

2010

SECURED TRANSACTIONS SYSTEMS AND COLLATERAL REGISTRIES

January 2010



Investment Climate Advisory Services | World Bank Group



With funding from FIAS, the multi-donor investment climate advisory service

in partnership with



© 2010 INTERNATIONAL FINANCE CORPORATION
2121 Pennsylvania Avenue, NW, Washington DC 20433
All rights reserved
Manufactured in the United States of America
First Printing: January 2010

This information, while based on sources that IFC considers reliable, is not guaranteed as to accuracy and does not purport to be complete.

This information shall not be construed, implicitly or explicitly, as containing any investment recommendations and, accordingly, IFC is not registered under the U.S. Investment Advisers Act of 1940. This information does not constitute an offer of or on behalf of IFC to purchase or sell any of the enterprises mentioned, nor should it be considered as investment advice.

The denominations and geographical names in this publication are used solely for the convenience of the reader and do not imply the expression of any opinion whatsoever on the part of IFC, the World Bank, or other affiliates concerning the legal status of any country, territory, city, area, or its authorities, or concerning the delimitation of its boundaries or national affiliation.

The findings, interpretations, and conclusions expressed in this work are those of the authors and do not necessarily reflect the views of the Board of Executive Directors of the World Bank or the governments of the countries that they represent. The information in this work is not intended to serve as legal advice. The World Bank Group does not guarantee the accuracy of the data included in this work and accepts no responsibility for any consequences of the use of such data.

Rights and Permissions

The material in this publication is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The International Finance Corporation encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly.

For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center Inc., 222 Rosewood Drive, Danvers, MA 01923, USA; telephone: 978-750-8400; fax: 978-750-4470; Internet: www.copyright.com.

About the Investment Climate Advisory Services of the World Bank Group

The Investment Climate Advisory Services of the World Bank Group helps governments implement reforms to improve their business environment, and encourage and retain investment, thus fostering competitive markets, growth and job creation. Funding is provided by the World Bank Group (IFC, MIGA, and the World Bank) and over fifteen donor partners working through the multi-donor FIAS platform.

The pictures on the cover were taken by (from left to right) Dominic Sansoni (World Bank), Yosef Hadar (World Bank pictures 2 and 5), Curt Carnemark (World Bank), Shehzad Noorani (World Bank), and Eric Miller (World Bank).

Acknowledgments

The publication of this book was made possible due to the generous support of: The State Secretariat for Economic Affairs of the Government of Switzerland (SECO) and the Government of the Netherlands under the Partnership Program (NIPP) between the Netherlands Ministry for Development Cooperation and the International Finance Corporation.

The preparation of this Toolkit was led by Alejandro Alvarez de la Campa, from the World Bank Group. The content of the book was developed jointly with Everett T. Wohlers (World Bank), Yair Baranes (World Bank) and Sevi Simavi, International Finance Corporation (IFC). The authors are indebted to the following individuals for their excellent suggestions and thoughtful contributions to improve the content of the Toolkit:

Spiros V. Bazinas, UNCITRAL
Nicholas Budd, World Bank
Margarete O. Biallas, IFC
Dobromir Christow, World Bank
Santiago Croci, World Bank
Ronald C. C. Cuming, University of Saskatchewan
Frederique Dahan, EBRD
Alejandro Garro, Columbia University
Numa de Magalhaes, World Bank
Margaret Miller, World Bank
Hung Ngovandan, IFC
Raha Shahid-Saless, World Bank
Peter D. Sheerin, IFC
Murat Sultanov, IFC
Mahesh Uttamchandani, World Bank
John Wille, World Bank

This book was edited by the internal editing services of the World Bank Group (GSDTI). Corporate Visions was in charge of the production.

Table of Contents

Introduction: Purpose and Use of Toolkit	5
Chapter 1: Economic Rationale	6
Chapter 2: Diagnostic in Preparation for Project	14
A. Existing Lending Practices (Using Movable Property as Security)	14
B. Legal System, Legislative Practice and Customs	18
C. Baseline Legal and Economic Data	19
D. Level of Support for and Understanding of Proposed Reform	21
E. Capacities of Executive Agencies of Government, End Users and Courts	21
F. Unique Limitations or Capabilities of Client Country	22
Chapter 3: Project Design and Management	23
A. Objectives	23
B. Timeline, Actions and Deliverables	23
C. Risk Management	23
D. Budget and Resource Allocation	23
E. Staffing Plan and Task Allocation	28
Chapter 4: Implementation	29
A. Consensus Building and Client Input to Reform Process	29
1. Identify and Develop at Least One Strong Champion for Reform	29
2. Identify Stakeholder Groups and Leaders	30
3. Form Advisory Committee or Working Group	31
B. Development of the Law	31
1. Analysis and Mapping of the Existing Legal Environment	31
2. Building the New Secured Transactions Legal Regime	39
C. Design, Placement and Implementation of Registry	61
1. Information Gathering and Analysis	61
2. Registry Best Practices	65
3. Business Model	71
4. Development of Design and Specifications	75
5. Staffing, Housing and Equipping the Registry	79
6. Operating Budget Estimate	80
7. Implementation Timeline	82
8. Legacy Data Conversion	82
9. Procurements	84
10. Testing and Acceptance	85
11. Start-up Management	86
D. Public Awareness Building and Training	87
1. Information Gathering and Analysis	87
2. Public Awareness	88
3. Training	90
Chapter 5: Monitoring and Evaluation	98
A. What to Measure?	98
B. Tracking Impact through Indicators	99
1. Output Indicators	99
2. Outcome Indicator	100
3. Impact Indicators	102
C. When to Measure?	105
D. How to Measure? Monitoring Tools and Data Collection	106

Annex 1: Diagnostic Survey – Baseline Data	108
Annex 2: Model Survey to Assess Registry Capacity	116
Annex 3: <i>Doing Business</i> Methodology for the Legal Rights Index	122
Annex 4: Model Memorandum of Understanding with Government to Reform Secured Transactions Regimes	124
Annex 5: The World Bank Principles for Effective Insolvency and Creditors Rights Systems (Revised 2005)	129
Annex 6: Example of Regulation for Registry Procedures	133
Annex 7: Example of Terms of Reference for Registry IT System	137
Annex 8: Impact of Secured Lending in Gender Financing	141
Annex 9: Bibliography	150

Figures and Tables

Figures

Figure 1: Firms' Access to Credit around the World	6
Figure 2: Why Are Firms Not Able to Get Credit	7
Figure 3: Better Secured Transactions Laws = More Credit and Fewer Defaults	8
Figure 4: Negative Effect of Super Priorities on Credit	36
Figure 5: Perfection Requirements	44
Figure 6: Basic Program Logic Model	98

Tables

Table 1: Jurisdictions with Modern Secured Transactions Have More Favorable Credit Policies for Borrowers	9
Table 2: Target Audience to Gather Information/Data at the Diagnostic Stage	15
Table 3: Project Timeline	25
Table 4: Common Risks in the Implementation of Secured Transactions Projects and Mitigation Factors	25-26
Table 5: Illustrative Budget for Implementing Secured Transactions Projects in Emerging Markets	26-28
Table 6: Team Members' Responsibilities	28
Table 7: Examples of Counterparts and Champions in Secured Transactions Reform Projects	30
Table 8: List of Countries Which Allow Out of Court Enforcement	52
Table 9: Priority Conditions and Transition Rules of the Reformed Law	58
Table 10: Payment Method Options	77
Table 11: Examples of Events to be Plotted in Timeline	83
Table 12: Planning for Public Awareness	89
Table 13: Media Tools and Modes of Delivery	90
Table 14: Output Indicators for Secured Transactions and Collateral Registries Projects	99
Table 15: Outcome Indicators for Secured Transactions and Collateral Registries Projects	100, 101, 102
Table 16: Impact Indicators for Secured Transactions and Collateral Registries Projects	103
Table 17: Monitoring Tools and Frequency of Data Collection	106

Introduction: Purpose and Use of Toolkit

The main **objective** of this Toolkit is to provide technical advice and guidance to World Bank Group staff, donor institutions, government officials and other practitioners on the implementation of secured transactions law and institutional reforms in emerging market countries. However, the Toolkit has not been designed to eliminate the need for in-person expert advice for governments that undertake to introduce a secured transactions system. It is necessary to take into account the factors that are unique to each jurisdiction.

The **content** of the Toolkit will guide the reader through the various stages of the project cycle (identification, diagnostic, solution design, implementation, and monitoring and evaluation) involved in the introduction of secured transactions reforms. The recommendations presented in the Toolkit are based on IFC's experience in the secured transactions area, the contributions of a number of experts in this field, existing literature, reform experience in a number of emerging market countries and the existing best practices in jurisdictions with advanced secured transactions systems. While the Toolkit does not cover all aspects of secured transactions reform, it addresses the most important elements of such reform. The Toolkit does not address secured financing systems involving immovable property as collateral.

Chapter 1 contains a brief discussion of the **economic rationale** for modern secured transactions systems. Chapter 2 describes the main elements that a proper **diagnostic** study of the state of secured transactions in a country should contain. Chapter 3 provides an overview of **project management** techniques required to support the full project cycle. One of the most important parts of the Toolkit, Chapter 4, which deals with the **implementation of the reform**, includes sections on building consensus for the reform, developing and enacting the necessary laws and regulations, designing and implementing a secured transactions registry, building local awareness and conducting secured transactions training. Chapter 5 of the Toolkit elaborates in detail the **monitoring and evaluation strategy** that should be employed following the implementation of the project to assess the effect and impact of reforms. Finally, the Toolkit contains a number of annexes that include **tools** available to develop the different phases of the project as well as **technical information**.

Chapter 1: Economic Rationale

Access to Finance Is Crucial for Private Sector Growth but Remains a Major Constraint in the Developing World

It is well accepted that access to credit is crucial for economic growth and is the engine for private sector development. Removing barriers to a wide range of financial services can unleash private enterprise productivity and help reduce the size of the informal sector. While access to credit varies from one jurisdiction to another, constrained access to finance remains among the top three limitations on private sector growth in the developing world. More than half of private firms in emerging markets have no access to credit. This percentage is even higher and reaches up to 80 percent in Middle East and sub-Saharan Africa. The number of firms that use loans to finance investments

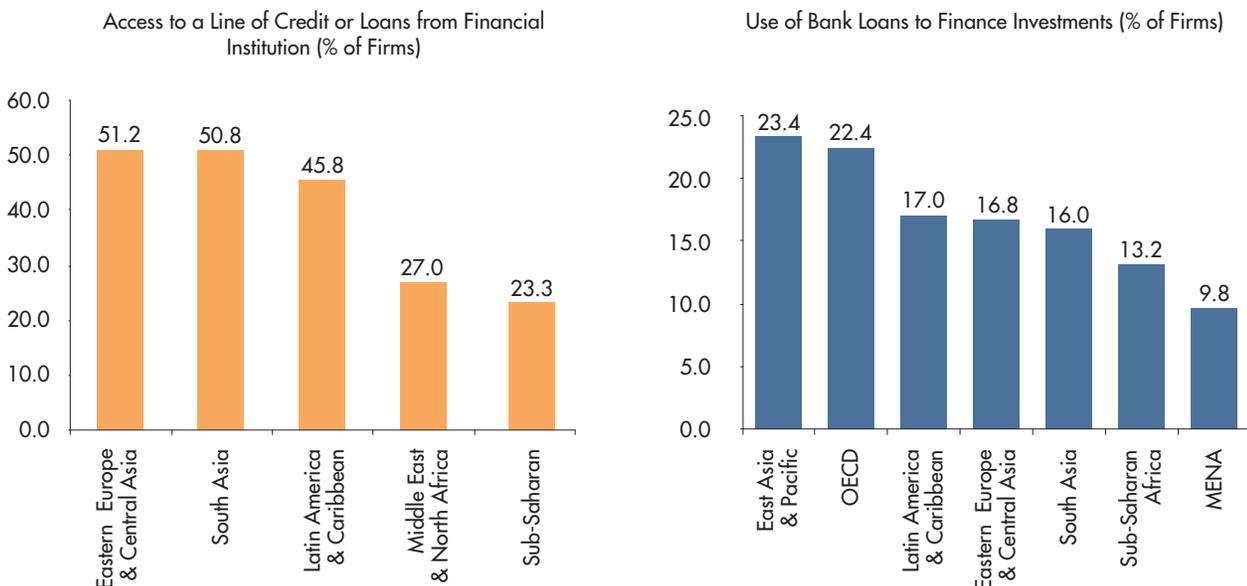
in the developing world is half the number of those firms operating in countries of the Organization for Economic Cooperation and Development (OECD).¹ See Figure 1.

Insufficient Collateral Is among the Top Reasons for Difficulty in Accessing Finance

Firm-level surveys conducted by the World Bank in developing countries help explain why obtaining finance is difficult. A common trend among the firms is that credit applications are rejected mostly due to insufficient collateral, i.e. unacceptable or unsuitable collateral. In many cases, business owners did not even bother applying for loans, because they were certain that they could not meet the collateral requirements often requested by banks.² See Figure 2.

An in-depth analysis indicates that unavailability of collateral is frequently not the problem; rather, it is the

Figure 1: Firms' Access to Credit around the World

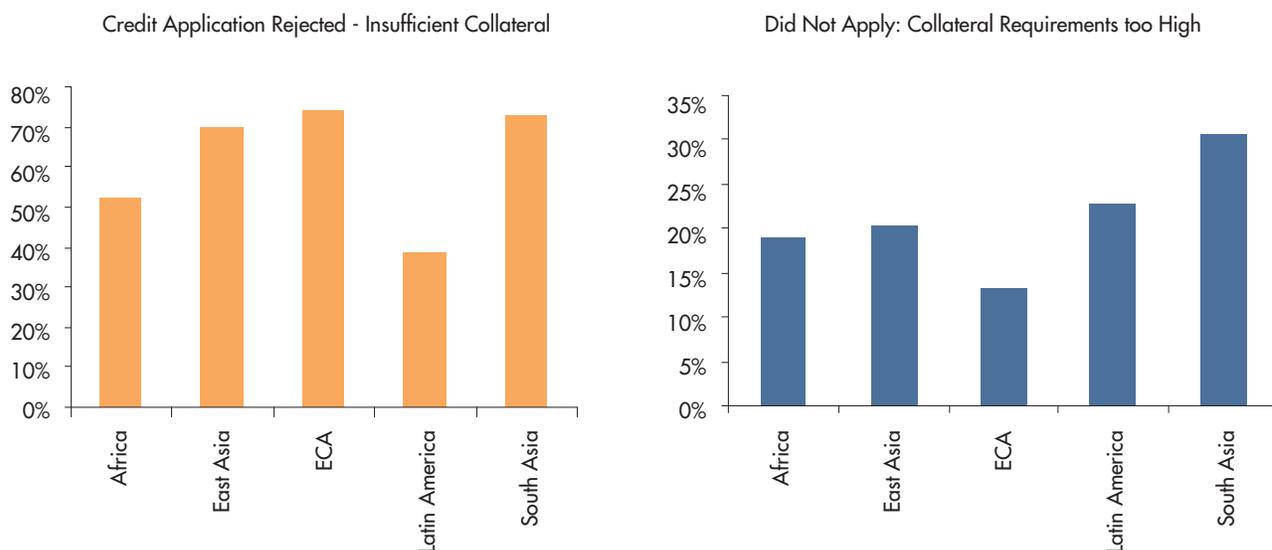


Source: World Bank Enterprise Surveys Global Database

1. See World Bank Group Enterprise Surveys.

2. See "Reforming Collateral Laws to Expand Access to Finance" Fleisig, Safavian, De La Pena, 2006.

Figure 2: Why Are Firms Not Able to Get Credit ?³



Source: World Bank Enterprise Surveys Global Database

inability to utilize valuable assets as collateral. While in the developing world 78 percent of the capital stock of a business enterprise is typically in movable assets such as machinery, equipment, or receivables and only 22 percent is in immovable property, financial institutions are reluctant to accept movable property as collateral. Banks heavily prefer land and real estate as collateral.⁴ By contrast, in the United States, movable property makes up about 60 percent of enterprises' capital stock⁵ and lenders consider such assets to be excellent sources of collateral; movables account for around 70 percent of small-business financing.⁶ The asset-based lending industry in the United States has been growing rapidly since the mid-1970s, and the volume of movable asset lending has increased 40-fold over 30 years, reaching a total of

US \$400 billion. The industry has grown by 12 percent annually over the past 10 years.⁷

One of the Ways to Increase Access to Credit Lies in Reforming Secured Transactions Laws and Registries

Providing legal structures through which movable assets in emerging markets can be effectively used as collateral will significantly improve access to finance by those firms that need it the most. Even in the most advanced jurisdictions where reliable credit information and a wide range of financial products are available, only the largest and best

3. *Unlocking Dead Capital*. Safavian, Fleising, Steinbuks, March 2006, The World Bank Group Private Sector Development Vice Presidency, View Point Note Number 307.

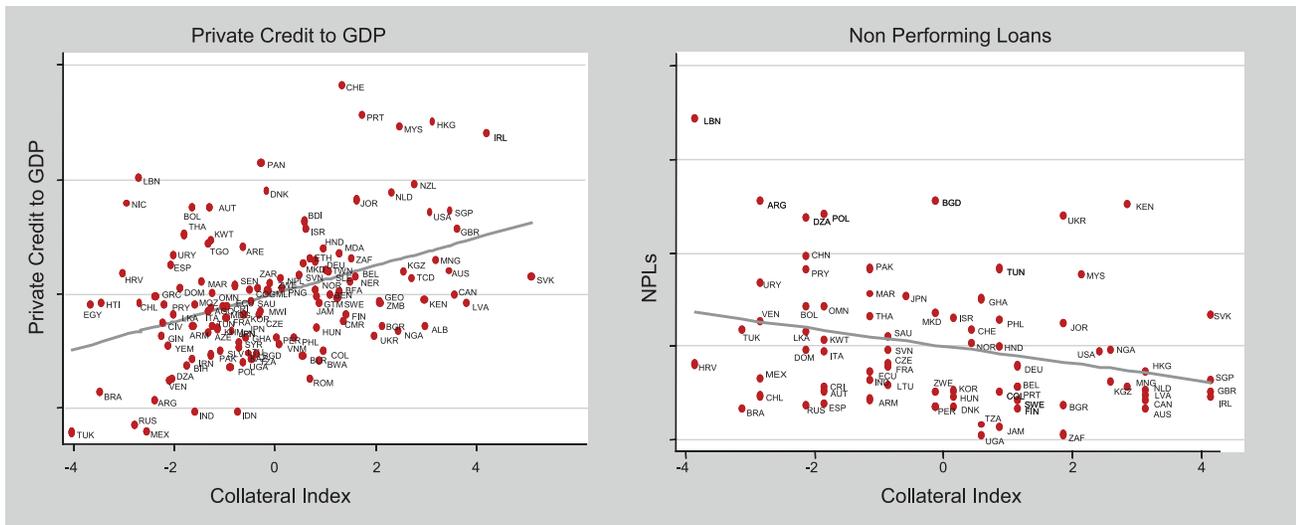
4. *Id.* 1 at 9.

5. *Ibid.* at 7.

6. Apart from consignment sales by producers and floor-plan financing for large-ticket items such as vehicles and equipment and seasonal borrowers such as agricultural producers, banks and commercial finance institutions will normally offer inventory finance reluctantly and far prefer receivables-based loans. Therefore, inventory is not the preferred type of movable asset and bankers would normally consider it riskier than other assets such as receivables.

7. Commercial Finance Association, *Annual Asset Based Lending and Factoring Surveys*, June 2008.

Figure 3: Better Secured Transactions Laws = More Credit and Fewer Defaults



Note: Relationships are statistically significant at the 1 percent level. Private credit analysis controls for country income, growth, and enforcement. Access to loans analysis controls for income per capita.
Source: WBG, "Doing Business 2005."

connected businesses can obtain unsecured loans. The rest have to offer collateral. A sound legal and institutional infrastructure is critical to maximize the economic potential of movable assets so that they can be used as collateral.⁸

Well-functioning secured transactions systems enable businesses to use their assets as security to generate capital—from the farmer pledging his cows as collateral for a tractor loan, to the seller of goods or services pledging the cash flow from customer accounts as collateral for business expansion. Modern secured transactions systems also contribute to private sector development by:

- Increasing the level of credit: In countries where security interests are perfected and there is a predictable priority system for creditors in cases of loan default, credit to the private sector as a percentage of gross domestic product (GDP) averages 60 percent compared with only 30 to 32 percent on average for countries without these creditor protections.⁹

- Decreasing the cost of credit: In industrial countries, borrowers with collateral get nine times the level of credit given their cash flow compared to borrowers without collateral. They also benefit from longer repayment periods (11 times longer) and significantly lower interest rates (50 percent lower).¹⁰

Further economic analysis suggests that small and medium-sized businesses in countries that have stronger secured transactions laws and registries have greater access to credit, better ratings of financial system stability, lower rates of non-performing loans, and a lower cost of credit. The end result is higher productivity and more growth. (See Figure 3. Note, however, that the term "collateral" in the chart refers to both immovable and movable property.)

This conclusion is also supported by empirical studies conducted with financial institutions in OECD and emerging market countries on the role of collateral in the overall credit decision and risk management process. Prevailing lending practices in a diverse group of countries

8. *Doing Business*, 2005.

9. Safavian, Mehnaz, Heywood Fleisig and Jevgenijs Steinbuks, 2006. "Unlocking Dead Capital: How Reforming Collateral Laws Improves Access to Finance." Private Sector Development Viewpoint, No. 307, World Bank, March 2006.

10. Chaves, Rodrigo, Nuria de la Pena and Heywood Fleisig, 2004. "Secured Transactions Reform: Early Results from Romania." CEAL Issues Brief, Center for Economic Analysis of Law, September 2004.

reveal that, while their primary focus is on the capacity to repay the loan, availability of collateral is also a condition precedent to lending.¹¹

Additional evidence shows that countries that have introduced new or reformed secured transactions systems (legal framework and registries) have achieved a *higher degree of development of their credit systems* by increasing the effective use of movable collateral to secure credit.¹² This is the case in most OECD countries and emerging market countries such as Bosnia and Herzegovina and Romania (see the Romania example in case 2 of this chapter). Proof of this is the analysis of collateral coverage ratios (or the percentage of the total loan that will be

covered by the collateral) in reformed or modern systems and unreformed systems as shown in Table 1.

Anecdotal Evidence of the Value of Reform

In addition to the foregoing empirical evidence of the impact of secured transactions reform, there are a number of success stories from reforms in recent years. Two good examples of such successes are the following cases:

Table 1: Jurisdictions with Modern Secured Transactions Have More Favorable Credit Policies for Borrowers

LOAN-TO-VALUE RATIOS (LTVs) ¹³			
TYPE OF COLLATERAL	OECD	EMERGING MARKETS	
		Friendly/Reformed	Difficult/Unreformed
IMMOVABLE PROPERTY	Up to 90%	Up to 80%	Between 60-80% (cities) 30-60% (rural areas)
MOVABLE PROPERTY			
Vehicles	Up to 100%	Between 70 and 100%	Between 60 and 85%
Equipment	Up to 80%	Up to 80%	From 60 to 80%. Most times no value (secondary collateral)
Accounts Receivable	Up to 80%	Up to 50%	No value (secondary collateral)
Inventory	Up to 50%	No value (secondary collateral)	No value (secondary collateral)

Source: International Finance Corporation

11. See "How to Expand Credit to SMEs – Creative Solutions to the Puzzle of Collateral Lending", Alvarez de la Campa, Alejandro. IFC Smart Lessons, Washington D.C. 2007.

12. See "Emerging Collateral Practices in Countries with Reformed and Unreformed Secured Transaction Frameworks", International Finance Corporation, December 2006.

13. The collateral coverage ratio is defined as collateral value/loan; its inverse, the loan to value (LTV) ratio is defined as loan/collateral value.

Case 1: Impact of Secured Transactions Reform in Slovakia¹⁴

When Prime Minister Mikuláš Dzurinda first took office in 1998, the Government of Slovakia sought help from the World Bank, the European Bank for Reconstruction and Development (EBRD), and other international organizations to stabilize the business environment through institutional and legislative reforms. The Government sought to restructure the economy to make Slovakia eligible for membership in the United Nations and the European Union.

Secured Transaction Legal Framework. In the late 1990s, Slovakia was on the verge of an economic crisis. The National Bank was plagued with inexperienced staff and poor IT systems. The Mečier government (1994–98) had employed unsustainable macroeconomic policies that privatized some public entities and overspent on infrastructure projects. National debt was 60 percent of GDP. In 2000, the EBRD listed Slovakia as an “unreformed” country.

The Dzurinda government introduced a reform package that included a bankruptcy regime, corporate governance rules and a framework for secured transactions. The latter reform included:

- Provision for both movable and immovable assets to be used as collateral
- Reduction of formalities, including abolition of a requirement for notarized documents
- Establishment of creditor priority immediately upon registration, with information available instantly
- Abolition of the super-priority of tax liens—tax authorities must now register their claims alongside other secured creditors
- Enforcement made more efficient by the Law on Auctions, making timely sale of collateral possible

Electronic registries: As part of these reforms, two registries were created. The Chamber of Notaries handles movable assets, which, according to users, can be registered in minutes at any local office through an electronic terminal for as little as €30. Immovable assets are registered at the Land Cadastre. This technology is available to all users, not just banks.

Impact: According to government statistics, successes of the reforms include:

- Annual registrations increased from 7,508 in 2003 to 31,968 in 2007, a per annum increase of over 50 percent.
- The time needed to foreclose on a mortgage decreased from 560 days to 45 days.
- Slovakia was named the top reformer in the World Bank’s *“Doing Business 2005.”*

Remaining challenges. Despite the support that the World Bank and other institutions gave to the reforms, it became difficult to keep policy makers focused on implementing and monitoring secured transactions reform. Also, the registry has had some technical difficulties that are common to new IT systems, due in part to limited human capacity of the Chamber of Notaries.

14. See “Secured Transactions Reform and Access to Credit”, Edited by Frederique Dahan and John Simpson. Elgar Financial Law Series, 2009.

Case 2: Impact of Secured Transactions Reform in Romania¹⁵

Since the fall of the Soviet bloc, Romania has sought to reform its commercial landscape. A team from the World Bank was charged with overhauling secured transactions legislation to enable a more robust business environment.

Secured transaction legal framework: Though a Commercial Code and a Civil Code existed, they were rarely used during the Communist period because business transactions involved state-owned enterprises. In the early 1990s, after the collapse of the Communist regime, a period of “wild capitalism” ensued, causing banks to be very cautious in their lending practices. The only form of secured lending that was used was the mortgage of land, because priority and enforcement of all other forms of security were uncertain, cumbersome and impractical.

The Romanian parliament passed Title VI on Legal Treatment of Security Interests in Personal Property in May 1999. Highlights of the legislation include:

- Simplified documents and registration process for secured transactions
- Elimination of the state as a “privileged creditor”
- Expansion of the types of assets that can be used as collateral, including goods that may be created or acquired in the future (such as crops from a year-end harvest)

Electronic archive of security interests in personal property: Title VI provided for the creation of an archive for the registration of collateral, administered and regulated by a department in the Ministry of Justice. The archive contains information on the parties to a transaction and the collateral used to secure individual loans. Intake of registrations is through the offices of members of a consortium of private registrars who have electronic access to the registry database to add registrations and changes. The registry software automatically assigns a sequential registration number and the date or time of registration to each registration record. The public has access to the registry via the Internet and may search the database for information. Information retrieved in a search can establish priority among competing security interests according to the time of registration.

Impact: According to government statistics, impacts of Title VI in its first seven years include:

- An increase in registrations from 65,227 in 2000 to 536,067 in 2006, for an average per annum increase of almost 60 percent.
- The development by banks of a variety of new lending products, which has caused credit to become cheaper and more efficient.
- Many foreign companies and international agencies have secured investments with assets located in Romania. These include the EBRD, several Austrian banks and companies, and several Dutch companies.

Remaining challenges: As of 2006, only six legal entities were authorized as registrars entitled to enter registrations into the database, and two of those are government agencies. Initially there were more private sector registrars, but many were removed when they could not meet the requirements of the law. There are lingering concerns about enforcement upon default. Though the law provides for enforcement, creditors find it difficult to recover and dispose of collateral

15. See “Secured Transactions Reform and Access to Credit”, Edited by Frederique Dahan and John Simpson. Elgar Financial Law Series, 2009.

Small and New Businesses Benefit the Most, but So Do Women Entrepreneurs

Asset-based loans secured by movable assets disproportionately benefit small enterprises and new businesses. Asset-based lenders often advance funds when traditional sources are not available. Asset-based lending, as practiced by non-bank financial institutions (NBFI), differs from traditional bank lending because NBFIs serve borrowers with risk characteristics that typically fall outside a bank's comfort level. The NBFIs business model is considerably different from that of commercial banks. If the growth of NBFIs outside of industrialized countries is to be encouraged, we need to take into account the different methods, pricing, capitalization and refinancing structures of these businesses and how the law can be tailored to their particular needs. Such lenders are familiar with various types of businesses and are responsive to client needs. As a result, small companies can usually get more cash more quickly than they could from a traditional bank loan. This makes asset-based financing a feasible option for rapidly growing, cash-strapped companies for short-term cash needs. Also, asset-based lenders and factors offer an array of services, including accounts receivable processing, collections and invoicing.

Box 1: Benefit to Women of Secured Transaction Reforms

In **Sri Lanka** women commonly hold their wealth in gold jewelry. This is accepted by formal banks as security for loans.¹⁶

In **Tanzania**, Sero Lease and Finance, a women's leasing and finance company, provides loans to women to purchase equipment for their businesses, using the equipment as security through leasing agreements. Sero has more than 10,000 exclusively female clients.¹⁷

Asset-based lenders frequently look beyond financial statements to determine how much money they are prepared to advance at and after closing. Asset-based lenders' primary focus is on collateral and liquidity, with leverage and cash flow being secondary considerations. Typically, asset-based lenders provide borrowers with more liquidity and fewer financial covenants. Asset-based borrowers usually have higher financial leverage and marginal cash flows. The cost of asset-based loans is influenced by the credit risk and collateral associated with the transaction.

The amount of credit depends on the type of business and the content and quality of the collateral. The lender provides funds secured by the assets of the borrower. The collateral can include accounts receivable, inventory, raw materials and work in process, machinery, vehicles, intellectual property rights or other assets where value can be determined. The secured lender may establish a revolving credit facility where the borrower provides a pool of collateral that the lender translates into operating cash or working capital. The lender agrees to grant a line of credit up to a maximum amount, which is secured by a borrowing base made up of inventory, receivables and cash. A certain amount is advanced when the inventory is purchased (usually not more than 50 percent of the purchase price), a bit more is advanced when the inventory is converted to a receivable (usually not more than 80 percent of face value), and when the receivable is paid and funds arrive in the lock-box account, the credit line balance is paid down and the credit line is available for redrawing against additional inventory and the remaining assets in the borrowing base.

It is important to note that secured transactions reform can increase the accessibility of credit to women, and in particular to women entrepreneurs (see Box 1). Enabling movable assets—such as machinery, book debts, jewelry, and other household objects—to be used as collateral can benefit all businesses. But opening up this type of financing has the potential to be of particular benefit to land-poor women, enabling them to circumvent their lack of titled land in a number of countries and use the assets they do have to unlock access to formal credit markets.

16. See M. S. Pal, 1997. Women Entrepreneurs and the Need for Financial Sector Reform. *Economic Reform Today*, Number Two.

17. See A. Ellis, et al. 2008. *Doing Business: Women in Africa*. World Bank, Washington, DC.

The impact on the households of women who gain access to credit to enable them to start or grow their businesses is likely to be profound. When poor women (rather than men) are the direct beneficiaries of credit, its impact on the various measures of household welfare (such as school enrolment rates¹⁸) is greater. For a more in depth analysis of the gender impact of secured lending, see Annex 8.

Secured Transactions Systems Mitigate the Impact of a Financial Crisis

The development of *financial market infrastructure* promotes financial stability¹⁹ and access to finance. It is imperative to support development of sound and efficient financial infrastructure to strengthen financial stability and enhance access to financial services. A sound financial infrastructure includes secured transactions systems, payment systems, remittances, insolvency regimes, credit information reporting, interbank lending and central bank support.

Well-designed secured transactions systems contribute to robust financial systems by promoting credit diversification, allowing NBFIs to provide credit (reducing the dependence on bank credit) and to rely less on real estate collateral. Financial institutions (FIs) benefit from these systems by: (i) being able to diversify their portfolios by accepting movables, including more liquid assets such as receivables or investment instruments; (ii) having access to information on existing security interests in movable assets and their priorities; (iii) strengthening their risk management policies, by making more informed credit decisions on collateral lending; and (iv) making possible better reporting mechanisms on collateralized lending practices to the

supervisory or regulatory authority, usually central banks.

Effective secured transactions laws are a crucial component of a healthy financial sector and business climate. They make it possible for banks and NBFIs to provide the working capital that enables entrepreneurs to expand their business activities so they do not have to rely on the slow accumulation of retained earnings. Businesses in emerging markets are severely underleveraged, which is one of the chief reasons for their very slow rate of growth and development and their overly conservative business plans in comparison to SME's in OECD countries.

The current financial crisis and the Asian financial crisis point out the vulnerability of financial systems in which sources of credit are concentrated in the banking system and not diversified.²⁰ The G22²¹ report on International Financial Crises of October 1998 highlights the importance of establishing secured transactions systems and movable collateral registries to mitigate the impact of future financial crises: "Recent experience shows that financial systems which are heavily dependent on banks can experience financial instability of a magnitude that can generate macroeconomic difficulties . . . Effective debtor-creditor regime laws [including a framework for secured transactions] create a legal framework that allows loans to be extended at lower interest rates at less risk while facilitating the diversification of credit risk and fostering non-bank financial intermediation. Reduced dependence on bank credit lessens the economic impact of a banking crisis on the real economy. . . ."

The Bank for International Settlements (BIS), through its Working Group on International Financial Crises, has identified the need for effective debtor-creditor regimes and secured transactions systems as a key policy to prevent crises and limit their scope.²²

18. See Mark Pitt and Shahidur Khandker. 1998. "The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?" *Journal of Political Economy* 106: 958-96.

