate scope and applicability of the EPMSI concept, in this regard, requires further contemplation and debate.

B. Dilution Potential and EPMSI Collateral

This section assesses approaches to the scope of "environmental practices" and "environmental-practices-money collateral" in terms of relative potential for dilution. In the EPMSI context, the super-priority interest creditor would provide new value, but not necessarily to finance the acquisition of new assets. In some instances, investment in environmental practices may yield very tangible returns; in others, the value of environmental practices may be harder to calculate or may be externalized. ¹⁷⁰

The extent of an EPMSI under the proposed rules is limited to value given to engage in environmental practices "if the value is in fact so used." The EPMSI arises when, along with the other attachment requirements of section 9-203, the creditor gives new value to enable the debtor to engage in environmental practices. Article 9 defines "new value" to mean "(i) money; (ii) money's worth in property, services, or new credit; or (iii) release by a transferee of an interest in property previously transferred to the transferee." New value "does not include an obligation substituted for another obligation." So, the priority granted to the EPMSI holder is in exchange for new value added to the debtor and is only enforceable to the extent of the investment the debtor makes in environmental practices.

At the broad end of the spectrum in terms of EPMSI collateral, EPMSI rules could create a later-in-time interest with priority in all personal property assets of the debtor.

^{170.} In the PrMSI context, extensions of production-money credit must be applied to the production of farm products that then become PrMSI collateral. The extent of the PrMSI is limited to credit advanced that is actually used in the production of crops or other farm products. *See* U.C.C. art. 9 app. 2 § 9-324A (2005) (model section).

^{171.} See supra text accompanying notes 146-49.

^{172.} U.C.C. § 9-102(a)(57).

^{173.} Id.

This would be the case if, for example, a state did not limit the assets in which the EPMSI creditor has an interest. The proposed definition of "environmental-practicesmoney collateral" presented as Alternative One in draft section 9-103B(a)(1) reflects this approach. This definition would create a type of interest that would dilute earlier creditors' claims in the event of insolvency to the extent of new value provided to engage in environmental practices. Again, creditors could insulate themselves from risk by overcollateralizing their interests or using contract provisions like negative pledge covenants. 174

The broad scope EPMSI is not the only possible formulation. We can imagine broader and narrower versions of EPMSI. It is conceivable that EPMSI rules could limit EPMSI collateral to a segregated asset to which earlier creditors are not looking for security (hence, minimizing dilution risk). For example, consider the current industry for energy efficiency consulting. Energy audit firms in certain contexts offer to perform services to make facilities more energy efficient, accepting as payment in some instances a percentage of the savings in energy costs over time. ¹⁷⁵

This arrangement assumes that the company engaging the services has a method of calculating the savings, presumably based on historical use rates. Under an EPMSI scheme, these service providers could take a secured interest in the savings by requiring the company to deposit the difference between its prior energy costs and its new energy costs periodically into a deposit account in which the service provider takes an interest and perfects by control. (In this scenario the EPMSI creditor would take a security interest in the deposit account as original collateral.) The service provider could have priority in a segregated asset. The proposed definition of "environmental-practices-money collateral" presented as Alternative Three in proposed section 9-103B(a)(1) reflects this approach.

This hypothetical arrangement offers one example of how EPMSI collateral could be limited to prevent dilution risk. This type of arrangement, however, may not have much, if any, impact in terms of incentivizing investments in environmental sustainability. Consultants willing to perform services in exchange for a percentage of future savings are already facilitating investments in sustainability. They do not appear to need a super-priority security interest as an incentive. Also, the security interest would not be in collateral of value at the time the secured party extends credit. This type of arrangement could very well not be worth its transaction costs.

This conclusion is conjecture, of course. Environmental industry consultants themselves could better determine whether or not an EPMSI arrangement like this one would enable more business. For example, we could imagine a company that would like to engage these services, but needs to recoup more future savings than the unsecured percentage arrangement permits. An EPMSI might facilitate a deal if the consultants were induced to accept a lower percentage of the returns if they had a first-priority security interest in an account in which the returns were deposited.

