UCC ARTICLE 9 REGISTRATION SYSTEM FOR LATIN AMERICA

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INTRODUCTION

The purpose of this article is to outline the main features of a system to register notices of security interests as it was pioneered in Canada under the Personal Property Security Act (PPSA) and in the United States under the Uniform Commercial Code Article 9 (UCC Article 9). The features identified below should be implemented in any registration system irrespective of the jurisdiction and region that seeks to modernize its secured transactions legal framework. However, this article focuses on the implementation of the features in the context of Latin America, where recently a number of jurisdictions undertook reforms of their secured transactions systems but failed to establish a modern notice-registration system (e.g., Chile, Guatemala, and Peru). Such failures may be partially attributed to the absence of models for the establishment of a registry. Only recently, in October 2009, did the Organization of American States (OAS) approve the Model Registry Regulations under the Model Inter-American Law on Secured Transactions (the OAS Model Registry Regulations); the World Bank Group published its Secured Transactions Systems and Collateral Registries Toolkit in January 2010 (the Collateral Registries Toolkit); and the United Nations Commission on International Trade Law (UNCITRAL) began developing in November 2010 a text on registration of security interests that will include model registry recommendations and regulations. The UNCITRAL registration text implements the recommendations included in the UNCITRAL Legislative Guide on Secured Transactions adopted in 2007. The reader is advised to refer to the full text of these sources to get a complete picture of modern secured transactions and registration systems. The registry features discussed in this article have been included in one or all of these sources, and references are provided when appropriate. The legal rules governing registration systems in Chile, Guatemala, Honduras, Mexico, and Peru will be referenced when discussing the individual features. It should be noted that, with the exception of Honduras, all of these jurisdictions reformed their secured transactions and registration systems prior to the adoption of the international model rules for registries of security interests.

This article uses the terms "registry," "registry regulations," "registration form," "registrant," and "registrar" instead of the UCC Article 9 terms "filing office," "filing-office rule," "financing statement," "filer," and "filing officer."¹ Although traditionally the term "registration" has been associated with a system where secured creditors submit the underlying documentation such as loan agreements for scrutiny to a registrar as a condition of registration, in this article,

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^{1.} See U.C.C. § 9-102(a)(37)–(39) (2000).

"registration" will be used as a synonym for the term "filing" that has been associated with a system where secured creditors submit a standardized registration form that provides minimal information that is subsequently stored in the registry database without any scrutiny by the filing officer.²

A. Transparency

The types of claims and interests in the debtor's personal property that are subject to notice-registration reflect the substantive secured transactions law. The legislator must make at least two important decisions as to the scope of the law and the registry. First, the law should classify all contractual arrangements whose purpose is to secure an obligation as a secured transaction subject to registration to achieve effectiveness against third parties. Accordingly, security interests, retentions of title, pledges, charges, financial leases, commercial consignments, sales of accounts, and a variety of fiduciary arrangements should be treated as secured transactions subject to registration and compete for priority under a uniform set of rules. The OAS Model Inter-American Law on Secured Transactions (the OAS Model Law) is based on such a functional approach and in Article 1 provides: "A State adopting this Law shall create a unitary and uniform registration system applicable to all existing movable property security devices in the local legal framework, in order to give effect to this Law." This uniform regulatory framework must assign priorities on the basis of the time of registration rather than the type of property right (e.g., ownership trumps limited security interest) or the type of claimant (e.g., judgment creditors have priority over creditors that took a security interest in the debtor's personal property).

The UNCITRAL Legislative Guide also prescribes, in Recommendation 8, the implementation of the functional approach, "under which it covers all rights in movable assets that are created by agreement and secure the payment or other performance of an obligation, regardless of the form of the transaction or the terminology used by the parties" Peru sought to implement the functional approach and subject security interests, assignments of rights, leases, financial leases, lease-back agreements, consignment contracts, and similar devices to a single regulatory framework.³ However, the Peruvian approach is somewhat

^{2.} See, e.g., U.N. COMM'N ON INT'L TRADE LAW, UNCITRAL LEGISLATIVE GUIDE ON SECURED TRANSACTIONS, U.N. Sales No. E.09.V.12 (2010) [hereinafter UNCITRAL LEGISLATIVE GUIDE]; ORG. OF AM. STATES (OAS), MODEL INTER-AM. LAW ON SECURED TRANSACTIONS (2002), http://www.oas.org/dil/cidip-vi-securedtransactions_eng.htm [hereinafter OAS MODEL LAW]; OAS Model Registry Regulations under the Model Inter-American Law on Secured Transactions (2009), http://www.oas.org/dil/cidip-vii_doc_3-09_rev3_model_regulations.pdf [hereinafter OAS Model Registry Regulations]; INT'L FIN. CORP., SECURED TRANSACTIONS SYSTEMS AND COLLATERAL REGISTRIES (2010) [hereinafter COLLATERAL REGISTRIES TOOLKIT].

^{3.} See Ley de la Garantía Mobiliaria, Law No. 28677, art. 2(13), 1 de marzo de 2006, GACETA OFICIAL [hereinafter Peru LGM], available at http://www.derecho.usmp

unclear because it also subjects purely contractual arrangements such as options to purchase and transactions unrelated to security interests such as the issuance of representative documents of title to registration.⁴ Mexico has repeatedly failed to subject all devices whose function is to secure an obligation to a single regulatory framework. Recently, it reformed its legal framework and established a unique secured transactions registry (Del Registro Único de Garantías Mobiliarias).⁵ Nevertheless, it remains unclear whether all rights in the debtor's property created contractually are subject to registration.⁶ For instance, notification of the account debtor renders transfer of receivables under a factoring arrangement effective against third parties without the requirement of registration.⁷ Chile has also failed to provide for a single regulatory and registration framework for all security devices. For instance, with regard to receivables financing, the Law on Non-Possessory Pledges applies to security interests in accounts receivable, Article 1902 of the Civil Code regulates outright assignments of debts, and a special law governs factoring of debts.⁸ Chile has even established a special registry for the registration of interests in electronic invoices.⁹ In contrast to Chile, Mexico, and Peru, Guatemala, and Honduras have clearly set out the scope of their respective secured transactions laws to classify all devices that function to secure performance of an obligation as a security interest.¹⁰

.edu.pe/instituto/revista/articulos/LEY_N_28677_DE_GARANTIA_MOBILIARIA.pdf. Formal requirements for the registration of security interests are set forth in Reglamento de Inscripciones del Registro Mobiliario de Contratos Vinculado con Registros Jurídicos de Bienes Muebles, Resolution No. 142-2006, 25 de mayo de 2006, arts. 68–77 [hereinafter Peruvian Registry Regulations], *available at* http://www.sunarp.gob.pe/Publicaciones .asp?ID=365.

4. See Peru LGM art. 32(3).

5. *See* Código de Comercio [CCo.] [Commercial Code], art. 32 bis, Diario Oficial de la Federación [DO], 7 de Octubre de 1889, *available at* http://www.diputados.gob.mx/LeyesBiblio/ pdf/3.pdf (Mex.); Reglamento del Registro Público de Comercio, ch. V, DO, 23 Septiembre de 2010 [hereinafter Mexican Registry Regulations], *available at* http://www.siger.gob.mx/siger/RRPC18.htm.

6. The Mexican Commercial Code provides that security interest includes mercantile juridical acts that create, modify, transfer, or cancel a special privilege or the right of retention over personal property. *See* CCo. art. 30 (Mex.). However, the Commercial Code does not define "special privilege" or the "right of retention."

7. *See* Ley General de Títulos y Operaciones de Crédito [LGTOC] [Mexican General Law on Securities and Credit Operations], art. 426, DO, 27 de Agosto de 1932, *available at* http://www.diputados.gob.mx/LeyesBiblio/pdf/145.pdf.