19. See "The Unfolding Crisis: Implications for Financial Systems and Their Oversight". World Bank, Financial Systems and Development Economics, Washington D.C. October 2008.

20. See Law and Policy Reform at the ADB Vol. II, 2000 Edition", Asian Development Bank, December 2000.

21. The Group of 22 (G22) or Willard Group was created by the leaders of APEC in 1997. The intention was to convene a number of meetings between finance ministers and central bank governors to make proposals on reform of the global financial system. The Group of 22 comprised members of the G8 and 14 other countries. It first met in 1998 in Washington D.C. to consider the stability of the international financial system and capital markets. The Group of 22 was replaced by the Group of 20 (G-20), which exists today.

22. Report on the Working Group on International Financial Crises, BIS, October 1998.

Chapter 2: Diagnostic in Preparation for Project

The preparation and diagnosis set the stage for the beginning of the project. This phase focuses heavily on the collection of information about the existing situation in the jurisdiction with regard to secured transactions systems and the availability of commercial credit, but it also addresses important related economic and legal issues. This is an important phase as it sets the basis for designing future interventions as well as the type and extent of reform.

An assessment of an existing legal, social, economic and institutional environment is a precondition to any successful reform of secured transactions system in any jurisdiction. The process will include at least one visit to the jurisdiction, and generally research and writing at the home station. The recommended staffing for a diagnostic mission will include a secured transactions expert (or separate legal and registry experts), a project leader and, if feasible, a financial sector expert, a measurement and evaluation (M&E) expert, a local lawyer, a local IT expert and a local administrative support person. The secured transactions expert should be versed in related legal reforms such as insolvency, enforcement or commercial law, as well as in the structural design and implementation of a secured transactions registry. Depending on the jurisdiction, a mission may last between one and two weeks. Factors that may determine the length of the mission include the structure of the government in terms of the level of decentralization, the number of existing registries for movables, the existence of secured transactions legislation, the size of the credit market, political support for reform and local capacity to handle a sustainable reform.

The mission of the diagnostic assessment is to collect the information that is needed to determine the approaches to legal and functional reforms and to develop the project plan. Following the collection of information, the diagnostic team will analyze it and produce a report with recommendations. This chapter of the Toolkit provides a description of the areas that need to be assessed and interviews to be conducted, as well as preparation of the report.

Table 2 provides a sample of possible stakeholders that could provide valuable information that may bear on the approach to and planning for secured transactions reform.

IFC has developed a comprehensive survey that can be used to collect the necessary information when doing diagnostics and to collect baseline data. Although this chapter does not describe in detail all the elements contained in the survey, it describes important areas to be covered during the data collection process. See Annex 1 for the complete IFC Diagnostic Survey.

A. Existing Lending Practices (Using Movable Property as Security)

The existing lending practices in the jurisdiction are an important determinant of the approach to any new system for securing credit with movable property. Depending on the complexity and degree of sophistication of the lending scenario, the team will need to identify which areas of the process will need more attention in order to eventually introduce secured transactions reforms. The reform team will need to identify the existing shortcomings in asset-based lending by meeting with different stakeholders and analyzing the existing legal framework governing the financial sector.

In order to get a comprehensive picture of the lending practices in the country, the team should conduct a detailed survey among all financial institutions (FIs) and other key public and private sector representatives. (See Annex 1 for a detailed model survey.) However, if the survey proves difficult, or if the results of the survey are not satisfactory, individual meetings or interviews may be conducted during the field visit to collect all relevant information about lending practices.

As a general practice, the reform team will need to meet with FIs, including banks (local and foreign), NBFIs, and private sector representatives. (See Table 2.) It is important to meet all active players, as foreign banks often have approaches to lending that are different from local banks, and the same is true for banks and NBFIs in general. Only by looking at the existing practices is it possible to reliably assess the lending practices in the jurisdiction. Meetings with government representatives from the Ministry of Finance, Central Bank and Collateral and Credit Registries are also essential to get different perspectives.

Specific attention during the data collection should be given to the following:

Table 2: Target Audience to Gather Information/Data at the Diagnostic Stage

Public Sector	Ministry of Finance/Economy
	Ministry of Justice
	Central Bank/Superintendency of Banks
	Ministry of Commerce
	Existing public registries (business registry, collateral registries, vehicle registry, leasing registry, ship/plane registry, land registry, credit registry)
	Members of the Judiciary (Commercial Court judges)
	Bailiffs or execution agencies
	Public notaries
	Legislators, members of parliamentary economic commissions
Private Sector	Banks (foreign and local)
	Microfinance institutions
	Leasing companies
	Sellers on credit (car dealers, equipment dealers)
	Law firms
	Borrowers (SMEs, multinationals, entrepreneurs)
	Bankers association, credit bureau
	Bar associations/ law societies
	Business associations and Chambers of Commerce
	Farmers associations
Other	Donor organizations (bilateral and multilateral donors)
	Academia (law, business and economics faculty)

1. Lending Decision-Making Factors: The majority of financial institutions worldwide use the Five Cs (capacity, character, capital, collateral, and conditions) methodology or an adaptation of it as part of their credit evaluation process. However, these are just general methodologies that might not be used in every jurisdiction. Though collateral is often described as secondary to character²³ and capacity²⁴ during the evaluation process, it very frequently

influences the eventual approval of a credit application. For loans of any material size (be it in relation to the capital of the enterprise or in absolute terms as defined by the institution), collateral is typically considered a condition precedent, not just an evaluation criterion.²⁵ Finally, it is important to gather information from FIs on loan-to-value ratios for both immovable and movable collateral, terms for mortgages, loans, interest rates, etc.

23. The character of a creditor refers to the willingness of a company to repay based on past credit repayment history of the business and the principal business owners together with an analysis of business and personal stability (e.g. length of time in business, length of time at residence, etc.).

24. The capacity of a creditor usually refers to the analysis of the enterprise’s capacity to repay the loan. Qualitative indicators include an evaluation of management capacity whereas quantitative indicators include inventory turnover, profitability, cash flow analysis, debt service coverage ratios, etc.

25. See “Emerging Collateral Practices in Countries with Reformed and Unreformed Secured Transactions Frameworks”, International Finance Corporation, December 2006.

Therefore, the team must analyze the factors that affect lending decisions in order to be prepared to explain how FIs should adapt some of their practices to the future secured transactions system. Specific lending practices in a jurisdiction are important to consider, but change and innovation with the introduction of new systems mean that some of those practices will need to be adjusted. One of the key aspects of a project is to convince FIs that, in order to reach the goal of expanded credit facilities for SMEs, they must make substantial changes in their existing practices – changes that will benefit both FIs and their customers. The principal purpose of examining existing practices is to be in a position to explain the required changes.

Another important factor in lending decisions is the use of credit scoring models. In emerging markets, use of judgmental scoring models to evaluate a business' credit application is increasing, though it is not widespread. While scoring models are a useful supplementary measure when assessing risk, they are not a substitute for security in the form of interests in debtors' property. Where used, scoring models generally utilize data from the business' balance sheet and income statements. They rarely include significant credit information on the business or business owner aside from the business' history with the FI. Whether or not credit scoring is available, FIs in emerging markets tend to rely on an internal risk evaluation that considers the business' history with the FI in the operation of its credit and deposit accounts over an extended period of time (e.g. greater than three years), as well as other factors such as the type of loan and the FI's appetite for risk.

In light of the objective of enhancement of lending secured by movables, it is useful to diagnose the capacity of local banks to audit and monitor a borrowing base consisting of inventory and receivables and for marking various types of inventory collateral to market. Do local banks have teams charged with this responsibility, are there internal policies requiring periodic on-site visits to clients by the FI; and are the rights to conduct visits included in the loan agreements?

2. Banking regulations and prudential norms: When conducting the diagnostic, it is important to review the existing banking regulations and prudential norms, normally issued by the Central Bank or Superintendency of Banks. These norms and regulations might have a tremendous impact on the lending practices of banks and NBFIs. The diagnostic should also examine factors

such as requirements for risk provision for loans, credit risk mitigation techniques (including the use of collateral), and rules requiring banks to lend to SMEs or to make loans to the agricultural or other specific strategic sectors.

3. Types of assets accepted as collateral: It is important to determine the types of assets that are used as collateral under existing law. In most cases, before the introduction of secured transactions reforms, the types of movable assets that are accepted as collateral are very limited. In most unreformed jurisdictions, the use of immovable property as collateral is the dominant type of secured lending, though in a number of jurisdictions, movable assets such as vehicles, machinery and equipment may be used, often to supplement interests in immovables, as well as personal guarantees from directors and principal shareholders. In many countries where bank liquidity is low and local currency funding costs are high, local banks may obtain funding from international banks that restrict the type of on-lending that may be offered, e.g., short-term, secured, pre-export finance transactions. These types of refinancing restrictions present both limitations and opportunities for economies that have adopted reasonable secured transaction regimes, but they need to be identified. It is important to compare and contrast what the existing laws permit as collateral and what the actual collateral lending practices of the FIs are. The diagnostic should also identify classes of movable assets that are prohibited by law from being used as security for obligations or that are exempted from seizure in enforcement of an obligation upon default by the debtor; i.e. things deemed by law to be necessities for survival, such as one vehicle per household or beasts of burden of farmers. See Chapter 4 on the legal framework and Annex 1 for more details on the types of collateral that can be used as security.

4. Existing institutional infrastructure: An important supportive element of the financial sector is the institutional infrastructure, such as credit information systems or collateral registries. It is particularly important to determine whether the country already has one or more collateral registries for classes of movable assets. If a collateral registry or an asset registry (such as a vehicle registry) already exists, the team will need to collect and assess in detail the characteristics of the registry such as (i) the nature and organization of the registry; (ii) its utilization of information and communication technology; (iii) the existing data set; (iv) the operational aspects of the registry; (v) the level or levels of the government at which it operates, (vi) ease of public access to the database, and

(vii) the staffing, management and other important aspects included in the survey of collateral registries. (See Annex 2 for the detailed survey to assess the capacity of an existing movable collateral registry.) It is also important to determine the extent of actual utilization of these various facilities for various asset classes; some may exist but barely be used (see Box 2). Finally, it is important to determine whether non-utilization is due to informal structuring methods, such as retention of title to the assets by the lender or supplier, use of special purpose companies, deposit of pledged goods in bank-controlled warehouses, etc.

5. Seizure and disposition of collateral and distribution of proceeds: The reason security is taken by a credit grantor is to provide an alternative source of repayment in the event the debtor fails to meet his or her contractual obligations to discharge the debt. A jurisdiction can have the most modern law possible dealing with creation, registration, and priorities, but unless it provides for an efficient and effective system for enforcement, the entire *raison d'être* of secured financing is defeated and secured financing will not occur other than on a very limited scale. In many jurisdictions, court-ordered foreclosure is costly and inefficient. Measures designed to protect the interests of debtors often result in creditors not granting secured credit because they realize that the market value of the collateral will have depreciated dramatically during the long period it takes to get the collateral sold pursuant to a court order. In addition, court proceedings are generally costly with the result that there is likely to be little left for the secured creditor after the enforcement costs have been deducted from the meager proceeds of sale of the collateral.

It is clear that legal obstacles to the enforcement of security interests in collateral in case of default can be a very important barrier to the effective use of movable property as security. It is essential to analyze the laws governing enforcement of security interests and the actual practices of creditors in enforcing against collateral. In this context it is necessary to determine the extent and effectiveness of participation by the judicial system and other government actors in seizure, disposition and distribution of the proceeds of disposition. The legal limitations on the methods of disposition of collateral, e.g., sale at auction or private sale, and the rules for distribution of the proceeds of disposition must be identified and analyzed.

Box 2: Secured Transactions Registries and Credit Information Systems (Credit Bureaus)

Where one or more private or public credit reporting organizations (credit bureaus) exist in the jurisdiction, the diagnosis should involve examination of their structure (whether they are public or private), their coverage, the type of information included (positive and/or negative) in their records, who has access to this information, and the current practices of FIs in using and providing data to them.²⁶

There are potential synergies between secured transactions and credit information systems that may be beneficially developed. For example, credit bureaus may want access to information in secured transactions registries in bulk form or with a dedicated on-line connection, because such information is generally relevant to their clients. Therefore, the needs of credit information systems for data in particular forms should be assessed. Another example is the potential for sharing of technology assets and facilities by a credit bureau and the secured transactions registry. If the existing infrastructure of a credit information system has excess capacity, it may be possible to share some of the facilities or technology resources, with resulting cost savings. Such sharing of facilities and assets is planned or adopted for the secured transactions registries in Nepal and Sri Lanka, for example.

Seizure of collateral is just a first phase in enforcing a security interest in movable property. Once the asset has been recovered, the collateral must be sold in the secondary market. This step often results in low recovery of proceeds to be applied to the discharge of secured loans. Some of the more common reasons for this are mandatory legal procedures that involve delays (and attendant depreciation in the value of the collateral), lack of demand for specific types of assets in the market, cultural reluctance to buy repossessed assets, lack of infrastructure for selling the

26. See the latest version of the *Doing Business Report* for information on Credit Bureaus and coverage.

assets in auctions and lack of knowledge within the FI about how to sell the assets. All of these aspects should be considered and addressed in the diagnostic.

B. Legal System, Legislative Practice and Customs

The legal system of a country (common law, civil law or other) provides the structure within which secured transactions occur. However, legal tradition and principles need not constitute a barrier to the introduction of modern secured transactions systems. Various approaches have been implemented to allow jurisdictions with different legal systems to modernize their systems and increase the use of movable property as collateral. Jurisdictions with civil law, common law, or other legal systems have implemented successful modern systems of secured transactions. States with different legal traditions have successfully implemented the recommendations of the UNCITRAL Guide on Secured Transactions. Further, states with one legal tradition have

successfully modeled their laws on laws of states with a different legal tradition. For example, Albania and Bosnia and Herzegovina (civil code states) modeled their laws on the law of Canada (a common law state). The conceptual basis of modern secured transactions systems is such that it can accommodate any legal system. Moreover, some states have signed or ratified relevant conventions, such as the United Nations Convention on the Assignment of Receivables in International Trade and the Cape Town Convention of International Interests in Mobile Equipment and the associated Aircraft Protocol that are based on modern secured transactions concepts and structures.

The team doing the diagnostic should work with a local lawyer who has good knowledge of secured transactions or, at the least, of the local commercial law framework. The diagnostic team should compile and analyze all the laws related to secured transactions and identify the shortcomings, the gaps in the legislation and the issues that the current legal framework presents. Box 3 provides a very comprehensive list of all the laws that could be

Box 3: Laws to Collect and Analyze

The diagnostic team should collect and analyze, when available, the relevant parts of laws governing the following areas and other laws that may affect creditors' rights:

- Creditors' rights against movable property
- Statutory rights against movable property, such as taxes and claims for wages and social insurance (National Provident Fund) from employers
- Leasing of movable property
- Factoring law
- Bankruptcy or insolvency law
- Commercial law
- Sales law
- Negotiable instruments law (including negotiable bonds) and negotiable documents of title (warehouse receipts and bills of lading)
- Code of Civil Procedure, including enforcement of judgments
- Fixtures and accessions law
- Real and personal or movable property law(s)
- Motor vehicle registration law
- Banking law
- Securitization law (to the extent that secured transactions law applies to the outright transfer of receivables)
- Intellectual property law
- Assignment of receivables law
- Privileges (in civil law jurisdictions)

examined for the diagnostic.²⁷ As we will see in detail later on, it is critical to analyze some of these laws, while others are less important and in most cases would not have any conflicting clauses with the secured transactions law.

The following aspects of the existing secured transactions system should be evaluated:

- **Scope:** the types of legal structures that can be used to secure obligations (e.g. pledge, mortgage, etc.); the types of movable property that may be used as security; and the types of debtors who may give security in movable property.
- **Creation:** the legal requirements for giving and taking a right against movable property to secure an obligation to the party who takes the right.
- **Priority:** the rules that determine the relative rights among conflicting claims against movable property.
- **Publicity:** the means of making a claim against movable property transparent to third parties, commonly provided by registration in a public registry, by taking possession or control of the movable property, by direct notice, or by other means.
- **Enforcement:** the process for enforcing a claim against movable property when the debtor defaults on the secured obligation.
- The diagnostic team should also look at the implementation chapter (Chapter 4) of this Toolkit to ensure that all of the necessary information for the implementation team is gathered.

C. Baseline Legal and Economic Data

Documentation of the success of a secured transactions project will depend on the quality of data collected at the outset of the project, throughout the duration of it and over the years following completion. During the diagnostic stage, the team will need to gather “Baseline Economic Data”. These data relate to structural and economic indicators, and are collected before the reform. Baseline data will

be later compared with data taken after the completion of the project.

Important baseline legal and economic data include, but are not limited to, data on the following:

- The credit market
- The legal framework
- The secured transactions registry or other registries where interests in certain classes of movable property may be registered; e.g. motor vehicle registry, public notary, leased asset registry, clerk of court or recorder
- Judicial precedent affecting rights in movable property as security
- Operation of enforcement institutions

Annex 1 provides a description of the data that should be collected through surveys or interviews. The diagnostic team should discuss with its government counterpart the indicators that should be tracked to analyze the impact and the methodologies to be used to collect the data.

With regard to the overall framework for secured transactions and the sophistication of the systems, the World Bank Group (WBG) has developed useful diagnostic tools that are available to collect initial data on a specific secured transactions system in a given country. Existing tools include (i) the Indicator on Getting Credit of the *Doing Business* Report, in particular the Legal Rights Index, and (ii) the “Insolvency and Creditors Rights Report on Observance of Standards and Codes” (ICR ROSC). IFC, through its advisory services projects to implement reforms on secured transactions systems, carefully coordinates the diagnostic work with these existing tools.

The WBG *Doing Business* Report’s Legal Rights Index (part of the “getting credit indicator) measures the degree to which collateral and bankruptcy laws facilitate lending.²⁸ The *Doing Business* Report benchmarks 183²⁹ countries on the strength of the specific features of their collateral laws. To measure the strength of collateral laws, the *Doing Business* Report uses a specific methodology (see Annex 3 for detailed methodology). Box 4 provides a description of the criteria used to create the index.

27. See “Reforming Collateral Laws to Expand Access to Finance”, Fleisig, Safavian and de la Peña, The World Bank 2006.

28. <http://www.doingbusiness.org>

29. As of September 2009.

It is important to understand the use of this *Doing Business* Indicator and that the mere inclusion of language in the legislation to garner *Doing Business* points does not by itself constitute a comprehensive and meaningful secured transactions reform. The Legal Rights Index's objective is to analyze the correlation between lending flexibility and specific legal provisions and to benchmark different jurisdictions. The Indicator is useful to inform and track

legislative change and, within the parameters of the methodology, helps in measuring the impact of these changes on lending by financial institutions to the private sector. As with any indicator, it is an important and useful tool for diagnostics, but not a replacement of a broader analysis of aspects to be considered when reforming secured transactions systems.

Box 4: Features of Collateral and Bankruptcy Laws Analyzed in the *Doing Business* Legal Rights Index

The index ranges from 0 to 10, with higher scores indicating collateral and bankruptcy laws that are better designed to expand access to credit. The strength of legal rights index includes eight aspects related to legal rights in collateral law and 2 aspects in bankruptcy law. A score of 1 is assigned for each of the following features of the laws:

1. Any business may use movable assets as collateral while keeping possession of the assets, and any financial institution may accept such assets as collateral.
2. The law allows a business to grant a nonpossessory security right in a single category of revolving movable assets (such as accounts receivable or inventory) without requiring a specific description of the secured assets.
3. The law allows a business to grant a nonpossessory security right in substantially all of its assets, without requiring a specific description of the secured assets.
4. A security right may extend to future³⁰ or after-acquired assets and may extend automatically to the products, proceeds, or replacements of the original assets.
5. General description of debts and obligations is permitted in collateral agreements and in registration documents, so that all types of obligations and debts can be secured by stating a maximum rather than a specific amount between the parties.
6. A collateral registry is in operation that is unified geographically and by asset type and that is indexed by the name of the grantor of a security right.
7. Secured creditors are paid first (for example, before general tax claims and employee claims) when a debtor defaults outside an insolvency procedure.
8. Secured creditors are paid first (for example, before general tax claims and employee claims) when a business is liquidated.³¹
9. Secured creditors are not subject to an automatic stay or moratorium on enforcement procedures when a debtor enters a court-supervised reorganization procedure.³²
10. The law allows parties to agree in a collateral agreement that the lender may enforce its security right out of court.

30. Future in this context can also be understood as a broader category which includes assets that do not yet exist or that may be produced from existing assets.

31. The issue of absolute priority for creditors is a contested one, and there is not enough consensus among practitioners to consider this point a best practice. The legal section of the toolkit provides different alternatives to approach this issue. The UNCITRAL Legislative Guide recommends that states limit privileged claims, but that where the state maintains such claims, they should be specified in the secured transactions law if they arise outside insolvency, or in the insolvency law if they arise in insolvency.

32. The issue of stay of secured creditors when insolvency proceedings have started is viewed differently by a number of institutions. UNCITRAL in its Secured Transactions and Insolvency Guides states that secured creditors are subject to stays (with different requirements and results depending on whether there is liquidation or reorganization), but the value of the security right is protected and secured creditors can seek relief (e.g. the lifting of the stay).

D. Level of Support for and Understanding of Proposed Reform

It is important to provide in the diagnostic report an assessment of the political environment, as it is likely to affect support for reform of secured transactions. This information should be gathered primarily through interviews of (1) officials from institutions such as the central bank, the ministries of the government and the legislative branch, and (2) representatives of the private sector and professional organizations (such as law societies, bar associations or business organizations or associations). Even when the reform process is driven by the government counterpart (which should always be the case), it is of particular importance that the counterpart and all stakeholders clearly understand what the reform entails and the benefits that the reform might have in the financial sector. It is recommended that the diagnostic team conduct a workshop for stakeholders to acquaint them with the experiences of other countries that have undertaken reform in this area, showing the systems that were implemented and the impact of reform. This may be more effective in making the counterpart and stakeholders aware of the importance and benefits of the reform than just discussing it in a meeting. It would also be important to point out that other policy measures may be necessary to reap all the benefits of a secured transactions reform. For example, inventory and receivables finance will be stimulated if the central bank provides a discounting window for refinancing of short-term secured loans or (either in tandem or in the alternative) reduces reserve requirements and capital limitations on secured loans that are packaged and sold. Such measures stimulate not only direct loans but also bank-to-bank exchanges with regional banks that have relationships with SMEs throughout the country.

The diagnostic phase must include an assessment of the likely success of reforming secured transactions. While this is necessarily speculative, interviews with members of the financial and business communities can provide information on which this assessment can be based. For example, in jurisdictions where the banking sector is conservative and regards movable property as poor security, it is likely that any impact of reform on bank

lending practices will not be experienced for a long period of time. However, where bankers are aware of banking practices in other jurisdictions that have modern secured transactions systems, it is likely that new practices will be more easily and favorably adopted.³³

E. Capacities of Executive Agencies of Government, End Users and Courts

In most cases, the analysis of institutional capacity will involve four questions:

1. Are there competent institutions to host and run a modern registry?
2. Are the end users sophisticated enough to effectively use a secured transactions system?
3. Is the judiciary equipped to deal with priority and enforcement issues under a modern secured transactions law?
4. Is there an authority or body of government officials capable of enforcing rights against movable property, such as execution officers or bailiffs?

Existing registry systems: The diagnostic should include an assessment of the extent to which the existing institutional infrastructure can be used in the design of a modern registry. The team should examine existing registration procedures and facilities. This includes the use of information technology and human resources, administration, methodology of storing and retrieving data and security measures. In case there are no existing registry institutions suitable to undertake the running of the registry, the consultant should determine whether there is a government institution capable of operating a modern secured transactions registry. It would be very important when analyzing the current registry and technology infrastructure to look also at existing e-government initiatives or reforms of other registries (i.e. the company registry). That could determine the need to coordinate and perhaps benefit from those other initiatives. If there are no viable government institutions, the team may check into the existence of appropriate private sector institutions that may be viable as an outsourced operator of the registry. Such institutions may include, for example, an experienced

33. "A Manual for Creating & Implementing Secured Financing Systems", Yair Baranes and Ronald C.C. Cuming, 2006.

private sector credit bureau if it is adequately organized and has a reputation as a trusted third party.

Level of sophistication of the users: The end users of the system will be FIs that accept movables, manufacturers and wholesalers that finance the inventories of their customers, and retailers of durable goods that finance their customers. The diagnostic should identify the degree to which existing FIs accept movable collateral or would be willing to accept it in their future lending if the reform is implemented. It should further examine the extent to which manufacturers, wholesalers and retailers finance their customers and secure the purchase price with the goods sold.

The judiciary: While reform of secured transactions systems does not change the judicial system, aspects of the design of a secured transactions system are influenced by the efficiency of the court system and the quality of judges' decisions. The diagnostic should address the speed at which applications to the courts are handled and enforcement orders are executed. Significant uncertainty or delay in court rulings and in enforcement of orders increases the level of risk in granting credit and reduces the willingness of creditors to rely on security in movables.

Execution office: If the jurisdiction is one in which self-help enforcement is not permitted under the existing law, it is important for the analysis to focus on the enforcement administration (execution office) to determine whether it is efficient and cost-effective. Identification of the limitations of the existing system can provide information that will be used in the design of a system that does not have these limitations.

F. Unique Limitations or Capabilities of Client Country

Apart from the aforementioned gaps or needs, the team should also be able to identify other potential limitations that might affect the successful implementation of secured transactions reform. By identifying these deficiencies, the team will be able to propose solutions that mitigate or cope with these problems. The following constitute just a sample of issues that need to be taken into account:

- Very poor telecommunications and IT infrastructure in the country resulting in high costs of access, limited access and unreliable service
- High degree of political decentralization, which makes it difficult for a single government institution to manage a secured transactions reform and a unified centralized registry
- Limited financial resources of the government counterpart to sustain the reform after the completion of the project
- Limited skills of the government counterpart to implement the reform and manage the secured transactions registry
- Lack of awareness by the project's stakeholders about benefits of an effective secured transactions system
- Cultural norms with regard to lending, such as cultural reticence to repossess property if a secured obligation is breached, or reluctance to buy repossessed assets from defaulted loans
- Inability to definitively identify a borrower due to such shortcomings as nonexistent or inadequately functioning national identification system or a poorly functioning or decentralized business registry

Chapter 3: Project Design and Management

A. Objectives

The first necessary step in a successful project is to state its objectives clearly. Project objectives are “concise statements that reflect the results expected from the projects, and constraints within which the project will be managed. In addition, objectives should include statements that document the value and the short-term and long-term benefits of the project to the client.”³⁴

Therefore, the objectives of a project will depend on the type of secured-transactions reform that we want to introduce. Generally, when implementing secured-transactions reform, the objectives should be *to improve and expand asset-based lending in the country by facilitating access to finance to private sector firms using movable assets as collateral*. Clearly, the team will need to determine the type of indicators that will be used to achieve this objective, as noted in the previous section about baseline indicators.

B. Timeline, Actions and Deliverables

As part of the project management effort, the team leader of the project will need to plan from the beginning what the *major actions and deliverables* will be, as well as the timing for the project. Box 5 lists some of the deliverables that a fully fledged secured transactions reform project should include. Specific projects might have just a few of these deliverables, so the planning will need to be adjusted accordingly.

With regard to the timeline, it is difficult to foresee the duration of a project that involves implementing all of the activities of a fully fledged reform. However, Table 3 presents an example of a reasonable timeline.

It is difficult to determine how long a task will take. For example, the time required for enactment of the secured

transactions law is unpredictable because it depends on the discretion of the parliament and often on the cabinet and individual executive agencies as well. The duration of other tasks (like the diagnostic or awareness campaign) that are under the direct control of the team implementing the reforms are easier to determine. Some tasks, such as awareness building, will last for almost the whole duration of the project. Monitoring and evaluation will extend even beyond the end of the project.

C. Risk Management

Every project is likely to encounter obstacles or face risks that could determine the success or failure of the project. Therefore, the team should devise a plan that provides for (i) identification of risks early in the process, (ii) mitigation of those risks, (iii) taking contingent action to minimize the seriousness of the risk once it has occurred, and (iv) adjusting the strategy if necessary.³⁵

When implementing secured transactions projects, it is possible to encounter general risks that are common to many projects of this nature, like political risks or financial risks, but there are also risks that are more specific to secured transactions, which could be considered as technical risks. Table 4 provides an overview of some of most common risks in secured transactions projects and how to mitigate those risks partially or completely.

D. Budget and Resource Allocation

It is difficult to determine how much the implementation of a secured transactions project will cost. Factors that are unique to the country where the project is being implemented can cause considerable differences in the costs of project components. Such factors might include: (i) the costs of registry software and hardware; (ii) the existence of technology capacity within the counterpart or a central government facility; (iii) the cost of local consulting or legal services; (iv) the need for a strong awareness campaign; (v) the cost of office space if the counterpart is not providing it; (vi) the cost of Internet and communications;

34. Kepner-Tregoe, IFC Project Management.

35. See “KT Project Management”, International Finance Corporation, 2007.

Box 5: Major Actions and Deliverables in Implementing a Secured Transactions Reform**1. Identification Phase**

- Official request from client to provide support in secured transactions reform.

2. Project Preparation or Initial Scoping

- Analysis of the request and decision whether to intervene or not
- Secure funding for diagnostic
- Organization of a team and plans for the diagnostic field visit

3. Diagnostic Phase

- Field visit and interviews
- Survey, collection of baseline data
- Preparation of a report with recommendations for reform

4. Implementation Phase

- Secure funding for implementation of reforms
- Identify government counterpart to sponsor law reform and registry development
- Sign cooperation agreement or memorandum of understanding (MOU) with counterpart or client
- Put together implementation team
- Create a working group composed of representatives of different stakeholders to work on the implementation of the project
- Conduct as many field visits as needed
- Prepare draft legislation (including appropriate implementing decree and/or regulations), vet it with a working group and deliver to government counterpart for introduction to adoption processes
- Provide ongoing technical support at the law adoption stage and until the law is enacted
- Determine organizational and physical placement and configuration of registry
- Determine number and types of procurements to be done, such as application software, hardware, office equipment, Internet service provider (ISP), data center services, IT maintenance, and office space
- Design and develop specifications for procurement of software for the registry
- Conduct awareness-raising events
- Develop job descriptions and selection standards for registry staff
- Conduct training for registry staff and other stakeholders such as creditors or users, judges, execution officers, government officials and private sector
- Design or procure the software for the registry
- Produce a manual of procedures for the operation of the registry and a user guide for end users
- Test and deploy registry technology system

5. Official Start of the Registry and IFC's Exit

- Registry officially inaugurated
- IFC closes the project

6. Monitoring and Evaluation and Follow-up

- Impact assessment reports at least every six months after the completion of the project, done by registry staff with guidance from the donor institution
- Periodic follow-up from IFC officers with client or counterpart

Table 4: Common Risks in the Implementation of Secured Transactions Projects and Mitigation Factors *(continued)*

Risk	Mitigating factors
5. Government officials oppose electronic registry because there is an interest to maintain the status quo and non-transparent practices.	<ul style="list-style-type: none"> • If possible, find a reform-driven government champion to support reforms. • If no reform-driven champion is available, condition funding on acceptance of registry reforms.
6. Key stakeholders resist reform after it has begun, risking political defeat of the reform or non-use of the system if adopted.	<p>Identify all stakeholder groups and their positions during the diagnostic. Use public awareness activities to shape stakeholder opinions. Engage all stakeholder in reform process as participants in working group.</p>

(vii) accessibility and availability of a mission office and staff to support operational staff and consultants; and (viii) the need to hire international consultants due to the lack of local secured transactions knowledge or the need for reforming the legal framework.

An estimated budget for implementing secured transactions can be developed by breaking the total project into its different components and determining the cost of each. The overall budget can then be developed by aggregating the

costs of the components. This approach permits a budget to adjust to the particular context of the jurisdiction. For example, if reform of the legal framework is not needed for a specific project, cost of legal reform can be left out of the budgeting process.

Table 5 is an example of a project budget based on IFC's experiences with secured transactions projects. It illustrates budgeting by phases of the project cycle. It is important to secure, if possible, all of the funding at the beginning

Table 5: Illustrative Budget for Implementing Secured Transactions Projects in Emerging Markets

Sequencing	Project Component	Activities	Cost Elements	Estimate Cost in US\$
1 st Phase: Diagnostic and Design	1. Initial diagnostic / scoping	<ul style="list-style-type: none"> - Detailed analysis of secured transactions in the country - Surveys - Focus groups - Meetings with stakeholders - Diagnostic report with recommendations 	<ul style="list-style-type: none"> - Local and/or international consultants and their travel expenses and fees - Survey experts (fees) - Expenses for meetings and focus groups 	\$80,000
	2. Secured transactions legal framework	<ul style="list-style-type: none"> - Analysis of existing legal framework - Meetings with legislators, members of parliament 	<ul style="list-style-type: none"> - Local legal experts (fees) - International legal experts and their travel expenses and fees 	\$40,000
2 nd Phase: Implementa- tion and	3. Consensus building and awareness raising ³⁶	<ul style="list-style-type: none"> - Workshop for stakeholders - Creation of working group - Organization of events 	<ul style="list-style-type: none"> - Workshops and events - Conferences and seminars - Press conferences and press releases 	

36. The cost of many of these Public Relations (PR) tools will be covered by PR agencies or newspapers. Once the project has produced results, there will be articles in the local press, and perhaps in radio or TV. Most of the expenses are related to the organization of workshops, conferences, production of brochures, in the initial phases of the project.