It is also conceivable that EPMSI rules could limit EPMSI collateral to a new asset that—while not necessarily as segregated or discrete as a separate deposit account—constitutes new property to which earlier creditors were not already looking for

^{174.} For a discussion of the effectiveness of such clauses, see *infra* Part III.D.

^{175.} See, e.g., Jenny Burns, Power Play: Companies Find Energy Savings in Monitoring Utility Bills, NASHVILLE Bus. J., Aug. 14, 2009, http://nashville.bizjournals.com/nashville/stories/2009/08/17/focus1.html.

security. Intellectual property could be such an asset. Alternative Two in proposed section 9-103B(a)(1) contemplates this approach.

Investment in environmental practices could, in many instances, require acquisition of licenses to use technologies, materials, or processes developed with patent or copyright protection. Or, a company may develop its own processes, materials, or programs in which it gains patent or copyright protection. In either case, through investment in environmental practices the debtor acquires new personal property that is not goods (that is, is not covered by PMSI rules) and to which earlier creditors were not looking for security.

It may not be necessary to enact EPMSI rules to effectuate new, super-priority interests that extend only to intellectual property. This narrow form of EPMSI could be enacted, perhaps, by expanding the definition of purchase-money collateral to include intellectual property, either across the board or in certain contexts.

C. Notice to Earlier Secured Creditors

One device for limiting the threat of dilution of earlier creditors' claims is to provide notice to these creditors of an impending super priority security interest. If an earlier creditor has notice that the debtor plans to grant an EPMSI, it can re-negotiate with the debtor, extend credit for environmental practices itself, or otherwise protect against the dilution threat.

Section 9-324 regarding PMSIs provides different rules for establishing the priority of purchase-money interests in three different types of collateral: non-inventory, inventory, and livestock that are farm products. The rules require that PMSI holders in inventory and livestock give notice to existing creditors within a period of time before the debtor receives possession of the purchase-money collateral. With respect to PMSIs in goods other than inventory or livestock that are farm products, the PMSI holder has priority over earlier creditors so long as the PMSI holder perfects its interest within twenty days of the debtor's receipt of possession of the goods.

Model section 9-324A regarding PrMSIs also requires that the super-priority interest holder provide notice to earlier secured creditors in order to claim exception to the first-in-time rule. However, section 9-324A requires that the PrMSI creditor send notice to earlier secured creditors within a period of time before the PrMSI creditor first gives new value to the debtor. Specifically, the PrMSI creditor must give notice to existing secured parties with UCC-1 financing statements on file between ten and thirty days in advance of extending credit.

Requiring notice in advance of extensions of environmental practices money credit would make good sense given that EPMSI creditors could dilute earlier creditors' positions. Proposed section 9-324B(b) contains an advanced-notice requirement.

^{176.} U.C.C. § 9-324(a)–(e).

^{177.} *Id.* § 9-324(b)(3), (d)(3).

^{178.} *Id.* § 9-324(a). The code does not define "possession" for purposes of this provision. Meyer, *supra* note 39, at 168–69.

^{179.} U.C.C. art. 9 app. 2 § 9-324A (model section).

^{180.} *Id.* § 9-324A(b)(2).

^{181.} See id.

The comments to model section 9-324A make clear that the reason for this rule is that it affords a prior creditor the opportunity to prevent subordination by extending credit itself, or by calling an event of default on its loan. Proposed subsection 9-324B(d)—like 9-324A(d)—is designed to "make explicit," as the official comments to 9-324A put it, the fact that "[t]he notification [required in subsection (b)] affords the earlier secured party the opportunity to prevent subordination by extending the credit itself." Under 9-324A(d), "[i]f the holder of a security interest in production-money crops which conflicts with a production-money security interest gives new value for the production of the crops, the security interests rank according to priority in time of filing under Section 9-322(a)." Proposed section 9-324B(d) would serve the same purpose as its analog in model section 9-324A.