8. *See* CóDIGO CIVIL [CóD. CIV], arts. 1902, 2384; Law No. 19983, Diciembre 15, 2004, Diario Oficial [D.O.] (the Chilean factoring law) (Chile).

9. See REGISTRO ELECTRÓNICO DE CESIÓN DE CRÉDITOS, https://palena.sii.cl/rtc/ RTC/RTCMenu.html (last visited Dec. 20, 2011).

10. Ley de Garantías Mobiliarias, Decree No. 182-2009, art. 2, 28 de enero del 2010, DIARIO OFICIAL [D.O.] [hereinafter Honduran LGM], *available at* http://www.ahiba.hn/ component/docman/doc_download/12-ley-de-garantias-mobiliarias; Ley de Garantías Mobiliarias, art. 7, Decree No. 51-2007, 16 de noviembre de 2007, DIARIO OFICIAL [D.O.] (Guat.), *available at* http://www.rgm.gob.gt/ documentos/LRGM51_2007.pdf. The second decision that the legislator must make relates to nonconsensual interests in the debtor's property such as tax and judgment liens. In many jurisdictions, such liens enjoy super-priority, even over previously registered notices of security interests. They become effective against third parties by levy, i.e., when the lien holder or a sheriff repossesses the debtor's property without notifying secured creditors or having to register a notice in the registry of security interests. Clearly, non-consensual liens are created by operation of law and should not be subject to the creation requirements of the secured transactions law that applies only to contractual arrangements.¹¹ However, liens should be subject to the rules on registration and priorities included in the secured transactions law and compete under the same rules for priority against other creditors.

Recommendation 84 of the UNCITRAL Legislative Guide subordinates the rights of judgment creditors to the rights of secured creditors that were made effective against third parties before the judgment creditor took the necessary steps to render its lien effective against third parties. Article 32 bis 5 of the Mexican Commercial Code provides that judicial and administrative decisions that affect a person's property are susceptible to registration. Accordingly. unregistered judicial liens are subordinate to security interests, notices of which were previously registered.¹² The Mexican Registry Regulations use different terminology for consensual security interests, notices of which are "registered," and non-consensual liens created by administrative or judicial decisions, notices of which are "annotated" in the registry of security interests.¹³ Honduras chose a straightforward solution and subjected all judicial and administrative claims in the debtor's personal property to the priority rules of the secured transactions law. Pursuant to Article 50, for such non-consensual claims to get priority over security interests, they must be registered, and the date of registration will determine their respective priority.

If jurisdictions subject non-consensual liens to the registration and priority rules of the secured transactions law, the registration system must provide for a mechanism to register a notice of such liens. The jurisdiction may provide special registration forms for notices of non-consensual liens or include special fields to indicate the nature of liens and security interests in the standard registration form. For instance, in California, judgment creditors must fill out and submit a special "Notice of Judgment Lien."¹⁴ The registration system and forms used to submit information to the registry may also include a special field with

^{11.} See Commentary, UNCITRAL LEGISLATIVE GUIDE, *supra* note 2, at 35 ("As the basic purpose of the Guide is to promote access to secured credit, its recommendations deal primarily with security rights created by agreement. It does not directly address issues relating to encumbrances that arise by statute or judicial process."); *see also* OAS MODEL LAW art. 2.

^{12.} See LGTOC art. 371(III) (Mex.).

^{13.} See Mexican Registry Regulations art. 33(II)-(IV).

^{14.} Notice of Judgment Lien Form, CAL. SEC'Y OF STATE, http://www.sos.ca.gov/business/ucc/ ra_9_jl1_barcode.pdf.

checkboxes to indicate the nature of an interest (e.g., checkboxes for "security interest," "judgment lien," and "tax lien") as is the case in Honduras. Implementation of one or the other approach will allow indexing and searching of notices of non-consensual liens by the criteria that equally apply to notices of consensual security interests. It is important that non-consensual lien holders are not subject to different rules with regard to the identification of debtors in registration forms so that the searcher may retrieve all notices of contractual and non-contractual interests in the debtor's personal property with a single search.¹⁵

B. Flexible Access

The second feature of a modern registration system is the unrestricted or flexible access to the registry services. A registration system must be easily accessible to a variety of users. These users should be identified before the final decision on the registry design is made. Such users typically include: 1) highvolume registrants such as banks and service companies; 2) regular users such as distributors of equipment, car dealerships, and leasing companies; 3) occasional users such as law offices and suppliers; and 4) one-time users such as a business owner who sells her business and takes back a security interest. The registry system designer should keep in mind that these users may be domestic, but also increasingly foreign. The level of sophistication of potential users also varies and ranges from a service company that specializes in providing registration services for the public to a one-time user. Depending on the frequency of access, users may employ state-of-the-art technology that allows the automated submission of single or multiple registration forms through an XML interface or personal delivery of a paper-based registration form to a registry office. The registry should also accommodate users who do not take security interests in the debtor's property voluntarily. Involuntary creditors such as tax authorities and persons who obtained judgments may also need to access the registry to discover whether some property of the debtor remains unencumbered and to effect a registration. While tax authorities may belong to one of the first three categories of users depending on the number of delinquencies in tax payments, judgment creditors will most likely belong to the category of one-time users. How does a modern registration system accommodate all of these types of users?

Access to the registry services may be provided by electronic means or by the traditional way of submitting and processing paper-based registration forms. In terms of access, three types of registration systems may be identified: 1) exclusively paper-based; 2) exclusively electronic; and 3) a hybrid electronic/paper-based system. Early registration systems were exclusively paperbased, and registration forms were submitted over the counter, processed, and

^{15.} See United States v. Crestmark Bank (*In re* Spearing Tool & Mfg. Co.), 412 F.3d 653, 656 (6th Cir. 2005) (holding that "a requirement that tax liens identify a taxpayer with absolute precision would be unduly burdensome to the government's tax-collection efforts").

archived manually. Such systems are relics, and with the availability of computer technologies, have become largely obsolete. They may be found primarily in jurisdictions that do not have the financial means to invest in computer technologies to modernize their existing systems. In any case, even not-yet fully electronic systems commonly allow electronic searches of their indexes or even entire records. Paper-based systems are also more expensive to operate on a daily basis because a sufficient number of employees must index registration forms, and they are more prone to error as employees may occasionally make mistakes in indexing registration forms and fraud when employees do not index registration forms in the order in which they were received.¹⁶ No jurisdiction in Latin America should design its registration system solely on the basis of processing paper-based registration forms.

A registration system may also be exclusively electronic.¹⁷ The establishment of such a registration system requires that participants in the credit market have access to and be accustomed to using modern technologies, including a reliable network system.¹⁸ Electronic access may be provided not only through electronic user accounts, but also through intermediaries and local registry offices, where one-time users may utilize computer facilities to submit registration forms. A fully electronic system reduces the risk of fraud and error to a minimum because it shifts the responsibility entirely to the registrant; the registrar is not involved in the registration process at all. A jurisdiction that has adequate technological infrastructure should contemplate designing its system on a purely electronic platform for access. Given the tradition of handling registration forms manually, the excessively formal registration process, and the inadequacy of technological infrastructure, some Latin American jurisdictions may not be ready to take the giant step to implement an exclusively electronic system. For such jurisdictions, a hybrid system that provides for both paper-based and electronic access seems to be the most practical for all of the potential users identified above. Such a hybrid system for the communication with the registry is contemplated in Article 24 of the Chilean Law on Non-Possessory Pledges¹⁹ and Article 42(3) of the Honduran Law on Secured Transactions.²⁰ All U.S. states that provide

^{16.} The law must then provide adequate measures to address errors and breaches of duties committed by registrars. *See, e.g.*, U.C.C. §§ 9-516(d), 9-517 (2000).

^{17.} See, e.g., New Zealand Personal Property Securities Register, http://www.ppsr.govt.nz/cms (last visited Dec. 20, 2011).