Table 5: Illustrative Budget for Implementing Secured Transactions Projects in Emerging Markets (continued)

Sequencing	Project Component	Activities	Cost Elements	Estimate Cost in US\$
Monitoring and Evaluation		- Public relations campaign, advertising	- TV & radio broadcasts - Articles in newspapers - Posters and brochures - Publications - Etc.	\$50,000
	4. Drafting or amending law and decree or regulations	- Develop drafts - Vet drafts with working group of stakeholders		\$60,000
	5. Creation of Secured transactions registry	Develop registry design concept and performance specifications	International consultants and their travel expenses and fees	\$50,000
		Development or acquisition and modification of registry application software	Software acquisition or development costs	\$100,000
		Equipment for the operation of the registry (software and hardware) ³⁷	- Hardware (servers, system software, PCs, printer, phone, etc) - Internet connection ³⁸ - Other office material, furniture	\$90,000 ³⁹
	6. Training of registry staff and other stakeholders	- Training of end users (FIs) - Training of registry staff	- International trainers and their travel expenses and fees - Local/international trainers - Logistics and costs for training facilities - Study tour for registry staff	\$80,000
	7. Monitoring and evaluation	- Initial baseline surveys (at the beginning of the project) - Monitoring through program records, surveys - TA/ training to counterpart and registry staff on how to track indicators	- Databases for tracking indicators - Data and M&E experts fees and travel expenses	\$50,000
TOTAL ESTIMATED PROJECT COST				\$600,000

37. Ideally, the equipment for the registry should be paid by the counterpart if possible. Experience shows that a counterpart that provides for these with its own funds will be: (i) more committed to the reforms, as they are putting their own resources into the project; (ii) much more capable of maintaining the system in the future once the technical and financial assistance is completed.

38. As with the previous item, ideally, the counterpart should bear the costs for this. However, if this is not possible, the project could finance the Internet connection for at least the first 6 months or first year of the project.

39. This should normally be borne by the counterpart, but in some cases IBRD or other donors may be able to assume it. Care should be taken to ensure that commitment is made from a source that is capable of such funding before committing to proceed. In some circumstances, it may be feasible to use a software-as-a-service provider to run the application software on shared servers. If that option were used, the annual cost would be on the order of US\$15,000 and may require a subsidy for the first one or two years until revenues reach a self-sustaining level.

of the project to avoid the risk of not having funding to implement all the phases. Most budgets are funded by a single allocation for the duration of the project. It is important to note that the budget presented here does not include overhead and the salaries and benefits of the implementing team, though it includes the cost of external consultants. It is also recommended that some of the costs of the project be borne by the client/counterpart, in particular those related to the registry equipment (hardware and software).

E. Staffing Plan and Task Allocation

The staffing of a secured transactions reform project will be a mixture of local and international staff. A reasonable team might include all or some of the following:

- A task manager (can either be a local expert or an international expert). Ideally, the task manager

should be based in the country where the project is being implemented

- An international secured transactions legal expert
- A local lawyer with good knowledge of the existing commercial law framework
- An international registry expert (who may be the international secured transactions legal expert)
- A local IT expert
- An international financial sector or banking expert with specialized secured transactions knowledge
- A communications expert, usually local
- Monitoring and Evaluation (M&E) expert
- A local administrative support staff

Not all of the team members should be working full time on the project. Normally, there will be a core team composed of the task manager and legal and registry experts, while other members (M&E expert, banking expert, etc.) of the team will be consulted for specific periods of time, or assigned specific tasks at different stages of the project. Table 6 provides a picture of what the staffing needs would be like at each stage of the project.

Table 6: Team Members' Responsibilities

TASK	TEAM MEMBER
1. Project Identification	Task manager, local on-the-ground team
2. Project Preparation/Initial Scoping	Task manager, international secured transactions legal expert, local lawyer, international registry expert, local IT expert, financial sector expert, M&E expert, local administrative support person
3. Full-Fledged Diagnostic with Recommendations	
4. Implementation	
4.1. Consensus building	Task manager with ad hoc support from specialists
4.2. Development/drafting of the law and enactment	Task manager, international secured transactions legal expert, local lawyer
4.3. Development of decree and/or regulations	Task manager, international secured transactions legal expert, international registry expert, local lawyer
4.4. Design, placement and implementation of registry	Task manager, international registry expert, local IT expert
4.5. Public awareness building	Task manager, communications expert
4.6. Training	Task manager, international secured transactions legal expert, international registry expert, international financial sector (banking) expert, local IT expert
5. Testing Period of Newly Implemented Systems	Task manager, international registry expert, local IT expert
6. Monitoring and Evaluation	Task manager, M&E expert
7. Project Completion and Exit	Task manager

Chapter 4: Implementation

A. Consensus Building and Client Input to Reform Process

1. Identify and Develop at Least One Strong Champion for Reform

The local champion will be the key driver of the project. The local champion must be the one who pushes the reform forward and not the task manager or the project team. If the local champion is not convinced of the reform's value and does not support it 100 percent, the implementation and the overall success of the project will be at risk. Therefore, it is critical for the success of the project to secure the support of a strong local champion in the design phase. If there is no support from the champion, it would be better to drop the project than to proceed without support. There is no ideal local champion when implementing a secured transactions reform, but there are some basic characteristics to look for in the local champion:

- Strong political clout
- The ability to make decisions and implement them
- Good understanding of the credit market
- Conceptual understanding of secured transactions and its potential benefits
- Financial resources that could be devoted to the project if needed
- Support of other stakeholders

As stated in the Public-Private Dialogue Handbook,⁴⁰ there are certain principles that need to be considered with regard to champions, i.e. backing the right champions and not depending on a single strong champion after the initial design phase. What is clear is that it is difficult to sustain dialogue without champions from both the public

and private sectors who invest in the process and drive it forward.⁴¹

Typical candidates for the role of champion for a secured transactions project commonly include the *Ministry of Justice, Ministry of Commerce, Ministry of Economic Development, Ministry of Finance and the Central Bank*. In some cases, the choice of the counterpart might not be entirely up to the team, but might be determined by demand from the counterpart, existing legislation or the mandate of any of these institutions.

The team's government counterpart is most commonly the driver of the reform and therefore the natural champion. However, in some cases a private or public institution (e.g. the Bankers Association or the Central Bank) that is truly interested in introducing secured transactions reform as part of its own strategy could also be a key driver of the reform, although these institutions would not replace the role of the champion but rather support the reform process and strengthen the overall reform process.

Before implementation commences, the team and the government counterpart should sign a cooperation agreement or an MOU to ensure commitment. The better of these alternatives is the cooperation agreement, because it binds the two parties with respect to the obligations stipulated in it, thereby assuring certainty of the government's commitment. This is even more critical when there is a co-financing arrangement in which the counterpart, for example, is financing part of the reform project (usually the IT component related to the secured transactions registry). Where a binding cooperation agreement is not feasible, the MOU alternative may be used. The MOU is a non-binding agreement between two or more parties to execute a joint project. It sets out the responsibilities that each party must fulfill in order to achieve the desired results. See Annex 4 for an example of an MOU.

40. See "Public-Private Dialogue Handbook: A Toolkit for Business Environment Reformers," DFID, WB, IFC, OECD, 2006.

41. See "Charter of Good Practice in Using Public Private Dialogue for Private Sector Development", DFID, WB, IFC, OECD, 2006.

Table 7: Examples of Counterparts and Champions in Secured Transactions Reform Projects

Country	Champion	Counterpart
Nepal	Credit Bureau	Ministry of Finance/Registrar
Cambodia	Ministry of Commerce	Ministry of Commerce
Vietnam	Ministry of Justice and National Registration Agency for Secured Transactions (NRAST)	NRAST
Bosnia Herzegovina	Ministry of Justice	Deputy Minister of Justice
Albania	Ministry of Finance	Minister of Finance
Georgia	National Agency for Property Registry (NAPR)	NAPR
China	Peoples' Bank of China	Peoples' Bank of China

Table 7 contains brief references for the various choices of local champions that were pursued in different countries for the implementation of secured transactions reforms.

2. Identify Stakeholder Groups and Leaders

Creating a strong stakeholder or leader group is a critical step towards introducing a sustainable and long term support for the reform. Therefore, the team should identify the key stakeholders in the early stages of the project, make sure that all stakeholders understand the benefits of a secured transactions system, and secure their support for introducing the reform.

According to IFC's "Guide to Stakeholder Engagement and Reform Promotion," a stakeholder is an individual, community, or group that has something to gain or lose from the outcomes of a reform program or activity. Stakeholders may impede reform or actively promote it—they influence change or fight for the status quo. The term "stakeholder" also includes audiences who are indirectly affected by the reform. In any reform project, identifying and analyzing the needs and concerns of different stakeholders is

fundamental to shaping and implementing reform.

In a secured transactions project⁴², the stakeholders may include, among others:

- The Ministry of Justice
- The Ministry of Finance/Economy
- The Ministry of Commerce
- Ministry of Industry and Trade
- Social insurance agency or National Provident Fund
- The Ministry of Labor
- The tax or revenue authority
- The Central Bank or superintendency of banks
- The Judiciary, and particularly commercial court judges
- Banks
- Non-bank financial institutions
- Bankers Association/Leasing Association
- Private sector firms
- Notaries
- Public registries
- The Chamber of Commerce and other business organizations
- Law firms and/or Bar Association

42. There might be other stakeholders. This is not a comprehensive list of all possible stakeholders. For more detailed information about how to conduct a stakeholders analysis please see "Strategic Communications for Business Environment Reforms: A Guide to Stakeholder Engagement and Reform Promotion", IFC 2007.

- NGOs and international organizations, including other donors
- Representatives of academia (local university or country expert)

3. Form Advisory Committee or Working Group

Once the main stakeholders have been identified, the team may form an advisory committee or working group to monitor the project. This committee or group should be organized during the design phase and should include the main stakeholders and champions. It can serve as a management and monitoring tool, support adoption of the law and the regulations, and help to resolve issues that require high-level decisions. Although it is not a requirement to create this group, it can be very useful in jurisdictions with turf battles between ministries, a complex political situation or a broad spectrum of stakeholders. Members of the working group or advisory committee should include the technical counterpart staff, the project team, and other technical experts such as local lawyers, banking experts, IT experts, etc.

The working group or advisory committee should adopt an *action plan* with clearly defined activities and resultant outputs and outcomes. It should include the timeframe for the completion of each activity. The example provided in a previous section (Box 5) could serve as a model for the milestones required in a detailed action plan. The working group or advisory committee should meet periodically either in person (which might not always be possible for all members) or by conference call to report progress and discuss issues.

B. Development of the Law

1. Analysis and Mapping of the Existing Legal Environment

1.1. The Existing Legal Tradition

General considerations: The foundation of any modern secured transactions system is the legal basis upon which it is designed, constructed and operated. The legal framework determines all elements of the secured transactions regime, including execution of the security

agreement, the registration process, determination of the relative priorities among conflicting claims to collateral and the enforcement of such claims.

The risk of non-repayment is one of the key factors in a creditors' determination whether to advance credit or not. A well-designed legal system based on sound public policies can reduce that risk, thereby encouraging creditors to provide credit under reasonable credit costs to the borrowers. However, there are examples of initiatives taken by a number of countries where a reform to secured transactions law resulted in additional barriers to access credit. Some of these resulted from inadequate legal reform in terms of secured transactions law or related legislation. (Examples include Poland, where the law required filing of hard-copy security agreements, and Madagascar, where the leasing law required filing of four copies of the registration documents.)

Section B of this chapter discusses the various components of modern legal systems that are designed to facilitate access to credit secured with movable property.

Modern and traditional systems: Modern secured transactions law was born in the United States and the introduction of article 9 in the Uniform Commercial Code was a departure from traditional common law. However, modern secured transactions laws are adaptable to any system whether based on the common law, the civil law or any other law system. Some states with undeveloped commercial law systems regard this area of reform as a product of developed nations and therefore too advanced or complicated. However, these systems have been implemented successfully in both developed and developing jurisdictions (e.g. USA, Canada, New Zealand, Albania, Romania, Bosnia and Herzegovina, Slovakia, Vietnam, China, Bulgaria and Cambodia).

While a modern secured transactions system is important to any legal system regardless of its legal tradition, the approach to this reform must take into account the existing local conditions and customary practice. In addition to the main differences included in Box 6, challenges arising from different practices may include the following:

Legal environment—form over substance: Modern secured financing legislation typically determines its application based on the substance or economic rationale underlying of the transaction (USA, Albania), as opposed to legislation where the name or form of the transaction determines whether it is a secured financing transaction or

not (OHADA Uniform Act on Secured Transactions).⁴³

Use of notaries: The mandatory use of notaries is more pervasive in civil law jurisdictions with undeveloped secured financing systems, where they play a central role in the execution of security agreements and registration procedures (e.g. Tajikistan and Indonesia). Other jurisdictions have abolished the mandatory role of notaries to reduce the cost and time for the creation of security interests without compromising the legal validity of the transactions (e.g. Romania and Bosnia and Herzegovina).

Fragmentation: One of the deficiencies that can render secured financing systems unsustainable is multiple sources of information regarding claims against the same movable property. This can happen when the information on claims against movables is not centralized, i.e. registration is fragmented among different registries for sub-national jurisdictions or among registries at different levels of government. The better practice is to centralize all secured transactions information in one place (with respect to movable property). With modern computerization, this

approach has proven very effective (e.g. The International Registry of Security Interests on Mobile Equipment, Romania, Cambodia and Bosnia and Herzegovina).

Debtor classification—juridical persons versus individuals:

In some jurisdictions there are separate registries for security in property of juridical persons (companies) and security in property of individuals. For example, in the Peoples Republic of China, security in the movable property of individuals is registered with the public notary, whereas security in the movable property of juridical persons is in registries wof the Administration of Industry and Commerce. In some jurisdictions, natural persons (including sole proprietorships) may not use their movable assets as collateral. These are jurisdictions in which security interests are registered in the Company Registry (i.e. UK's Company Register and "Registres de Commerce et du Credit Mobilier" in Morocco, Mali, Madagascar, Burkina Faso, Togo, Chad, etc.). The recommended practice is to create a single depository of security interests for all types of legal and natural persons.

Box 6: Main Differences between Jurisdictions with Undeveloped Commercial Law and those with Developed Commercial Law with Respect to Secured Financing

Jurisdictions with undeveloped commercial law generally:

1. Adhere to strict legal forms such as the pledge or mortgage and their related formalities;
2. Require possession of collateral by the creditor (if possessory pledge is the only form of security);
3. Require traditional document registration (for example, the notarized credit agreement);
4. Require specific description of property subject to an interest and preclude use of future property and changeable property as security; and
5. Protect debtors in enforcement to the point that enforcement becomes excessively costly and unlikely to succeed in timely manner.

43. The OHADA Uniform Act on Secured Transactions is currently being revised so this example might not be valid in a near future if the reform is successful.

1.2. Recognized International Standards in Secured Transactions Legal Frameworks

The central concepts of modern secured transactions have been incorporated into a number of international principles and guidelines. Two of these guidelines have been endorsed by a number of countries and multilateral organizations and are valuable guidelines for secured financing reform:

- The World Bank Principles for Effective Insolvency and Creditor Rights Systems, revised 2005 (see Annex 5)⁴⁴
- The United Nations Commission on International Trade Law (UNCITRAL) Legislative Guide on Secured Transactions, 2007,⁴⁵ and the annex thereto

The principles and recommendations contained in these documents should be used when advising governments on secured transactions reforms. UNCITRAL's Legislative Guide is a comprehensive resource that can be used by practitioners and government officials in the reform of the legal framework for secured transactions. Annex I of the UNCITRAL Guide, which includes the terminology and the recommendations of the Guide, is a useful framework for a secured transactions law that can be adjusted to the needs and circumstances of each jurisdiction.

In addition to the internationally recognized principles and guidelines, a number of multilateral donors and organizations have drafted model laws and guides on secured transactions that have served as a base for some of the principles recognized as international standards by UNCITRAL and the World Bank Group. Such model laws and guides include the European Bank for Reconstruction and Development Model Law on Secured Transactions (2004) and the Organization of American States Model Inter-American Law on Secured Transactions (2002). Some of these were created to serve as a guide rather than a final form of legislation to be adopted, so it is necessary to evaluate the suitability of each provision in light of the local needs and legal environment before

recommending adoption. Though it is not a model law per se, the Annex to UNCITRAL Legislative Guide, mentioned earlier, provides detailed guidance on each type of provision that should be included in a law, as well as commentary on the advantages and disadvantages of alternative approaches.

1.3. Existing Pertinent Legislation

General considerations: Modern secured transactions law does not exist in a vacuum. Nor does it redefine all aspects of law relating to the relationships it encompasses. It functions in the context of, for example, basic property law, obligations law, bankruptcy law, negotiable instrument law and other areas of the law related to commercial relationships. Therefore, the existing laws must be examined in order to ensure a functional relationship with the reformed secured transactions law. Any conflict between the existing law and the new regime will have to be addressed either by amendment to the former or by other means. When it is determined that amendments to the existing law are impossible or impracticable, the international and local legal experts should assess other options. For example, decrees or regulations may be used to provide interpretation to provisions in the main legislation. It will be necessary before making such decisions to determine what the relevant rules of statutory construction are in the jurisdiction and what the relative levels of authority are between different types of legislation; i.e. whether a special law may pre-empt conflicting provisions of the Civil Code or other special laws.

Legislation and area of impact: The following examples include legislation that typically exists in a jurisdiction before a reform to its secured transactions law takes place. There may be other laws that bear on secured transactions reform, so it is necessary to identify all relevant laws before beginning the reform. The examples illustrate the interactions and potential issues that may arise between a reformed law and existing legislation:

1. Sales law: Under the law of some jurisdictions, when a seller repossesses movable property sold under a title-

44. See <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/LAWANDJUSTICE/GILD/0,,contentMDK:20196839~menuPK:146205~pagePK:64065425~piPK:162156~theSitePK:215006,00.html>

45. See http://www.uncitral.org/uncitral/en/uncitral_texts/security.html

retention sales agreement, the contract is deemed to have been terminated and the seller is required to return to the buyer any refundable portion of the purchase price paid up to the time of the repossession. A reformed secured transactions regime should include conditional sales contracts in its scope. From a functional standpoint, a conditional sale is a secured transaction, and therefore, the seller and the buyer are respectively the secured creditor and the debtor both with respect to the relationship between the parties and with respect to determining priority against third-party interests in the property.

2. Leasing law: In some jurisdictions, financial leasing is treated as a secured transaction and, consequently, is regulated by secured transactions law. However, other jurisdictions have special laws governing financial leasing. Re-characterizing financial leases as secured transactions may not be necessary or possible in some jurisdictions. However, it is important to ensure that the rights of financial lessors are subject to the same publicity and priority rules as other rights arising out of other secured transactions. Even though operating leases are not otherwise treated as a secured transaction, property held by a lessee under a long-term operating lease is not distinguishable from owned property to an uninformed third party. Consequently, the requirements for publicity and priority of the secured transactions law should be

applied to financial and long-term operating leases (see Box 7). This has been accomplished in some recent leasing laws, such as in Yemen and Jordan, by providing in the leasing law that the lessor's priority against third parties who may buy or take security in the leased goods is established by registration in the secured transactions (collateral) registry. However, the more efficient approach is to include financial and long-term operating leases in its priority and registration provisions of the secured transactions law if that is practicable.

3. Codes (e.g. civil or commercial codes): Some jurisdictions have codes that contain all commercial legal provisions. In many of these codes, the means of securing obligations with movable property is the pledge, wherein the creditor's priority depends on possession of the property by the creditor or a third party. Further, codes often address the use of obligations, e.g. accounts receivable, as collateral. Therefore, codes must be examined and, when necessary, amended or supplemented as part of the reform in these jurisdictions.

4. Land law: Examination of existing land law is also important, since it may provide that any movable property affixed to immovable property is considered part of the immovable property. A conflict may exist between the secured transactions law and land law (see Box 8).

Box 7: Example of Leasing Law and Secured Transaction Law Provisions

Leasing Law : A lessor has the right to repossess the property from the lessee or anyone to whom possession may have been transferred if the lessee does not perform his obligation.

Secured transactions Law: A buyer of property takes free from any pre-existing right against the property if that right is not publicized before the buyer acquires the property.

While a secured creditor must publicize its interest in the collateral in order to maintain its priority against a buyer under the secured transactions law, a lessor has no such obligation under the leasing law. With respect to a buyer of the property from the debtor or lessee, there is no possibility to distinguish between property that is owned subject to a security interest and property that is held under a lease. So if the buyer buys leased property, he has no way to know of the lease if it is not publicized, so he will take it subject to the lessor's interest if the leasing law governs publicity and priority. Therefore, the publicity and priority rules of the secured transactions law should be applied to property held under a financial lease or long-term operating lease.

46. A purchase-money security interest is taken in goods to secure: a) the purchase price of the goods if financed by the seller, or b) the value given by a third party financier to enable the acquisition of the goods.

Consequently, the provisions of the land law dealing with fixtures that are attached to a property must also be considered as part of the law reform.

5. Laws creating security rights: Security rights created by operation of the law (liens or privileges), and not on the basis of an agreement between parties, are designed to protect the public interest in specific cases where it is not practical to require agreement as the basis for the property right. Some jurisdictions provide in their laws for the creation of liens in favor of individuals or public institutions. Since these specialized types of legislation implement specific public policies, such as protecting tax revenues (as in the case of tax liens) or social justice (as in the case of a labor law providing for a lien against property of an employer in default on its wage payment obligations), they may contradict other public policies, such as increasing access to finance (see Box 9). This may result in such legislation giving unlimited priorities to liens over a secured creditor's rights. Legislation creating liens and priorities to liens must be examined as part of the law reform.

The optimal solution to this situation is to harmonize the secured transactions law and the laws under which liens are created. The laws that provide for liens should, if possible, be amended to provide that lien holders or the responsible government agency, e.g. the Ministry of Labor in the case of liens for wages, are governed by the publicity and priority rules of the secured transactions law. Ideally, all lien holders, including the government with regard to tax claims and employment wages, should follow the registration rule and register security interests in the secured transactions registry. This solution is often hard to sell to the jurisdiction because tax or labor law enforcers generally deem the existing super-priority of liens to be essential to enforcement of the obligations secured by the liens. However, there are two persuasive arguments that can be used to overcome such resistance. First, a World Bank *Doing Business* study has shown that such super-priority liens cause a significant decrease in access to credit because of the increased risk they represent to lenders, and therefore reduce overall tax collections and employment (see Figure 4 below). In addition, economic empirical evidence validates the assumption that, where there is no absolute priority rule, there is a lower recovery rate and a higher risk for creditors. According to this evidence, "7 percent of the estate is lost to the senior creditor, on average, because of violations of absolute priority. The correlation between priority and recovery

Box 8: Practical Example of conflicting provisions

Assume that Alfa Bank holds a registered mortgage on Grocer's store. Grocer then buys a furnace for his store from Acme Heating on credit, and Acme takes and registers a purchase-money security interest⁴⁶ in the furnace, which is at that point a simple movable. Grocer then installs (affixes) the furnace in his store.

Land law: A registered mortgage in the Land Registry has priority over any right which is not registered in the Land Registry. Items that are affixed to real estate are deemed to be part of the real estate.

Secured transactions law: A purchase-money security interest in movable property registered in the secured transactions Registry has priority over any right in the movable property which is not registered in the secured transactions registry.

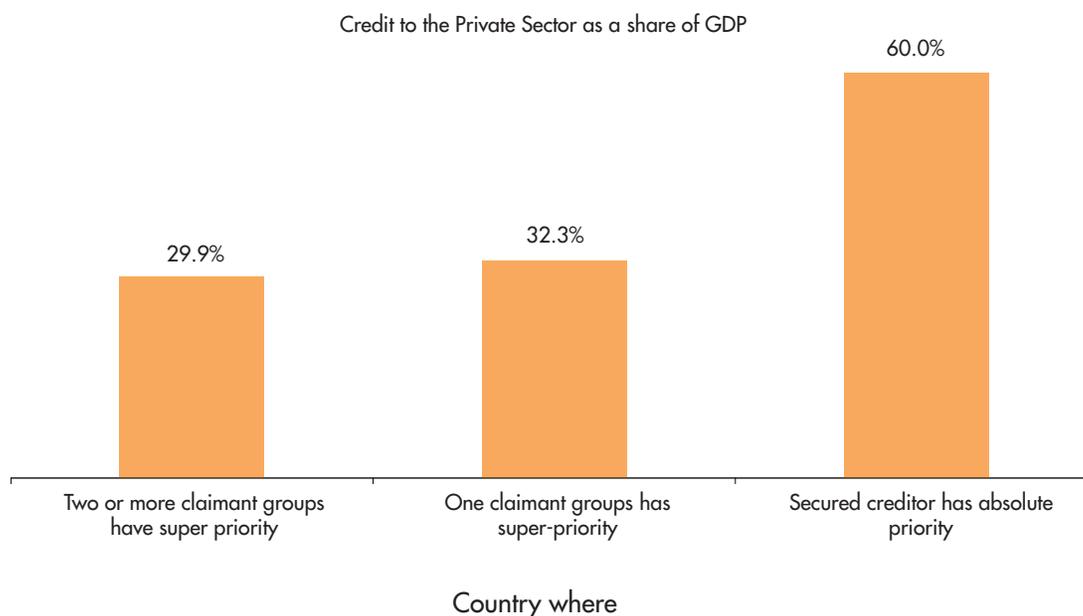
Because these two laws are not harmonized, Alfa Bank can claim priority based on the Land Law, while Acme Heating can claim priority based on the secured transactions Law. One common solution is to harmonize the laws to permit the priority of the purchase-money security interest in the furnace to continue as against interests in the land, provided it is recorded in the Land Registry before or within a fixed short period after the furnace becomes affixed.

Box 9: Practical Example of Provisions Creating Liens with Priorities

Tax law: The state has an automatic lien against a taxpayer when the taxpayer defaults on his income tax payment. This lien has a priority over any other right against the taxpayer's property whether or not this lien is registered.

Labor law: An employee, whose employer is in default in payment of wages, has an automatic lien against the property of the employer that has priority over any other right in the employer's property, without registration.

Figure 4: Negative Effect of Super Priorities on Credit



Source: World Bank *Doing Business* Project database.

Note: the relationship between private credit and priority status of secured creditors is statistically significant when controlling for country size, income level, enforcement, legal origin and regions.

is .528.⁴⁷ Second, publicity by registration gives lien holders leverage over lien debtors because the debtors will be unable to secure credit from lenders once the lien is published unless it is quantifiable.

However, if it proves infeasible to obtain agreement of the government to forego the absolute super-priority of liens and to participate in the priority system of the secured transactions law, the risk to financiers caused by potential super-priority liens should be mitigated to the extent possible in the course of law reform. The form of mitigation may depend on whether or not the existing law that provides for the super-priority can be amended in the course of the reform.

If the political or legal situation permits the existing law that provides for the super-priority of liens to be amended, it should be amended to limit the lien's priority to a specified period of arrears or to a monetary amount, e.g. arrearages for the last three months up to a maximum of \$X per person.

If the existing law providing for super-priority of liens cannot be amended, mitigation can include a provision in the secured transactions law for permissive registration of liens in the registry, along with incentives for the lien holder or responsible government agency to register, e.g. a provision that a secured creditor who enforces its security interest must give notice to the lien holder or responsible government agency if its lien has been registered when the secured creditor commences enforcement. The enforcement provisions of the law could further provide that commencement of enforcement of a security interest cuts off assertion of unregistered liens, so that a secured lender will not be put at further risk by going through the enforcement process only to be dispossessed of the seized collateral or its proceeds just short of distribution of the proceeds under the secured transactions law. Finally, the risk to secured creditors can be mitigated by a provision in the law that a lien holder must proceed against the unsecured assets of a lien debtor before proceeding against assets that are secured by a registered security

47. See "Debt Enforcement around the World", Djankov, Hart, McLiesh and Shleifer. *Journal of Political Economy*, 2008.

interest or that are in the possession of the secured creditor, unless the lien was registered before notice of the security interest was registered or possession of the assets was taken by the secured creditor.

In cases where a local government will not agree to either full participation of lien holders in the secured transactions law's priority scheme or mitigating measures, the reform should still go forward. The benefits of the reform may be less than optimal, but will be greater than having no reform at all. The debtor's tax or social security obligations can always be generally assessed by the creditor who then can insist on additional security to cover these potential preferential rights as well as the credit advanced.⁴⁸

6. Contract law: Contract laws usually include provisions dealing with transactions involving movable property. These may include e.g. lending for use or consignment agreements. The right to hold, use or sell movable property belonging to another person may affect the owner's freedom to exercise his full ownership rights. Since security interests in property are generally given by owners of property, creditors need to know about such limitations. Contract law should, therefore, be examined as part of secured transactions law reform. In many cases, it may be possible to bring such agreements into the registration and priority schema of the secured transactions law.

7. Property law: The extent to which the laws governing property generally recognize exceptions to the principle of *nemo dat qui non habet* (He who hath not cannot give) is important to the reform. If a person in possession of property that is subject to an interest held by another person has the power to "pass good title" to a good faith purchaser, the priority regime of a secured transactions system would be rendered largely ineffective. Such provisions in the property law must be addressed during the secured transactions reform to ensure an integrated and comprehensive priority schema results.

8. International Conventions: A few international conventions deal with property rights and their enforcement

in jurisdictions that adopted them. One example is the Convention on International Interests in Mobile Equipment (Cape Town, 2001). This convention includes separate protocols for each of three different types of mobile equipment (rolling stock, aircraft and space objects) governing security interests and providing for priority to be established by registration in an international public registry for the type of mobile equipment. A jurisdiction that is a signatory to a protocol and undertakes to reform its secured transactions system must consider the relevant provisions of each ratified protocol. The reason is that when a protocol is ratified by the jurisdiction, it becomes part of the law of that jurisdiction. A reformed secured transactions law must be consistent with provisions of ratified international conventions, in particular when it comes to priorities and publicity of rights (see Box 10).

9. Bankruptcy law: In theory, bankruptcy law deals with the process of enforcing existing rights of creditors in case of liquidation or dealing with all creditors' claims as part of reorganization of the bankrupt entity. However, in some jurisdictions, bankruptcy legislation is more than procedural and sometimes touches upon existing relative priorities of the bankrupt's creditors. In some jurisdictions bankruptcy legislation and secured transactions legislation are under the jurisdiction of two different levels of government or they are inconsistent with each other because of a lack of coordination in their reforms. Consequently, there is a risk of inconsistent approach in terms of priority rules as well as in terms of enforcement of security interests (see Box 11). Therefore, bankruptcy legislation must be considered and, if necessary, amended in the course of a secured transactions reform to ensure it is consistent with the policies underlying secured transactions law reform. This can mean in general, the following:

- (a) Priority provisions of secured creditors are generally consistent between the two laws.⁴⁹
- (b) Protection of the secured creditors' rights during bankruptcy proceedings,⁵⁰ including during reorganization or liquidation proceedings, is

48. The US tax service has priority over all security interests registered after the tax lien is registered and over any advances and any security interests that attach under an after-acquired property clause of a security agreement for which notice was registered before the tax lien was registered. The point is that, once the lien is registered, the secured creditor cannot rely on an after-acquired property clause or tack later advances.

49. The formulation of the UNCITRAL Guide on Secured Transactions is more concrete, i.e. "Insolvency law generally respects: (a) the effectiveness of a security interests under secured transactions law, except to the extent the security agreement is subject to avoidance; and (b) the priority of secured creditors under secured transactions law, except to the extent privileged claims are recognized that should be set out clearly in the law."

Box 10: Example of a Possible Provision in Domestic Law

“This law shall not apply to a transaction governed by an international convention or treaty to which (name of country) is a party that governs the creation, publication, priority, or enforcement of a security interest, except to the extent that the convention or treaty does not address a matter that is addressed by this Law.”

Box 11: Practical Example of Possible Conflict between Secured Transactions and Bankruptcy Laws

Secured transactions law: A secured creditor who has registered has priority in the collateral over unsecured creditors.

Bankruptcy law: If the security interest of the creditor was registered within a certain period before initiation of the bankruptcy proceeding, it does not have priority over unsecured creditors.

Box 12: Possible Problematic Enforcement Law Provisions

“The judgment officer must notify the debtor 7 days before seizure of the collateral.”

“The court must stop enforcement proceedings if the debtor appeals against the initiation of the proceedings.”

maintained to the extent possible, e.g., preservation of the collateral’s value and recourse of the creditor to relief.

This example illustrates potential conflict between priority provisions in each of the legal texts mentioned earlier. It is therefore important to ensure that relative priorities are consistent or at least known so that creditors are able to assess the risk of advancing credit.

10. Enforcement Law (Code of Civil Procedure): All jurisdictions with legislation dealing with creditor-debtor relationships must address the enforcement of creditors’ rights against defaulting debtors. However, execution laws often include provisions that make them ineffective in enforcing a creditor’s rights against movable property (see Box 12). As a result, in these jurisdictions, movable property becomes less attractive as security. A well designed reform of secured transactions law involving movable property should either include reform of the enforcement law or provide in the secured transactions law a separate enforcement process that makes use of self-help when possible and calls for expedited judicial enforcement when self-help is not an option.

Mapping existing legislation: Once the legislation is collected, analyzed and examined in the context of the required reform, it should be mapped to the relevant provisions of modern secured transactions laws. This approach has a number of practical advantages:

- The mapping will assist in assessing the extent of the reform needed.
- It will assist in deciding on one of two methods of reform: (i) enacting new secured transactions legislation with harmonization of related legislation; or (ii) reforming existing legislation by amendment.
- It provides a simple and clear reference for the extent of the reform required on existing legislation.
- It assists law reformers to understand modern secured transactions law and its components.
- It allows for a continuous and updated procedure of reform taking into account any intervening amendments to related legislation during the period of the reform.

- It leaves local jurisdictions with an organized methodology and infrastructure to monitor any further law reform necessary in the context of secured financing reform.

2. Building the New Secured Transactions Legal Regime

2.1. Legal Reform: New Legislation or Reform to Existing Legislation

Following the mapping of the existing legislation, the process of reforming the law may start. Reforming the existing legal system should start with a statement of the objective of the reform; that is, to develop and support adoption of a legal and institutional framework to support a best-practice secured transactions regime that will increase access to credit in the jurisdiction. The next step is the analysis of the substantive changes to and new features of the legal framework that are required. This may involve (i) assessment of the existing credit-granting practices, (ii) identification of possible new credit vehicles the reformed law should include, (iii) evaluation of public policies for existing priority rules and whether they require reform, (iv) determination of the characteristics of a new registry institution suitable for the particular jurisdiction, and (v) identification of necessary improvements to the process of enforcement of property rights.