Like in existing sections 9-324 and 9-324A, in proposed section 9-324B(b)(3), the super-priority interest creditor's notice to holders of existing security interests must provide a description of the collateral. It is unclear under the current rules for purchase and production money interests how specific this description must be. We can look to the rules for collateral descriptions sufficient for security agreements and UCC-1 financing statements for guidance. These rules tend toward permitting general descriptions of types of assets, as opposed to requiring specific references to particular assets.

For purposes of creating a valid security interest, section 9-108 states that a description of collateral is sufficient so long as it "reasonably identifies what is described." With few exceptions, reasonable identification can be made by any method that makes the identity of the collateral objectively determinable. Such methods include listing property by classification, such as "inventory" or "accounts." However, a "supergeneric description" such as "all the debtor's assets" does not reasonably identify the collateral. 187

The requirements for sufficiency of a collateral description in a UCC-1 financing statement are looser than those for security agreements. A financing statement sufficiently indicates collateral if it contains a description that meets the sufficiency requirements of section 9-108 or if it indicates that "the financing statement covers all assets or all personal property." ¹⁸⁸

For purposes of an EPMSI creditor's notice to existing secured creditors of the debtor, a description that meets the requirements of section 9-108 should suffice. Because there may not be specific, new assets acquired by the debtor as a result of an EPMSI holder's credit, a notice requirement that demands a description more specific than what section 9-108 requires would not make sense. (Debtors, of course, would be free to assign interests in assets described with more specificity.)

^{182.} See id. § 9-324A cmt. 2 (model section).

^{183.} See id.

^{184.} Id. § 9-324A(d) (model section).

^{185.} U.C.C. § 9-108(a).

^{186.} Id. § 9-108(b).

^{187.} *Id.* § 9-108(b), (c).

^{188.} Id. § 9-504.

D. Contracting Around EPMSIs

Secured parties could respond to EPMSI rules with contract provisions prohibiting debtors from assigning security interests (other than as contemplated in the contract). Promises by debtors not to grant to any other person a security interest in the assets assigned—negative pledge clauses—are quite common.

Negative pledge clauses cannot halt the creation of later security interests. Under section 9-401(b), "[a]n agreement between the debtor and secured party which prohibits a transfer of the debtor's rights in collateral or makes the transfer a default does not prevent the transfer from taking effect." Negative pledge clauses do not affect a debtor's ability to create a later security interest. They just give the earlier creditor a breach of contract action if the debtor violates the clause. Section 9-401(b) does not provide that the agreement restricting assignment itself is ineffective.

So, an earlier secured party can call a default and accelerate its loan if a debtor were to create an EPMSI despite having agreed to a negative pledge clause. But the fact that the debtor breached its contract with the earlier secured creditor would not invalidate the EPMSI itself or change the respective priorities of the creditors. As Official Comment 5 to section 9-401 makes clear, the later secured creditor can still achieve priority over the earlier secured creditor.¹⁹²

Even though negative pledge clauses do not block creation of later security interests, they are a strong deterrent. Many debtors would be unlikely to avail themselves of EPMSI credit if doing so constituted a default under their existing credit agreements. ¹⁹³ Capacity to obtain credit in the future, reputation, and a desire to avoid liability for damages are factors that make breach unattractive.

States that want to enact EPMSI rules and also preserve debtors' capacity to utilize these rules despite negative pledge clauses could do so with statutory provisions that render ineffective contract provisions making assignment of an EPMSI an event of default. State legislatures have used this kind of strategy before.

The issue of secured parties using contract provisions to discourage super-priority security interests arises in the PrMSI context as well, of course. North Carolina responded to this issue by enacting a nonuniform subsection (f) in its version of section 9-324A that makes ineffective contract provisions (1) prohibiting the creation of PrMSIs, or (2) making the creation of a PrMSI an event of default. ¹⁹⁴ In other words,

Creating or perfecting a production-money security interest shall not operate under any circumstances as a default on, an accelerating event under, or otherwise as a breach of any note or other instrument or agreement of any kind or nature to pay

^{189.} Id. § 9-401(b).

^{190.} See id. § 9-401 cmt. 5.

^{191.} See id.

^{192.} See id.