^{18.} It is important that the jurisdiction's technology infrastructure be assessed. Such assessment should include: 1) connectivity with the Internet, 2) presence of facilities to support registry hardware, and 3) availability of people with the necessary skill to maintain the registration system. *See* COLLATERAL REGISTRIES TOOLKIT, *supra* note 2, at 62.

^{19.} Chilean law on non-possessory pledges is part of the broader legal framework regulating capital markets. *See* Law No. 20190, art. 24, Junio 5, 2007, D.O., *available at* http://sinley.cl/?a=2512.

^{20.} See Honduran LGM art. 42(3).

electronic registration services also allow registrants to submit paper-based registration forms.²¹

However, a hybrid system should be operated only until the user community is ready to make the transition to an exclusively electronic registration system. Such transition occurred after decades in Canada, where, for instance, Ontario moved to an exclusively electronic system in 2007.²² Such a transition has yet to happen in the United States, where Colorado is expected to be the first jurisdiction to do so in the near future. In Latin American jurisdictions, users first should be comfortable with the key features of the notice-registration system (e.g., no requirements to submit the underlying loan documentation for registration and for the debtor to sign the registration form, etc.). Eventually, the users themselves will discover the benefits of electronic registration systems and willingly make the transition. A notice-registration system is a revolutionary concept in many civil law jurisdictions, and, assuming an initial reluctance to use it will be encountered, it is necessary that access for the users be as flexible as possible.

Flexibility of access also requires that certain entities or professions not be given exclusive access. In a number of jurisdictions, notaries or other public officials are the sole access point to the registry, which means that secured creditors must bring their loan documentation and registration forms to a notarial office that will verify the accuracy and validity of the information provided therein and eventually submit the registration form on their behalf. This type of registration procedure is contemplated in Article 34 of the Peruvian Secured Transactions Law and implemented in Article 35 of the Peruvian Registry Regulations. The Peruvian legal and registration framework is fraught with formalities that distance it from a modern notice-registration system's features, which are highlighted in this article.²³ A similar exclusive access is enjoyed by notaries in Chile under Article 24 of the Law on Non-Possessory Pledges. In contrast, Mexico, in its latest amendments to the Registry Regulations, moved away from the monopolistic access given to notaries and public officials and permitted creditors and their agents to access the registry services directly.²⁴ Article 48 of the Honduran Secured Transactions Law provides for absolutely open access to all users, whether domestic or foreign.

^{21.} See, e.g., CAL. CODE REGS. tit. 2, § 22600.1 (2010).

^{22.} *See* The Ontario Personal Property Security Registry, http://www.ontario.ca/en/ services_for_business/access_now/STEL01_086165.html?openNav=services_for_business es (last visited Dec. 20, 2011).

^{23.} It is noteworthy that Peru became the first jurisdiction in Latin America to implement some features of the OAS Model Law, yet failed to establish a registration system contemplated in Title IV of the OAS Model Law. See OAS MODEL LAW tit. IV; see also Alejandro M. Garro, The OAS-sponsored Model Law on Secured Transactions: Gestation and Implementation, XV UNIF. L. REV. 391, 395–400 (2010).

^{24.} See Mexican Registry Regulations art. 33(II).

C. Security

In a notice-registration system, the responsibility for the accuracy and legal validity of the information to be registered is placed entirely on the registrant. In other words, the registry does not verify the identity of the registrant and his or her authorization to submit a registration form or the content of the registration form.²⁵ The registry is not a gatekeeper but rather an accessible receptacle for registration forms.²⁶ In that role, the registry must ensure that access is secure and that registrations may not be fraudulently altered or even deleted from the database. Not only must the access be secure, but the information that was previously registered and stored in the database must be secure as well. This type of cyber-security for access and registered information must be complemented by appropriate measures against the risk of natural and human-caused disasters as well as physical damage to the registry facility and equipment.²⁷

The registry should grant electronic access only upon proper verification of the applicant's identity. This verification may be done in person or remotely over the Internet such as by requesting credit-card information. The registry should collect some basic information about the future user, including contact and financial data, and enter into a user agreement as a condition of access. However, such verification is only a one-time procedure that should not be repeated every time the user seeks access to a registry service. Once the user agreement has been signed and other requirements are satisfied, the registry will establish a user account for the person.

Readers unfamiliar with user accounts for accessing registries may visualize their bank accounts, which they may log into via the Internet. Just like accessing a bank account, the registry user will enter his or her log-in information and a password. Agreements between the registry operator and users regularly impose a duty on the user to keep log-in information confidential and not to disclose, transfer, or sell the access privileges.²⁸ Once the log-in has been successfully completed, the user may have access to a variety of functions, such as those to submit registration forms, conduct searches, view history of registrations, etc. It is important that the registry keep track of the users and be able to connect the identity of a particular account user with the particular registration. For this reason, the registry may be designed to maintain the identity of the registrant and the user account holder, if different.²⁹ As an additional precaution, the registry

^{25.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 54(d).

^{26.} See Harry C. Sigman, Some Thoughts About Registration with Respect to Security Rights in Movables, XV UNIF. L. REV. 507, 508 (2010).

^{27.} See COLLATERAL REGISTRIES TOOLKIT, supra note 2, at 71.

^{28.} *See, e.g.*, Contrato de Acceso a la Información Registral a Través del Servicio de Publicidad en Linea de la Superintendencia Nacional de los Registros Públicos, SUNARP cl. 11, https://enlinea.sunarp.gob.pe/interconexion/webapp/extranet/acceso/frm_terminos .htm (last visited Dec. 20, 2011) [hereinafter SUNARP User Agreement].

^{29.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 55(d).

should accept the payment of fees only in a form that identifies the person effecting a registration (e.g., by a credit card or pre-funded deposit account, but not cash).³⁰ In a case where a registration turns out to be fraudulent, the registry will be able to more easily identify the person who submitted it.

However, security measures should not make access to the registration system expensive. If the registration system requires the potential user to download expensive software or pay licensing fees for its use, or the user approval process is lengthy and entails numerous administrative procedures that may be costly, such level of security and associated costs may make access prohibitive for certain creditors. For example, the Mexican Registry Regulations require that registration forms be authenticated by an electronic signature of the person effecting the registration.³¹ Although using an electronic signature for the submission of registration forms will increase access security, it may have a negative impact on occasional and one-time users. The level and costs of the security measures should be weighed against the possibility of reducing access to the registration system.

Equally important is the security of registered information stored in the database. The database is to be distinguished from the database server. While the former is software, the latter is hardware—the database (software) resides in the database server (hardware). Electronic records are naturally vulnerable to security breaches and information theft. Given the legal importance of registered information, the security measures employed for its protection, such as firewalls and anti-virus programs, should be robust to ensure the security of that information. Just like no one should be able to steal money from a bank account, no one should be able to enter the database and alter or delete any information. Appropriate measures must also be employed to protect the database server from physical damage.

However, just like humans, computer systems are not perfect, and they malfunction occasionally. For instance, the application server that processes registrations may temporarily stop functioning, and as a result users will not be able to submit registration forms. Designs of modern registration systems should take this situation into account and provide for a "fail-over" secondary application server that automatically starts operating when the main server encounters temporary malfunction and halts services. The secondary server ensures that registration forms are processed without interruption. Traditional registration systems also store registration information, formerly copies of the actual registration forms, on back-up servers. Back-up servers do not ensure uninterrupted access and service because it may take some time to restore the previously stored information. The main function of a back-up server is to ensure that the information is not lost.

^{30.} A number of jurisdictions prohibit the payment of registration fees in cash. *E.g.*, Reglamento del Registro de Garantías Mobiliarias, art. 16, Decree No. 51-2007 [hereinafter Guatemalan Registry Regulations], *available at* http://www.rgm.gob.gt/documentos/ reglamentorgm.pdf.

^{31.} Mexican Registry Regulations art. 33(I).