Following the analysis of the necessary substantive changes and additions, the team must decide whether they can best be adopted as new comprehensive legislation on secured transactions or as changes to existing legislation without the need to enact a new law. As mentioned earlier, the mapping of the existing legislation described previously will help the team make this decision. Another factor in that decision is resistance in some jurisdictions to changes to the Civil Code or Civil Procedure Code for political reasons or because the codes are revered by legal professionals and the judiciary. Consequently, enactment of special legislation for secured transactions is often the simpler and more successful reform. On the other hand, some jurisdictions may already have a progressive secured transactions law, and an effective reform may be accomplished by amendments to existing legislation without the need for new legislation.

In summary, the final determination on the reform can be made only after:

- Mapping of pertinent provisions to modern secured transaction law
- Setting out the objective of the reform
- Determining public policies underlying priorities among conflicting claims
- Determining the type of registry that can be implemented
- Determining the type of enforcement mechanism that can be implemented
- Determining the necessary substantive changes to the legal framework
- Determining whether to introduce new secured transactions legislation or to amend existing laws

2.2. Necessary Components for a New Secured Transactions Legal Regime

Following the determination as to the type of reform that will follow, it is important to ensure that the fundamental components of modern secured transactions law are included in the reformed law. The following discussion focuses on the required elements of any new secured transactions law if it is to be effective. The discussion accounts for the elements of modern secured transactions law and describes the drafting techniques to ensure these components fit within the domestic legal environment.

2.2.1. Scope of the Law

A modern secured transactions regime increases access to finance by reducing the risk of lending. It does so by permitting a creditor to take an interest in the movable assets of the debtor, with certainty of the creditor's priority in the assets and assurance of enforceability of the interest in case of default by the debtor. The features of the secured transactions law that are necessary to success of the regime are:

- The simple creation of an enforceable interest in movable assets by agreement between the creditor and the debtor
- A comprehensive scheme for determining the relative priority of competing interests in the assets that includes all relevant types of interests that may affect the creditor's rights
- Provision for publicity of interests in the secured assets, which includes, in addition to alternate means of publicity, a public registry in which all claimants of interests in assets may give notice of their interests

Box 13: UNCITRAL's Recommendations for the Scope of a Secured Transactions Law

A secured transactions law should apply to all rights in movable assets created by agreement that secure payment or other performance of an obligation, regardless of the form of the transaction, the type of the movable asset, the status of the grantor or secured creditor or the nature of the secured obligation.

The law should apply to:

- (a) Security rights in all types of movable asset, tangible or intangible, present or future, including inventory, equipment and other tangible assets, contractual and non-contractual receivables, contractual non-monetary claims, negotiable instruments, negotiable documents, rights to payment of funds credited to a bank account, rights to receive the proceeds under an independent undertaking and intellectual property;
- (b) Security rights created or acquired by all legal and natural persons, including consumers, without, however, affecting rights under consumer-protection legislation;
- (c) Security rights securing all types of obligation, present or future, determined or determinable, including fluctuating obligations and obligations described in a generic way; and
- (d) All property rights created contractually to secure the payment or other performance of an obligation, including transfers of title to tangible assets for security purposes or assignments of receivables for security purposes, the various forms of retention-of-title sales and financial leases

The law should not apply to:

- (a) Aircraft, railway rolling stock, space objects, ships, as well as other categories of mobile equipment in so far as such asset is covered by a national law or an international agreement to which the state enacting legislation based on these recommendations (herein referred to as "the State" or "this State") is a party and the matters covered by this law are addressed in that national law or international agreement;
- (b) Intellectual property in so far as the provisions of the law are inconsistent with national law or international agreements, to which the State is a party, relating to intellectual property;
- (c) Securities;
- (d) Payment rights arising under or from financial contracts governed by netting agreements, except a receivable owed on the termination of all outstanding transactions; and
- (e) Payment rights arising under or from foreign exchange transactions.

The law should not apply to immovable property except insofar as its application to fixtures may affect rights in the immovable property to which a fixture may be affixed.

- A simple and speedy enforcement process

There are several dimensions to comprehensiveness of the law, and it is important that the law address all of them.

- The types of parties, particularly debtors, to which the law applies must include natural and juridical persons, in any capacity or legal status, wherever located in the jurisdiction.
- The types of movable assets to which the law applies must include tangibles and intangibles, present and future, including their products and proceeds.
- The types of obligations that may be secured must include pre-existing, present and future obligations, whether monetary or other performance.
- The forms of transaction must include all legal forms in which an obligation is secured by movable assets, as well as other transactions in which a creditor may be deceived about the ownership of the assets if the transaction is not publicized, e.g. an operating lease or the sale of accounts receivable and secured sales contracts.
- A single system must cover the entire jurisdiction.

UNCITRAL's Legislative Guide on Secured Transactions includes a very comprehensive and clear recommendation on what the scope of the law should be (see Box 1.3).

The more comprehensive and the more inclusive the law is, the lower the creditor's risk is. One way to make the law comprehensive and inclusive that is used in legal systems of a number of jurisdictions is often referred to as the "substantive approach." That is, the applicability of secured transactions law is based on the substance (operational effect), not the legal form, of a transaction. Such an approach can be implemented by providing that, "Unless provided otherwise in this law, this law applies to any transaction in which a civil or commercial obligation is secured by an interest in movable property."

In those jurisdictions with modern secured financing systems, such a provision is likely to be understood and implemented with little difficulty. Other jurisdictions, on the other hand, rely to a large extent on the form of the transaction. A pledge of assets is governed by the pledge law, a mortgage by the mortgage law, a sale with retained title by the sales law, etc. A transaction in which movable assets are used as security that does not fit a specific legal form is not recognized, and mischaracterization of a transaction may cause it to fail. The substantive approach is more difficult to implement in jurisdictions with such a

tradition because lawyers, judges and other professionals who deal with business transactions look at the form, not the substance of the transaction.

Another approach is to provide in the law a list of transactions that are subject to the law as a whole or to the requirements for publicity and priority provisions in the law. This approach is simple to implement because the transactions are listed in the scope provision without the need to examine each claim in terms of its substance. However, it is also more risky, as new forms of secured transactions involving movable property may be created. If the reformed law failed to predict and include these transactions in the list of transactions included in the law, the result may be "hidden" rights that the law does not require to be published as condition for priority, increasing thereby the risk of relying on movable property. To mitigate this risk, it may be possible to add to the list a catch-all provision for any other transaction where the effect is to secure an obligation with movable assets. For example, in Vietnam and Bosnia and Herzegovina, the counterpart insisted on listing legal forms, but accepted a catch-all clause to accommodate future legal forms that may evolve.

2.2.2. Creation of security interests

A security interest is the most common property right in the context of secured transactions law. It is usually the right of a creditor to seize and dispose of the property (collateral) of the debtor in case the debtor fails to perform its primary obligation.

Creation of security interests under modern secured transactions law requires an agreement between the creditor and the debtor. For the security interest to become enforceable against the collateral (commonly known as attachment to the collateral), three conditions must be satisfied in any sequence, as follow:

1. **Debtor has a right in the collateral:** A security interest can be created only when the debtor has an alienable right in the collateral. The most common right here is ownership of or title to the collateral, but it may alternatively be a leasehold right or a license or right to use the collateral. What constitutes an alienable right in property is determined by the property law of the jurisdiction in which the system is to be implemented.

2. **The security agreement:** There must be a written security agreement (i.e., an enforceable contract) whereby a debtor agrees to grant a security interest in movable property to a creditor to guarantee performance of an obligation. In this context, “written” means the agreement must be manifested in a tangible form that can be reduced to a readable document or documents. So long as that requirement is met, the parties have autonomy to decide for themselves whether or not to employ traditional formalities. For example, the agreement could be a hand-scribed and notarized document, or it could consist of an exchange of e-mail messages that establish the intent of the parties to be bound to an agreement.⁵¹ While the simple type of agreement described here is the ideal, there may be jurisdictions in which notaries are so integral to the legal culture that it is unavoidable to provide in the law for hand-scribed ink signatures and some degree of notary intervention, e.g. preparation of the agreement or affixing a notarial verification of the signature. In such cases, the law should be drafted to limit the burden imposed by such formalities, e.g. closely circumscribe the role of the notary and set the fee for required notarial acts at an affordable level.
3. **The creditor gives value:** The creditor must give value to the debtor. The value can consist of a binding undertaking to advance credit in the future, or, more commonly, it can be the actual advancement of credit at the time the security agreement is entered into.

Some jurisdictions will be predisposed to assume that registration of the security agreement will be required as a condition of creation of the security interest because their tradition requires registration as the “constitutional act” that creates any contractual right. However, in most modern systems, registration is relevant only in the context of priority issues that arise when third person claims are made against the collateral. Under these systems, the role of registration is to provide a method by which third parties can become aware of the existence of the interest. While some jurisdictions with modern systems of secured financing require registration as condition for creation

of a security interest, the better approach is to exclude registration from the prerequisites for the creation of a security interest.

If the reform is done in a jurisdiction that insists on publication as a condition for the creation of the right, it is important to ensure that there is no requirement in the law that registration must be preceded by the signing of the security agreement. The reason is that a creditor will often want to establish its priority by registration, and only then determine what level of secured credit can be advanced.

2.2.3. Priority of security interests

The general rule: Priority (or preference, as used in some civil law jurisdictions) of claims, such as security interests in property, determines the sequence in which competing claims to the collateral will be satisfied from the proceeds of its disposition when the debtor defaults on one or more of the claims. The higher the priority of a security interest is in relation to other claims, the more likely the secured obligation is to be covered by the proceeds of the disposition of the collateral.

An effective priority system is based on two main components: (i) a clear public policy underlying each priority; and (ii) a clear set of rules regulating the order of priorities to facilitate the implementation of these public policies. Public policies that support the priority scheme must be determined before the beginning of the law reform, so will be a given during the reform.

The general priority rule used in modern secured transactions systems is based on notice. A creditor who publicizes the existence or potential existence of its security interest has priority over other persons who thereafter acquire rights in the collateral or who thereafter publicize the existence of their interests. Often this rule is referred to as the “first to register rule”. There are two common ways in which the rule is implemented in jurisdictions where secured transactions law is a new concept, either of which is acceptable, depending on the circumstances of the jurisdiction.

51. While some modern secured transactions laws allow for creation of security interest by the creditor’s possession of the collateral without an agreement, the better practice is to provide in legislation that a security agreement be available as evidence of the existence and terms of a relationship between the parties.

Alternative 1: In some jurisdictions, registration is not the only way to provide notice. Those jurisdictions provide for alternative forms of notice, specifically possession and control. Priority is accorded to the first secured creditor or other claimant who gives notice by registration, possession or control. The means of notice will often depend on the type of property that constitutes the collateral. The general rules for the type of notice required are: (i) notice of an interest in cash other than proceeds or in negotiable instruments must be by possession; (ii) notice of an interest in a deposit account or immaterialized securities must be by control; and (iii) notice of an interest in any other type of movable property may be by registration, possession or, in some cases, control. The rationale for this alternative is that it gives secured creditors greater flexibility and avoids the cost and time required to register in cases where notice by possession or control is sufficient to alert third parties (see Box 14).

Alternative 2: In other jurisdictions where an efficient computerized registry system essentially eliminates the time and cost burdens of registration, the law provides for notice only by registration (except for specific classes of property where possession or control may be the only viable means of perfection, e.g. possession for cash or negotiable instruments, or control for deposit accounts or immaterialized securities). The rationale for this alternative is that it is much simpler to prove date of notice by registration than by possession⁵² (see Box 15).

A note on “perfection”: The term “perfection” is a product of North American secured transactions law and refers to the optimization of a creditor’s rights in collateral against third parties, whether other creditors, purchasers or lien holders. Perfection requires both attachment of the security interest to the collateral and notice (publicizing) of the security interest by a permissible means. As noted above, the means may include registration, possession, control and automatic perfection, as in the case of perfection in proceeds of collateral that is subject to a perfected security interest. Figure 5 (see p. 44) diagram presents the requirements for perfection graphically.

While the requirements of perfection are clear, the use of the term itself may, in some jurisdictions, create confusion. The reason is that lack of perfection may be understood to mean “without legal validity.” Consequently “unperfected security interest” may be understood to mean an invalid security interest that cannot be enforced against the debtor. Because of this potential for confusion, some jurisdictions use other terms such as “crystallization,” “completion,” “maturation” or “confirmed in full” for the same purpose, while others simply refer to making the security interest effective against third parties.

For jurisdictions that adopt Alternative 1 above, the utility of the “perfection” concept is a refinement of the general priority rule to facilitate the use of registration as the means of notice. The priority rule using the concept is: “Priority is determined by the first to either register or perfect.” That is,

Box 14 : Example for General Priority Rule under Alternative 1

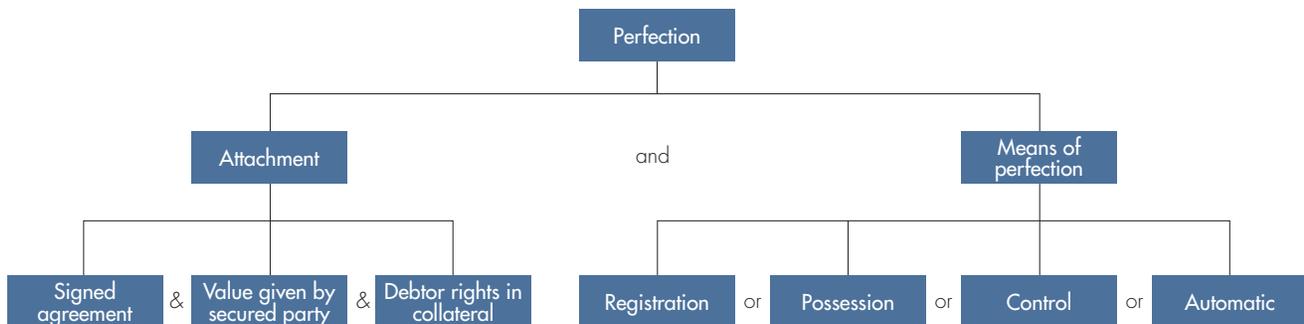
Priority is measured from the earlier to occur of registration of a notice or perfection by other means, provided that there is no time thereafter when a registered notice is not effective or perfection does not exist.

Box 15: Example for General Priority Rule under Alternative 2

“Subject to the special priority provisions of this law, priorities among conflicting claims are determined by the chronological order of registration of a notice in the registry, as provided in this law.”

52. In some jurisdictions with advanced commercial laws, registration is permitted as an alternative to possession to perfect a security interest in cash or negotiable instruments, though those laws provide that registration is a “weaker” method of perfection than is possession in those cases. In jurisdictions where secured transactions law is a new concept, adding complex priority rules for determining priority among “weaker” and “stronger” means of perfection may be an unnecessary distraction, so it is not recommended.

Figure 5: Perfection Requirements



if a creditor registers before the security interest attaches, and then later takes all steps to cause the interest to attach to the collateral, its priority relates back to the time of notice (registration). If, in the gap between the creditor's registration of a notice and attachment of its security interest, a competing creditor takes and perfects a security

interest in the same collateral, whether by registration, possession or control, the first creditor has priority because it registered before the competing creditor registered or otherwise perfected its interest. For jurisdictions that adopt Alternative 2, it is important for the law to permit registration of notice before the security interest is created,

Box 16: Example of Priority Rule as It Applies under Both Alternatives 1 and 2

On June 1, Borrower applies for a loan from Bank A secured by Borrower's delivery truck. Bank A's loan officer gets Borrower's consent to register a notice to secure Bank A's priority until due diligence can be completed and the loan agreement can be signed. The loan officer does a search of the registry for prior competing interests and, finding none, registers the notice identifying Borrower's delivery truck.

On June 4, Borrower applies for a loan from Bank B secured by Borrower's delivery truck. Bank B's loan officer decides to make the loan without due diligence and without searching the registry. Bank B's loan officer makes the security agreement with Borrower identifying the delivery truck as the collateral, advances the loan amount to Borrower, and registers a notice in the registry identifying the delivery truck. Since all three requisites for attachment (agreement, value given, and debtor rights in collateral) are complete, Bank B's security interest in the delivery truck is perfected.

On June 8, Bank A notifies Borrower that it will make the loan secured by the delivery truck. Borrower signs the security agreement giving Bank A a security interest in the delivery truck. Bank A advances the loan amount to Borrower. Bank A's security interest is then perfected because all three requisites for attachment have been completed.

On August 1, Borrower defaults on one or both of the loans, and the lender commences enforcement. The value of the delivery truck is insufficient to satisfy both loan balances, so priority must be determined. Bank A has priority because it registered before Bank B perfected, notwithstanding that Bank B perfected its interest before Bank A's security interest was perfected.

and that priority relates back to the time of registration if the security interest is then created. See examples of both alternatives in Boxes 16 and 17.

Under either alternative above, there is automatic perfection in the proceeds upon disposition of the collateral if there is a perfected security interest in the collateral at the time of disposition. If the proceeds are identifiable cash proceeds, or if the proceeds are goods that are described by the registered notice's description of the original collateral, e.g. replacement inventory, perfection continues in the proceeds without further action. If the proceeds are goods that are not described by the description of the collateral in the registered notice, the law should provide that perfection lapses within a specified short period after the proceeds are received by the debtor unless the registered notice is amended to add a description of the proceeds. Similarly, perfection continues in the products of collateral that is described in a registered notice, e.g. offspring of livestock or carcasses of animals after slaughter.

Special priorities: There are three main policy reasons for certain exceptions to the general priority rule provided above, as follows:

- Enable a debtor to utilize multiple credit sources,
- Protect certain classes of unsecured creditors, such as employees, and
- Enable the conduct of ordinary business transactions that the general rule would preclude.

The following are the special priority rules that should be included in a priority scheme of any reformed secured transactions law.

1. Purchase-money security interest

The priority rule: A purchase-money security interest (hereinafter: PMSI) is a security interest in goods that are purchased with the credit advanced by the creditor. A PMSI has priority over an earlier-registered security interest, provided that notice of the PMSI is registered before or within a brief period specified by the law (e.g. five days) after the debtor obtains possession of the collateral⁵³ (see Box 18). A lessor's interest under a lease of goods is treated as a PMSI for priority purposes.

Box 17: Example of Priority Rule Showing Differences between Alternatives 1 and 2

On May 1, Bank A lends to Borrower under a security agreement providing for a security interest in Borrower's painting. Borrower delivers the painting to A's warehouse on May 2.

On June 1, Bank B lends to Borrower under a security agreement providing for a security interest in the same painting and registers a notice on the same day.

On September 1, Borrower defaults on one or both of the loans. Priority will differ, depending on whether Alternative 1 or Alternative 2 has been incorporated into the law, as follows:

Alternative 1: Bank A has priority because its interest was perfected on May 2 when it took possession of the collateral. The rationale for Alternative 1 as illustrated here is that Bank A made its interest transparent when it took possession; i.e. Borrower could not produce the painting as viable collateral to later lenders because Borrower did not possess it.

Alternative 2: Bank B has priority because it registered notice of its interest and Bank A did not. Possession of the painting by Bank A did not perfect its security interest because the only permissible form of notice is registration. The rationale for Alternative 2 as illustrated here is that registration provides absolute proof of the time of priority, whereas there may be no clear proof of the time that possession was taken. Therefore, the risk of fact issues in litigation of priority between competing interests is substantially reduced under Alternative 2.

With respect to a PMSI in inventory of a merchant or in livestock of a producer, many reformed jurisdictions add a requirement for the PMSI creditor to provide direct written notice to a secured creditor whose security

53. Reforms in some jurisdictions accord a purchase money priority in inventory only if the registration precedes possession by the debtor, whereas the brief post-possession registration period is permitted for other classes of goods. However, the distinction should be considered in the context of the jurisdiction. If speedy registration is available via the Internet, and if registration before possession is necessary to preclude manipulation by the debtor, it may be warranted to accord PMSI protection only if registration pre-dates possession with respect to all classes of goods.

interest covers the same class of inventory or livestock as the purchase money collateral. The reason is that inventory and livestock generally secure a floor plan or line of credit where the amount of the obligation changes frequently. The creditor secured by the interest in the whole class of inventory or livestock cannot be expected to constantly monitor the registry for new PMSIs that may impair the creditor's position, so the PMSI creditor should give notice directly.

With respect to a PMSI in consumer goods, there is a division among reformed jurisdictions as to how priority is established for security interests with regard to other creditors and buyers of the goods from the consumer. The first position is to treat security interests in consumer goods under the same rules that apply to other goods, i.e. to perfect the security interest by registration of a notice, and to accord priority according to the "first to register" rule. The second position is to provide in the reform that the only security interest that may be taken in consumer goods, excluding motor vehicles, is a PMSI. This position sometimes is adopted in societies where there is a significant risk of unscrupulous lenders who may take advantage of unsophisticated individual borrowers by taking a security interest in all of a borrower's household goods, and then seizing them when the borrower cannot meet the onerous repayment terms of the loan. If this position is taken in the reform, there is no need to provide notice of the PMSI to other potential creditors, since they cannot take a security interest in the goods. The reformed law can, then, provide that perfection is automatic, without registration, as against other creditors and lien holders. The law permits the PMSI creditor to register a notice to perfect against a person who buys the secured goods from the borrower if the creditor wishes to give notice

and secure priority as against buyers. The decision between the two positions in the reform will be based on an analysis of the culture and informal lending practices in the jurisdiction.

The policy: The policy behind the PMSI rule is to avoid monopoly of one creditor over credit sources of its borrower.

Explanation: When a secured creditor registers notice of a security interest in a class of the debtor's property, the general priority rule would give that secured creditor priority over property of that class that is later acquired with credit supplied by another creditor, even if the second creditor takes a security interest in the specific later-acquired property and registers it. The general rule, then, makes it virtually impossible for a creditor to rely on a security interest in the goods acquired with the credit if there is a prior registered security interest in the class of goods. Consequently, the debtor has no access to credit from sources other than the original creditor who has the security interest in the entire class of collateral. The debtor will have to return to the first creditor, who may refuse to provide further credit or may agree to provide further credit only under unacceptable conditions. The PMSI rule is designed to break this monopoly situation by granting the second creditor priority with respect to the specific property purchased with the credit provided by the second creditor (see Box 18). Examples of creditors that finance acquisition of property include financial institutions such as banks, leasing companies, and sellers on credit.

2. Production-money security interest

The priority rule: Secured transactions reform, particularly in jurisdictions where agriculture or animal husbandry is a significant economic factor, sometimes includes a priority against prior perfected security interests for financiers of the means of production of crops or animals subject to the prior security interest. The means of production generally include such things as veterinary care, medicines and feed for animals, or seed, fertilizer, insecticides, herbicides and fuel for the growing of crops. In the most common case, the provider of the means of production finances its purchase by the producer (debtor) and takes a security interest, known as a production-money security interest, in the animals or crops produced. If a notice of the production-money security interest is registered before

Box 18: Example of a Purchase-Money Security Interest Rule

"A PMSI in an asset, notice of which is registered, has priority over a security interest in the same asset, notice of which was earlier registered, provided that notice of the PMSI was registered before (or within [X] days after) the debtor takes possession of the collateral."

the means of production are provided or within a short period thereafter, as specified by the law, the production-money security interest has priority over a prior perfected security interest in the animals or crops generally, except for a purchase-money security interest.

The policy: A financial institution that provides a loan or operating line to an agricultural or animal producer secured by the crops or animals relies on the value of the crops or animals produced, so it is to the prior creditor's advantage to have the means of production provided to enable successful production. The provider of the means of production would be less likely to finance the producer if it did not have the priority, so it is often deemed to be a necessary measure to enable production.

Though the concept is known to have been applied only in the context of agriculture and animal husbandry, it may be applicable in other contexts as well. One example may be in the production of intellectual property, e.g. a commercially valuable software program. If a software company needs financing to produce a specific program for which there will be a commercial market, the production-money concept may apply to a loan made specifically to pay the costs of production of the program; i.e. if the financier of the production of the program registers notice of its security interest in the program, it would have priority in the program as against a prior perfected security interest in all movable assets of the debtor.

3. Government and other legally protected claims

The situation: To reduce the risk of lending to an acceptable level, a secured creditor must have confidence in the collateral on which the creditor relies. That confidence requires that the secured creditor have notice of all claims against the collateral that may impair the secured creditor's priority, and those claims include public claims such as tax and labor claims. In the secured creditor's perfect world, such claims that arise after the secured creditor registers its security interest would be subordinate to the right of secured creditors, and there are well-established economic arguments for that to be the case, as described in Figure 4, *supra*. However, in many jurisdictions, government claims such as taxes and other legally protected claims such as wages and judgment execution orders have priority

over security interests, even if those security interests are registered or otherwise perfected before the government or legally protected claim arises. The best solution is to permit those claims to be registered and to secure their priority on the same basis as for security interests, giving certainty of priority to all participants in the priority schema. However, political considerations in some jurisdictions may preclude bringing those claims into the priority schema, so special priority rules protecting the rights of at least some classes of government or governmentally protected claims may need to be retained in the legal framework.

The policy and the priority rules—(i) Employees (labor wages): Protection of some degree of employee compensation and benefits may be justified on several grounds. When a borrower is also an employer and is in arrears in payment of salaries, the employees are creditors of their employer. For the most part the unpaid salaries are unsecured obligations. Under the general rule, they are subordinate to security interests in their employer's property. However, employees do not have sufficient bargaining power to require an employer to enter into a security agreement to secure unpaid wages and are not likely to be sufficiently sophisticated to register their rights against subsequent creditors. In any event, registration would not protect them from an earlier registered security interests. Consequently, it may be necessary to include a special rule to protect employees' right to unpaid wages, salaries, and benefits. This protection is provided, not only on equitable basis, but also to give employees incentive to remain in their work place even when their salaries are not fully paid on time. Such protection will be within specific limits on the amount or period of back wages/salaries and benefits, in order to permit secured creditors to quantify the priority claims of the employees. In many jurisdictions, the priority of employee claims is provided in the labor or employment law, and it is only necessary to ensure that the secured transactions law accommodates the priority. If the labor/employment law or other law does not protect employees, the secured transactions law may include such protections if it is determined that there is such a need in the jurisdiction.

The policy and the priority rules—(ii) Tax claims: When a person does not fulfill his public obligations, such as the obligation to pay taxes when they are due or to remit taxes (and other source deductions) collected

on behalf of the government, the jurisdiction to which the obligation is owed becomes an unsecured creditor of the taxpayer – the obligor. If some or all of the property of the obligor is subject to a perfected security interest, the tax claim would, under the general rule, be subordinate to the security interest with respect to the secured property. In order to protect against loss of income to the budget of the jurisdiction to which the obligation is owed, the laws of some jurisdictions give priority to public claims for taxes, even against security interests that arose and were registered or otherwise perfected before a tax delinquency occurred. While such a super-priority may intuitively seem beneficial to the government, the argument for it fails under more detailed examination. As noted in Figure 4, *supra.*, such super-priorities dramatically reduce the amount of lending and, hence, the amount of business done and business taxes collected. Further, if the government participates in the priority schema used for security interests, it acquires leverage over the taxpayer that it does not otherwise have. That is, the government can register a notice of delinquency immediately upon the taxpayer's failure to pay, thereby making it impossible for the taxpayer to get a secured loan until it pays the delinquent tax. Despite the logic against super-priority for tax claims, it may be politically impossible to overcome the traditional preference for them, and they

may have to be included in the legal framework, even if not in the secured transactions law itself.

The policy and the priority rules—(iii) Judgment creditors: Modern secured-financing laws may address priority of conflicting claims of secured creditors and judgment creditors in different ways. In some jurisdictions a judgment creditor who causes property to be seized under a writ of execution (or other judgment enforcement process) has priority over an unperfected security interest in the seized property, but not over a perfected security interest. Other jurisdictions give priority of even unperfected security interests over judgment enforcement. Yet others do not address the issue at all, often resulting in execution against assets that are covered by a perfected security interest. The first case, where execution has priority over unperfected security interests but not over perfected security interests, is the preferred option. In jurisdictions that adopt the preferred option, the law may provide that a judgment creditor may register a judgment lien against the property of the judgment debtor to secure priority of the judgment pending execution against the property or as an alternative to priority resulting from seizure under execution process, as is the case in several Canadian provinces. The inclusion of such a provision should be considered in light of the legal framework for enforcement of judgments, including the civil procedure and enforcement laws, and the availability of a suitable registry. If a modern electronic registry for secured transactions is available, the inclusion of such protection for judgment creditors may be warranted if the enforcement process for judgments is so slow that there is a long gap between the judgment and execution. On the other hand, if the judgment enforcement process is quick, there may be no need to provide for registration of judgment liens.

Explanation: While the optimal way to handle conflicting priorities between security interests and government or legally protected claims is to bring the latter into the priority schema for secured transactions, that may not be politically feasible in all cases. In those cases where such claims cannot be brought into the secured transactions priority schema, the risk of loss of the collateral to the government or legally protected claim should be mitigated by the law to the extent possible, so as to make the risk quantifiable. Such mitigating measures may include, among others: (i) limitations on time; (ii) limitation on amounts; (iii) permissive registration

Box 19: Examples of Provisions Regarding Government or Governmentally Protected Claimants

"A registered government or governmentally protected claim has priority over any security interest for which a notice is registered after the registration of the government or governmentally protected claim".

An employee has priority over any claim on the property of his employer to the extent of 6 months unpaid salaries".

A government or governmentally protected claimant must proceed first against the unsecured assets of a debtor before proceeding against property that is subject to a perfected security interest.

of government or legally protected claims, with provision for notice of enforcement proceedings by a secured creditor to be given to the claimholder if the claim is registered; and (iv) requiring that government or legally protected claimants proceed against unsecured assets before proceeding against collateral that is subject to a perfected security interest (see Box 19).

The limitations imposed on government or governmentally protected claimants provide either notification or a tool to quantify or limit the rights protected by the special priority rules. As a result, financial institutions are better able to estimate the net value of the property available to secure their claim. Any credit advanced by the creditor can be secured by the net value of the property.

4. Buyers, lessees, or licensees

General considerations: An important priority issue involves the rights and priorities of persons who purchase, lease or license property that is already encumbered. When an earlier security interest exists against the purchased property, a priority conflict may arise between the earlier established security interest and the right of the buyer, lessee or licensee of the property. In some jurisdictions, in the absence of a modern secured transactions law and registry, a buyer, lessee or licensee may take subject to an earlier security interest, while in others, in some situations the buyer, lessee or licensee takes free of the security interest. This situation presents a risk to either of the parties depending on the priority rules in the specific jurisdiction. If the secured creditor loses its right to a subsequent buyer, lessee or licensee and has no replacement security, the secured credit is essentially unsecured. If, on the other hand, the buyer, lessee or licensee loses its right without having the means to learn about the existence of the earlier security interest, the buyer, lessee or licensee may hesitate to engage in the sale or leasing transactions at the outset. This problem must be addressed in the reform (see Box 20).

Priorities between the right of a buyer, lessee, or licensee and a security interest: The general rule of modern secured transactions laws is that a buyer, lessee or licensee of movable property takes subject to a security interest if it has been perfected. If notice of the security interest was not registered or otherwise previously perfected, the subsequent buyer, lessee or licensee takes free of it. Actual knowledge of the

existence of the security interest is not relevant.

Exception for consent of secured creditor: A buyer, lessee or licensee of collateral takes its right in the collateral free of a previously perfected the subsequent security interest if the secured creditor consented to the sale, lease or license free of the security interest.

Exception for buyer, lessee, or licensee in the ordinary course of business: One of the exceptions to the general

Box 20: Example of a Rule Protecting Both Secured Creditors and Buyers

“Subject to exceptions in this law, a security interest has priority over a right of a purchaser or lessee of the collateral, if notice of the security interest is registered or perfected before the purchase or lease of the collateral. A purchaser or lessee of the collateral has priority over a security interest that is not registered or perfected before the purchase or lease of the collateral. A security interest ceases to exist in property that was sold or leased in the ordinary course of the seller’s or lessor’s business.”

Box 21: Example of a Provision Regulating the Priority of a Buyer, Lessee, or Licensee in the Ordinary Course of Business

“A buyer, lessee or licensee of property in the ordinary course of the seller’s, lessor’s or licensor’s business takes free of a perfected security interest in the property.”

Box 22: Example of a provision regulating priorities of a buyer of small value goods

“A purchaser who purchases property has priority over any registered or unregistered security interest if the value of this property is less than the value stipulated in the regulations.”

rule described above is purchase, lease or licensing in the ordinary course of a seller's, lessor's or licensor's business. Often borrowers obtain credit secured with the inventory of their business. When this inventory is sold, leased or licensed as part of the ordinary business activity of the seller, lessor or licensor, it is necessary to ensure the buyers, lessees or licensees are not concerned with the potential existence of a security interest against the right they acquire. The business' ability to generate income to repay the creditor depends on its ability to sell, lease or license products to its customers. In order not to disturb such commercial transactions a special priority rule should be included in a reformed secured transactions law; that is, a buyer, lessee or licensee who acquires its right in movable property in the ordinary course of the seller's, lessor's or licensor's business takes the right free of security interests in it (see Box 21). The sole criterion for this exception is that the sale, lease or license be in the ordinary course of the seller's, lessor's or licensor's business. The determination of what constitutes ordinary course of business depends on a number of factors such as:

- Is the seller, lessor, or licensor in the business of selling, leasing or licensing of goods of the type sold, leased or licensed?
- Was the price paid the usual price for such a purchase, lease or license?
- Was the quantity unusual for such a purchase, lease or license?

In any event, the buyer's, lessee's or licensee's knowledge regarding the existence of a perfected security interest in the property purchased or leased is not relevant. Further, while the security interest in the property will be limited by the right acquired by the buyer, lessee or licensee, it will attach to any proceeds, including money or replacements, which are generated from the sale, lease or license.