^{193.} Also, a later secured creditor that takes an interest knowing that the debtor is party to an earlier agreement containing a negative pledge clause could, potentially, encounter tort liability for interference with contractual relations. Whether and when this tort doctrine would apply, however, is unclear. See Carl S. Bjerre, Secured Transactions Inside Out: Negative Pledge Covenants, Property and Perfection, 84 CORNELL L. REV. 305 (1998).

^{194.} N.C. GEN. STAT. ANN. § 25-9-324.1 (West 2003). Subsection (f) to section 9-324A as enacted in North Carolina reads:

North Carolina's version of section 9-324A overrides contractual prohibitions on the creation of production-money security interests, including any provision making the creation of such an interest an accelerating event. Even if a farmer and secured lender expressly agree that the farmer will not grant any PrMSIs in farm products during the life of their transaction, the statute authorizes the farmer to disregard her own agreement.

It may seem that if a state legislature wanted to ensure the availability of a type of super-priority security interest, it would follow North Carolina's lead and override provisions making creation of the new interest a contractual default. However, this type of provision does not exist in the five other states that have enacted section 9-324A. It also does not exist to override clauses that prohibit the creation of PMSIs. PMSIs—and presumably PrMSIs—still arise despite the fact that secured creditors and debtors can enter into clauses making their creation a breach of contract. This may be because secured creditors agree to carve-outs to negative pledge provisions to permit certain specific new kinds of loans. In any event, a state considering EPMSI rules would want to consider, also, whether it would be appropriate to prevent parties from making the creation of an EPMSI a contractual default.

The rules in section 9-408 could be relevant in some cases to EPMSIs as well. ¹⁹⁵ This section provides that provisions in promissory notes, health-care-insurance receivables, or general intangibles are ineffective to the extent that they "would impair the creation, attachment, or perfection of a security interest" in such assets or provide that assignment of a security interest in these assets may give rise to default or breach. ¹⁹⁷ Section 9-408 is about overriding restrictions on assignment to enable assignment of interests in notes or intangibles themselves. It is about financing secured by assets that contain restrictions on assignment, not overriding restrictions on future assignments of assets securing a loan.

We can imagine a scenario, for example, where a company acquires the right to use a patent. It enters into a licensing agreement with the patent holder under which it pays \$25,000 per quarter. The licensing agreement's terms prohibit assignment of the license. If the company seeks environmental-practices-money credit and assigns an interest in the license as collateral, the restrictive terms of the license are ineffective under section 9-408. 198

There is one more twist to section 9-408. Under this section, later creditors can take effective security interests, but cannot enforce their interests to the detriment of the other party to the contract that prohibited assignment. ¹⁹⁹ So, if a debtor is party to an agreement that restricts assignment, and the debtor assigns an interest in the agreement anyway, the secured creditor cannot enforce its interests to the detriment of the other

debt, any loan or credit agreement, or any security agreement or arrangement of any kind or nature where the collateral is real or personal property.

Id.

195. These rules complicate the effectiveness of contractual restrictions on assignment in contracts that are general intangibles, promissory notes, and health-care-insurance receivables. *See* U.C.C. § 9-408.

^{196.} U.C.C. § 9-408(a)(1).

^{197.} Id. § 9-408(a)(2).

^{198.} We could imagine a similar hypothetical in which a company assigns an EPMSI in a lease, in which case section 9-407 would apply (with the same results). *See id.* § 9-407.

^{199.} Id. § 9-408.

party to the agreement. But the secured creditor will have a superior position at liquidation. It can wait for disposition of assets if the debtor cannot pay and it will prevail.

In summary, unless state legislatures seeking to enact EPMSI rules take measures such as North Carolina's 9-324A(f), secured parties could use negative pledge clauses to limit the implementation of the EPMSI. Except in cases covered by sections 9-408 or 9-407, negative pledge provisions—to the extent secured creditors used and enforced them—would discourage debtors from creating EPMSIs.

Negative pledge clauses can, currently, discourage PMSIs and PrMSIs. These clauses may pose a greater threat to the use of EPMSIs than they do to PMSIs and PrMSIs because EPMSIs would present, potentially, a greater dilution risk. Whether secured creditors use these clauses, and debtors agree to them, depends upon the particularities of parties and transactions.