D. Easy Identification

Registration forms in notice-registration systems are typically standardized and require only minimal information. In general, the registration form must identify: 1) the debtor by its identifier and address; 2) the secured creditor or its representative by its identifier and address; and 3) the collateral. Some registration systems may also require an indication of the maximum amount for which the security interest may be enforced, the duration of the registration, and the nature of the security interest if it covers purchase-money collateral.³² Requiring other information, such as an indication of the purchase-money nature of the security interest and the maximum amount for which the security interest may be enforced, depends on the local financing environment and should be evaluated by the legislator before enacting the underlying law.³³

The identifier of the debtor is the most important component of the registration information because registrations are organized or indexed in the database according to the identifier of the debtor.³⁴ Such identifiers may be the debtor's (legal) name or an identification number.³⁵ The name will typically consist of the paternal and maternal surnames (family names), a middle name, and a first name. These individual name components are indexed separately. In addition, for purposes of uniquely identifying individual debtors who have the same name, the type and number of an identification document (e.g., driver's license) may be requested.³⁶ The type and identification number may also constitute the indexing criteria. In other words, registrations may be indexed and searchable by the debtor's unique identification number, rather than by the debtor's name. This approach avoids the problem associated with defining the debtor's names.³⁷

Modern registration systems include a number of features designed to minimize the risk of error in identifying the debtor. The first of these features

37. Sigman, supra note 26, at 511.

^{32.} *See* UNCITRAL LEGISLATIVE GUIDE, *supra* note 2, Recommendation 57; OAS MODEL LAW arts. 12, 38.

^{33.} See OAS Registry Regulations art. 14(VI)(b); Guatemalan Registry Regulations art. 30.

^{34.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 54(h).

^{35.} *See, e.g.*, Peruvian Registry Regulations art. 10 (requiring all registrations to be indexed according to the name of the debtor).

^{36.} See also UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 59 ("The law should provide that, where the grantor is a natural person, the identifier of the grantor for the purposes of effective registration is the grantor's name, as it appears in a specified official document. Where necessary, additional information, such as the birth date or identity card number, should be required to uniquely identify the grantor."); Guatemalan Registry Regulations art. 23 (requiring that a number of the identification document (e.g., the driver's license) and a personal identification number for the debtor and secured creditor be provided).

may check the exact number of digits that constitute the particular identification number. For instance, the identification number of a debtor who is a citizen of Honduras consists of thirteen digits. The registry application may be programmed to reject a registration form that indicates less than thirteen digits in the field for the identification number of a debtor that is a Honduran citizen. An error message to the effect that "the debtor's ID number must be 13 digits" may be displayed to alert the registrant. In addition, the registry application may not allow the registrant to enter more than thirteen digits in the same field. This feature essentially and practically eliminates the error of entering the incorrect number of digits. Another common mistake is a typographical error (e.g., entering "1" instead of "3"). In order to minimize these types of errors, the registry application may be connected to a data source for individuals where their identification numbers, names, and even addresses are stored. A number of states throughout the world have civil registries or computerized systems for birth certificates. Another possibility is the data source of voters; however, this is limited in scope because it only includes information about registered voters. Data sources of natural persons may be subject to some privacy protections, which might prevent If such limitations and constraints do not exist, the public disclosure. identification information for natural persons may come from a data source that is either remotely connected or loaded as part of the registry application. When the registrant enters an identification number of the debtor, the registry application may automatically conduct a search for the natural person with such an identification number. If the identification number has been entered incorrectly. the fields may be populated with the name of a different natural person or an error message indicating "no record found" may be displayed. The registrant will thus be alerted to a potential error in the identification number. It is important to note that the information returned is for the identification number entered—thus, if the identification number is incorrect, then a different name will be returned. This potentially could introduce errors. If the information was not found, no fields would be populated.

The law should not require collateral description that is overly prescriptive or that requires unnecessary detailed information. For instance, the registrant should not be required to indicate whether the debtor is the owner or has a limited right to the collateral, the present market value of the collateral, or to provide an otherwise detailed description (e.g., serial numbers of computers held for sale by a retail store). Some jurisdictions have taken the collateral description requirement to its extreme. For example, Article 5 of the Chilean Registry Regulations requires that grain, seeds, and plants be described by their kind or variety. The registrants must also indicate whether they are ordinary or certificated and provide a sanitary certificate number. For fruits, the registration form must indicate whether they are still growing or have been harvested.

If required by the law, as part of the collateral description, the registration system must provide a specific field for the identification of the collateral by a serial number. In such a case, the serial number will also constitute an additional indexing/search criterion. In other words, searches of the registry

database would be possible by the identification number or name of the debtor as well as the serial number of the collateral. The list of assets subject to serial number identification, however, must be carefully and narrowly defined. It must be limited only to assets that have a reliable serial number and that have a significant resale market and sufficiently high market value. In no case should serial number indexing apply to assets held as inventory.³⁸ Although the serial number should sufficiently identify the collateral, the law may require that the registrant also identify the type (e.g., a vehicle). The law should not impose requirements to identify serial number assets in great detail. This is the case in Chile, where vehicles must be described by the type, model, make, year of manufacture, number of the chassis, number of the engine, plate number, and registration number from the Registry of Motor Vehicles.³⁹

The law should not require that registration forms be signed by the parties or certified by notaries or similar public officials. This is the case in Guatemala, where Article 43 of the Secured Transactions Law requires a signature on the registration form. Authorization of the debtor to effect a registration is included in a security or similar agreement and should not become part of the registration.⁴⁰ Under Article 32 bis 4 of the Mexican Commercial Code, unless otherwise proved, it is presumed that the debtor granted an authorization to effect the registration. The registrat does not examine whether the debtor authorized submission of a registration form prior to processing. However, the debtor may ex post facto prove that the registration was not authorized.

E. Informative Notice

Modern registries of security interests are notice-registration systems that do not require submission of the underlying documentation creating the security interest or other proof of its existence. Only minimal information identifying the debtor, the secured creditor, and the collateral must be provided in a standard registration form. As noted earlier, some registries may require that additional information be provided as a condition of registration.⁴¹ The majority of Latin American jurisdictions are yet to embrace the notice-registration concept. For instance, pursuant to Article 24 of the Chilean Law on Non-Possessory Pledges,

^{38.} *See* UNCITRAL, 18th Session, Doc. A/CN.9/WG.VI/WP.44, at 19 (Aug. 26, 2010), *available at* http://www.uncitral.org/uncitral/commission/working_groups/6Security_Interests.html.

^{39.} *See* Reglamento del Registro de Prendas sin Desplazamiento, art. 5(4), Decreto No. 722, Octubre 23, 2010, D.O., [hereinafter Chilean Registry Regulations], *available at* http://www.registrocivil.cl/transparencia/marcoNormativo/Decreto_722.pdf.

^{40.} *See* UNCITRAL LEGISLATIVE GUIDE, *supra* note 2, Recommendation 71 ("The law should provide that registration is ineffective unless authorized by the grantor in writing. The authorization may be given before or after registration. A written security agreement is sufficient to constitute authorization for the registration.").

^{41.} See id. Recommendation 57(d); see also OAS MODEL LAW art. 38(III).

the notary must submit an authenticated copy of the security agreement for registration within three days of its execution.⁴² In a notice-registration system, registration does not prove existence of a security interest. The registration may have been effected before the security agreement was entered into,⁴³ in which case the security interest does not yet exist; or, it may relate to a secured obligation that may have already been satisfied, in which case the security interest no longer exists. Accordingly, having found a registration on record, the searcher must engage in further inquiry to find out the details of the security interest to which the registration relates.