Purchasers of small-value goods for household use in private sale: Another exception to the "first to register" rule involves purchasers of small-value property in a private sale.⁵⁴ This exception does not exist in all jurisdictions that reformed their secured transactions laws but has very important practical implications. The exception aims to facilitate transactions where ordinary

Box 23: Provisions that a Secured Transactions Law Should Include in Reference to the Registry

- Scope – type of legal interests, types of debtor (natural and juridical persons) and geographical coverage
- Establish registry – that the registry is the place to register security interests in movable assets, and assign responsibility for its operation
- Electronic registration – that the electronic record is the official record
- Centralized registry for the whole jurisdiction
- Public record – access available without proof of any particular capacity or need
- Notice registration – set specific, limited information required for legal sufficiency of notice; no formalities such as signature or notarization
- Effectiveness – stated duration of effectiveness or provision for registrant to set duration
- Types of notice that may be registered – initial notice, amended notice, termination of effectiveness (also known as discharge), continuation of effectiveness (also known as extension) and objection to registration by debtor
- Registry duties and authority – include issuance of regulation
- Standards for refusal of registration – limited and objective
- Standards for searching – basis on which to search and rules for legal effect

54. A private sale is a sale between two or more persons who do not conduct the sale as part of the seller's ordinary course of business.

persons purchase very small value property that is not likely to have been used as collateral. This usually exists in situations where ordinary persons purchase very small value (usually second hand) property from another person. The rule gives priority to such purchasers. In practice, it is likely that conflict with a pre-existing security interest will not occur because of the small value of the property. Further, while the security interest will cease to exist on the property purchased it will attach to any property, including money, that is generated from the sale (see Box 22).

2.2.4. Registration of security interests—legal foundation

Secured transactions law must provide the fundamental legal authority for the secured transactions registry, though some details may be reserved to decrees or regulations promulgated under the law. Generally, the law should address the points outlined in Box 23, though in some cases conditions may require that some of them be deferred to an implementing decree or regulation.

If the team's legal expert and its registry expert are not the same person, the legal expert must consult with the registry expert to ensure that the law's provisions governing the registry are consistent with the registry design that the registry expert has found must be adopted to meet the needs of the jurisdiction. The law should comply to the greatest extent possible with the international best practices for registries as those are set out in chapter 4.C.2 *infra*.

Because of the unique nature of notice registration, there are a couple of other limitations that the law may need to include, depending on the extrinsic legal framework. First, since the information in a notice is so limited, a creditor who finds a registration that may include assets in which the creditor wishes to take a security interest may need more information about the transaction in order to decide whether to rely on the remaining equity in the asset as security. In that case, the inquiring creditor will need to contact the secured creditor who registered the notice to determine the conditions of the loan and the outstanding balance. Many jurisdictions have bank secrecy acts that preclude the secured creditor from disclosing information about the loan. It may be necessary, then, to provide in the secured transactions law an exception to the general bank secrecy rule for this situation. One common form of such an exception is a provision requiring the creditor

to provide details to a person nominated in writing by the debtor, i.e. the inquiring creditor. The second limitation that may need to be included, either explicitly or implicitly, is a limitation of liability of the registry for errors or omissions. A notice registry does not examine the content of a notice, so it must not have liability for anything more than ensuring that a registered notice has sufficient information to be indexed in the database, and for keeping that information available in the database without introducing errors into it.

2.2.5. Enforcement of security interests

Enforcement of security interests against movable property is the last major component of secured transactions law. Efficient procedure is particularly important in the context of movable property, which in most cases depreciates in value over time. A modern secured transactions system without an efficient enforcement mechanism cannot provide the security creditors seek. The "security" of secured transactions is the assurance of recovering on the outstanding obligation by taking and disposing of the collateral.

Enforcement measures in jurisdictions with developing or transitional economies are usually provided in specialized legislation. In many cases, the existing legislation does not provide an efficient and speedy enforcement mechanism. Furthermore, in some jurisdictions where the law does provide an efficient enforcement mechanism, implementation by the judiciary and the enforcement agencies is poor. When this occurs, the impact on the availability of credit is significant. Reform of enforcement legislation and processes may be necessary.

This section examines different approaches to enforcement of a security interest upon default by the debtor. It does not address the recovery mechanisms that are used when a debtor files for insolvency, which are controlled by the legal framework for insolvency. There are two critical aspects of enforcement: (i) recovering possession or control of the asset by or for the secured creditor, and (ii) disposition of the asset.

The following paragraphs describe the approaches to enforcement that appear in the legal frameworks of some countries and recommendations on what the enforcement components of a secured transactions law may include in order to make movable property attractive collateral:

1. Extrajudicial recovery of possession

There are two ways in which the law may provide for a secured creditor to recover the secured asset(s) without resort to judicial process: (i) seizure by either the secured creditor or a specialized agent, and; (ii) recovery of possession of the asset(s) by award or settlement agreement using alternative dispute resolution mechanisms (arbitration, mediation, conciliation).

(i) Seizure by the secured creditor or other specialized

agent. In some jurisdictions, the enforcement law allows the parties (the creditor) to the security agreement to take possession of the secured asset upon default of the debtor without court assistance. Under this procedure the secured creditor takes the property from the debtor without the assistance of the execution office. In order to maintain public peace, the legislation usually provides that the person in control of the property must consent in writing. While many jurisdictions require that the consent must be given post-default, some

Table 8: List of Countries Which Allow Out of Court Enforcement

1. Albania	17. Bulgaria	33. Iceland	49. Malawi	65. Qatar	81. Swaziland
2. Angola	18. Canada	34. India	50. Malaysia	66. Romania	82. Sweden
3. Antigua and Barbuda	19. Costa Rica	35. Iran	51. Maldives	67. Russian Federation	83. Switzerland
4. Armenia	20. Croatia	36. Ireland	52. Marshall Islands	68. Samoa	84. Tajikistan
5. Australia	21. Dominica	37. Jamaica	53. Micronesia	69. Serbia	85. Tanzania
6. Austria	22. Ethiopia	38. Japan	54. Moldova	70. Sierra Leone	86. Tonga
7. Azerbaijan	23. Fiji	39. Kazakhstan	55. Mongolia	71. Singapore	87. Trinidad and Tobago
8. Bahamas, The	24. France	40. Kenya	56. New Zealand	72. Slovakia	88. Uganda
9. Bahrain	25. Gambia, The	41. Kiribati	57. Nigeria	73. Slovenia	89. Ukraine
10. Bangladesh	26. Georgia	42. Korea	58. Norway	74. South Africa	90. United Kingdom
11. Belgium	27. Germany	43. Kirgiz Republic	59. Pakistan	75. Spain	91. United States
12. Belize	28. Ghana	44. Lao PDR	60. Peru	76. Sri Lanka	92. Uzbekistan
13. Bhutan	29. Guatemala	45. Latvia	61. Philippines, The	77. St. Kitts and Nevis	93. Vanuatu
14. Botswana	30. Guyana	46. Liberia	62. Poland	78. St. Lucia	94. Vietnam
15. Brazil	31. Hong Kong, China	47. Luxembourg	63. Portugal	79. St. Vincent and the Grenadines	95. Zambia
16. Brunei	32. Hungary	48. Macedonia FYR	64. Puerto Rico	80. Suriname	96. Zimbabwe

Source: *Doing Business 2010* report.

jurisdictions have provided in their legislation that a consent provided in the security agreement is sufficient. However, such a provision does not guarantee that the person in control of the collateral will actually allow the secured creditor to take the collateral when the creditor or its agent attempts to do so. In such case, the law should provide that the creditor or its agent may not seize the collateral if to do so would cause a breach of the peace. The law should further define what constitutes a breach of the peace. When revising a secured transactions law it is desirable to include provisions that allow for out of court enforcement as explained in this paragraph. See Table 8 for a list of the countries that, as of June 2009, provide by law for out of court enforcement when agreed by creditor and debtor.⁵⁵

The actual repossession of the asset(s) in order to sell it is a critical part of the enforcement process. International practices on how the asset is repossessed in practice varies and a number of countries have found different solutions that work more or less well (see Box 24 for examples).

Notification to debtor about seizure. As mentioned earlier, one of the risks of relying on security in movable property is that the debtor may move the property to another location or hide it before seizure takes place. In some jurisdictions, enforcement proceedings include a requirement to notify the debtor about the intention to seize his or her property. The period for the notice the execution officer must provide may vary depending on the jurisdiction. However, this notification may be abused by the debtor's moving the property to another location, hiding it or even damaging it before the arrival of the execution authorities. Therefore, an effective modern law should require that notice be given to the debtor before seizure commences, though the notice period may be very short, perhaps even on the same day as the seizure, in order to reduce the risk of loss of the collateral by the debtor's moving, hiding or damaging it.⁵⁶

Box 24: Different Extrajudicial Models for Seizing Assets Upon Default

Different countries have chosen different techniques to seize assets from debtors that have incurred in a default. The context of each country will determine what the best way to organize the seizure of assets is.

Public Collection Agents. A number of countries have created public collection agents that are responsible for seizing the asset with the appropriate executory title or judgement. These public collection agents are usually part of the executive branch (police forces or bailiffs) but not associated with the courts. The courts may also have judicial officers responsible for seizing assets when the enforcement process is done through the judiciary. The approach of using public collection agents is very used in former Soviet Union countries.

Private Collection Agents. Other jurisdictions have established organized bodies or private enforcement agents that can vary from notaries (in Romania), private enforcement officers (Georgia) to bailiffs or huissiers (in France), to receivers (in the UK). These bodies are usually regulated and certified or licensed to avoid abuses, and determine the procedure that needs to be used for the seizure of the asset and the rights of both parties.

(ii) *Alternative Dispute Resolution Mechanisms.* ADR mechanisms have proven to be very effective ways of resolving disputes in a fast, low-cost and non-adversarial way in many countries. The use of such mechanisms as mediation, conciliation or arbitration to enforce the payment of debts or seize assets secured as collateral

55. *Doing Business* 2010.

56. UNCITRAL takes a more debtor-friendly approach in its Guide. While the Guide permits ex-parte proceedings, it sets conditions. First, the debtor must have consented to such proceedings in the security agreement. Second, the secured creditor must have given to the debtor notice of default and its intention to obtain possession of the collateral out of court. And third, at the time of seizure by the secured creditor, the debtor does not object (see recommendation 147).

is limited to those countries which have developed both the legal or regulatory and institutional framework for these mechanisms to be effective. For example, if the legal framework does not provide for the execution of arbitral awards, arbitration is not viable. Likewise, some countries, e.g. Colombia, have developed legal frameworks for mediation or conciliation in which the settlement agreement of a conciliation (signed by both parties) has the same value as a court order. Others countries that have successfully established ADR structures to resolve these types of disputes are Serbia, Bosnia and Herzegovina, Montenegro and Pakistan. To be effective the institutional structures for arbitration and mediation should be in place (i.e. Arbitration/Mediation Centers, certified professional mediators/arbitrators). When ADR structures are efficient, they may be the most effective way to recover secured assets as illustrated in the example (see Box 25).

2. Judicial enforcement mechanisms

When a jurisdiction does not provide for out of court enforcement, or when a creditor decides to enforce its security interest through a judicial procedure, the judicial process for recovery of collateral should be expeditious enough to permit recovery before loss of value of the assets and without undue risk of concealment or surreptitious sale of the assets by the

debtor. This situation should be considered when reforming enforcement laws or procedures.

Expedited or fast-track judicial processes. Whenever possible, when reforming enforcement procedures, the reformed law should include specific fast-track judicial procedures for the seizure of movable collateral. As mentioned earlier, the rapid devaluation of assets in some cases makes expeditious judicial processes a critical element.

Some jurisdictions have a pre-judgment procedure by which, upon presentation of proof of the security agreement and an act or omission constituting default by the creditor, the court issues an order of seizure of the property without the possibility for appeal by the person in control of the property until after seizure is completed. This could be inserted in the law as follows:

“When the secured creditor presents to the court evidence of a security agreement and of default by the debtor, the courts shall issue an execution order. No appeal is allowed on the execution order before seizure is completed.”

The proof may be simply by sworn affidavit of the creditor. This process is recommended, particularly for jurisdictions with lengthy court proceedings.

Box 25: Banco Caja Social in Colombia: Recovering Assets Through Conciliation⁵⁷

In 2006, Banco Caja Social (the bank) initiated, on a pilot basis, a conciliation process to recover non-performing loans from clients, in addition to the bank's established use of collection houses and litigation. After the completion of the pilot, the bank realized that the conciliation mechanisms had produced a much more effective outcome in the recovery of small amount loans than the other two methods.

While the effectiveness of recovering assets from non-performing loans through litigations is around 1%, the effectiveness has increased to around 6% using conciliation.⁵⁸ The time spent by bank staff trying to recover the loan and associated costs has also been reduced by using conciliation. With regard to the effectiveness of conciliation, only around 8% of the conciliation cases between the creditor (Banco Caja Social) and the debtors/clients held (around 9,000) between 2006 and 2008 were not settled.

57. See “Private Sector Approach to Commercial ADR: Commercial ADR Mechanisms in Colombia”, Alejandro Alvarez de la Campa, March 2009. The World Bank Group.

58. Data corresponds to the period of January-May of 2008, Banco Caja Social.

There are other successful variants of expedited judicial processes. In some countries, e.g. Georgia, a notarized security agreement constitutes an executory deed. In these situations, the creditor will be able to receive a speedy judgment for seizure of the assets. The debtor can raise very limited arguments to challenge the seizure, e.g.: (i) lack of jurisdiction; (ii) lack of sufficient powers of the complainant; (iii) waiver of the security interest by the secured party; and (iv) extinction of the secured obligation through payment. Any other arguments by the debtor can be raised only *after* the collateral was repossessed so to ensure protection of the collateral from mishandling by the debtor.

3. Disposition of the secured asset(s)

Disposition of the seized property by the secured creditor is an important element in efficient enforcement mechanisms. The secured creditor, rather than a court enforcement officer, should be permitted to dispose of the property because the secured creditor is more likely than the enforcement officer to be familiar with the resale market for the property. The secured creditor is also motivated to sell it for a price that will cover the outstanding obligation. Some laws impose on the secured creditor an obligation to sell the property for market value, thereby putting on the secured creditor the onus of proving the property was indeed sold for its market price. The recommended provision for a modern law is to apply a standard of commercial reasonableness to the creditor's conduct in the disposition of the property, putting the burden on the debtor to show that the disposition was not commercially reasonable. Most laws also give the secured creditor the option to request the assistance of an official to conduct the disposition, which is generally by auction. The secured creditor may participate in the auction under certain conditions protecting the interest of the debtor and other secured creditors if participation in the auction is commercially reasonable.

Varying *methods of disposition* are practiced in different jurisdictions. Public auctions are common in many jurisdictions with both Common and Civil Law backgrounds. Some laws oblige the secured creditor to sell the asset only through a public or private auction, while others allow private sales without an auction. Requiring an auction by law can sometimes cause difficulty in situations where the assets are not easily marketable. For example, the assets of a biotech

company may not be easily sold through an auction. Some laws even require a minimum number of bids for the auction to be valid. Rare assets that have a small niche market may not be easily sold through an auction process. It is very important, therefore, for the law to allow the secured creditor to decide on the method of disposition, whether through private sale or auction, instead of dictating a particular method in the law. If not appropriately checked, public auctions are sometimes more susceptible to inefficiency and lack of transparency. Whatever methods of disposition are permitted by law, it is important to ensure that the rights of all known creditors, not only secured creditors, and the rights of the debtor are fully protected by providing for notice to them and the right to participate in the proceeds of sale based on their priority.

With regard to *the pricing of the asset* being sold, in some countries, the price of the asset stipulated in the security agreement will serve as the initial price at auction. However, that value may not be meaningful at the time of auction because the value is likely to have changed between the time of the agreement and the auction. In some jurisdictions, public assessors are responsible for evaluating the price of the asset to set the initial asking price. This method, however, may be subject to abuse and lack of transparency, and is not, therefore, recommended for reforms of the legal framework. The better approach to pricing is to not set an arbitrary price and instead to rely on the market, i.e. the auction price if auction is used, or the going rate for assets that have an established market value.

4. Debtor's protection during enforcement proceedings

While execution proceedings are designed to allow secured creditors to enforce their rights efficiently, protection of debtors' rights should also be included. There are three provisions to protect debtors' rights that should be included in any reformed execution proceedings:

- (i) *Right to appeal against enforcement proceedings:* Debtors against whom enforcement proceedings are initiated should be allowed to appeal against the proceedings. The appeal should not delay the seizure proceedings, but may delay for a limited time the disposition procedure. Examples of such provisions follow:

“A person may appeal to stop enforcement proceedings against his property only after the property is seized.”⁵⁹

“The court may stay disposition of the property if the debtor appeals the proceeding until a decision is rendered, unless it is found that the property is perishable or otherwise likely to quickly decline in value if not disposed of quickly.”

“The court must render its decision on the appeal not later than eight days after the appeal is submitted.”

- (ii) *Right to be notified of the proposed disposition of the property:* The enforcing creditor must inform the debtor, any other secured creditor who has registered a notice of an interest in the property and any other person who has presented a claim of an interest in the property, of the proposed disposition. The right to notice usually includes notice of (a) the right of the debtor or a junior secured creditor to redeem the property at any point before its sale, and (b) the place and time of any public sale. Examples of such provisions follow:

“When the secured creditor obtains possession of the property he must, within three days after he gains possession of the property, notify the debtor, other secured creditors, holders of other registered interests, and persons who have presented claims against the property, that the debtor, other secured creditor, or claimant has the right to redeem the collateral from the secured creditor by performing the outstanding obligation.”

“The secured creditor may proceed with the disposition of the property after he notifies the debtor, other registered secured creditors, holders of other registered interests and persons who have presented claims against the property.”

“The secured creditor shall notify the debtor, other registered secured creditors, holders of other registered interests and persons who have presented claims against the property as to the time and place of the sale of the property.”

- (iii) *Debtor’s right of redemption:* The debtor may approach the enforcing creditor at any point and offer to pay the outstanding obligation. If such request is made before the property is sold the enforcing creditor must accept the offer and return the property to the debtor. The following provisions illustrate the operation of this procedure:

“At any time before the sale of the collateral, the debtor may propose to the enforcing creditor to perform the outstanding obligation”.

“The enforcing creditor must accept the debtor’s offer and return the property to the debtor, if the offer to perform is for the full amount of the outstanding obligation, including the expenses of the creditor in taking and maintaining the collateral”.

2.2.6. Transitional provisions

One set of legal issues that must be addressed as part of any secured transactions law reform is the transition to a new law. There are four elements of transition that must be addressed by the new law. Those are:

1. Effectiveness between the parties and enforcement of interests in movables that arose under the prior law
2. Priority of interests that arose under the prior law (prior interests) as against each other
3. Priority between a prior interest and an interest created under the new law
4. Rules governing registration of prior interests during and after transition

For the first and second elements, the team’s legal expert can begin with the analysis of prior laws that was done during the diagnostic phase. For the third and fourth elements, the legal expert must coordinate with the registry expert to determine what is possible in light of priority rules and registration practices under the prior law.

Effectiveness of prior interests: The legal expert should examine the relevant prior laws that were identified in the diagnostic phase to determine if prior law provides for non-possessory security in movable property and, if so, what types of interests are included and what rules govern

59. For example, in Bosnia and Herzegovina appeal by the debtor regarding enforcement can affect the proceedings only after the property is taken away from the debtor.

their creation and enforcement. Such interests may include non-possessory pledge, mortgage of movables, sale with retained title, etc.

The reformed law should recognize the validity of rights created under the prior law. The effectiveness and enforceability of the interest as between the parties to the agreement should continue to be governed by the prior law (see Box 26).

Priority of prior interests with respect to each other: The legal expert must determine whether the prior law provides for perfection, i.e. effectiveness against third parties, of security interests. In the rare case where there is no way to perfect under prior law, the reformed law can deal quite simply with prior interests by permitting a creditor to perfect a prior security interest under the new law on the same basis as for a new security interest. In that case, priority can be determined under the new law after it becomes effective. If the prior law does not address the issue of effect on third parties, there is no conflict if the new law permits perfection and prioritization under its terms.

However, if prior law provides for perfection and prioritization of security interests, priority between competing security interests, both of which were perfected under the prior law, will not be affected by the new law; i.e. priority between prior interests will continue to be governed by the prior law.

Priority of prior interests with respect to interests created under new law: If the prior law provides for perfection and prioritization of security interests, the legal expert must consider what means to provide to secured creditors for the preservation of priority of their prior interests after the new law becomes effective. The means generally consists of a transition process whereby a prior perfected security interest may be perfected under the new law's priority schema, while preserving its original priority date. The rules for the transition process that is used will depend on the situation in the jurisdiction.

The legal expert and the registry expert must consider several questions before developing the transition rules that will govern prior security interests. Those questions include:

- What are the means of perfection of security interests

Box 26: Example of Provision in a Secured Transactions Law for Validation of Prior Security Interests

"The effectiveness between the parties of a security interest that was created under the prior law continues after this law comes into effect, and shall continue to be governed by the prior law."

Box 27: Different Approaches for a Transition Period for Prior Registrations

There are two approaches the reformed law can take to a transition period for prior registrations, each with its own advantages. The first is a provision to preserve the original priority date of prior security interests if a notice is registered during a transition period before commencement of registration of notices under the reformed law. The second is a provision to preserve the original priority date of prior interests if a notice is registered during a defined period after commencement of registration under the new law while allowing registration of new interests during the same period in parallel. Under either approach, if notice of a prior interest is registered after the transition period, its priority against interests created under the new law is from the registration date. The first approach precludes the risk of a new security interest registered during the transition period being subordinated to a prior security interest that is registered later in the transition period. The second approach permits commencement of registration of all types of interests as soon as the registry is ready to operate, rather than delaying it while notices of prior interests are registered, though it does leave new security interests that are registered during the transition period vulnerable to later registration during the transition period of a notice of a prior interest with an earlier priority date.

under the prior law? Are security interests perfected at the time of creation of the security interest, at the time of registration, or at another time?

- If perfection is by registration, is the prior registration system centralized or decentralized, and if decentralized, on what basis (geographically, type of debtor, type of collateral, etc.) and at what level(s) of government?
- Is/are the relevant registry(ies) under the prior law computerized, and if decentralized, are the systems consistent with respect to data elements and organization of data?
- If the registry(ies) under prior law is/are computerized and consistent, does the database include all data that will be required in the new registry, and if so, is the quality of data reliable and in a form that it can be automatically mapped to the new database?
- If migration is technically feasible, is migration of data or reregistration of security interests during a transition period more acceptable to the stakeholders?

If registration under the prior law is centralized in a computerized registry, if the data captured include all of the elements required under the new law, if the data elements are organized and identified in a fashion that permits them to be mapped into the new database, and if the data have been accurately entered, then it may be

possible to transfer the data into the new registry database by an automated process and to continue operations with the original registration date preserved in the system. In this case, it is not necessary to have secured creditors take any action to preserve their priority against new registrations.

In the more common case where the prior law provides for perfection by registration in a decentralized system or a system that is not conducive to automated migration to the new registry's database, the reformed law should generally provide for a transition period during which prior security interests may be registered to preserve their priority against security interests created under the new law (see Box 27).

Priority between registered security interests will be determined by the date and time when they become effective as notice to third parties. In the case of security interests created and registered under the reformed law that is the date and time of registration. In the case of prior interests, the legal expert should draft the reformed law's transition rules in light of the priority rules of the prior law and the limitations of the registration system that was used under the prior law. Those possible conditions and possible transition rules for the reformed law are presented in Table 9:

Table 9: Priority Conditions and Transition Rules of the Reformed Law

Priority Conditions under Prior Law	Transition Rule of Reformed Law
No registration provided under prior law; perfection under prior law is upon the security agreement becoming effective.	If registered in transition period, priority relates back to the date/time of the agreement. If registered after transition period, priority against new interests and registered prior interests is from date/time of registration. If not registered, priority against other unregistered prior security interests is per prior law.
Priority under prior law is by registration; automated migration of data from prior registry(ies) to new database is not viable.	If registered in transition period, priority is from registration date/time of prior registration under prior law. If registered after transition period, priority is from date/time of registration. If not registered under new law, priority against other unregistered prior security interests is per prior law.
Priority under prior law is by registration; automated migration of data to the new registry database is viable and elected.	Provide for migration of prior registration data to new system. Priority of prior interests dates from date/time of registration under prior law.

The operation of transition rules may be illustrated by the following examples:

Example 1: Prior Law Provided for Priority by Registration

Facts:

June 1, 2007, Creditor A registered pledge under prior law
 June 1, 2008, Creditor B registered pledge under prior law
 June 1, 2009, reformed law effective, registry commences operation and transition starts
 June 5, 2009, Creditor B registers transition notice
 June 10, 2009, Creditor C registers new notice of security interest under reformed law
 June 15, 2009, Creditor A registers transition notice
 September 1, 2009, transition period ends
 October 1, 2009, enforcement commences by A, B or C

Priority ranking:

First priority to Creditor A dating from June 1, 2007
 Second priority to Creditor B dating from June 1, 2008
 Third priority to Creditor C dating from June 10, 2009

Example 2: Prior Law Provided for Priority by Registration

Facts:

June 1, 2007, Creditor A registered pledge under prior law
 June 1, 2008, Creditor B registered pledge under prior law
 June 1, 2009, reformed law effective, registry commences operation and transition starts
 June 10, 2009, Creditor C registers new notice of security interest under reformed law
 June 15, 2009, Creditor A registers transition notice
 September 1, 2009, transition period ends
 September 5, 2009, Creditor B registers transition notice
 October 1, 2009, enforcement commences by A, B or C

Priority ranking:

First priority to Creditor A dating from June 1, 2007
 Second priority to Creditor C dating from June 10, 2009
 Third priority to Creditor B dating from September 5, 2009

Example 3: Prior Law Provided for Priority by Date of Agreement – No Registration

Facts:

June 1, 2007, Creditor A made pledge agreement under prior law
 June 1, 2008, Creditor B made pledge agreement under prior law
 June 1, 2009, reformed law effective, registry commences operation and transition starts
 June 5, 2009, Creditor B registers transition notice
 June 10, 2009, Creditor C registers new notice of security interest under reformed law
 June 15, 2009, Creditor A registers transition notice
 September 1, 2009, transition period ends
 October 1, 2009, enforcement commences by A, B or C

Priority ranking:

First priority to Creditor A, dating from June 1, 2007
 Second priority to Creditor B, dating from June 1, 2008
 Third priority to Creditor C, dating from June 10, 2009

Registration transition provisions: The reformed law should provide for transition of prior interests if the prior law provided for effectiveness against third parties (perfection). The transition rules may be included in the new law itself, or the law may defer them to implementing regulations. In any case, the rules should provide a means for identification of a transition registration and for capture of information that establishes the priority date of the registration.

The **first provision** will be the transition process. This will include the transition period, if any, and whether it will be before or after the start-up of registration under the reformed law. It may also set out the responsibilities of the registry and the parties to prior transactions in getting registration data for prior transactions into the new system.

The **second provision** will set out the information on prior transactions that is required in transition registrations. If prior law provided that perfection was automatic upon creation of the security interest under the prior law, the rules may require a statement of the date and other identifying

information about the security agreement, and might also require a statement of the legal authority under which it was created, e.g. the pledge law. If the prior law provided for perfection by registration, the rules may require information such as the registration number, registration date and the name of the registry in which registration under the prior law was accomplished. Or, depending on the circumstances, the rules may require a book and page number of the registration if it was made in a paper-based registry.

A **third provision** may be required to establish the date on which the registration's effectiveness will lapse if the general rule for new registrations will not work. In the case of registration of transition notices by creditors, the provision could state that the period of effectiveness for prior registrations during the transition period will start on the first day of operation of the registry, or it could state that the period will start on the date of the transition registration. In the case of registrations that are moved by the registry from a prior database en masse, the rule might retain the effective period from the registration under the prior law, or it might provide for a set period after the start-up of the new registry. There may be other valid options, depending on the situation. The point is that the matter will need to be addressed in cases where the rule for registration of security interests under the reformed law will not work.⁶⁰

Box 28: Matters That May Be Included in Secured Transactions Decree or Regulation

- Time and location of operation of the registry
- The manner in which the head of the registry discharges his duties and obligations
- Requirements to complete a registration, including amendment, cancellation, extension
- Requirements to complete a search request
- Search methodology
- Format of confirmation of registrations and search results reports
- Establishment of regular user accounts for access control and fee payment
- Methods and processes for payment of fees
- Fees for registry services

2.3. Implementing Decree or Regulation of the Registry

While the secured transactions law provides the legal basis for the operation of the registry, it may not have sufficient detail to guide the operation of the registry, or it may explicitly defer certain decisions, e.g. the fee structure, to a lower level of legal authority so as to permit later adjustments without the need for amending legislation. The lower level legal authority generally consists of an implementing decree, a regulation or both, depending on the legal system of the jurisdiction. The decree and/or the regulation may provide legal standards and rules governing registration and searching, fee structure and levels, and administrative details such as hours and

⁶⁰. Laws of some jurisdictions deal with rights in movable property that were created in a foreign jurisdiction under its law. However, these provisions are not included in all reforms, and their lack is not serious deficiency. Such provision can assure priority of foreign rights in imported property by registration. The security interest will be recognized if it was created in accordance with the foreign law, and will have priority over a security interest created under local law if it was registered first or within time limit set by local law.

location (see Box 28). In jurisdictions where both a decree and a regulation are used, the decree generally governs the standards and rules for registration, as well as the fee structure and levels, whereas the regulation generally governs the merely administrative matters. If a decree is needed, it is generally promulgated by the prime minister or equivalent, whereas the regulation is usually issued by the ministry in charge of the registry without higher level approval.

Drafting the decree and/or regulations should be done following a decision as to the type of registry that will be used in the jurisdiction. For example, if the registry is fully electronic without the use of any paper, the decree or regulation should include provisions describing the manner in which information can be submitted to the registry. If for example, the registry is not centralized but regional, the decree or regulation will stipulate where a registrant may go to register.

C. Design, Placement and Implementation of Registry

1. Information Gathering and Analysis

1.1. Capabilities of Government to Operate Registry, and Private Sector Alternatives

The obvious place to start an analysis of the question of placement of the registry is to first determine if there is an existing registry of interests in movable property or another registry that is well adapted to registration of interests in movables. If there is one, the implementation team should assess the extent to which the existing institutional infrastructure can be used in a reformed secured transactions registry. The assessment should cover existing registration procedures and facilities, as well as the use of information technology and human resources, administration, types of data retained and security measures. For example, some countries with a French legal system have modernized motor vehicles registries where claims against vehicles are recorded. In other jurisdictions, a creditor may record a claim against a company's assets in the companies or business registry. In jurisdictions that have these or other

registries, the assessment should examine these registries to determine their potential to be expanded to accommodate secured transactions registrations.

If there are no existing registry institutions suitable to undertake operation of the registry, other government institutions should be assessed to determine their capabilities for operating or overseeing a modern secured transactions registry. If this approach is necessary, the potential government institutions should be examined initially without having made a determination of whether the institution that is eventually selected will operate the registry (1) as part of its existing structure, (2) as a new autonomous entity under the institution, or (3) as the oversight partner in a public-private partnership where all or parts of the operation are outsourced (see Box 29).

If there is sufficient capacity in the institution to establish the registry, the organizational arrangement can be determined based on considerations such as ensuring the registry is not excessively vulnerable to political turnover in the institution and ensuring the registry maintains a necessary degree of independence of operation and finances. It is often better, in light of these considerations, to establish it as an autonomous entity under the institution rather than merely incorporating it into the existing structure.

If there is not sufficient capacity within the government institution, two further determinations must be made before pursuing a partnership with an outsourcer. First, the legal and political constraints on outsourcing must be identified. That is, what kind of private sector participation in registry operations is viable? Some governments are unwilling to permit the day-to-day management of a registry to be outsourced, so outsourcing may be limited in such cases to just the IT system's operation. Other governments, such as a number of Pacific island countries, are open to total outsourcing and even off-shoring if justified by the lack of viable domestic options. It is critical to learn the government's policy and views on off-shoring before making the decision on what kind of external sources to consider. Second, the capacity of the private sector to handle the IT system's operation must be evaluated, since there are many developing countries where the IT sector is so underdeveloped that adequate facilities are not available. In such cases, off-shoring may be the only viable option.

If outsourcing of day-to-day operations is the best option, the potential outsourcers must be evaluated. Local institutions

that may be good options generally include the credit bureau, provided it has a governmental connection, and the central bank. Evaluation of outsourcing candidates includes consideration of organizational factors, technical factors and the candidate's reputation as a trusted third party. Organizational factors include the interest of management of the institution, stability of management and ownership, relevance of the institution's mission to secured transactions and the institution's reputation among secured transactions stakeholders. The technical factors are generally the same as those for evaluation of government institutions, as described above.

1.2. Country's Technology Infrastructure and Support Capacity

There are two perspectives from which to assess a country's technology infrastructure and capacity to support an Internet-based registry. The first is the perspective of the registry, and the second is the perspective of the end user.

From the registry's perspective, which is concerned with the ability of the infrastructure to meet the needs of an electronic registry, the important components are (i) connectivity with the Internet, (ii) presence of facilities to support registry hardware, and (iii) availability of people with the right skill sets to support the technology components. If the assessment from the end-user perspective reveals that a purely Internet-based registry is not feasible, the assessment from the registry perspective may examine information and communication technologies available to distributed intake points that will serve users in outlying parts of the country who do not have the capability to use the Internet for one reason or another. The first question is whether the intake points have Internet access. If they do not, then alternate means of transmitting images of paper documents to the central registry location must be considered. For example, intake points may have the ability to fax paper documents to the central location, along with payment information. If there is no means for real-time transmission to the central location, it may be necessary to assess the transportation infrastructure to determine the fastest way to move paper from the intake points to the central location. If remote

Box 29: Typical Government Counterparts and Factors to Consider When Assessing the Capacity of our Counterpart

Institutions should be examined to identify interest in taking on the task, competence and stability of management, economic interest in the success of the registry, reputation among stakeholder groups and legal competence to deal with implementation. The state institutions considered generally fall into four categories:

1. The ministry that deals with commercial, economic and development matters
2. The Ministry of Justice
3. The Ministry of Finance
4. The Central Bank

Once the best option among the potential government institutions is identified, it should be enlisted as the government partner for the reform. The next step is to assess its capacity to establish the registry within the institution or as an autonomous entity under its aegis. The following factors need to be considered when assessing the counterpart's capacity:

1. *The resident information technology (IT) capacity* is perhaps the most important factor to be considered. That includes an IT facility to house the servers in an appropriate environment, to include climate control, power supply, physical security, back-up capacity, and presence of competent staff to maintain operations on a 24/7 basis.
2. In addition to the IT capacity, *the physical facility* must be capable of accommodating the staff, though the staff of a modern registry will be very small.

intake points are found to be necessary, the technology and staff capacity of the different organizations that may provide them should be assessed to identify the best option. Those organizational options may include branches of the registry itself (e.g. Vietnam), provincial offices of the ministry in which the registry is located (e.g. Solomon Islands), provincial offices of another ministry contracted for the service (e.g. Vanuatu), or branch offices of another entity such as the Post or a bank with which the registry or its parent ministry has contracted for the service.