IV. WHY THE EPMSI?—DISCUSSION AND CONCLUSION

One might think that if a certain investment is a good idea, then a debtor's existing creditor will finance the activity itself or will agree to subordination. Or, the debtor will have access to refinancing to remove the existing creditor all together. Opponents of PMSI priority and also of the PrMSI have made this case against super-priority security interests before. The problem lies in subjecting the debtor to earlier creditors' views of what investments are a good idea.

The relief-from-situational-monopoly rationale behind the PMSI rules applies, arguably, in a more salient way with respect to the proposed EPMSI. Improving environmental sustainability may involve up-front costs that yield only longer-term returns. Or, it may involve investment in technologies the results of which are not yet well established. State legislatures seeking ways to encourage companies to take new steps towards improving environmental impact may want to consider offering relief from the direction of existing creditors when companies are seeking to take these steps.

Ultimately, the effects of UCC provisions creating an EPMSI would depend upon whether and how commercial actors use the provisions. The provisions themselves should have value from an environmental standpoint because they would make a new form of credit available to fund improvements in environmental sustainability. To the extent that companies avail themselves of this credit, it could reduce demand for public funding sources for environmental projects. These sources—such as government loan programs, financing incentives, and subsidies in the form of tax credits²⁰⁰—could then fund other projects that do not receive private funding even in the form of high-priority secured debt.

Companies may identify value in investments in environmental sustainability that decrease business costs over time, but be unable to make these investments because existing secured creditors will not finance up-front costs. The proposed EPMSI could help companies in this situation improve their environmental impact.

Peter Lehner, executive director of the Natural Resources Defense Council, has observed that businesses often have unrealistic return expectations surrounding

investments in energy efficiency programs. ²⁰¹ Businesses talk about the need, he reports, "to have an energy efficiency program pay for itself in three or five years. . . . A three-year payback is actually the equivalent of almost a twenty-five percent rate of return." ²⁰² Lehner concludes that these expectations evidence irrational behavior because the same actors will invest in other ventures with far lower rates of return and miss chances at investment in energy efficiency. ²⁰³

Without getting to the merits of Lehner's argument about rational investment strategies, if we accept his observation that businesses are seeking unrealistically high-return rates on investments to improve energy efficiency, we might ask why this is the case. One reason may be that businesses do not have sufficient capital to fund these programs, such that they can only do so if the return is relatively short term. ²⁰⁴ The proposed EPMSI rules could open up financing alternatives that make investment in energy efficiency programs more attractive.

Legal scholars have argued that creating incentives for corporations to adopt renewable energy practices is a good way to address the issue of corporate environmental responsibility. To date, however, it is unclear whether or not voluntary corporate efforts do actually improve the environmental impacts of businesses. Again, the effectiveness of putting an EPMSI at commercial actors' disposal would depend entirely on whether and how businesses use it. Whether the EPMSI would actually enable investment in environmental sustainability depends on whether businesses use it at all and, if they do, what types of programs or investments they fund.

The EPMSI concept could have the benefit of prompting institutional lenders to make credit available themselves for environmentally progressive processes and practices. These lenders tend to be commercial banks that have developed internal procedures for conducting credit analyses of debtors. The threat that EPMSI creditors could take priority over prior secured creditors could encourage institutional lenders to develop credit analyses that include assessment of new technologies and practices relating to environmental impact.

^{201.} Peter Lehner, *Changing Markets to Address Climate Change*, 35 B.C. ENVTL. AFF. L. REV. 385, 391 (2008) (discussing market failures that aggravate environmental problems and possible solutions to these failures).

^{202.} Id.

^{203.} Id.

^{204.} Consider, also, that businesses are specialized and need outside goods and services to implement strategies for environmental sustainability.

^{205.} See, e.g., Steven Ferrey, Corporate Responsibility and Carbon-Based Life Forms, 35 B.C. ENVTL. AFF. L. REV. 419, 451–53 (2008).