Some laws and registration systems allow registrants to submit additional documentation with the registration form.⁴⁴ In developed markets with a long tradition of notice-registration systems, registrants rarely attach any documents to the registration form. For instance, attachments may be used to describe the assets of an insurance company such as its insured clients, the types of policies, their expirations, premiums, etc. This may not be the case in developing nations where the interest and expectations of creditors may be different. These creditors may want to attach to their registration forms documentation such as the loan agreement, accounting statements, or invoices. The registration system may allow that even pictures of the collateral be attached to a registration form. However, under modern notice-registration systems, submission of an attachment is not necessary, and the registration form shall be processed even if it is not accompanied by a document. The purpose for allowing attachments to registration forms is two-fold. First, in jurisdictions that are transitioning from document-registration to notice-registration systems, such a feature should bring comfort to registrants used to submitting the underlying documentation for registration. As users get familiar and comfortable with the new registration system, the number of attachments will shrink. However, at the outset, it may be important to make this feature available to attract the user community. Second, in some transactions, the collateral description field may not be sufficient to describe the encumbered assets (e.g., when the debtor is leasing dozens of items of construction equipment). In such case, the registrant may attach a document to which the collateral description in the registration form may refer. Accordingly, a registration system that allows attachments provides a level of comfort to the users as well as accommodates certain commercial transactions.

It is important that the law clearly set forth the legal effect of the information contained in attachments. What if the name of the debtor provided in the registration form is incorrect, but the debtor is correctly identified in an attachment? As will be discussed below, a mistake in the debtor's name may

^{42.} Furthermore, if the security agreement is subsequently amended, an authorized copy of such amendment must be submitted for registration by the notary. *See* CóD. CIV art. 2384 (Chile).

^{43.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 67; U.C.C. § 9-502(d) (2000).

^{44.} See OAS Model Registry Regulations art. 6(II), Alternative B.

render the registration ineffective.⁴⁵ Information contained in an attachment should not save an otherwise ineffective registration. In other words, attachments should have only an informational function and should not have any legal effect on the registration.⁴⁶ Information in an attachment is not an indexing criterion that allows third parties to retrieve the registration. In this regard, it is also important that the law protects the rights of transferees that buy encumbered assets or acquire other rights in the collateral. Under modern secured transactions laws, transferees in the ordinary course of business of the transferor may take free of a security interest unless they know that the transfer violates the rights of the secured creditor under the security agreement.⁴⁷ The rights of transferees should be protected unless the secured creditor attached to the registration form a security agreement that contains a restriction on the sale of collateral and the transferee gained knowledge of the restriction from the search. Knowledge of such a restriction would deny protection to the transferee. This is the case in Chile, where the security agreement itself is registered. When such agreement contains restrictions on disposition, third parties will be bound by it.48

How can such functionality be implemented in the registration system? Electronic registration systems may include this functionality and allow users to submit registration forms with or without an attachment. The system should be designed so as not to reject a registration form that does not include an attachment. If registration systems allow submission of registration forms in paper, adequate scanning equipment must be available to the registrar. The registration system should also include some safeguards limiting the ability of users to submit excessively large attachments. The system itself should place a limit on the size of attachments (e.g., two megabytes), permit only a single attachment per registration, and allow the registry to charge higher fees for the scanning of attachments (e.g., \$1 for every page). Such limitations will preserve the flexibility of the system, allow users to submit additional information, and at the same time protect the functionality of the system against the abuse of submitting large attachments.

F. Legal Certainty and Sufficiency of Information

Searchers must be able to rely on the information retrieved from the registry database when conducting searches. The information registered in the database may be: 1) correct; 2) incorrect to the extent that the registration is still

^{45.} See infra Part F; see also UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 58; U.C.C. § 9-506(b) (2000).

^{46.} *See* OAS Model Registry Regulations art. 6(II), Alternative B ("Provision of information by filing an attachment referred to in this paragraph does not constitute compliance with the requirement of these Regulations with respect to registration information.").

^{47.} UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 81(a).

^{48.} See Chilean Registry Regulations art. 7.

retrievable (e.g., an address of the debtor is no longer current); or 3) incorrect to the extent that the registration is not retrievable (e.g., the debtor's name contains errors that prevent the system's search logic from retrieving the registration under the search using the debtor's correct name). How should the searcher respond? The law must provide a clear answer as to which registrations will be effective even if they contain an error or other misleading information. This is known as the test of sufficiency of information provided in a registration form.

The test of sufficiency depends on the type of information provided in registration forms and distinguishes between the information that is used to index registrations (e.g., the debtor's identifier) and that which is not utilized as the indexing criterion (e.g., the secured creditor's identifier). Notice-registration systems are invariably searchable by a debtor's identifier. In other words, all registrations are indexed according to the debtor's identifier, and when a third party searches the registry database, it will use the debtor's identifier, whether a name or unique identification number. If the registrant made an error in the debtor's identifier and entered "Perdo Silva," the searcher using the debtor's correct name "Pedro Silvas" may not be able to retrieve it, depending on the type of search logic used by the registration system. In this case, the test of sufficiency should render the registration ineffective if it would not be retrieved by a search under the correct debtor identifier.⁴⁹ The test of sufficiency (i.e., the test of the search logic with respect to the debtor identifier) is objective because the effectiveness of the registration depends on the retrievability of the registration by the official search logic of the registration system.⁵⁰

With regard to information that is not an indexing/search criterion, the test of sufficiency is more relaxed, and errors in such information should not render a registration ineffective as would be the case with errors in a debtor's identifier. In other words, the same error in the debtor's and secured creditor's identifier may have different legal consequences. If the registrant makes an error in the secured creditor's identifier, the registration will be ineffective only when it is seriously misleading. In this case, the test of sufficiency is subjective and will depend on the gravity of the error and its potential to mislead. Unlike the objective search logic test, the subjective seriously misleading test allows the judge to consider equities of the particular case. For instance, U.S. courts have held that errors such as listing the debtor's business address instead of a home address,⁵¹ missing the description of a crane by one digit,⁵² or entering the wrong

^{49.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 58.

^{50.} The registration should be ineffective even if it may be retrieved using an unofficial "wildcard" type of search logic or searching the records maintained by a private entity such as a service company.

^{51.} Grabowski v. Deere & Co. (*In re* Grabowski), 277 B.R. 388, 392 (Bankr. S.D. Ill. 2002).

^{52.} Maxus Leasing Grp., Inc. v. Kobelco Am., Inc., No. 5:04-CV-518, 2007 WL 655779, at *3 (N.D.N.Y. Feb. 26, 2007).

contract number of an annuity⁵³ are not seriously misleading. By contrast, indicating an address for collateral when it is located at a different address⁵⁴ or listing the serial number of equipment that identifies an item that is substantially different in appearance, performance, and price⁵⁵ have been held to be seriously misleading.

The law should provide for the legal consequences of errors in registrations. The recommended approach is to apply different tests to errors in indexing/searching criteria and non-indexing/searching criteria as highlighted above. However, only Honduras addresses errors in registrations in its Registry Regulations. Chile, Guatemala, Mexico, and Peru should incorporate the rules set out in the UNCITRAL Legislative Guide and the model registry recommendations and, thus, provide guidance to their judges that will ultimately decide the questions of effectiveness and sufficiency of registrations. Judges in Latin American jurisdictions are unfamiliar with the functioning of notice-registration systems and the impact of errors on the effectiveness of registrations. Unless clear guidance is provided, they may issue decisions contrary to the expectations of secured creditors and render their security interests essentially unsecured and vulnerable to other claims.

For the efficient resolution of disputes, it is important that registered information be accorded due evidentiary weight. Parties should not be able to dispute the status and content of information on public record. For instance, if the record shows that the registration form was registered on a specific date, the registrant should not be able to persuade the judge that it was actually registered earlier. Or, if the registration describes the collateral as "inventory," the registrant should not be able to persuade the judge that the registration form originally submitted also referred to "equipment," but it somehow got lost in the system. Interested parties may also request that the registry issue a certificate of the information on record.⁵⁶ The registry may issue such a certificate in writing that bears the logo, seal, and signature of the registrar or issue one electronically that contains an electronic signature and digital seal, as is the case in Mexico.⁵⁷

Registry regulations typically distinguish between search results from the registry database by users over the Internet and the actual form of a certificate issued by the registry. The legal effect of a search result a user prints may be different from a certificate issued as a result of a search conducted by a registry employee. For instance, the SUNARP User Agreement provides that Internet search results are merely informative; printouts do not have any evidentiary value

^{53.} ProGrowth Bank, Inc. v. Wells Fargo Bank, N.A., 558 F.3d 809, 815 (8th Cir. 2009).