From the end user's perspective, the key question is whether all potential users of the registry's services have access to the Internet in some fashion. The potential users whose needs must be considered include banks, inventory financiers such as manufacturers and wholesalers, buyers of farm products, lessor, non-bank financial institutions (NBFIs) and the public at large. It is not absolutely necessary for all potential users to have Internet access in their places of business to meet this standard; they need only have access through such avenues as Internet cafes or service providers. If users do not have access across the country, it will be necessary to provide intake points in outlying regions to which users who do not have access may take paper documents, either for entry as data via the Internet from the intake points or for transmission to the central registry location via fax or some other means. While the intake points discussed in the prior paragraph are provided by government, there are a number of jurisdictions where private sector businesses operate as service providers to registry users that do not have their own means of access or that choose to use an intermediary for other reasons. Such service providers are common in jurisdictions as diverse as the United States and Bosnia and Herzegovina.

1.3. Capacity of Potential Users to Utilize Various Levels of Technology

Even if a country has Internet access across its breadth, there are some countries where potential users do not have sufficient technological literacy to make use of the Internet for registration. In such cases, it will be necessary to determine if it is necessary to accommodate their needs with adaptations of the registry's infrastructure, or if it should be left to those users to find a means to register, such as an agent who is Internet capable.

In some more backward societies, even banks that have Internet access restrict it to the highest levels of management,

and they are often unwilling to extend it to loan officers to permit them to search and register. It may be possible to overcome such resistance by recommending the use of a dedicated terminal in the bank for registration use only, with other sites blocked from the users. If such approaches are not accepted, it may be necessary to assess the viability of providing only Internet registration, thereby forcing such banks to change their practices. If such banks have political strength to resist at the political level, it may be necessary to accommodate them with alternate means of access.

1.4. Form of Funding Registry Operations

It is essential that the user community have confidence in the continuity of operation of the registry. Therefore, it is necessary to determine what form of funding of registry operations will be the most certain and stable, and what forms of funding are legally and politically feasible (see Box 30). If there is sufficient confidence in the projected

Box 30: Factors to Be Considered in Determining the Type of Funding Mechanism

- Degree of certainty that revenues will cover expenses and depreciation
- Legal or political barriers to creation of special or enterprise funds
- Difficulty of processes of creating and maintaining special or enterprise funds
- Functionality and stability of the government
- History of government in funding operations with appropriated funds

registration volume, and if it is legally permissible to create a special or enterprise fund, the better option for funding is to create a separate special or enterprise fund in the Treasury into which fee revenues are deposited and from which funds can be drawn without appropriation to pay the costs of operation.

If use of a special or enterprise fund is the selected course, it will be necessary to arrange for an initial one-time appropriation to fund operations during the start-up period until revenues are sufficient to cover costs. The amount of the appropriation must be determined by assessing the costs for the period during which revenues will not cover costs of operation. It will also be necessary to provide in the law that fees can be adjusted over time by regulation in order to assure enough funding and to avoid accruing excessive balances in the fund. It may also be advisable to provide for a spill-over of excess accruals to the general treasury according to a formula that can be applied automatically at the end of each fiscal year.

If there is a high level of doubt about whether the volume of registrations will be sufficient to fund operations without setting fees prohibitively high, reliance on appropriations from the general fund may be the lower risk course, despite the risk of defunding by the legislative body. If implementation of a special or enterprise fund is not legally or politically possible, the only option is to rely on appropriated funding, notwithstanding the risk of defunding in the future.

Some jurisdictions, particularly in North America, have found an additional source of revenue, albeit not a large one, in provision of data in bulk to certain types of users. Those users are generally of two types. The first is data aggregators that provide multi-jurisdictional searching for clients in a database compiled from regular bulk reports from registries of many jurisdictions. The aggregators often get complete transfers of the active database, with frequent incremental updates to keep them current. The second type is credit reporting institutions, either credit bureaus or more comprehensive business reporting firms such as Dunn and Bradstreet. In both cases, the registry can charge a fee based on the cost of production or the commercial value of the database, and thereby supplement revenue to keep the costs to other users low, provided that the registry's revenues can be used to support its operations. Provision of bulk data in this fashion may run afoul of competition laws in some countries because it may allow for searching by name of the secured party, thus giving financial institutions the ability to determine what is in the loan portfolios of their competitors. So before providing for bulk data sales, it is necessary to determine if competition laws of the jurisdiction may preclude them.

1.5. Payment Methods

Regular users of the registry will establish *payment accounts* with the registry that may be either pre-paid or post-paid accounts, with payments made on periodic statements for services rendered during the period. Both options could be considered when setting up the registry and both have advantages and disadvantages

The **post-paid accounts option** is more convenient for users and easier to administer by the registry. For users, the convenience is that there is no risk of interruption of service in the middle of entering registrations as there would be in a pre-paid system if an unusually high number of registrations in a statement period (e.g. a month) causes the balance to hit zero and causes service to be cut off until a new payment is credited to the account. For the registry, post-paid accounts can be administered completely automatically, with no need for exception processing to restore interrupted service. Further, post-paid accounts do not require the refund of unused payments if the account owner decides to pull its deposited funds out of the account. Finally, the software for post-paid accounts is less complex than that for pre-paid accounts. Since users of such accounts are by definition recurrent users, the risk of non-payment is quite low – the software can provide that access to the account will be suspended if an account is not paid, so users will have incentive to pay on time. However, there does remain a small risk that an account owner will stop using the registry at a time when it has a balance owing, causing the registry to lose the fees for registrations made during the final statement period (month) of that client's usage.

If legal or political limitations exist that preclude the use of post-paid accounts, **the pre-paid option** would be the preferred one. The principal benefit of pre-paid accounts is that their use eliminates the risk that a client may stop using the registry while it owes fees for its last period of use, and then refuses to pay. The most obvious drawback of the pre-paid option is the loss of convenience to users and the registry as described above for post-paid accounts. But beyond the matter of mere convenience, there is the risk to users of delay due to the account balance hitting zero in the middle of entering registrations into the system.

Since regular users will need a means of making periodic payments on their accounts, and since one-time users will need to pay fees in advance of service, the types of payment methods and media used within the country

must be determined. Questions would include whether credit card usage is widespread enough to assume that all potential users of the registry would have credit cards. The level of credit card service fees and any legal rules for apportioning them should be determined. The existence of electronic funds transfer (EFT) capability and its usage in the country should also be examined. There may be other options used for payments, e.g. phone cards or debit cards, so those should be identified as well if they appear to have any potential as fee payment media. However, with respect to one-time users who register via the Internet, it is necessary that whatever payment method is selected permits identification of the payor. That is necessary to provide some protection against fraudulent registrations by unidentifiable persons, e.g. by someone using an Internet café to register and pre-paid phone card in a disposable phone for payment.

In some countries, the most viable means of payment may be to use a local bank to receive payments to a registry account, identify the payor and issue a receipt or deposit slip. In that case, an effort should be made to identify the bank or banks with the best distribution of branches and with the ability and willingness to enter payment details into the registry system in real time. If the banking network does not have full Internet capability, the alternate means of communicating payment details to the registry must be determined. If alternate means are necessary, it will be important to know what information is provided to payors on the receipt or deposit slip; i.e. whether it has a unique number that is entered into the bank's payment record, and whether the payor is or can be identified in the system and on the receipt/slip by name.

1.6. Projected Registration Volume and Concurrent Users

While modern registry IT systems are generally scalable, there is still a need to ensure that the physical configuration of the hardware and the operating system licenses that are procured are sufficient to handle both the data and the number of concurrent users. It is, therefore, necessary to develop projections for the number and size of expected transactions and the maximum number of concurrent users that might use the system. Information will include (i) the average record size, (ii) projected number of registrations, and (iii) projected distribution of users.

1.7. Legacy Registrations and Data

There is a significant problem that often occurs when starting up a new registry system where there has been a registration law in existence before the law under which the new registry is authorized. That problem is what to do with existing registrations that will now fall within the purview of the new law. It must, therefore, be determined whether there are existing registrations and, if there are, where they are located, how they are indexed, what data elements are in the index, whether the data are in a database, what the technology platform is, whether registrations can be determined to be active, and what the approximate number of them is. This information will be used in determining whether to convert them into entries in the new database with a conversion program or to require re-registration during a safe harbor period after implementation of the new registry.

1.8. Capital and Operating Costs of the Registry

There are a number of local factors that will affect either capital outlays to start the registry or its continuing operating costs. These factors must be identified and their impacts determined in order to develop the budget (see Box 31).

2. Registry Best Practices

Over the past half century of experience with notice registries, first in the West and in more recent years in other parts of the world, a set of generally-accepted principles for such registries has evolved. These best practice principles comprise the standard against which registries should be designed and operated. Over the past ten to fifteen years it has become possible to better realize the full value of the principles with the use of modern information and communications technologies. New registries should make optimal use of those technologies to enable the full application of the best practice principles. Those principles are described in the following paragraphs.

2.1. Unity or Centralization

Since the principal function of a registry is to provide to persons who rely on it sufficient information to decide whether to deal with movable property, it is important that this information be available from one source. Therefore,

there should be only one database in which information is captured and retained, and from which information may be retrieved. A unified database provides complete information relating to any registration effected against the movable property of a debtor regardless of the location of the debtor or whether the debtor is a juridical person or a natural person.

The registry should provide for registration of all types of relevant interests and include security interests in movables (including fixtures), financial leases, long-term operating leases, a consignor's interest in consigned goods, the sale

of secured sales contracts and non-possessory liens in movables, e.g. tax liens. Liens that are in essence a right of retention need not be included, since they generally enjoy priority under the law that is founded on the preservation or enhancement of the value of the collateral. Such rights of retention include, but are not limited to, mechanic's lien, materialman's lien, agister's lien, transport lien and bailee's lien.

The law governing registration should not exclude certain types of movable property from registration, e.g. objects made of gold, which some older laws exclude. There

Box 31: Capital and Operating Costs of the Registry

1. *Application software:* It must be decided whether to buy the application software off the shelf from a regular supplier or to build it locally from scratch. In the long run, the former option is most cost-effective and produces the better results, so should be recommended. But it must be determined if there is a legal or political reason that the purchase option cannot be used, and if there is any other reason that it cannot be used.
2. *Procurement options and limitations:* Assuming that the purchase option is used, local procurement requirements that may apply must be examined to see what kinds of costs are involved and what limitations there may be on bidding processes and eligible bidders. Hardware procurement processes must also be examined to determine the limitations on eligible bidders that may foreclose selection of the least expensive supplier. Because many emerging-economy countries have substantial import duties that increase the price of both software and hardware, it must be determined if such import duties exist, what their impact is, and whether the client is eligible for an exemption from the duty and whether that exemption can be used by the suppliers of the software and hardware.
3. *Operating costs:* Operating cost factors that must be investigated include the costs of labor and IT support for the registry, as well as associated costs for housing the registry office. Potential for mitigating these costs by sharing them with other applications that are run on the same platform or in the same facility should be explored. For example, in Azerbaijan, facilities, firewall, domain server, e-mail server and physical security measures will be shared with the land registry with which the movables registry will be colocated.
4. *Internet costs:* Another very significant factor in some countries is the cost of Internet communication. In some countries, particularly those with wide geographical distribution in remote parts of the world, Internet service can be very expensive, to the point that Internet service costs, assuming an off-shore operator of the registry, could be the largest operating cost after server colocation or rental. So it is essential to determine the order of magnitude of Internet service costs, particularly if an off-shore operator is used.
5. *Additional cost considerations:* Yet another factor in operating costs is the additional cost of operating if a paper registration option must be provided to users. In that case, there will be costs of remote intake and providing a backup medium for the paper, e.g. scanning to disk or microfilming, so those must be considered in determining total operational costs.

may, however, be an exception to this rule where there are existing registries of special property that already function efficiently. In that case, there is no justification for abolishing them in favor of a new registry of security interests. The law should clearly identify the types of property excepted from the new registration requirements in order to avoid duplication of registrations. One example of such an exception occurs in Azerbaijan, where the securities register has a well-functioning process for registration of security interests in investment securities.

In legal form, financial leases, long-term operating leases, consignments, sales with reservation of title, the sale of secured sales contracts, and liens are not true security interests. However, it is important that they be included in the registry and that they be bound by the same priority rules as true security interests. The reason is that, without registration, leasehold interests, liens and the sale of secured sales contracts could remain hidden from third parties who may rely on the debtor's apparent ability to alienate them. A registry can easily accommodate registration of notices of all such interests, without significant difference from what is required for true security interests.

In sum, unity refers to geographical unity, unity of legal form of interest, unity of type of movable property and unity of type of debtor. So the registry should include in one database all forms of non-possessory legal interests in all types of movable property wherever located within the jurisdiction (see Box 32).

2.2. Limited Purposes

Registration should serve only the legitimate purposes of registration. Those purposes are (i) to give notice that a security interest may exist in the identified collateral and (ii) to provide evidence of publicity as the basis for the secured party's priority in the collateral (see Box 33). Extraneous information should not be required. A notice should not include information that is not necessary to alert a potential creditor or buyer of the possible existence of a security interest; i.e. it should not include information on the nature or amount of the secured obligation or the value of the collateral.

2.3. Rule-Based Decision-Making

Registration in and searching of the registry database should not require the use of human discretion on the

Box 32: China—The Classic Case of Disunity in a Registration System

The existing unreformed registration system for interests in tangible movable property in the Peoples' Republic of China is the classic case of disunity.

- First, registration of security in movables is made with a public notary if the debtor is an individual, but with the State Administration of Industry and Commerce (SAIC) if the debtor is a business, including a proprietorship. It is often difficult to determine whether an individual is a debtor in his/her individual capacity or in a proprietorship capacity, so the place of registration is uncertain.
- Second, if the debtor is acting as an individual, registration can be with any public notary in the municipality, and there may be many notaries with concurrent jurisdiction in the same municipality. So there is no way to determine where a registration may have been made.
- Third, if the debtor is a business, registration is made at an SAIC registry at one of four different levels of government, and the basis of determining the level is by a combination of obscure factors, including the type of secured asset and the legal form of the interest.
- Fourth, within a given level of government, place of registration is determined by the location of the asset, with separate registries in each geographical division at that level. At the lowest level, the geographical divisions may be very small and many in number, so a movable asset may easily move from one registry's jurisdiction to another without the move being detected.
- Fifth, there is no connection of databases, so searching is limited to one specific registry.
- Sixth, there is no supervision of the lower levels of registration by the highest level of SAIC, so policies vary among registries.

The bottom line is that registration does not provide any meaningful transparency because it is fragmented by type of debtor, type of asset, legal form of the interest, level of government, and geographical location of the asset.

part of the registry staff. The registry's rules, as set out in the law and subordinate legal authority, should eliminate randomness in acceptance or rejection of a notice and in determining what information to report on a search. See Annex 6 for an example of registry regulations.

Acceptance and rejection standards for registration must be concrete, specific, and limited. Reasons for rejection must be objective so that no discretionary judgments are involved in the decision-making process. Acceptance or rejection decisions should be capable of being made by the information technology system.

The rules for performance of searches of the registry database must likewise be concrete and objective. There are several types of search that may be done to find a notice or notices, including search by debtor, search by registration number of a notice and search by the serial

number of a vehicle or item of serial-numbered industrial, construction or agricultural equipment. For a rule-based search to work reliably, there should be only one criterion on which to search for each type of search. The reason for this limitation is that a rule-based search must be done the same way in every case so as to produce the same result set for all searchers. That is, if two criteria were permitted for a particular type of search, and if one of them was entered incorrectly when the notice was registered, a searcher who searches on the incorrectly entered criterion would not find the notice, whereas a searcher who searches on the correctly entered criterion would find it. For a search on any type of debtor, the law must provide for search by the debtor identifier (name or number), but it must not give the searcher a choice of criteria. Nor should the law provide for searching on two criteria, because a search on two or more criteria may exclude a notice that correctly

Box 33: Information Required for Registration

The information that is necessary to serve the purposes of registration consists of:

1. *The identity of the debtor:* The form of identification of the debtor must be specified for each type of debtor in the law or the implementing decree or regulation, since the debtor's identifier is the key used to search the database in most cases. That identifier may be the debtor's name, national identification number, company registration number or other unique and immutable identifier that may lawfully be used for such purpose.
2. *The name and contact information* of the secured creditor.
3. *A description of the movable property (collateral)* that secures an obligation to the secured creditor. When collateral consists of a motor vehicle that is not inventory, the law should provide for indexing and searching by a vehicle's serial number, also known as vehicle identification number (VIN) or frame number, unless the law provides for registration of security interests in vehicles in a different registry. If business conditions and practices in the jurisdiction establish a need for potential buyers of major end items of equipment (agricultural, construction or industrial) in private sales to search by serial number, the law may also provide for indexing of major end items of equipment by their serial numbers. Depending on the economic needs of the jurisdiction, it may be useful to expand this approach beyond vehicles to include major serial-numbered end items of industrial, construction or agricultural equipment.
4. *Duration of registration* if the law permits the registrant to specify a period of effectiveness of the registration.

In sum, the registry serves an informative function by publicizing information necessary to alert a person who searches the database that a security interest may exist in particular movable property of a particular debtor.

identifies a debtor by one of the criteria. Box 34 provides examples of problems with multicriteria searches.

For searches by a serial number or by the registration number of a notice, the search rules are very clear and concrete. That is, the search will identify only those notices for which the number is an exact match.

The most effective way to remove human discretion and error is to use a technology system that applies fixed rules in the form of system edits of data fields, fixed search logic and the use of check sums in registration. The fixed rules must yield predictable results, so it is necessary for the rules to be known by all users, including both registrants and searchers.

2.4. Accuracy

The registry design should push data entry into the hands of the registrant in the vast majority of cases, thereby eliminating the possibility of data entry error by registry staff. That can be done by making it attractive to do most, or preferably all, registrations on-line. The same is true of entry of the search criterion for a search. To assist both users and registry staff in ensuring that data entry is correct, the registry technology system should require a verification step before the user commits a notice to the database. Finally, if there are notices that must be entered by registry staff from paper, a printout of the entered data should immediately be given to the registrant who delivered the paper to the registry office so its accuracy can be confirmed or a correction made immediately.

The registry's technology system should also be designed to detect or avoid errors in data entry to the extent possible. Such measures include system edits that will detect whether a mandatory field has been filled or, where a particular type of data is required in a field, whether the data are of the right type (e.g. numeric or alpha). Another type of error detection and avoidance technique that should be included in a registry's design is the use of a check sum in the registration number assigned to a notice by the system at the time of registration. When a change to a notice, i.e. amendment, continuation or termination of the notice, is registered, the change notice must identify the registration number of the initial notice in order for the system to link the change to the initial notice. The check sum enables the registry system to determine whether the initial notice's registration number was correctly entered on the change notice, and will cause the system to reject the

change notice if the initial notice's registration number is incorrectly entered.

2.5. Speed of Registration and Timeliness of Information

The registry technology system should immediately accept or reject a notice upon its submission by the user, without the need for registry staff intervention in the case of registrations submitted via the Internet. The registry system should immediately generate a printable confirmation of registration, to include the date and time of registration, the registration number assigned to the notice, and all

Box 34: Example of Problems that Arise from Permitting Search on Alternative Criteria

- In a system that permits searchers to search by a citizen debtor's name and/or national identification number, John Alan Doe, national ID# 12345678, is identified on a notice registered by Bank A as John Alan Dough, national ID# 12345678.
- Bank B then does a search on the same debtor when he applies for a loan, and uses the debtor's correct name, John Alan Doe. Bank B does not find the notice registered by Bank A, so makes the loan secured by the same assets that secure Bank A's loan.
- The debtor then defaults on one or both loans.
- Bank B claims it has priority because it did a correct search and did not find the notice registered by Bank A.
- Bank A claims it has priority because it correctly identified the debtor by his national ID#, so Bank B could have found the notice if it had searched by the ID#.

While the apparent correct result would be for Bank B to prevail because it was misled by Bank A's error, experience in jurisdictions that have used such systems shows that courts often find in favor of Bank A.

information entered for the notice. In cases where registry staff must enter information from a paper notice, entry should be done immediately upon receipt of the notice. The confirmation should be printed and immediately returned to the registrant.

Since a searcher must be confident that information found in a search reflects all effective registrations at the moment of the search result, it is essential that all effective notices be included. Therefore, a notice must not become effective until it has been accepted to the registry database. Information must be available to searchers immediately upon acceptance of a notice by the registry system. If information is not available from the moment a registration is done, a second registrant may search the registry records during the gap before a new registration's information is available, find nothing encumbering assets of the debtor, and rely on that state of the record to grant credit secured by the same assets.

2.6. Accessibility

The registry should be available to users for registration and searching 24 hours a day, seven days a week via the Internet to the extent permitted under the laws of the jurisdiction. It is not necessary that users have their own Internet access in order to use the registry, since transactions can be done as well through other access points such as Internet cafes. If there are significant numbers of potential users who do not have access to the Internet either directly or through private sector service providers, the registry should accommodate receipt of notices by a variety of means such as Post, fax or personal delivery. In some situations, it may be necessary to provide for receipt of notices through geographically dispersed intake points, as in the case of island nations spread across large reaches of ocean or in the case of countries with little or no Internet, telephone or postal infrastructure outside the main cities.

Information in the registry is public information and should be available to any user without restriction. There should be no requirement for any particular capacity of a searcher because the information is needed by more than just financial institutions, e.g. buyers of movable property such as equipment or agricultural commodities. It should be noted that some countries with modern secured transactions systems require a searcher to state the purpose of the search (e.g. Article 173 of the New Zealand Personal Property Securities Act). Such requirements are

misguided, since they serve no valid purpose and, in any case, can be easily circumvented by any searcher whose true intent may not be one deemed "legitimate" by the bureaucrats who operate the registry.

2.7. Simplicity

The registry technology system should use simple, user-friendly interfaces for the majority of users who register notices via the Internet. Information requirements should be limited to only those relevant to the purposes of registration as described above.

The registration law and subordinate legal authority must not include unnecessary formalities, particularly requirements for signatures, notarization or personal appearance by parties to the secured transactions. Since registration should only provide notice and not create rights between the parties, there is no legal reason for requiring signatures, appearance or other formalities. Though the real risk of fraudulent notices being registered is minimal because perpetrators cannot gain a significant legal advantage by doing so, such risk as there is can be countered by technology system controls on access to the system. Modern systems make it possible to identify a person who submits any application electronically.

If there are users of the registry who do not have access via the Internet, paper forms should be simple and user-friendly. To the extent possible, they should reflect the requirements and screens used by on-line registrants, so that registrants who use paper or fax do not have more complicated processes than those who register on-line.

2.8. Cost Effectiveness

Since the costs of registration constitute a burden on secured transactions, they should be minimized. Such costs include both the costs of preparation and presentation of notices and the fees paid for registration and searching. Costs of preparation and presentation can essentially be eliminated by providing for Internet registration and, if necessary, simplified registration on paper or by fax. The operational, overhead and transactional costs of the registry should be kept as low as possible by making maximum use of technology to minimize staffing and archiving needs. Registration fees should be assessed per notice, and should be set to recover only the costs of operation and capital replacement. The level of fee

required to cover costs of operation will vary greatly from jurisdiction to jurisdiction. Since the largest costs of operating a registry are fixed, a large jurisdiction with a high volume of registrations will need less revenue per registration than will a small jurisdiction with a low volume of registrations. For example, the registration fee in the Federated States of Micronesia, with a population of about 135,000, is US\$15, whereas the registration fee in Cambodia, with a population of about 12 million, is the equivalent of US\$2.50. The registration fees in the United States differ dramatically from one state to another, but the average is approximately US\$10. Registration fees in Canada are assessed based on the term of effectiveness selected by the registrant, but are in no case prohibitive. Access to information by on-line search could be with or without fee. Some jurisdictions charge a fee for all searches and others do not charge for doing searches unless additional service such as certification of the search result is needed by the searcher.

2.9. Add-only

The registry should only permit documents to be added to the record, but never removed. That is, if a notice's effectiveness is terminated by the secured creditor, the act of termination is added to the record so that a viewer of the record can see that the secured creditor no longer claims the security interest, but the act of termination does not cause the notice of the security interest to be removed from the database, and it can continue to be found in a search until the initial notice's registration period lapses.

The concept also applies to amendments and to corrections of the record by the registry in the case of data entry errors by registry staff from paper notices. That is, the state of the record before the amendment or correction was applied should remain available to searchers, and the record of the amendment or correction should be transparent.

The rationale for adding to, and not removing, registration records before their natural lapse is that it is often important for a searcher to know of a security interest's existence, even after it has been terminated, and to know the prior state of a record that has been amended or corrected. In the case of termination of a security interest, it is possible for a registration of termination to be fraudulent or to apply to fewer than all secured creditors. In the case of a correction, it is important to retain a record of the uncorrected registration so as to determine liability when a

searcher has relied on the uncorrected state of the record before the correction is made.

2.10. Security

Since information in the registry database is determinative of priorities among competing interests in collateral, it is essential that the information be secure against all types of threats. The types of security that must be considered include (i) security of data against electronic tampering, (ii) security against natural or human-caused disaster, and (iii) physical security of the registry facility. Security should be addressed comprehensively in a security strategy. If necessary, the services of a security specialist may be helpful in devising the strategy to ensure that all aspects are addressed. The registry's users must have confidence in its continuity of operation and in the reliability of its information. It must, therefore, provide for security against disruption of operations and for protection of data integrity.

Security measures against electronic tampering include the use of firewalls and anti-virus programs, as well as controls of user groups and rights. Security measures against disasters include location and hardness of the facility, fire suppression system, continuity of power and regular back-up of data to a secure remote facility. There are many acceptable ways to do back-ups, including a DAT drive mounted on the data server, replication to an off-site database, etc. The recommended approach will vary according to the IT capacity of the country and the registry, as well as other factors. Security measures against physical penetration include both technological controls such as electronic combination locks and administrative controls such as knowledge of all authorized entrants to the facility.

3. Business Model

3.1. Physical Form and Modes of Access

A secured transactions registry can employ one or more physical forms and provide a variety of way for users to gain access to the registry's functionality.

Spectrum of different types of registries: For the first three decades of operation under modern secured transactions

laws, the US states and Canadian provinces successfully operated paper systems until technology advanced sufficiently to permit the transition to the use of electronic registration. At the opposite end of the spectrum is a purely electronic registry where access is exclusively by a Web form via the internet or kiosks provided for electronic access by those without their own internet access. In between are different combinations of these forms and intermediate forms such as registration or search request by fax or e-mail attachment. There are systems still in operation that rely only on paper and equivalents such as fax and e-mail attachments.

Paper-based systems: The traditional, but less ideal, form of registry is a pure paper system where a user either presents a notice for registration or a search request in person at the registry or sends it by post or courier. It is recommended that the paper-based registry system is not used in the creation of future registries.

Web-based systems: Some modern registry systems, e.g. most Canadian provinces, New Zealand, Bosnia and Herzegovina, Cambodia and Federated States of Micronesia, permit only one method of access, i.e., direct electronic entry and search of registration data using web forms. The advantage of such systems is that secured creditors enter their own data to effect a registration and to enter the search criterion for a search. The most common means of access is from the user's computer over the Internet, but in cases of a concentration of very large users, it may be advantageous to provide for access via a wide area network (WAN). Users who do not have access through their own Internet connections can use other public access points such as Internet cafes, government kiosks or computer access facilities in public agencies. In some countries there are intermediaries that have arranged for direct access to register or search on behalf of registrants who do not have access through their own facilities. Such intermediaries take different forms in different countries, including the Post, notaries, consortia of private registry intake points, and business services companies. See Annex 7 for an example of Terms of Reference for the development of the registry system using web-based requirements.

An electronic system is much less costly to operate than others since registration and searching are done by users or their intermediaries. Secured creditors and searchers have complete control over the timing of registration and searching and have much more control over error

avoidance, since they need not rely on registry staff to manually enter or scan registration information submitted in hardcopy form. The potential for error, omission or fraudulent conduct on the part of the registry staff in dealing with registration data is eliminated, with the resultant reduction of liability risk to the registry.

Hybrid systems: While a purely electronic registry is the ideal, there are many countries where that is not possible. For example, there are countries in Africa and the Pacific where much of the population is widely dispersed in areas that either have no Internet access or have very limited access. In such countries it is necessary to consider the full range of modes of access to the registry and select the best combination to be made available to users. With the passage of time, the number of users who have access to and are able to use electronic media for access to the registry should increase as infrastructure develops and expands to cover areas not currently developed.

Where a purely electronic registry is not feasible due to the technological capacity of the country or other reasons, alternative methods of access to the registry may be used in parallel with Internet access to provide the best possible means of access to the full range of users. For example, in remote areas where Internet access is not commonly available to the private sector, the government may have local offices that have either Internet or WAN access to the registry IT system. In such cases, the staff in the local offices can provide intake and data entry functions for remote users for registration and searching. In some cases, not even government offices will have electronic access to the registry database because there is no Internet or WAN access in remote locations. In such cases, access to the registry may be possible by using fax machines in local government or intermediary offices to fax paper forms to the registry for entry through the same web forms used by web registrants and searchers. Where Internet access is not generally available to users, users should also be able to register or search by physical delivery (in person or by mail or courier) of hard copy registration or search request form to the registry for entry by registry staff.

In considering whether Internet access is sufficient to rely exclusively on it for access by all users, it is important to remember that many users of the system will not be registrants, but rather will need only to use the search function. While banks and other creditors that both register and search will generally have Internet access, those users that only search may not. They include buyers of farm

products or livestock and buyers of other movables where the sale is not in the ordinary course of business of the seller, as in the cases of the purchase of an item of a business' equipment or the purchase of all of a business' inventory. Consequently, it is not enough to ask, when determining what means of access must be provided, whether all of the potential creditors that will register notices have access to the Internet; Internet capability of potential search users must also be considered. In all but the least technologically developed countries, however, the needs of such users for access to the Internet can be met by Internet cafes or NGO-provided Internet access facilities.

In order to minimize risk of mistake in registrations and searches and to ensure standardization of procedures, it is necessary to require the use of prescribed forms for use by persons who register or search using paper. This will minimize errors in data entry of registration information by the registry staff. These forms should be available throughout the jurisdiction through local intake points, other government offices or by Post. Beyond requiring standard forms, accuracy of entry by registry or intake point staff must be assured by requiring registrants to immediately check the accuracy of data that have been entered. To that end, each registrant will be given a printed confirmation of the data that have been entered and instructed to inform the registry or intake point staff of any data entry errors. In order to limit the registry's liability for such errors, notification to a registrant of the need to check the data must be institutionalized, and the law or other legal authority should set a time limit after which the registrant assumes liability for errors if he or she fails to notify the registry of the error so that it can be corrected.

3.2. Responsible Government Entity or Entities

If the government has not already pre-empted the choice of entity to operate the registry, the responsible entity should be selected based on its capacity and willingness to take on the responsibility. As discussed earlier in this Toolkit, the entity's capacity will be assessed based on compatibility of the entity's mission with the secured transactions function and on its technological capacity, facility, management continuity and vision, physical capacity to house the technology assets and personnel, and independence from political interference in registry operations and budgeting. The selected entity should be enlisted as the local governmental partner for implementation of the secured

Box 35: Factors to Consider Before Outsourcing Operation of the Registry

Before looking into whether to outsource and to what extent, the first question should be whether it is possible and advisable to locate all aspects of the registry within the responsible government entity. Things to consider in making this judgment include:

- The stability of the entity's management
- The quality of the entity's information technology staff and facilities
- Whether employees are hired on merit or patronage
- Stakeholder perceptions of the entity
- Stakeholder attitudes toward outsourcing of governmental functions

If the responsible government entity has adequate facilities, is well managed, hires competent employees, is well regarded by stakeholders, and wants to assume operational responsibility for the registry, then full operation of the registry by the entity is the best option.

transactions registry. As noted in the following section, that does not necessarily mean that the entity will engage in the day-to-day operations of the registry.

3.3. Extent and Type of Outsourcing

The spectrum of options for operation of the day-to-day functions of the registry ranges from mere oversight and legal responsibility for a fully outsourced operation of all registry functions on one end, e.g. Vanuatu, to operation of all aspects of the registry within the responsible government entity on the opposite end of the spectrum, e.g. Vietnam. The one common requirement is for ultimate responsibility for the registry and ownership of registry data to reside in the government in the form of the responsible entity. Aside from that requirement, all other elements can be considered for outsourcing to other operators, whether public or private.

Based on the analysis of the capacity of the responsible government entity as described in a previous section, a

decision on the extent of outsourcing that is needed must be made. If the only significant shortcoming is lack of information technology assets, a commercial data center may assume responsibility for managed co-location of servers, to include hardware maintenance, running of back-ups and off-site storage of back-ups. In that case, the responsible government entity will retain control of registry operations such as help desk, management of revenues and training of users. The physical location of the outsourcer for data center functions is not operationally important, but there may be political concerns that outweigh mere financial considerations. That is, an off-shore data center may offer the best value, but political unease about having government-owned data housed outside the country may preclude off-shore locations (see Box 35).

If the responsible government entity lacks interest in or is incapable of operating the registry within the government, essentially all of the registry functions except for high-level oversight may be outsourced. In that case, the outsourcing options identified in the analysis must be evaluated, and a decision made on the type of outsourcing to be used. Guidance on outsourcing is provided in Box 36.

In both forms of outsourcing, i.e. outsourcing of just the information technology function and outsourcing of all registry operations, there is an additional factor that should be considered. That factor is the balance between capital costs and operational costs. If financing of capital costs is not a major problem, the hardware and system software may be purchased and located with the outsourcer. If capital financing is not readily available, use of leased servers owned by the outsourcer or a third party lessor can be considered. Using the latter option will incur greater periodic costs of operation than will co-location of servers owned by the government, but the difference in periodic costs is often less than the amortization of the costs of purchase of hardware and system software.