^{206.} See Kurt A. Strasser, Do Voluntary Corporate Efforts Improve Environmental Performance?: The Empirical Literature, 35 B.C. ENVTL. AFF. L. REV. 533, 546–54 (2008) (surveying existing empirical literature on elective environmental performance programs and reporting mixed results, but noting that both the company programs and the empirical studies are new and therefore subject to further development).

A. Distinguishing Other Priority-for-Deserving-Creditor Arguments

A number of legal scholars have argued for priority under UCC Article 9 for various classes of creditors, including holders of environmental claims. ²⁰⁷ These arguments are rooted in criticisms of the fairness and also the efficiency of Article 9's full-priority, floating-lien structure. ²⁰⁸

The EPMSI focuses on creating incentives for credit extensions to enable investments of a certain type. The special priority rules proposed for environmental-practices-money credit would not address fairness or efficiency concerns surrounding unsecured creditors. Rather, EPMSI rules would encourage a certain type of investment—investment in environmental sustainability—during companies' operating lives.

The EPMSI would be a collateral-security device that enables certain practices and investments. It is not about involuntary creditors with environmental claims, for example, except in the ancillary sense that investment in environmentally progressive practices could, in theory, reduce environmental harms and, therefore, reduce such claims.

In fact, enacting the EPMSI could potentially aggravate unsecured creditors' positions in bankruptcy. EPMSI holders would present another class of creditors whose claims would trump those of unsecured creditors when a debtor's bankruptcy estate cannot satisfy all claims. It is important to consider the extent to which the proposed EPMSI might aggravate fairness or efficiency questions surrounding Article 9, and whether such potential aggravation detracts from the value of the EPMSI.

B. Debtor Misbehavior

One might be concerned that, if the EPMSI were enacted, debtors could offer high-priority debt to creditors to finance activities that are only nominally "environmental practices." For example, a company could—to the detriment of earlier creditors—take out an environmental-practices-money loan to completely redecorate offices with an eco-chic motif that has nothing to do with improving the company's activities' environmental impact.

The threat of debtor misbehavior is present in all secured lending. Proceeds of loans can be applied in ways that fail to enhance value, that actually violate a loan and security agreement, or that defeat the expected characterization of a loan. This type of risk is endemic to the practice of secured lending. To limit risk of fraud or other misbehavior, secured parties must monitor debtors, and debtors must comply with reporting covenants or other monitoring devices. Environmental-practices-money credit would not be exempt from this reality.

207. See Heidt, Cleaning Up, supra note 124; Heidt, Corrective Justice, supra note 124. 208. But see Yair Listokin, Is Secured Debt Used to Redistribute Value from Tort Claimants in Bankruptcy? An Empirical Analysis, 57 Duke L.J. 1037 (2008); Schwarcz, supra note 112. See generally Bebchuck & Fried, supra note 111, at 1290; Lynn M. LoPucki, supra, note 124, at 23–30; Lynn M. LoPucki, The Irrefutable Logic of Judgment Proofing: A Reply to Professor Schwarcz, 52 Stan. L. Rev. 55, 59–67 (1999); Richard Squire, The Case for Symmetry in Creditors' Rights, 118 Yale L.J. 806 (2009).

The notion that debtors may try to stretch the definition of environmental practices to avoid allegations of misbehavior is a separate issue. As discussed above, the challenge of defining environmental practices for EPMSI purposes is a formidable one, but there are strategies legislatures could take to make clear the types of activities that would be permissible or impermissible to create an effective EPMSI.

C. Proliferating Super-Priority Interests

Given the existence of the PMSI and the PrMSI, and now this proposal for an EPMSI, why not create super-priority interests for multiple investment types that state legislatures deem worthy of facilitating? If legislatures were to do this facilitating, how would we avoid a disintegration of uniformity and of first-in-time, first-in-right default rules?

The concepts behind both the PMSI and PrMSI have a long, precode history. These existing super-priority interests are contemporary expressions of collateral-security rules developed over many years. Though the PrMSI provisions of Article 9 are new, they reflect established ideas about priority in agricultural financing. Because secured transactions law has not otherwise contemplated an EPMSI, this proposed interest introduces the question of proliferating super-priority interests in a way that the PMSI and PrMSI do not.