^{54.} Allete, Inc. v. GEC Eng'g, Inc., 726 N.W.2d 520, 524 (Minn. Ct. App. 2007).

^{55.} Deere Credit, Inc. v. Pickle Logging, Inc. (*In re* Pickle Logging, Inc.), 286 B.R. 181, 184 (Bankr. M.D. Ga. 2002).

^{56.} See Mexican LGM art. 32 bis 7; U.C.C. § 9-523(d) (2000).

^{57.} See Mexican Registry Regulations art. 24 (authorizing the registry to issue electronic certificates).

in judicial or administrative proceedings.⁵⁸ Laws make this distinction between the types of searches, although the search conducted by an individual should retrieve the same result as the search conducted by a registrar because they access the same registered information and search logic.

G. Integrity of the Record

The person who enters information into the registration form, whether on paper or electronically, is solely responsible for its accuracy. Neither the registrar nor a third party such as the notary verifies, validates, or otherwise scrutinizes the content of the registration form.⁵⁹ Yet, in a number of jurisdictions, information provided in the registration form must be verified by a notary, the registrar, or even both.⁶⁰ In Peru, the notary must certify the registration form before it is submitted for registration. The notarial certification requires that the registration form be manually or electronically signed by both the secured creditor and the debtor.⁶¹ The notary verifies the identity as well as the capacity of the parties to enter into a secured transaction and ensures that all required information has been provided in the registration form.⁶²

In addition to the certification that may occur prior to the submission of the registration form to the registry, the information contained therein may be subject to another verification that is conducted by the registrar. This type of verification is commonly known as validation, or *calificación* in Spanish. The entire Chapter III of the Peruvian Registry Regulations is dedicated to the process of validation. Pursuant to Article 47, the registrar has three working days following the day of receipt of the registrar contrasts with that of the registrar under Article 5 of the OAS Model Registry Regulations, which provides:

> The duties and responsibilities of the Registry are ministerial. The Registry has no obligation to verify the accuracy of registration information submitted to it. In accepting or rejecting a form for registration, the Registry does not assess the legal sufficiency of the registration information and does not determine whether it is factually correct or incorrect. The

^{58.} All printouts from the Registry are labeled with the following heading: "COPIA INFORMATIVA EMITIDA A TRAVES DE CONSULTA POR INTERNET. NO TIENE VALIDEZ PARA NINGÚN TRÁMITE ADMINISTRATIVO, JUDICIAL U OTROS." *See* SUNARP User Agreement, *supra* note 28, at cl. 3.

^{59.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 54(d).

^{60.} See, e.g., Peruvian Registry Regulations art. 25.

^{61.} Id. art. 28(13).

^{62.} Id. art. 36.

Registry does not determine whether or not a registration or cancellation has been authorized. 63

The role of the UCC filing officer is similarly restricted to performing administrative or ministerial functions.⁶⁴ The Honduran Secured Transactions Law also bestows minimal validation powers on the registrar that are effectively limited to ensuring that all of the required information has been provided.⁶⁵ The Honduran registrar, however, has no authority to examine the content of the registration form and verify the accuracy of the information provided therein.⁶⁶

Responsibility for the correctness of the information submitted for registration is on the secured creditor or its agent who effects the registration. Article 32 bis 4 of the Mexican Commercial Code expressly provides that creditors and other persons who submit registration forms are responsible for legal effects of the information provided therein and its veracity. This responsibility persists as long as the registration remains effective. Accordingly, when some information turns out to be incorrect or the arrangement with the borrower changes so that it might require an amendment of the registration (e.g., some collateral has been released from the security interest), the secured creditor shall be responsible for effecting the changes. Pursuant to Article 43 of the Honduran Secured Transactions Law, only the secured creditor or its agent may effect any changes such as amendments, continuation, and cancellation of the registration.

In a notice-registration system, the registrar should not be able to alter the record upon his or her own initiative or upon request of the secured creditor. The duty to rectify any errors or amend the registration when necessary should be placed on the secured creditor—as is the case under the Mexican Commercial Code.⁶⁷ However, this does not appear to be the case in other jurisdictions in Latin America. For instance, in Peru, the registrar may rectify inaccurately registered information.⁶⁸ Some inaccurate information may be corrected upon

^{63.} OAS Model Registry Regulations art. 5.

^{64.} The UCC Article 9 Model Administrative Rules provides: "The duties and responsibilities of the filing officer with respect to the administration of the UCC are ministerial. In accepting for filing or refusing to file a UCC record pursuant to these rules, the filing officer does not determine the legal sufficiency or insufficiency of the UCC record, determine that information in the record is correct or incorrect, in whole or in part, or create a presumption that information in the UCC record is correct or incorrect, in whole or in part." Model Administrative Rules: Uniform Commercial Code, Article 9, INT'L Ass'n COMMERCIAL ADM'RS, sec. 2, r. 200 (2010),available OF at http://www.iaca.org/downloads/2010Conference/STS/v14-2010_Model_Administrative_ Rules.pdf.

^{65.} See Honduran LGM art. 42(5).

^{66.} *Id*.

^{67.} *See* CCo. art. 32 bis 4 (Mex.) (providing that it is the responsibility of the person who effected the registration to rectify any errors).

^{68.} Reglamento de los Registros Públicos, tit. VI, art. 76, Resolución No. 195-2001-SUNARP/SN (Oct. 1, 2001), *available at* http://www.sunarp.gob.pe/publi_RRP0.asp.

request from an affected party or upon a registrar's own initiative if material errors are discovered.⁶⁹ The Chilean registrar has the same power pursuant to Article 26 of the Law on Non-Possessory Pledges. This authority of the registrar to correct errors contradicts the limited role of the registrar under the OAS Model Registry Regulations, the Honduran Law on Secured Transactions, as well as the *UNCITRAL Legislative Guide*.

H. Immediate Registration

Modern registration systems are designed so that the secured creditor and other registrants have direct access to the interface through which they submit registration forms to the centralized database. The registrant may enter the required information in a screen on a computer and click a "Register" button to submit a registration form. Once the registrant clicks the "Register" button, and the registration form is not rejected, it will become immediately available to third party searchers. Practically, there is no gap between the moment of submission of a registration form and its public availability. Accordingly, the registration is effective against third parties almost instantly after its submission. Available technology makes such immediate registrations possible. Article 32 bis 4 of the Mexican Commercial Code aspires to implement procedures that would process registration forms "immediately upon their receipt."

Immediacy of registration requires that the registrar not be involved in the registration process. In some jurisdictions, registration systems were set up to allow users to submit registration forms electronically to the registry. However, upon submission of the registration form through an electronic system, the registrar would print out a hard copy, verify its contents, and ensure that other formalities had been satisfied. Modern registration systems should allow not only electronic submission of registration forms, but also their immediate indexing and storage in the database. All steps in the registration process, from the submission to the actual storage, should be automated, and any human intervention should be eliminated. Article 32 bis 4(I) of the Mexican Commercial Code seeks to implement such automation of the registration process.

In registration systems that allow delivery of paper-based registration forms, it is important that the time of effectiveness of the registration coincide with its searchability. Registrations should not be effective before they become publicly searchable. In other words, the registration will be effective against third parties⁷⁰ only when it is publicly accessible to searchers, and not when a

Article 75 defines inaccuracy of the Registry as "any discrepancy between registered information and extra-registry reality." *Id.* art. 75.

^{69.} Id. art. 76.