If the decision is to use an off-shore outsourcer, the best off-shore option may be the vendor of the application software, provided it has the capacity to house and maintain the IT assets and provide technical support to users. If this option is used, it is important to provide in the contract that the vendor must supply a copy of the source code to the registry operator and keep it updated with all upgrades or bug fixes that are made, and further that

Box 36: Outsourcing – Look for the Best Candidates

Factors in assessing outsourcing candidates include:

- Information technology capacity
- Internet communication costs to the outsourcer's location (in some remote countries, Internet costs to off-shore locations are high)
- Secured transactions registry domain knowledge
- Quality of management and reputation among stakeholders

Domestic candidates often include the credit information bureau, the bankers' association, a private business services company or a local data center that has the capacity to provide help-desk support.

Off-shore candidates include companies that provide outsourcing to other secured transactions registries, as well as secured transactions registries in other countries that will share their facilities with the registries of other countries (e.g. the New Zealand⁶¹ Personal Property Securities Registry).

61. So far, the only jurisdiction worldwide that is offering these services to other jurisdictions.

the vendor will deliver the database to the government or a new outsourcer upon expiration or termination of the contract. This option is in successful operation in Vanuatu and is being considered in a number of other similar small jurisdictions.

Depending on the anticipated volume of transactions, it may be viable to rent shared space on an outsourcer's servers and other hardware, and thereby avoid much of the capital outlay and maintenance costs entailed in owning the hardware. The decision will be driven by comparing (i) the present value of the difference in periodic costs of shared and owned hardware with the capital and (ii) the capital outlay for owned hardware. The analysis should also consider the costs of the operating systems and database, and whether they are included in the shared hardware arrangement. If this option is used, it is important to provide for safeguards against the risks of sharing servers with other users.

4. Development of Design and Specifications

4.1. Factors Considered in Design

4.1.1. Best practices

While all of the best practices described in 4.C.2, above, should be considered and incorporated in the registry design, there are some that require special consideration. Those are rule-based decision-making, simplicity and add-only.

Rule-based decisions that are made by the registry technology system relate both to acceptance or rejection of registrations and to determining what to report in response to a search request. Rules for acceptance or rejection are embodied in system edits of required fields to ensure that all required fields include an entry. In some cases, the rules will require fill of at least one of multiple alternate fields. If a registrant fails to fill the required fields, system edits will cause an error message to be generated to direct the registrant to correct the defect. If defects are not corrected, the system must reject the registration. If all edits are passed, the system must automatically accept it.

As to searches, the rules set out in the law and implementing regulation must be embodied in the system search logic so that all entries in the database that match the search

criterion are returned in the search results. In the case of numeric searches such as national identification number, registration number or serial number of a major item of collateral, the logic is quite simple, i.e. it requires an exact match of every character. In the case of searches by name of the debtor, the logic may include a normalization process whereby certain minor differences between compared names are eliminated by the system. For example, individual names may be broken into separate fields for surname, first given name and second given name; punctuation and case differences are eliminated; resulting surnames are compared for exact match; and first and second given names are compared for exact match or, if only an initial is given or the name is left blank, compared for the correct initial or blank space, which are also considered as matches. Legal entity names may be normalized by elimination of punctuation and case differences, and elimination of selected words or phrases indicating the kind of entity; the resulting character string is then compared for an exact match.

The logic used for searching for a debtor by name, whether an individual's name or an entity name, is less exact and more complex than the logic of a numeric search. Therefore, if there is a reliable, immutable and unique number that may be used under the law to identify a debtor, numeric identifiers are preferred to the name. For example, if the jurisdiction has a system that assigns a national identification number to all individuals that stays with them for their lives, if each citizen can have only one number, and if there are no restrictions under the law on the number's use, it is preferable to the name to identify citizens. It is possible that different types of identifiers may be needed for different classes of debtors. For example, the national identification number may be the best option for citizens, while it may be necessary to use the name for foreigners because passport numbers are neither immutable nor unique, i.e. a new number is issued upon renewal, and a person may have more than one passport at a time.

Simplicity is served by the design in two respects. First, screens must be designed to eliminate clutter and crowding, with only that information needed by registrants available to them on the screen. Second, screen flows must be intuitive to any user, so a registrant is led through the process from start to finish.

Add-only refers to the registry system's preclusion of alteration by any person, including registry staff, of data

that have been committed to the database. For example, if a paper registration has been entered by the registry staff, and if a data entry error made by the registry staff is then discovered, the original erroneous entry is not eliminated when the registry corrects the error. Rather, the registry adds to the file a correction of the registered notice that shows the date and time of the correction, so a later search will show both the initial erroneous entry and the correction. That is necessary so that the history is available to explain the results of a search conducted in the gap between the initial entry and the correction.

Add-only also refers to retention in the active database of all registrations until their lapse at the end of the registration period, regardless of whether a termination of the registration may have been entered. A search that identifies a terminated registration will simply show the termination in the file of the registration, along with the initial notice and all other entries such as amendments and continuations of the registration. This approach is necessary both to protect the interests of co-secured creditors who do not terminate their interests and to protect against the possibility of a debtor eliminating a registration from the active archive by fraudulently terminating it.

4.1.2. Antifraud and anticorruption measures

The registry design must protect against fraud by users and corruption by registry staff. Both can be deterred by features of the information technology system.

Fraudulent acts by users of the registry are rare but may generally consist of either false registrations by unknown persons for the purpose of harassment of or economic damage to persons named as debtors, or fraudulent termination of a notice by a person named as a debtor in a registered notice. In both cases, the best deterrent is knowledge by the offending person that he or she can be identified with certainty by the registry. Therefore, the registry design should ensure that persons who register or pay registration fees can be identified. In the case of regular users who have accounts with the registry, that is a simple matter, because each individual user of such an account will have a unique user ID and password, and the user ID can be captured and associated permanently with all transactions done by the user. In the case of one-off registrants, the system must include means to identify the payor of the fees. If credit cards

are used for payment, the system will capture the name of the card owner when the transaction is done, and the system should retain that in the payment record for the transactions done. If other means of payment are used, similar measures should be taken to ensure the identity of the payor is known. For example, if payment is made to the registry's bank account in advance of service, the bank should be required to positively identify the payor by identification card and to enter the name of the payor in the payment record.

Corruption by registry staff generally consists of demanding premiums for performing registration duties. The factors that enable such corruption are the ability to exercise discretion over the acceptance of a registration and the handling of cash received from the registrant. The registry design should eliminate both factors to the extent possible. An electronic registry that applies rule-based decisions eliminates all or nearly all discretionary judgments. If paper must be used to accommodate users who do not have Internet access, it is more difficult to eliminate the opportunity for corruption, such as demanding a premium for expeditious entry. But measures to limit discretion should be designed into the system, such as using the same application software for Internet registrants and registry staff, who should not be permitted to reject a registration for any reason other than rejection by the registry technology system or lack of payment. Handling of cash payments from users can and should be eliminated by using a payment system that does not allow cash payments directly to the registry. For example, payments may be made to the registry's account at a commercial bank that issues numbered receipts or deposit slips that can then be used by registrants as payment for fees. In one Asian jurisdiction where government corruption is endemic, the opportunities for demanding premiums were eliminated to the extent that it is possible to do so by permitting only electronic registration and using a commercial bank for payment intake.

The system must provide a full audit trail from every payment to either the services for which it paid or a user's account, and from an account to a every service of the account holder. The audit trail should also track every payment from receipt to deposit to the treasury or, if the registry is operated by a private outsourcer, to the bottom line of the financial report from the outsourcer to the responsible government entity.

4.1.3. Users and fee payment methods

Users: There are two different types of users of a registry, those being regular users such as banks and leasing companies, and one-off users such as a self-financing seller of equipment not in the ordinary course of business. Both types of users should be able to pay fees in such a way that they can have real-time access to register electronically or by delivery to the registry or an intake point.

The common payment mechanism for *regular users* is to maintain an account with the registry to which payments are made periodically and to which fees are automatically charged for services. Such accounts can be designed for advance payment to a draw-down account or for payment on period statements in arrears. As noted in 4.C.1.5 *supra.*, both types of systems are viable options.

Since the risk of non-payment by a *one-time user* is high if permitted to pay in arrears on an invoice, advance

payment should be required. The options for payment methods are set out in the following paragraph. What is important, however, is that one-time users should be able to register as quickly as a regular user, or nearly so.

Payment methods: The selected payment methods for payments by both types of users will depend on what is available in the country. But whatever payment methods are used, each must permit the identification of the payor so as to validate payments to the accounts of regular users and to prevent the potential for fraudulent registration by one-time users. In some more advanced countries, the use of electronic funds transfer (EFT) payment to the registry's account in a commercial bank may be viable for regular users and perhaps even for one-time users, provided there is a means for identification of the one-time user and a means for immediate notice of the payment details to the registry's system. If credit card usage is sufficiently widespread in the country that all potential one-time users of the registry would have them, they can be used both for

Table 10: Payment Method Options

Method	Advantages	Disadvantages	Examples
Frequent user account, also known as client account	User convenience; automated fee accrual and management	Minor risk of abuse by user	Vietnam, Cambodia, Federated States of Micronesia, US states, Canadian provinces, Albania, Bosnia and Herzegovina
Payment through commercial bank	Reduced risk of corruption or loss of cash, eliminates registry labor for payment entry	Minor inconvenience for users who register on paper	Cambodia, Albania, Bosnia and Herzegovina
Payment through treasury offices	Reduced risk of corruption or loss of cash, eliminates registry labor for payment entry	Minor inconvenience for users who register on paper	Federated States of Micronesia
Credit card	Can be used on-line or at intake points by all types of users	Service charges by clearinghouse; risk of dishonor after use	Vietnam, US states, Canadian provinces
Cash to registry or intake point	Simplicity and convenience of users who register on paper	Opportunity for corruption; risk of loss of cash	Vietnam, US states, Canadian provinces
Inter-bank transfer	Convenience of regular account users	Less useful for one-time users	Vietnam, US states, Canadian provinces
SMS payment by pre-paid phone card or account	Convenience of one-time users	Limited to cell phones that are owned and whose owner can be identified by recipient of payment, i.e. caller ID is not blocked	None known to use this method

one-time payments at the time of logging in to the registry site and for payments on accounts by regular users. Since credit card transactions incur a service charge, the government may wish to have an automatic computation of the service charge by the registry system and add it to the amount, or alternatively may set the fees incrementally higher to account for such charges.

Many emerging market countries do not have a sufficient level of *credit card penetration* to make credit cards viable, so an *alternate means* must be devised. If there is at least one leading commercial bank that has wide and deep branch distribution across the country, the registry can contract with one or more such banks to perform payment intake and payor identification functions for both one-time users and regular users. One-time users can pay fees into the registry's account at the bank through their local branches, and the bank can then use an interface to the registry system to enter payment details immediately. The same system can accommodate payments by regular users as well. If bank branches do not have Internet access, variations on this approach can be worked out using other technologies such as fax. Alternatively, the distributed intake points may be used to enter information from deposit slips or receipts brought to them by users. Depending on the media available to them, the intake points may transmit the information via the Internet or by fax.

There may be other payment methods that are better adapted to specific environments, so the foregoing methods should not be considered to be exclusive. Whatever methods are used, they should, if possible, not include cash payments to the registry office or intake points. Especially in emerging market countries, the risks of handling cash in the registry include corruption, loss of cash through inadvertence and loss of accountability between payment and services.

4.1.4. Costs of registry configuration and location options

Costs consist of capital outlays and ongoing operating costs of the registry. In both cases, they are affected by the configuration of the information technology system and the location options for the technology, i.e. the degree of outsourcing.

Configuration decisions are dependent upon several factors, including uptime reliability, the needs of the

selected application software for particular operating system and database, and what components (firewall, domain servers, e-mail server, etc.) are available from the facility where the technology system is located.

The minimum hardware configuration, assuming placement in a facility where firewall, domain server and e-mail server are already available, is one web/application server and one database server. In this case, each server would need an operating system (OS), and the database server would need a database. However, the better configuration is redundant servers for both functions with automatic failover in the event one server crashes. In higher volume situations, it may be necessary to have a shared data array for the database servers. Requirements for PCs and peripherals will be determined by the business model selected, i.e. managed by a government entity, full outsourcing or hybrid systems.

If servers are purchased and located in the registry or a data center, the minimum recommended configuration would be redundant web/application servers and database servers, assuming that a separate data array is not necessary and that the facility already has domain, firewall and e-mail servers that can be utilized. Costs for the operating system (OS) and database will depend on the choice of product. If a low cost option such as open source or Microsoft is used with the minimum configuration, capital outlay for servers, OS and database should be on the order of US\$80,000 to \$140,000. If Oracle running on Unix is used, the cost will be significantly higher. If domain, e-mail and firewall servers are not already available in the facility at no capital cost, the cost of the additional servers, probably redundant domain servers and one server for e-mail and firewall, plus the OS and the firewall software, should be on the order of US\$10,000 to \$25,000.

Cost considerations—Registry within the responsible government entity: If the registry and its information technology system will be operated by and within the responsible government entity, there may be substantial capital costs in preparing the facility for the technology assets if the entity does not already have such a facility with sufficient capacity for the registry's technology assets. Those capital costs include, among others, a secure room that has climate control, an automated gaseous fire suppression system, conditioned power, uninterruptible power supply (UPS), grounded circuitry, automated back-up power generators and sufficient rack space for the registry's servers. There would also be

capital costs for housing and equipping the registry IT and administrative staffs.

Operating costs will be widely variable and dependent on many factors. It is necessary to assess all the relevant factors as part of the decision-making process for choices on location, management and outsourcing options. For example, if the registry is located in and managed by the responsible government entity, the marginal operating costs of adding the registry will be small if the entity already has a fully-staffed and equipped data center facility within it, whereas those marginal costs will be very high if IT staff and facilities are dedicated to supporting only the registry. That is because there should be at least a database administrator and one other IT staff member to ensure 24/7 availability of the system to web users, whether they serve several applications in the government entity or just the registry. Further, if management staff for the registry must be full-time dedicated to registry functions instead of shared with other tasks, there will be personnel and related costs for that staff.

Cost considerations—Technology system in a commercial data center: If the registry owns and co-locates its servers in a commercial data center, there will be co-location costs, hardware maintenance costs and the cost of removing and storing periodic back-ups of data. If the minimum recommended configuration is assumed, and if it is further assumed that the facility will provide shared domain servers, firewall and e-mail server, the co-location, maintenance and back-up costs could range from on the order of US\$300 per month upwards.

Cost considerations—Internet connectivity: If the registry is contained fully within the responsible government entity or if the technology is outsourced to a data center, there will also be Internet connectivity costs. Internet rates vary widely by location and by bandwidth. So it is necessary to scope the Internet costs and determine the periodic cost of connectivity. In the smallest of jurisdictions, it may be possible to use a 256 KBPS bandwidth, but for larger countries, it is advisable to use 512 KBPS or better.

Cost considerations—Registry completely outsourced: If all registry operations are fully outsourced, and if shared server space is rented on fully redundant servers where system software and Internet connectivity are included, there will be no significant operating costs other than the periodic fee to the outsourcer. Experience has shown that such outsourcing to off-shore companies in developed

countries can range from around US\$800 per month up to US\$2000 per month, depending on the volume of activity and other factors.

4.2. Process Model

The first step in developing the design of any system is to understand what the system will do. If we think of the sequence of operations within the system as a play, the means used to communicate the lines and actions of all the actors is the script. The script used to communicate the operations of the registry system to the designers and operators of the system is a narrative description of each process, known as a process model narrative (PMN). The PMN describes in detail the role of every actor who participates in the registry system and every function performed within the system. The PMN provides all the information needed by a designer or an operator to understand what the system must do and how it will do each operation. It will be used in conjunction with other technical design specification documents to tailor the registry system to the exact needs of the registry.

4.3. Technical Specification Documents

While the PMN is the most essential document needed by a designer or operator of a registry system, designers will need a more detailed description of the operations and relationships in the system. This level of detail may be provided in detailed graphical representations of the data elements commonly known as business rules matrices, screen maps and flow diagrams of system functions. The registry expert may develop these technical specification documents separately or in conjunction with the developer of the system.

5. Staffing, Housing and Equipping the Registry

Planning for operation of a registry must include logistical issues of staffing, housing and equipping it. All three of those issues will be affected by the extent to which the registry is automated and the choice of options for location and operation of the technology components.

For fully web-based systems, with no provision for registrations or requests for searches of the database to be submitted on paper, and if operation of the technology

system is outsourced, staffing needs are minimal. In such a case, the only requirement for staff is to run reports on the system's performance and revenues, and, on rare occasions, to respond to a request from a user for help with use of the system. In this scenario, staffing could consist of assigning the registry function to an existing employee or employees in the host organization as an additional function, since the time required would be far less than one full-time employee equivalent, perhaps as little as one or two hours per month in smaller jurisdictions. There would be no need for housing new employees in such a case, and there should be no need for additional equipment, assuming each employee has access to a PC and printer.

If the registry is fully web-based, with no provision for paper, but with the operation of the IT system located within the registry's office, there will be a need for IT support, but probably less than full time. If the registry is located within a government office that has an IT staff, the registry could share that staff, provided it has the appropriate skills to maintain the database and hardware. There should be sufficient IT staff to ensure that appropriately skilled people are able to respond within a short time to a failure of the system, so as to maintain 24/7 operation. If there is no possibility of shared IT staff, the registry must hire enough staff or contract for such services to maintain operations. If existing staff of a host office are used, there will be no need for additional space or equipment.

For hybrid systems, that is, if the registry permits the use of paper for registration and search requests, in addition to electronic registration, the numbers of paper registrations and requests must be projected, and staffing levels set to provide for data entry from paper documents. Since the registry staff should use the same application software for entry of registrations and requests that is used by users who register or search via the web, data entry should be simple and quick, meaning that each employee can enter many registrations in one day. Since the registry must be available for paper registration at all times during business hours, there should be at least two employees who can enter data for registrations and requests. Each employee will need a PC with an Internet connection, office space, and access to a shared printer. The need for IT staff will be determined by whether the IT function is outsourced and by the availability of shared assets, as described in the foregoing paragraphs.

For paper-based systems, if the registry provides for paper for registration and requests, and if the geography of

the country makes it necessary to provide for intake of paper at remote locations, staffing of the remote intake points will be necessary. In nearly all such cases, the number of registrations and requests received through such remote intake points is so small that the function can be accommodated as an additional duty of existing employees in the office that is designated as the intake point. The exact functions and equipment requirements of such employees will depend upon the limitations of the IT and communications infrastructure used to connect the remote intake points to the registry. For example, if the remote intake points have access to the Internet, the business design may provide either for the intake point employees to enter data, or for the employees to scan the paper documents for transmission to the registry for data entry. In either case, each employee will need access to a PC with an Internet connection and, in the latter case, will need access to a simple document scanner and a printer. If the remote intake point does not have Internet access but does have phone service, the employee would need access to a fax machine to permit the paper documents to be faxed to the registry for data entry.

6. Operating Budget Estimate

The factors that must be included in an operating budget will vary according to the business model that is chosen, and to a smaller extent, according to the design of the IT system. Estimates of the relative costs of different models may be an important consideration in deciding which model to use. Once the model is chosen, more exact estimates must be made to establish an operating budget for operation of the registry. In making these estimates, it is useful to examine the different categories of costs, as follow:

6.1. Connectivity

Regardless of the business model used, there will be costs for Internet connectivity. In the case of outsourcing of the complete operation, connectivity costs may be bundled in the package price, so will not need to be considered separately. In all other business models, it will be necessary to compute projected connectivity costs.

Unless the registry will share a domain with a parent government entity, it will have to acquire a domain and pay the annual fee to maintain it.

The bigger cost, however, is the Internet service provider (ISP). Some ISPs charge a variable fee based on the amount of traffic per month, while others charge a flat monthly fee. In both cases, the fees will vary according to bandwidth, so it is important to determine how much traffic is anticipated and what level of service users expect. If registration volume is expected to be low, and if users generally do not have high-speed connections, 256 KBPS may be sufficient. But if users expect high speed, and if volumes are anticipated to be high, 1 GBPS may be a better choice, despite the higher cost.

After the bandwidth decision has been made, the periodic cost of connectivity can be computed. If the ISP charges based on traffic, it will be necessary to estimate the amount of traffic per month, based on the expected number of registrations and searches, and the average size of each. In the case of registrations, the traffic estimate will be based on the average notice size times 2, times the number of notices, since the returned confirmation will be approximately equal to the inbound notice. In the case of searches, the estimate will be based on the number of searches times the sum of the average request size and the average report size.

Once the periodic ISP fees have been estimated, they should be annualized, and the annual domain cost added to it to determine the total connectivity costs per year.

6.2. Operation and Maintenance of the Information Technology System

Costs of operation of the IT system will vary greatly depending on the business model that is selected. If registry operations are totally outsourced, the costs will probably be bundled, so need not be considered separately. In all other business models, however, different combinations of cost factors must be considered.

In all such business models, there will likely be a maintenance cost for the application software after the warranty period, which is generally one year from acceptance. Software maintenance costs can be defined with either a flat annual fee or with an hourly rate for actual services. If it is the latter, estimated annual cost will be based on projected needs for maintenance and upgrade of the software.

If hardware, including system software, is purchased, it may be located in the registry facility if it has the requisite security and environmental features such as physical

access controls, hardening against natural disaster, conditioned power, grounded circuitry, UPS, back-up generator with fuel supply, 24/7 air conditioning with failure alarm, gaseous fire suppression system, provision for off-site storage of data back-ups, and professional staffing consisting of at least a database administrator and another IT professional. In this case, budgeted operating costs, excluding personnel, will include utility costs, fuel costs for the generator, and maintenance costs for the facility and all of its security and environmental systems.

If hardware is purchased, and if the registry facility is inadequate for location of the hardware, the servers may be kept in a managed co-location facility, which may be operated by the central government or a commercial enterprise located in the country or off-shore. Costs of managed co-location will be charged on different bases by different co-location facilities, but generally consist of a rack space charge per "U" of space, a maintenance fee per device for minor maintenance functions such as swapping out drives, a charge for periodically removing and installing back-up media in an automated back-up device, off-site back-up storage charge, and an access charge to permit maintenance by registry IT staff or contractors. All of these components are generally flat periodic charges, so budgeting for them is straightforward.

In order to reduce capital costs, it is possible to lease servers in a co-location facility. In this case, the costs will be similar to the costs for managed co-location of owned servers, but with the addition of the lease charge.

If hardware is purchased, there will be maintenance costs for the hardware and system software (OS and DB) after the warranty periods. Those costs may be charged on a periodic flat rate per item or on a per call basis. In the latter case, the number of hours of each type of maintenance services must be estimated and multiplied times the rate for the type of service. If hardware is leased from the co-location facility, the system software maintenance costs may or may not be included, so it is necessary to determine that when budgeting.

6.3. Staffing, Housing and Equipping the Registry

Staffing costs will vary according to the selected business model as indicated in section C.5, above. In the case of complete outsourcing of the operation, staffing of the

registry's oversight entity will be negligible, as it will be only a small part-time requirement for oversight of the outsourcer and perhaps making payments to it under the contract for services. In all other models, there will be some staffing and related costs, though they may be small.

As noted in section C.5, staffing in the case of a fully web-based registry with no paper, where servers are co-located in an external facility, will be only one or two persons on the existing staff of the entity under which the registry is located. Staffing costs may be apportioned to staff based on projected time spent in running reports and responding to assistance calls from users, but should amount to only a fraction of one full-time employee equivalent. There should be no housing and equipping costs, assuming that the staff already has access to PC's with Internet connections and a printer.

If servers are located within the registry facility, staffing costs will include costs for a database administrator and other IT professional(s). If those functions are shared with other functions in the entity in which the registry is located, the staff costs may be apportioned according to the projected loads for support of the registry IT system and others within the entity. If staff must be dedicated only to the registry, its housing and equipment costs must also be included in the budget. There may also be a space charge for the servers, whether apportioned or dedicated.

If the registry provides for a paper alternative for registration and requesting a search, the paper volume must be projected and the staffing level estimated from that projection. The pay level for clerical level employees must be determined and applied to the number of staff needed. Space and equipment costs can then be developed from the staffing level. If there are remote intake points, any apportionment of their costs must be determined, though in most cases, there will be no marginal costs due to registration duties of the existing staff in those locations.

6.4. Budget Factors in Complete Outsourcing

If all operations of the registry are outsourced under a single contract, budgeting is quite simple. Such contracts generally provide for a flat periodic fee that covers all functions, including hardware usage. The only additional cost that may arise is an apportioned staff cost for the oversight responsibility in the responsible government entity,

though that should not be a significant factor. As noted above, the only other operating cost is for maintenance of the application software after the warranty period.

7. Implementation Timeline

The implementation schedule will vary depending on the business model, procurement methods and other factors. It is important that the timeline be established as early in the development process as possible, so that dependencies can be identified among steps and so as to permit concurrent development of different components wherever feasible. A GANNT chart or equivalent can be used to identify dependencies and permissible concurrent operations, and thereby to determine the target timeline to implementation.

Dependencies that must be identified include such things as (i) that finalization of the law's provisions on registration must precede development of the design specifications and (ii) selection of the application software vendor must precede completion of the specifications for hardware and system software. There are many other dependencies that will become apparent when the GANNT chart or equivalent is prepared.

8. Legacy Data Conversion

If the legal expert and the registry expert are not the same person, the registry expert must work with the legal expert to advise what is possible in the transition provisions of the law, as described previously. The registry expert will identify which of three registry situations prevails under prior law, i.e. no registration, decentralized or otherwise fragmented registration, or centralized registration of interests that would be covered by the reformed law. If there is no registration under the prior law, there is no legacy data issue. If either of the second or third situations exists, the registry expert will analyze it and advise the legal expert.

Table 11 provides a checklist of events, steps, and processes that must be plotted in the timeline.

When registration is decentralized or fragmented by type of asset, interest or debtor, the analysis focuses on what data other than that required for registration under the reformed law will be required for transition registrations. Such information may include the date/time of the prior registration, name or location of the registry, and registration

Table 11: Examples of Events to be Plotted in Timeline

<p>Finalization of the law’s provisions governing registration</p> <p>Development of the registry design specifications (PMN, BRM, screen maps, etc.)</p> <p>Preparation of application software tender documentation</p> <p>Approval of software tender documentation by approving entities</p> <p>Publication of Request for Expressions of Interest</p> <p>Selection of short list of application software vendors</p> <p>Publication of tender for application software</p> <p>Preparation of tender documents for local IT firm for IT and translation support</p> <p>Approval of tender documents for local IT firm</p> <p>Publication of tender for local IT firm</p> <p>Evaluation of bids and selection of vendor of application software</p> <p>Evaluation of bids and selection of local IT firm</p> <p>Development of specifications for hardware and system software</p> <p>Preparation of tender documents for hardware and system software</p> <p>Approval of hardware/system software tender documentation</p> <p>Publication of tender for hardware/system software</p> <p>Negotiate and sign contract with software vendor</p> <p>Evaluation of bids and selection of hardware/system software vendor</p> <p>Negotiate and sign contract with hardware/system software vendor</p> <p>Preparation of tender documents for colocation facility</p> <p>Approval of colocation facility tender documentation</p> <p>Publication of tender for colocation facility</p> <p>Evaluation of bids and selection of colocation facility</p>	<p>Preparation of tender documents for ISP</p> <p>Approval of ISP tender documentation</p> <p>Publication of tender for ISP</p> <p>Evaluation of bids and selection of ISP</p> <p>Final passage of law</p> <p>Develop implementing regulation/decre</p> <p>Negotiate and sign contract with co-location facility</p> <p>Negotiate and sign contract with ISP</p> <p>Develop staffing requirements and qualifications</p> <p>Publish notice for hiring staff</p> <p>Identify or procure location for registry administration</p> <p>Equip registry office</p> <p>Hire staff</p> <p>Prepare public awareness and training programs</p> <p>Delivery of text from software vendor to local IT firm for translation</p> <p>Approval of implementing regulation/ decree</p> <p>Develop user documentation and operations manual for registry</p> <p>Integration of local language by software vendor</p> <p>Identify and contract with escrow agent for source code and payments to software vendor</p> <p>Publish effective date</p> <p>Public awareness campaign</p> <p>Train staff</p> <p>Initial round of end user training</p> <p>Delivery and installation of hardware/system software</p> <p>Delivery of application software source code into escrow</p> <p>Installation of application software</p> <p>Testing and evaluation of application software</p> <p>Acceptance of application software</p> <p>Delivery of technical documentation from software vendor</p> <p>Registry in operation</p>
--	---

number or the book and page of the registration. The registry expert may also advise on the type and duration of the transition registration period.

When there is an existing centralized database of registrations of security interests, it should be evaluated to determine if it is feasible to convert those registrations to the new registry system:

- The first question in such an evaluation is whether the legacy database includes at least the data elements required for a sufficient notice under the new law.
- The second question is whether the debtor identifier that is used for searches under the new law is capable of being mapped from the legacy database to the new database. For example, if the new law and implementing regulation (decree) call for searching by an individual debtor name using a process that

requires the surname and given names to be in separate fields, and if the legacy database includes all elements of the debtor's name in one field, then the name cannot be reliably mapped to the new database. As to entity names, if the legacy system permits abbreviations or less than complete names, and if searching in the new system is by entity name using either an exact match or a normalized match process, then the name cannot be reliably mapped to the new database. If debtors are identified by a number, and the numbers in the legacy database are not in defined fields, it may not be feasible to map them to the new database.

- The third question is whether there are other data elements that are permissible search criteria under the new law and that are incapable of being reliably mapped to the new database. For example, if the new law provides for searching by serial number of vehicles or major equipment items, and if those serial numbers are not entered in defined fields in the legacy database or identified with a tag, then they cannot be reliably mapped to the new database.
- The fourth question is whether the expiry date of a legacy registration can be mapped to the new database or can be automatically computed from a registration date and entered in the new database.
- The final general question is whether there are any other elements that are required by the new law that cannot reliably be converted to the new database.

If it is determined that it is not feasible to reliably convert registration data from the legacy database to the new database, transition of legacy registrations will have to be as described in the prior paragraph for transition from a decentralized or fragmented system.

When prior interests are registered in a legacy database in a manner that permits them to be converted into the new database, priority can relate back to the date of the original registration, thereby preserving priority among competing prior interests. This process, however, is not without difficulty. It will require creation of a separate mapping program to pull data out of the legacy database and map it into the appropriate fields and formats of the new database. If some elements, e.g. collateral descriptions, are not in a format that can be mapped as data, they may need to be converted to an image format, e.g. PDF or JPG, and attached to the notice in the new database. It must be determined whether certain historical information from legacy registrations, e.g. extensions or

amendments of legacy registrations, must be preserved in the new database and, if so, how to accommodate them. Finally, there may be information in the legacy database that is not transitioned to the new database. It must be determined whether there is any legal requirement to preserve such legacy data and, if so, in what form and for how long. Once all these issues are resolved, it is critical that the transition process be planned so that the legacy database is fully transitioned before the start-up of registration under the new law. This plan will require the bulk of the migration of data to be completed and tested some time before the start-up date. In the period between the mass migration and the start-up date, registrations in the legacy registry will also have to be added to the transitioned data in the new database.

9. Procurements

9.1. Allocation of Components: Number of Procurements

The form and number of procurement processes is dependent on the business model that is selected, as well as the resources that are available within the registry's organization. The number of different procurement actions may be anywhere between one and seven. The different components that may or may not require procurement include the application software license, hardware and system software, server co-location, ISP services, local IT support, office space and office equipment.

The outsourcing business model has the simplest procurement requirements if it includes the complete outsourcing of the registry's operation. It requires only one or two procurements, since all components, with the possible exception of the application software, can be included in one tender that includes provision of hardware and system software, connectivity, maintenance, help-desk support and all staff-related components such as housing and equipment. It may be possible to include the application software license in the same procurement, since most of the vendors of secured transactions software also have the capacity to provide the other components and are most likely to have the expertise to provide help-desk and maintenance support.

Under all other business models, there must be at least separate procurements for the application software license and for purchase or lease of hardware with system software.

The decision between purchase and lease will require a cost-benefit comparison of the options. Procurement of ISP services is also necessary unless the entity in which the registry is located already has a contract for such services that can be extended to cover registry business. Unless the registry's own IT staff is capable of maintaining the application software and the hardware/system software, it is advisable to procure a local IT firm to maintain those after the warranty periods.

If servers are to be located within the registry's facility, space for servers and staff may have to be procured if the entity in which the registry is located does not already have sufficient space. In any such case, the IT staff and registry operations staff will need office equipment, so it must be procured.

If servers cannot be located in the registry facility, a tender will be required for a managed co-location facility, unless there is a central government co-location facility that can be used. If a commercial facility is required, it may be possible to combine the co-location and ISP procurements into one, provided that the major co-location facilities in the market are operated by ISPs, which is quite common in many emerging economies.

9.2. Rules That Must Be Applied

Before commencing any procurement, it is necessary to determine what procurement rules govern the process. The determination will depend on several factors, but the most important factors are the funding source and the nature of the funding commitment, i.e. loan or grant. Because of the number of variables that must be considered, it is necessary to do the research in each case. But in general, if the funding source is a donor, the donor's rules will normally apply. If funding is by a loan, local procurement rules may also apply. If some funds are provided by another donor, its rules may also bear on the procurement process. Most donors generally have procurement offices in country or regional offices that can provide expert assistance to project staff or consultants, so they should be called upon in any case of uncertainty about the procurement process.

9.3. Type of Bidding Process for Each Procurement

The bidding process used for each procurement will depend first upon the relevant procurement rules, but also

on local factors and the anticipated value of the tender. So it is necessary to conduct an evaluation of the rules and facts in each case before deciding on the process. Since the rules and value limits are subject to change over time, they will not be addressed further here, but must be investigated case-by-case.

Several local factors must be considered in determining what process to use. First is the availability of bidders for the product or service within the country. In the cases of ISP support and purchase of office equipment, it is clear that procurement will be local, and in most cases will be competitive. The exception to competition is where there may be only one viable option, as commonly happens in countries where the local telecom has a monopoly on ISP service. In the cases of application software, managed co-location facility and hardware/system software, it may be advisable to use international competitive bidding, since it may lead to more competition, or it may be necessary because the goods or services are not available or adequate locally. Other local factors that may affect the decision to procure by local bidding include the effect of customs duties or taxes on the bottom line price. In this respect, there may be exemptions for government that can be applied to mitigate the effect of such duties or other taxes, so their effect must also be determined and considered.