On the one hand, there is nothing inherently unworkable about a proliferation of super-priority security interests. More important than the number of super-priority interests that exist is the clarity of the rules that define these interests and provide for their priority in relation to other interests. Priority questions would be easier, for example, if the code treated super-priority interests equally—if the code applied first-in-time, first-in-right rules for priority among competing super-priority security interests. On the other hand, multiple super-priority interests could result in a de facto last-in-time priority system, especially if these interests were not kept narrow and clear in scope.

Importantly, the EPMSI concept is distinct from other possible enabling interest ideas. We can imagine multiple ideas for other new interests designed to facilitate other types of investments. For example, states could consider a "benefits-money security interest" with special priority rules to facilitate the availability of credit for investment in employee-benefits plans. But the reasons to consider an environmental-practicesmoney interest are distinct from the reasons we might consider another proposed interest. In the abstract it is easy to think about an endless line of other possible superpriority security interests that lawmakers could consider. In practice each possible interest would present distinct questions that would affect its desirability.

The proposed EPMSI responds to an existing, unprecedented demand for innovative financing practices to enable investment in improved environmental impact.²⁰⁹ Recent

209. Evidence of this demand includes various government loan guaranty programs, existing credit arrangements between environmental services providers and their clients, equity funds that limit themselves to investment in "green" companies, and current discussions of structured finance backed by carbon credits. Many commentators have noted the need for financing for improvements in environmental impact. In the popular media, *Newsweek* has reported that "the future of the alternative-energy industry now depends far more on financial engineering than mechanical engineering." Daniel Gross, *The Real 'Green' Innovation*:

state legislation already evidences a desire to incentivize private investments in environmental sustainability. States are already engaged in the project of enacting incentives for commercial actors to take more responsibility for their activities' environmental effects. The EPMSI is a device that would contribute to this project that attempts to respond to the massive and imperative problem that climate change presents.

This is not to say that the EPMSI concept is justified because we can imagine an effective lobby for it. The point is simply that the hypothetical parade of new superpriority security interests is just that—hypothetical. In any event, states could always repeal sections 9-324B and 9-103B if other interests were proposed in the future and the issue of multiple super-priority interests became problematic.

D. Nonuniform Provisions, Experimentation, and Environmental Concerns

Not all states would enact an EPMSI even if EPMSI provisions were incorporated into the official text of UCC Article 9. Even among states interested in the EPMSI concept, extensions of credit that would be environmental-practices-money credit could differ from state to state.²¹⁰ Given its objectives, the EPMSI concept could benefit from state-by-state experimentation.

Nonuniform provisions of the UCC are plentiful and reflect a diverse range of interests on the part of the state legislatures that have enacted them.²¹¹ As discussed above, six states have enacted a PrMSI in agricultural finance, and there is nonuniformity even among these jurisdictions.²¹²

Edward J. Janger has observed that revisions to Article 9 that limit secured creditors' rights can fail as state legislators fear that such revisions would increase costs of capital in the states that enact them.²¹³ State legislatures can be hesitant to

Alternative Energy Depends More on Financial Tricks than Simple Engineering, Newsweek, Apr. 20, 2009, at E10, available at http://www.newsweek.com/id/193369.