^{70.} It is the registration rather than a security interest that is effective against third parties when it becomes searchable. Registration may be effected before the security agreement is concluded, as a result of which the security interest at the time of registration

registration form is delivered to a registry office. This is the position recommended in the UNCITRAL Legislative Guide⁷¹ as well as the OAS Model Registry Regulations.⁷² However, a number of legal regimes provide that a registration is effective when delivered to the registry office. Peru is one such system.⁷³ When the registration is effective upon delivery and before it becomes searchable, the burden is placed on the searcher, who must be wary of the possibility of not-yet-public registrations. If a similar delay between the receipt and searchability of the registration occurs in an electronic registration system, the legislature must appropriately place the risk on one of the parties. Such delays are very rare in contemporary electronic registration systems. With the increasing use of electronic registration systems, the immediacy of registration will become the rule.

Registered information should be available in real time so that the searcher should be able to access information as presently registered in the registry database.⁷⁴ In other words, the ability of the registration system to process registration forms as soon as they are submitted provides confidence to searchers, who may rely on the search results reflecting the information presently registered. Such a registration system benefits: 1) the registrant, who immediately knows whether the registration was completed; 2) the searcher, who knows that it will not be subject to not-yet-registered notices of security interests; and 3) the borrower, who will get quicker access to funds.

I. Inexpensive Access

Fees to access the registry services must be set at a level that is not higher than necessary to recover the cost of the registry. The registry should not operate as a proverbial "cash-cow," generating income for the operator and/or the government. Expensive access to the registry service may undo the benefits of a modern secured transactions legal framework. Even if the law eliminated excessive formalities, provided clear rules on perfection and priorities, and allowed extrajudicial enforcement, creditors might be reluctant to lend under this framework if the registration fees are exorbitant. In extreme situations, creditors may even ask the borrower to relocate to a different jurisdiction with much lower registration fees. The policy of low-cost access has been incorporated into Article 20 of the OAS Model Registry Regulations, which states that "[t]he Registry may

may not yet have been created. Unless the security interest has been created, it is not effective against third parties.

^{71.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 70.

^{72.} *See* OAS Model Registry Regulations art. 6(I) ("A registration is effected when the registration information required by the Law and these Regulations has been entered into the database of the Registry and is searchable as provided in these Regulations.").

^{73.} Peruvian Registry Regulations art. 6.

^{74.} Id. art. 8.

charge a fee for the costs of the service it provided."⁷⁵ Similarly, Recommendation 54(i) of the *UNCITRAL Legislative Guide* provides: "[F]ees for registration and for searching, if any, are set at a level no higher than necessary to permit cost recovery."⁷⁶

The registry designer should develop a budget that would factor in the costs for the acquisition/maintenance of the hardware and the software necessary to operate the hardware; the acquisition and/or design of the registry software application; wages for registry employees, if any; upkeep of the facilities where the hardware is stored; and periodic upgrades to the registry software application. States should refrain from acquiring expensive hardware, software, or a registry application. An expensive system would consequently require high fees to recoup the acquisition and maintenance costs. For example, a \$10 million registry application may drive up the registration fees to an unreasonably high level. Modern registration systems place the responsibility for registrations and searches on secured creditors and their agents (e.g., service companies), who have direct access to the registry interface for the submission of registration forms. Consequently, the cost of labor for the registry personnel necessary to process paper-based registration forms will be gradually reduced and ultimately be quite modest. The cost of the other components listed above can be easily and objectively estimated and budgeted. Furthermore, with technology advances, the cost of maintenance and upgrades is also reduced.

The registration fee amount has the potential to significantly drive down the number of registrations. For instance, the July 2009 bulletin of the Guatemalan registry of security interests reported that, during the initial eight months of operation, only 588 registrations had been made.⁷⁷ Registration fees in Guatemala are currently being calculated as a percentage of the maximum amount of the secured obligation—and in some cases, they have exceeded US\$1,200 per registration.⁷⁸ In one particularly excessive case, on July 5, 2010, the Guatemalan registry charged a fee of US\$112,000 for the registration of a security interest

^{75.} OAS Model Registry Regulations art. 20.

^{76.} UNCITRAL LEGISLATIVE GUIDE, *supra* note 2, Recommendation 54; *see also* Commentary, UNCITRAL LEGISLATIVE GUIDE, *supra* note 2, at 158 (providing that "the fundamental logic of a general security rights registry system is to enhance transparency and certainty regarding security rights. For this reason, modern registry systems are designed so as to encourage registrants and searchers to use the system. It is, therefore, critical for fees to be set at a level that facilitates access, while still enabling the system to recover its capital and operational costs within a reasonable period of time. Excessive registration and searching fees designed to raise revenue rather than support the cost of the system are tantamount to a tax (ultimately borne by borrowers) that discourages access to and use of the system.").

^{77.} *See* Boletín Informativo, Registro de Garantías Mobiliarias (July 2009), *available at* http://www.rgm.gob.gt/documentos/boletin_julio_2009.pdf.

^{78.} See Acuerdo Gubernativo No. 55-2010 (Feb. 10, 2010), http://www.rgm.gob.gt/documentos/ARANCEL.pdf.

securing a loan provided to Sucden Americas Corporation.⁷⁹ With a low flat fee, the number of registrations could have been significantly higher. In modern systems—such as those that operate in Canada and in the United States—tens of thousands of registrations are processed on a monthly basis. The annual revenue from collecting registration fees in the largest filing jurisdictions, such as California or Illinois, exceeds a few million U.S. dollars. In some U.S. states, higher flat fees are charged for the processing of paper-based registration forms to encourage registrants to utilize the electronic registration service that places less of a burden on the registrars. For instance, the Secretary of State's office in Delaware charges a flat \$100 fee for the processing of paper-based registration forms, while the fee is only \$30 for electronic registrations.

J. Interconnectivity

Modern secured transactions regimes have a broad scope in terms of personal property assets that may be subject to a security interest. Most items of personal property are not uniquely identifiable by serial numbers, and specialized registries for the registration of title and rights thereto do not exist. Inventory or accounts receivable may be described in registration forms generically, that is to say not by a serial number of every item of inventory or an invoice number of every account receivable. Notices of security interests in such personal property assets must be submitted to a centralized registry of security interests.

Borrowers may also collateralize their loans with fixtures, which are a category of assets that overlap both personal and real property.⁸¹ A fixture is essentially an item of personal property (e.g., an air-conditioning unit) that is or will be attached to an immovable. Sometimes, it may not be clear whether notices of security interests taken in fixtures must be registered in the registry of security interests in personal property or in the real property registry. Modern secured transaction laws provide that security interests in fixtures may be perfected by registration in either the registry of security interests or the real property registry.⁸² The law then provides which registration has priority.⁸³

^{79.} See generally Urías Gamarro, *Inscriben garantía por US\$75 millones*, PRENSALIBRE.COM (July 29, 2010), http://www.prensalibre.com/economia/Inscriben-garantia-US75-millones_0_307169292.html (providing a press release announcing the loan but not the registration fee).

^{80.} See UCC Filing & Expedited Fees, DEL. DEP'T OF STATE (July 6, 2010), http://corp.delaware.gov/uccfeesSept09.shtml.

^{81.} See, e.g., UNCITRAL LEGISLATIVE GUIDE, *supra* note 2, at 456 (using the term "attachment to immovable property," which is defined in the Terminology Section as "a tangible asset that is so physically attached to immovable property that, despite the fact that it has not lost its separate identity, it is treated as immovable property under the law of the State where the immovable property is located.").

^{82.} See U.C.C. § 9-501(a) (2000).

^{83.} Id. § 9-334(e).