- 210. If some jurisdictions were to enact an EPMSI, choice-of-law issues could arise in the context of disputes over recognition of this type of interest. This Article assumes that UCC Article 9's governing law provisions (in sections 9-301 to 9-307) would control choice-of-law issues. Parties seeking to utilize an EPMSI device would want to ensure that they understand relevant governing law rules.
- 211. For example, Texas has enacted subsection 9-109(e) that states that sales of assets entered into in the context of a securitization are sales (regardless of recourse). Tex. Bus. & Com. Code Ann. § 9.109(e) (Vernon 2002). This provision is designed to facilitate asset securitization. An explanation of this type of asset-backed securities facilitation statute is not necessary here. The point is just that there have been recent enactments of nonuniform Article 9 provisions designed to achieve some policy goal. See Hughes, Aesthetics of Commercial Law, supra note 16, at 720–22; Jonathan C. Lipson, Secrets and Liens: The End of Notice in Commercial Finance Law, 21 EMORY BANKR. DEV. J. 421, 467–74 (2005).
- 212. See N.C. GEN. STAT. § 25-9-324.1 (West 2003) (enacting nonuniform subsection (f) making restrictions on creation of a PrMSI ineffective); WIS. STAT. ANN. § 409.3245 (West 2003) (enacting subsection (2)(b) with a twenty, instead of ten, day minimum advance notice provision).
- 213. See Edward J. Janger, Predicting When the Uniform Law Process Will Fail: Article 9, Capture, and the Race to the Bottom, 83 IOWA L. REV. 569, 581, 632 (1998) (discussing state legislatures' ability to externalize the costs of full priority secured credit and incentives to enact the full-priority version of Article 9 given that to do otherwise might increase costs of capital in

make the costs of doing business higher in their states than in others. They have an incentive, therefore, to enact the current, uniform version of Article 9 that is highly favorable to institutional secured creditors.

The proposed EPMSI would create an additional class of secured creditors who make investments that could reduce a state's costs of inducing private investments in improved environmental impact. The "race to the bottom" that Janger describes may not thwart enactment of EPMSI rules, if, for example, legislatures determined that increased costs of credit resulting from the EPMSI would not necessarily outweigh the EPMSI's benefits.

Environmental lawyers and activists have long noted the challenges associated with pursuing environmental legislation at the state level. While state-level constituencies can be easier to organize and mobilize, state governments themselves can be adverse to any changes that involve costs for the state the benefits of which are externalized.

But many environmental initiatives involve investment by some local or state government in technologies or practices the benefits of which are then reaped by communities far and wide. The widespread state-level response to climate change offers a recent example of state action that moves forward despite the apparent commons problem. Reasons for the high level of response to climate change on the part of states are several and included, at the time these laws were conceived, the federal government's failure to address the issue.²¹⁴

In any event, the EPMSI may not fall into the category of state legislative proposals that seem irrational from the standpoint of traditional commons analysis. It does not involve investment by the state to remedy a problem that is global, but rather creation of a new super-priority security interest that private actors can elect to use. States may view the EPMSI as a reform to help businesses and to potentially save costs by improving businesses' environmental impacts in the state. Also, it is possible that enacting an EPMSI would prompt some traditional banks to develop credit analyses that better account for the benefits of environmentally sound practices and improved sustainability.

Given the continuing legislative response to climate change, jurisdictions could create statutory liens in favor of providers of services or other value to improve companies' environmental sustainability. Institutional secured creditors may fare better, and the incentives for investment in sustainability may be greater, under an Article 9 approach. In other words, secured creditors should not assume—given the push towards an all-hands-on-deck approach towards the new energy economy²¹⁵—that their interests will remain unaffected if they successfully oppose a proposal like the EPMSI.

As new ideas emerge for financing investment in improved environmental sustainability, we should not overlook the UCC as a potential site for innovation. This Article provides a proposal and framework for discussion. UCC provisions ready for

214. See generally Kevin L. Doran, U.S. Sub-Federal Climate Change Initiatives: An Irrational Means to a Rational End?, 26 VA. ENVTL. L.J. 189, 190–91 (2008); Patrick Parenteau, Lead, Follow, or Get Out of the Way: The States Tackle Climate Change with Little Help from Washington, 40 CONN. L. REV. 1455 (2008).

the state).

^{215.} Barack Obama declared that "[t]he pursuit of a new energy economy requires a sustained, all-hands-on-deck effort." Valerie Richardson, *Greens Grapple With Economy for Obama Priority Energy Team Emerges*, WASH. TIMES, Dec. 16, 2008, at 1.

enactment are not drafted by one scholar or one lawmaker. They are proposed, drafted, and redrafted in a collective process that, hopefully, involves thoughtful deliberation by a range of participants. Ultimately, levels of commitment to mechanisms for private funding of improved environmental impact, and of tolerance for risk of dilution to secured creditors' positions, are for collective determination.