Specialized registries exist for certain personal property assets in which only title or both title and related interests are registered. For instance, registries for intellectual property rights such as patents and copyrights may record both title and security interests to such assets. Specialized asset-based registries exist in many jurisdictions for vehicles, boats, aircraft, trailers, etc. Registration of notices of security interests in these specialized asset-based registries may be either exclusive of or alternative to the registration of notices in the registry of security interests. If the registration of security interests is exclusive, a registration made in the registry of security interests describing such assets will be ineffective to perfect a security interest. If the registration is alternative, a registration in the registry of security interests will perfect the security interest, but, as in the case of fixtures mentioned above, the law must set forth clear priority rules.

Suppose that under the local law a registration against fixtures, intellectual property rights, and vehicles in the registry of security interests will render the security interest perfected. However, the law provides that a registration made in the respective specialized asset-based registry will not only perfect a security interest, but also will have priority over the security interest perfected by registration in the registry of security interests.⁸⁴ In some cases, the registration in the registry of security interests shall be ineffective unless an appropriate annotation is made in the specialized registry. Accordingly, the secured creditor may be required to submit two registration forms, satisfy two separate registration procedures and formalities, and pay two registration fees.

Article 25 of the Chilean Law on Non-Possessory Pledges expressly declares the security interest taken in a special asset such as a vehicle ineffective against third parties unless a marginal annotation referring to the registration in the registry of security interests is made in the Registry of Motor Vehicles. Article 2 of the Chilean Registry Regulations provides that a request for annotation be submitted to the relevant specialized registry if the registration covers an asset referenced in that Article. The law may also protect transferees of such assets that relied on the clean title record in the specialized asset-based registry.⁸⁵ Accordingly, the security interest perfected by registration in the registry of security interests may be vulnerable to security interests perfected by registration in the specialized asset-based registry as well as to transferees that acquire rights to the special asset in reliance on the clean record. How can the secured creditor achieve priority for its security interest that covers assets subject to specialized asset-based registration without having to make two separate registrations?

The registry system for notices of security interests may be designed and programmed to connect to specialized asset-based registries to forward information about the asset that was described as collateral in a registration form. For instance, the registration form may include Volkswagen Passat, VIN WVWAK73C86P056054, in the collateral description for serial number assets.

^{84.} See UNCITRAL LEGISLATIVE GUIDE, supra note 2, Recommendation 77(a).

^{85.} See id. Recommendation 78.

The registry system may then forward the registration form itself or a short notice that a registration of a security interest against the identified vehicle has been made in the registry of security interests to the specialized asset-based registryin this case the vehicle registry. The vehicle registry may be designed to automatically associate the received notice with the record of ownership to the vehicle so that a searcher of the vehicle registry records will be notified of the security interest and directed to the registry of security interests to find out more Ideally, this interconnection between the two registries should information. operate automatically without any human input on either of the ends. Article 31 bis of the Mexican Registry Regulations provides that the relevant specialized asset-based registry should replicate the record of the registry of security interests in case the registration form covers some assets that are registered in a specialized registry. This replication of records should be effected automatically. A similar interconnection may be designed with other specialized asset-based registries, such as the intellectual property rights registry, the real property registry, the registry of aircrafts, etc. A number of legal and registration systems already provide for such interconnections (e.g., Peru).⁸⁶

However, it is important that the assets subject to registration in the specialized asset-based registries be singled out and clearly identified in registration forms so that the system may recognize them and connect with the appropriate specialized asset-based registry. The system will not be able to parse through a lengthy collateral description looking for any assets described therein that may require submission of a notice to a specialized asset-based registry. Instead, for this interconnection to operate efficiently, the secured transaction laws or the registry regulations must require that secured creditors identify such assets in registration forms by unique identifiers such as serial numbers and descriptions that will allow the registration system to quickly identify them and connect to the appropriate specialized asset-based registry. For instance, the Chilean Registry Regulations require identification of a serial number for a vehicle that will allow the registry of security interests to submit a request for annotation to the Registry of Motor Vehicles.⁸⁷ Accordingly, the legislator should designate certain assets as serial number property and require that, in addition to the general description, the secured creditor must indicate that the asset is a serial number property (e.g., by checking a box), and enter the relevant serial number. The law must also address the consequences of a failure to associate a notice of a security interest with the particular title record in the specialized asset-based registry.

The first function of an interconnection with specialized registries is to ensure that the rights of secured creditors are perfected with priority against other creditors and transferees. The second function is to validate some of the collateral information provided in the registration form. When a registration form that describes a vehicle by its serial number is submitted for registration, the registry

^{86.} See Peruvian Registry Regulations art. 15.

^{87.} *See also* Chilean Registry Regulations art. 9(d) (providing that the registrant will be required to pay a fee, in addition to the registration fee, for any annotation that is made in the specialized registry).

of security interests may check the serial number provided against a serial number maintained in the vehicle registry records. If no match is retrieved, the system may display an error message that the serial number provided does not match any record in the vehicle registry. Most likely, the secured creditor entered the serial number incorrectly and the system will alert the secured creditor to this error. This limited validation service provided by the registry of security interests may minimize errors in serial number descriptions and thus, save some registrations from being rendered ineffective.

The registry of security interests may also be connected with a registry or central data source that maintains identification information for potential debtors. For instance, a state agency may maintain information about individuals in a registry of births, taxpayers, or voters. Business registries and tax authorities possess information about entities. Unless privacy concerns prevent its establishment, the registry of security interests may be connected to one of these registries or data sources for the purpose of validating identification information of debtors. When the secured creditor enters the unique number, name, and address of the debtor, the system may automatically check this information against the record in one of the available data sources. For instance, in the Honduran registry of security interests, when the registrant enters a unique identification number of the debtor who is a Honduran citizen, the system will search the voters' data source. If a positive match is found, the system will automatically populate the fields with the name of the debtor who matched the identification number. If no match is found, no information is populated in the relevant fields. If an incorrect identification number is entered, the search will return the found match. The logic used to connect to the external data source does not know whether the identification number entered is correct; it automatically returns matching information if found. It is up to the user to ensure that the information is correct. Depending on the type of debtor, the system may connect to a registry of births or voters when the debtor is an individual, or to a registry of companies or taxpayers when the debtor is an entity. If the information was provided incorrectly, the system will display a message alerting the registrant to the possibility of an error.

However, the interconnection does not relieve the registrant of the responsibility to ensure that the debtor identifier has been provided correctly. The records of a specialized debtor registry or other data source may be outdated or incorrect. For instance, the name of an organization in the index of the company's registry may be different than the name in its articles of incorporation registered in the database.⁸⁸ The voters' data source may be updated only periodically and may

^{88.} See Edwin E. Smith, A Summary of the 2010 Amendments to the Official Text of Article 9 of the Uniform Commercial Code, A.B.A. COMMERCIAL LAW NEWSLETTER, Fall 2010, at 4, 6, available at http://apps.americanbar.org/buslaw/blt/content/2011/01/0004a.pdf. It may be possible that the company's registry maintains a searchable record of the names of registered organizations that displays the names of organizations with certain abbreviations. However, the name of the registered organization provided in its charter document registered in the record may differ from the name displayed in the searchable record of names.

not reflect changes in names and addresses of individuals in the interim. These possibilities should be explored and taken into account when designing an interface.

CONCLUSION

It should be apparent that registration systems in the Latin American jurisdictions identified in this article, other than Honduras, fail the test of the recently adopted international model instruments on the registration of notices of security interests. Some jurisdictions have been making continuous progress and have come close to meeting the test (Mexico); some are in the process of structural reorganization (Guatemala and Peru); and in others, the legal framework enacted is a non-starter for the establishment of a modern registry (Chile). These jurisdictions are encouraged to re-examine their registration systems and implement the features identified in this article and the OAS Model Registry Regulations. Other jurisdictions in Latin America should take advantage of the lessons learned from the various failures encountered and avoid the difficulties experienced particularly in Chile, Guatemala, and Peru. Legislators should also pay close attention to the work of UNCITRAL on the text on registration of security interests and familiarize themselves with the World Bank Group's Collateral Registries Toolkit, which provides not only very useful background information but also the necessary steps to develop and implement an efficient registration system.