10. Testing and Acceptance

Testing and acceptance of both the application software and the hardware and system software must be done before start-up is attempted. Testing and acceptance of hardware and system software are technical and objective, and can be assigned to IT staff of the registry, a local IT firm retained to maintain the system or the technical staff of a managed co-location facility if so provided in its contract. The process described in the remainder of this section addresses a procurement managed by the donor, since most procurements of application software will be so managed. In the case of a procurement managed by the client country, the donor should provide advice and support of the same type of testing and acceptance process.

10.1. Composition of Acceptance Team

In order to ensure that the application software conforms to the requirements set out in the specifications and tender documents, testing of the installed software should be

overseen and evaluated by an acceptance team composed of the main stakeholders and IT experts. The team should include at a minimum the registrar or responsible manager in the governmental entity in which the registry is located, an IT professional from the registry or local IT support provider, a representative of one of the major institutional users of the registry and the donor's registry expert.

10.2. Development of Test Scenarios and Scripts

During development or modification of the application software, the vendor will conduct unit testing of the different application modules. The vendor and the registry expert should jointly develop test scenarios and scripts for the operations of modules for use in unit testing.

When the vendor installs the application software, it will have to conduct integration testing of the whole application. In preparation for that, the registry expert, a representative of the registry or the governmental entity in which it is located, and the vendor should develop test scripts for all types of operations of the registry by all types of users.

10.3. Development of Acceptance Scoring Documents

Acceptance is critical to both the client government and the vendor, since it will be a milestone for the vendor and the last chance before implementation for the client to require fixes to the software. Therefore, scoring by the acceptance committee must be fair and transparent. The registry expert should develop scoring sheets with detailed points on which the software will be scored during testing. Scoring of each point should be objective and should identify the minimum performance level for acceptance on the point. If the team finds that performance fails to meet the minimum performance level on any point, acceptance will not occur until it is corrected by the vendor.

10.4. Oversight of Testing and Acceptance Processes

The registry expert will set the schedule for integration testing and meetings of the acceptance committee. The expert will also monitor integration testing and all meetings of the acceptance team to ensure that evaluation of the software is procedurally correct and fully documented.

The expert must notify the vendor of failure of the software on any evaluation point.

11. Start-up Management

11.1. Setting Effective Date

If it is possible to do so, the secured transactions law should provide for implementation of the law upon occurrence of an act that can be controlled by the registry or the governmental entity under which it is located. This will permit implementation to occur when the registry system is ready to start operation. The act can be publication of a decree, publication of a notice of implementation in a gazette, effectiveness of an implementing regulation, or other act that can bring the law into effect at a time of the registry's or its parent entity's choice after the registry is ready.

11.2. Coordination of Publication of Implementing Act

Once it is known when the registry system will be ready for operation, the person who is responsible for the act can set the date for implementation of the law and commencement of registry operation. In addition to readiness of the registry system, other factors in setting the effective date include providing for adequate public notice of the law's effective date and for initial training of users of the registry. When the date is set, it should then be officially published, and the training of users and publicity campaign should be scheduled to lead up to implementation.

11.3. Assuring Effectiveness and Implementation of Contracts for Services

It is essential that all contracts for continuing services that support the registry's operation be in place before the implementation date. If operation of the registry is fully outsourced, the outsourcing contract must be in place well in advance of implementation, since it will cover testing and installation as well as operation of the registry after the implementation date. In other business models, service contracts may be with one or more of an ISP, a managed co-location facility and a local IT support firm.

11.4. Management of Problems and Defects

The registry expert will ensure that the application software vendor establishes a bug reporting and tracking system that enables the registry and the government entity in which it is located to submit bug reports or complaints to the vendor for fix under the warranty. The tracking system should permit all parties to track the status of each bug or complaint until it is fully fixed and the fix is accepted by its submitter. Fixed bugs and complaints will then be archived and made accessible to the vendor and the registry. The bug reporting and tracking system should be transferable to whatever IT resource will assume software maintenance responsibility after the warranty period, whether it is registry IT staff or an IT support firm.

D. Public Awareness Building and Training

1. Information Gathering and Analysis

1.1. Capacity of Registry Operator to Perform Awareness and Training Activities

Once it is determined in what government entity responsibility for the registry will be located, its training and public relations capabilities should be assessed to determine whether it is capable of managing the awareness raising and training activities associated with launching the registry. The assessment should determine whether the entity or its parent has an existing public relations function that could support an awareness raising effort or if it has an existing training structure that could support both staff and user training. Regardless of those findings, the assessment should also determine whether public relations and training functions have a budget line item and, if they do, whether it is sufficient to cover the costs for registry awareness and training activities.

If there is no existing capacity, or if capacity is insufficient to support awareness-raising activities and training of registry staff and users, resources will have to be identified and arranged. If the client government cannot raise the resources, it may be necessary to turn to the WBG or other

donors for support of the awareness-raising and training efforts. The availability of resources from the WBG or other donors must be determined in that case. The necessary resources would include at least an international consultant and two local staff, plus funding for materials, travel, publicity and training event facilities for the periods of awareness-raising activities and training.

1.2. Capacity of Media to Support Public Awareness

Print and broadcast media are the principal tools of the awareness campaign. In assessing their capacity to support the public awareness campaign, it is necessary to identify the most useful outlets by determining on what outlets business people rely for information. The evaluations for the different media will be somewhat different.

For broadcast media, the essential elements are format and coverage of the jurisdiction. For television, that means identifying outlets that have national coverage and that have news and public service programs that reach the target populations. As to radio, many smaller countries have one outlet that carries only local news and public affairs content and on which most of the population relies for information that affects their lives. If there is such an outlet, it should be identified. Radio outlets that have substantial news and interview content should also be identified as resources for awareness-raising interviews with registrars or officials from the government entity in which the registry is located.

There are three broad types of print media that should be assessed. The most useful type consists of focused publications that are distributed primarily to membership organizations whose members have a natural interest in secured transactions, e.g. bankers' association, leasing association, bar association, chamber of commerce, etc. The second type consists of newspapers that focus on business issues, though not on any particular organization. The final type includes newspapers of general circulation. The outlets of each type should be identified, and their willingness to carry articles on the law and registry should be determined.

1.3. Geographic and Demographic Limitations

Planning for awareness and training events must take into consideration the necessity to deliver them to users away

from the capital. Therefore, it is necessary to determine what factors will dictate the number and locations of such events.

The factors that must be identified in planning for events are both geographic and demographic. Geographic factors include contiguity of the country and barriers to travel by both the target population and those who conduct the events. A nation made up of islands stretched across expanses of ocean may require a number of events at widely distributed locations in order to reach most of the economically active population. A nation with a poor road network or barriers such as mountains or deserts will require a similarly distributed effort. Demographic factors include the number and distribution of commercial centers and economically active population concentrations. If resources limit the number of events that can be conducted around the country, they must be prioritized according to where they will have the greatest impact. Therefore, the most important centers of commerce and economically active populations must be identified.

1.4. Continuing Availability of Support for Training after Start-up

While the initial round of training is the most critical to getting the registry started, there must be continuing opportunities

to train new participants in the system. Institutions that can provide such continuing training should be identified so that training and materials can be sent to those institutions. Appropriate institutions include professional associations such as bankers' associations, bar associations, business associations, etc. Institutions of higher education such as business and law schools at universities should also be identified for distribution of information they can use in courses on business finance.

2. Public Awareness

2.1. Identification of Target Groups

The people who need to know about the secured transactions law and registry extend beyond secured creditors. They are also important to businesses and consumers who may make use of the law to gain access to credit that had been unavailable to them. The law and registry are also very important to buyers of movables that may be encumbered by a security interest, to include particularly buyers of vehicles, equipment, receivables, farm products and livestock (see Box 37).

Box 37: Target Groups for Awareness Raising

- Major financiers such as banks, NBFIs, leasing companies and buyers of accounts receivable and secured sales contracts
- Trade financiers who may secure their trade receivables with purchase-money security interests in the sold goods; these might include manufacturers, wholesalers and retailers
- Buyers of farm products from producers
- Buyers of livestock from producers, or purchasing agents for such buyers
- Businesses that may gain access to credit by giving security interests in their existing movable property or that may finance the purchase of equipment by giving a purchase-money security interest
- Retailers, manufacturers or agricultural producers who may obtain operating lines of credit by giving security in their inventory, accounts receivable, raw goods, work in process or crops
- Business and commercial lawyers who serve any of the foregoing groups
- Consumers who may make use of purchase-money security interests to acquire major durables such as vehicles
- Courts with jurisdiction over commercial disputes
- Financial reporters from business-oriented print media
- General media outlets

2.2. Public Awareness Plan

2.2.1. Timing

The timing of awareness-raising activities will vary according to the targeted group. In general, groups should be targeted in time to give them sufficient time to be prepared to use the registry or give advice on doing so, but not so early that it will be ineffective or will cause business decisions to be delayed pending implementation. Though each public awareness plan will be tailored to specific circumstances, the following guidelines may be used as a starting point.

2.2.2. Media mix and modes of delivery

Different target groups will be most effectively reached by specific media, delivery methods and times, so it is critical to select media that are tailored to the target group at an appropriate time. There are many situational factors that will cause the media mix to be different for any situation, but the following media recommendations may be useful as a starting point:

2.2.3. Delivery responsibilities

As a general rule, the principal responsibility for public awareness delivery is the registry or the government entity in which it is located. However, before and during the implementation period, an international registry expert should participate in preparation of written materials such as white papers, articles for professional publications, news releases, public service announcements and brochures. The international registry expert may also participate in speaking engagements with professional associations and as a guest instructor for business or law schools. However, it is not recommended that the international registry expert be the principal speaker at press conferences. Before the international registry expert departs, he/she should train registry or parent government entity’s staff sufficiently that they can assume responsibility for awareness-raising actions thereafter.

2.3. Content and Materials Preparation

Written materials should be prepared in advance, either by or with the participation of an international registry

Table 12: Planning for Public Awareness

Timing	Target Groups
Beginning after the implementation date is known, but not more than two months prior to implementation, and extending through the first round of training	Financers (banks, NBFIs, leasing companies, etc.) and their trade associations; bar association; financial reporters for business-oriented media
Beginning before implementation, and extending through training, which may be before or after implementation	Courts with jurisdiction over commercial disputes
Beginning shortly before implementation, and extending after implementation	Businesses and their trade associations, including trade financers, borrowers and line of credit users
Beginning at time of implementation, and extending after implementation	Buyers of equipment, farm products and livestock; consumers; general media outlets (broadcast and print)

expert. They should explain the economic rationale for the law and registry, address the mode of operation of the registry, refer to international best practices, provide directions to additional information on the registry's or parent government entity's website and provide information on training events or resources available to users.

2.4. Costs

The public awareness effort's costs will vary greatly according to the size of the jurisdiction, availability of useable media outlets, communication and transportation infrastructure and other factors. But even in the largest jurisdictions with costly media and problematic

infrastructure, costs of a program should not exceed about US\$50,000.

3. Training

3.1. General Considerations

A well-designed training program for registry operators can facilitate the use of the registry system by lawyers and creditors. Judges and enforcement officers will also need to be trained to implement the law in their areas.

The following description of training methodology and mechanisms applies to all groups involved in the

Table 13: Media Tools and Modes of Delivery

Medium/mode	Target Groups	Timing
Guest article for professional or trade publications	Bankers, bar, leasing, business and trade association publications	Generally before implementation or shortly after
Press release	Business-oriented and general media outlets	Generally immediately before and at time of implementation
White paper	Courts, and business and law schools	Before or after implementation
Press event or news conference	General media outlets	Concentrated just before or at implementation
Guest appearance on broadcast medium	General broadcast media outlets	Just before and after implementation
Direct mail	Banks, NBFIs and leasing companies	Before implementation
Participation in event of professional or trade association, as speaker or otherwise	Bankers, bar, leasing, business and trade associations	Any time
Public service announcements or paid advertisements	Buyers of equipment, farm products and livestock; trade financiers; business borrowers and line of credit operators; consumers	Starting just before and continuing after implementation
Invitation to training	Banks, NBFIs, leasing companies, lawyers and courts	Before and just after implementation
Brochures distributed through public institutions	Buyers of equipment, farm products and livestock; trade financiers; business borrowers and line of credit operators; consumers	Any time
Guest instructor engagement	Business and law schools	After implementation

implementation of modern secured transactions systems. The following topics should be included as part of the training program for each group.

Methodology/approach: As a matter of principle, each training program follows the “train the trainer” approach; that is, it involves training people who can subsequently train their colleagues. It is commonly thought that such an approach requires a specialized training method. However, experience shows that a training plan that includes building this capacity among trainees has long-term benefits by reducing dependency on long-term international training assistance. In the context of modern secured transactions, training should be the jumpstart for development, not a continuous condition for sustainability. For example, the training program for registry staff should not be limited to the immediate participants, but should include written material and instructions for training of future registry employees.

Scale of the training: If budgetary or time constraints limit the scope of coverage, training should start with the most important groups—creditors and judges—and continue with lower priority groups such as execution officers, government officials and law students. All trainees should receive the tools to allow them to transfer their knowledge to their colleagues.

Delivery tools: Training on the secured transactions law and registry may be given in several ways. The most common format is the seminar or workshop, which generally runs for one to three days. A second tool is the study tour by selected individuals to jurisdictions with successful experience in employing secured transactions systems. A study tour may be important from a practical and political standpoint because it can increase substantive capacity and diminish doubts regarding the efficacy of such systems. Another tool is the conference, which is generally used for the sharing of information, often among several jurisdictions, and to harmonize laws and technology on a regional basis. Other tools include on-line training programs and interactive electronic media programs such as CDs with simulations of the registration system that allow new users to practice before handling live registration.

Target groups: The groups identified for secured transactions training are:

1. Creditors
2. Judges
3. Enforcement or execution officers

4. Registry operators
5. Other groups such as lawyers, notaries and potential debtors

3.2. Training to Creditors

General considerations: The first and most important target for training consists of institutions that provide credit. These may include banking institutions, micro credit organizations, leasing companies and businesses that sell goods on credit. This group may also include public institutions that use the law and registry to enforce statutory obligations. Typical examples are tax or customs departments. Trainees from credit providers may include management level personnel such as credit department managers, and operations level personnel such as loan officers, leasing agents, risk managers and enforcement staff.

Training topics:

1. **Change attitude toward movable property:** Historically, movable property (or personal property) was considered “real” property. This was a result of a perception that movable property was less marketable than real property. In reality, the market value of movable property such as construction or agricultural equipment, production machines, accounts receivable, or intellectual property such as patents or trademarks, often exceeds the market value of real property such as residential units or even land. Further, movable property is often more liquid than real property, enabling faster recovery for the creditor in enforcement. Coupled with an effective legal system that protects and facilitates enforcement of property rights, movable property becomes “real” security for creditors, increasing their willingness to provide secured credit (see Box 38). A well-designed training plan will begin with a general overview of the legislation and the operation of the registry. The inherent risk of using movable property as security should be discussed, and practical solutions for control and monitoring of assets such as inventory, bank accounts and other movable property should also be addressed.
2. **Introduction to secured transactions law:** Training should familiarize creditors with new concepts and principles of secured transactions law, to include types of transactions and properties included in

the scope of the law, creation of security interests, notice registration, priorities, and enforcement. This preliminary training phase may be offered to large number of participants and can function primarily to raise awareness. It should set the platform for a more specialized training plan that will focus on each of the topics described below. More specialized sessions can be offered to smaller groups of creditors to allow more interaction and to deal with specific issues related to different types of creditors such as lenders, leasing companies or public institutions.

3. **Scope:** Creditor training should introduce trainees to the concept of the unified security interest that includes in its scope all types of legal interests that secure an obligation with movable property. This includes all the traditional forms of security such as the pledge, mortgage of movables, conditional sales and others. Training should also address the scope of types of property to which the law applies, to include tangible and intangible, present and future. Finally, training should cover the scope of obligations including monetary and non-monetary, existing, present and future.
4. **Creation of security interest:** Training should cover the conditions required to create an enforceable security interest. This should cover all three of the requisites for an enforceable interest as between the creditor

Box 38: The Case of Albania and Bosnia and Herzegovina

In *Albania*, acquisition of greenhouses by farmers was financed and used as security for the credit. The value of the green house was in the neighborhood of US\$250,000. In one of the cases when the borrower defaulted on the repayment, his greenhouse was seized and sold. The implementation of the secured transactions law facilitated the recovery of credit by the creditor.

In *Bosnia and Herzegovina*, mining equipment (valued at approximately US\$10 million) was used as collateral for credit and recorded at the pledge registry.

and the debtor, to include (a) an agreement in writing that does not require formalities such as notarization or registration to be effective, (b) an alienable interest of the debtor in the property used as security, and (c) value given by the creditor. Sample security agreement may be used during training.

5. **Priorities:** The real value of secured transactions: One of the most important areas of modern secured transactions laws is the scheme of relative priorities between conflicting claims against the same properties. There are some fundamental priority rules that are adopted by most jurisdictions undertaking this reform. Other rules are more specific, less central and not always are adopted as part of the reformed law. This document provides recommendations on training on the central priority rules. Further training on more specific rules may be considered based on the specific legislation in a jurisdiction.

First-to-register rule: The general priority rule is that priority is determined by the chronological order of registration, possession or control. Training should include scenarios illustrating the rule (see Box 39).

Priority of Buyers of the collateral: Under modern secured transactions laws, a registered security interest's priority in the property continues even after acquisition of the property from the debtor by a buyer. Training of creditors should include specific scenarios illustrating the operation of the rule (see Box 40).

Priority of purchase-money security interest (PMSI): The PMSI exception to the first-to-register priority rule should be included in the training on priorities. The PMSI exception is important since it permits a creditor who finances the purchase of property by the debtor to take priority with respect to the specific property financed over a prior general registered security interest in the class of goods.

Purchase money creditors include:

- Banks and other financial institutions that advance credit to borrowers for the purchase of specific items of movable property
- Financial lessors
- Sellers on credit (see Box 41)

6. **The use of the registry:** Creditors should be trained on the use and operation of the registry for both

registration of security interests and searching for information on prior security interests that identify the same debtor or, in the case of vehicles and, if the law so provides, serialnumbered equipment, that identify the same collateral. Training should be provided to representatives of as many creditors as possible in workshops for two or three representatives from each creditor institution.

Methods of creditor training on use of registry: Training workshops should make use of the most effective mixes of training methods and media that the situation permits. In addition to lecture and discussion, training should include visual media, preferably a live demonstration of all aspects of the registry system on a replication of the live system. If facilities are not available for a live demonstration in conjunction with the lecture/discussion, all of the interfaces that a user of the system will encounter must be presented visually as their functions are discussed, and copies of them provided to all participants. Optimally, all participants should be able to practice the functions on a simulated system, but that will require availability of sufficient hardware and connection to the simulated system. Finally, if resources are available, participants should be provided with a soft copy of the replicated system on a CD to take with them back to their institutions to continue practicing how to use the system and to use in training of employees who will interact with the system, e.g. loan officers and leasing agents.

The creditor training must include, as a minimum, the following topics:

- The structure of the registry web-site and how to navigate through it
- How to establish, use and maintain a user account for fee payment and access control, including addition or deletion of authorized users of the account
- The payment methods and media that may be used to make payments either on user accounts or for services by one-off users
- How to register a notice of security interest
- How to register a change to an existing registration, to include amendment, extension, termination or other change provided for by the law
- The law's requirements for identification of debtors and description of collateral in a notice of security interest

- How to search the registry archive for prior notices by different criteria, i.e. by debtor, by serial-numbered collateral or by registration number of a registered notice
- The importance of accuracy in choosing and entry

Box 39: Practical Example (First-to-Register Rule)

Jan. 1 – Alfa Bank signs a contract with Irina and takes possession of Irina's BMW

Feb. 2 – Beta Bank registers a notice describing Irina's BMW as a collateral and then signs the contract

Feb. 2 – Alfa Bank registers a notice describing Irina's BMW as collateral.

Question: Who has priority, Alfa Bank or Beta Bank?

Trainees will have to read the priority provisions in the legislation and determine who has priority. Of course the answer will depend on whether the date of registration, date of possession or date of signing the contract determines priority.

Box 40: Practical Example (Priority of Buyers)

Alfa Bank provides credit to Jim. This credit is secured with Jim's computer. Alfa Bank registers notice of a security interest against Jim's computer. Jim then sells the computer to Anne who does not know about the existence of the earlier registration.

Training shall highlight the importance of the provision which gives priority to Alfa Bank over Anne even though Anne paid Jim the full price for the computer. This provision should be contradicted with traditional priorities of good faith buyers where in the situation described above Ann would have priority.

of the search criterion, and the search logic used by the system for each type of criterion

- The different outputs of the system and their use in documentation of a loan or lease file of the creditor; outputs include the confirmation of registration and the search report generated by the search process

7. **Enforcement:** Creditors should be trained on the enforcement mechanisms provided in the law. This is particularly important to overcome creditors' reluctance to rely on movables as security because of their distrust of traditional ineffective enforcement mechanisms under which seizure and disposition of collateral can be excessively time-consuming and costly. A training program that introduces modern enforcement approaches as part of the secured transactions reform may address these concerns.

Training of creditors on enforcement should include the following topics:

- Seizure of the property, to include both (a) the legal requisites for self-help possession by the creditor and (b) the process and the elements of proof for an expedited judicial proceeding for possession
- Disposition of the property, to include (a) maintenance and preparation of the property for

disposition; (b) notices required to the debtor, other creditors, and holders of other interests in the property and exceptions to the requirement for certain types of property; (c) permissible methods of disposition under the law; (d) standard of care required of creditor in selecting the disposition method; (e) the potential role of enforcement agencies in disposition; and (f) legal requisites for retention of the property by the creditor in lieu of disposition if the law permits the option

- Distribution of the proceeds of disposition, to include (a) legal prerequisites to distribution, i.e. final resolution of the creditor's right by consent of the debtor or a judgment; (b) any notice required by the law; (c) the sequence for distribution, including expenses, creditors according to priority, other claims, and the debtor; and (d) any procedural requirements of the law

8. Lending practices using movable property as collateral:

In jurisdictions where pre-reform laws have not supported the use of movables as security, financial institutions have had no occasion to develop the knowledge and skills that are required to successfully lend secured by movable assets. Those skills extend well beyond mere knowledge of the secured transactions law and use of the registry. They include, among others, due diligence examination of applications for credit, to include credit worthiness, cash flow, balance sheets, business plan and the competitive market in which the borrower operates. Further, financial institutions that have not relied on movable security are usually not organized to support it. For example, they likely will not have a department to monitor collateral, i.e. to physically check the existence and condition of assets that are proposed as collateral, and to periodically visit the site where the collateral is kept to ensure it is still present and is being maintained during the course of the agreement. Consequently, training should extend beyond just the secured transactions law and registry, and include training of financial institutions comprehensively on the skills and organization required to support secured lending on movables generally. Training programs have been developed to provide this type of training in several regions, most notably in the Mekong countries.

Box 41: Practical Example (Priority of PMSI)

Jan. 1 – Alfa Bank advances 5,000 Euro to Anila to renovate her home.

Feb. 3 – Alfa Bank registers a notice describing the collateral securing the 5,000 Euro as Anila's "all present and future personal property."

Mar. 3 – Beta Bank advances to Anila 20,000 Euro she used to purchase a new vehicle.

Apr. 4 – Beta Bank registers a notice describing the vehicle as the collateral securing the 20,000 Euro.

Training will focus on the operation of the PMSI to establish Beta's priority over the prior security interest of Alfa that would have priority under the general rule.

3.3. Training of Registry Staff

General considerations: Modern electronic secured transactions registries require relatively little intervention by registry staff, with correspondingly limited training required. The extent and types of staff processes and related training depend on a number of factors, including:

- Whether geographical or political considerations require that there be a paper registration option in addition to pure electronic registration by users
- If a paper option is required, whether distributed intake points are required and, if so, what technological means exist for communicating registration information to the registry office and database
- The extent of outsourcing all or part of the registry functions to private sector entities
- Whether the organization in which the registry is located has its own IT assets and support, and whether the capacity of the technology is sufficient to meet the needs for a secured transactions registry, e.g. 24/7 operation with near 100 percent up time
- Whether the payment receipt process requires staff intervention, as in the case of cash payments at the registry office
- The level of sophistication and existing understanding of registry processes of the staff who will provide user support

The methodologies used for training of registry staff will vary according to the type of staff to be trained. For all types of staff, study tours to jurisdictions that already have implemented similar registry institutions successfully may be a starting point for the training program. However, to the extent possible, training should take place within the jurisdiction where the registry institution will be located. Registry staff may also benefit from taking active role in the creation of the registry guides on policies and procedures.

Training Topics:

1. **General management:** A well-designed e-registry will have relatively modest needs for human resources. There should be at least one person available to users of the registry during regular business hours. This person may be the manager of the registry.

The manager should be trained on the policies and procedures of the registry, to include the registration provisions of the law, the implementing decree or regulation, and access policy. Depending on (a) the degree and type of outsourcing of registry functions, (b) whether paper may be used to register, (c) whether there are distributed intake points, and (d) what forms of payment are permitted, additional staff may be necessary. If management of the IT system is not outsourced to the private sector or a central government facility, there may be a need for at least one IT professional to manage the system. However, the IT staff probably will not require specific training on the subject matter of registration, since its functions are common to any IT operation, e.g. running backups, monitoring and maintaining servers, tuning the system, responding to problems with connectivity, etc. If additional staff are required to process paper, manage distributed intake points, or process cash payments, those staff must be trained on the functions assigned to them. For example, if there are distributed intake points that receive paper notices, the staff in the intake points may be trained on how to receive the notice, how to transmit it and related payment and identification information to the registry, and how to receive the confirmation of registration and return it to the registrant; such staff would not have to be trained on all aspects of registration (see Box 42).

Box 42: Examples of Registry Management Tasks

- Recruiting of registry staff
- Producing and publishing the registry guide
- Producing registry certificates (for jurisdictions with no e-signature law)
- Managing of registry Web site
- Publicizing the fee schedule and other information on the registry Web site
- Reporting to body in charge of the registry on financial, performance and statistics
- Planning registry annual budgetary and logistical needs

2. **Familiarity with the registry IT system:** Whether or not the IT function is outsourced, the registry manager must be trained on how to use the IT system and how to communicate requirements and problems to the IT staff. Staff training should include simulations of registrations, searches, and of other functions of the system, particularly if the registry must accommodate the use of paper from which the registry staff must enter data. The registry staff should understand not only the management of the registry system, but also the client side of the application (see Box 43). Sustainability of the registry operation requires that replacement registry staff be trained in the future. It is therefore

recommended that an operational guide for the use of the registry IT system be developed in conjunction with the training of the registry staff.

3. **Customer services on technical issues:** Training of registry staff should include customer service or help-desk functions. Depending on the form of the registry, requests for assistance may be received in person, by phone or on-line. Most of the knowledge required to provide technical assistance will be learned in training on the system. Additionally, staff should be trained not to provide legal advice in the course of responding to requests for assistance. Finally, staff should be trained on how to manage the Frequently Asked Questions (FAQ) on the web-site and to include new questions that might recur (see Box 44).

Box 43: Typical Training Topics on Secured Transactions Registry Systems

- Managing user accounts
- Entering registrations
- Performing searches
- Running reports and queries
- Maintaining user-maintainable values such as fees and default values in drop-downs
- Adding, maintaining and deleting user groups
- Managing of registry Web site

Box 44: Examples of User Issues Requiring Technical Assistance

- Loss of passwords to use the registry system
- User's rights are locked for excess failed log-in attempts
- Registry web site does not work
- Administrative matters such as hours of operation and means of access
- Fee questions
- How to open a user account
- How to terminate a registration
- How to make a payment on a user account

3.4. Training of Judges

General considerations: The training of judges has a long-term rather than immediate impact and therefore can be offered in the second phase of a training program. The role of the judiciary under modern secured transactions laws is primarily limited to three types of issues, and all generally arise in the context of enforcement actions. Judges should be trained on each of those types of issues as follow.

Training topics:

1. **Issues arising between the parties under the security agreement:** Judges should be trained on the content and form of a security agreement. This training should include reference to the specific provisions in the legislation that govern the security agreement, to include which transactions fall within the scope of the legislation and the requisites for enforceability of an agreement.
2. **Resolution of priority disputes:** Judges need to be familiar with the priority rules in the law, specifically the general rule and its exceptions. Training should include discussion of the policies underlying each priority rule or exception. Part of this training will include use of registry reports such as confirmation of registration and search results to determine priority among competing claims. When the priority rules

of the secured financing law apply also during bankruptcy proceedings, training can be offered to trustees in bankruptcy or receivers.

3. **Enforcement orders:** While modern secured transactions laws provide for self-help enforcement as the first option in taking possession of collateral in an enforcement proceeding, it is important to prepare the judiciary to adjudicate cases where judicial intervention is required to take possession of the collateral from the debtor. Training should include (a) time limits within which actions must be taken; (b) the limitation of issues that may be considered in the decision to order seizure; (c) factors that may support immediate post-seizure disposition, e.g. goods that may spoil or otherwise decline in value; and (d) options for protection of debtor rights, e.g. ordering proceeds of disposition held in escrow pending final decision on the merits, or ordering that seized goods not be disposed of until final decision on the merits if they are unique and irreplaceable.

3.5. Training Costs

The effort and related costs for the design, preparation and implementation of training depend on the characteristics of each jurisdiction, e.g. geographical distribution of population centers, level of sophistication of bankers, technology options, etc. However, experience shows that with the use of modern technology, the costs are not as significant as their potential benefit (see Box 45).

Costs can be minimized and benefits maximized by relying on techniques such as training of trainers or self training using the registry web site with training modules provided on-line. Training of trainers involves the initial training of persons who can subsequently be qualified to provide training to their colleagues. This method not only reduces costs, but also promotes sustainability as trainees become trainers, and the registry itself can replace the international donor with the long term on line support.

Box 45: Cost-Effective Training Mechanisms in Bosnia and Herzegovina

In 2005, several months before the Bosnia and Herzegovina pledge law and registry came into effect, there was a strong need to provide training to some 50 financial institutions. With the main offices and branches, the number of people who needed to be trained was approximately 1,500. The implementing project of USAID launched training seminars where only two representatives from each financial institution were invited for the initial training. Following the initial training, the USAID project was available to answer questions on-line and provided on-line support to all 50 financial institutions for six months. The result was that, by the time the legislation came into effect and the registry became operational, all financial institutions reported they were ready. The resources for this activity were held to a minimum, with only one initial training seminar, followed by on-line support during the transition period. Following the transition period, the registry staff that was trained as trainers took over the long-term, on-line support and continue to provide this service.

Chapter 5: Monitoring and Evaluation

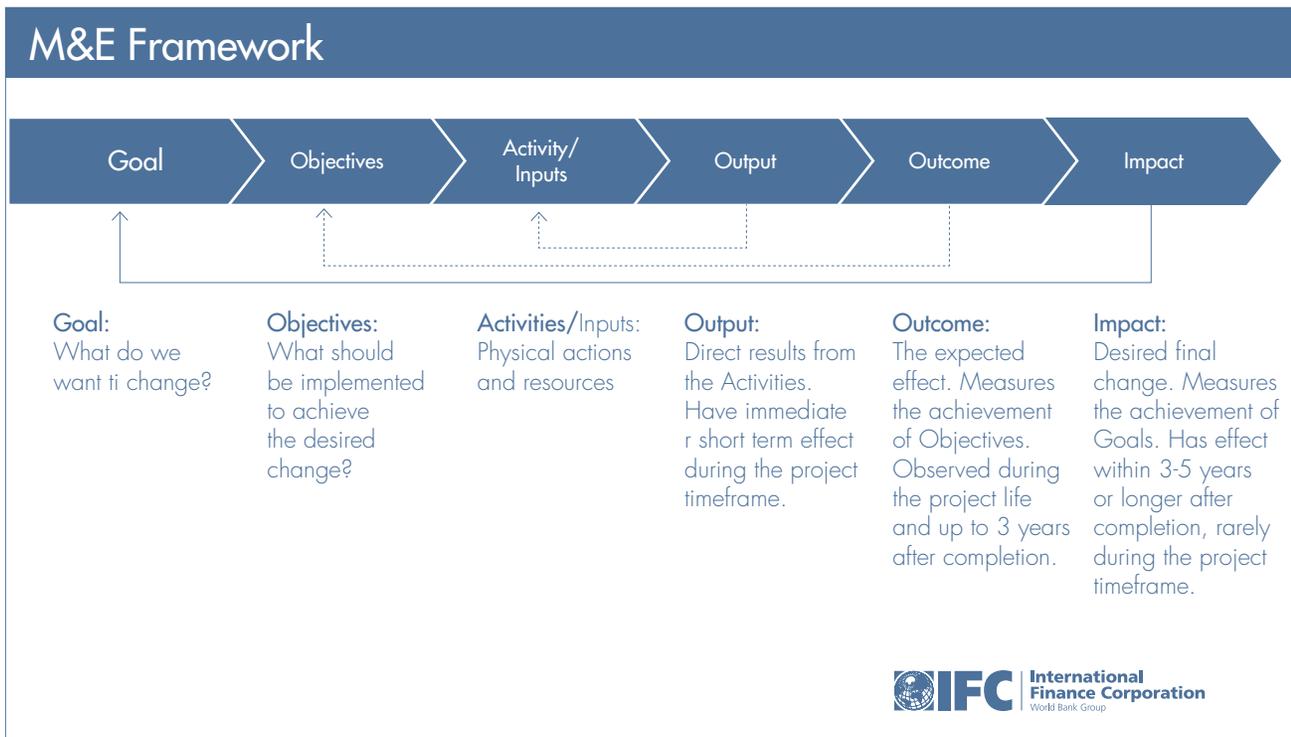
A. What to Measure?

It is essential for the success of any secured transactions and collateral registries reform program to set performance targets and to measure them. The project task manager will need to make sure that performance is measured from the very inception of the project to make sure that performance targets are met after the implementation. The monitoring of the project and the performance will serve as a reporting tool to the implementing institution, donors, the government, and main stakeholders that will give recognition to the work and to the reform. Monitoring the project impact is certainly one of the most important components of the project.

The IFC has developed a monitoring and evaluation methodology that is somewhat standard for all advisory services projects.⁶² There are obviously differences in the indicators that are used for each type of project depending on the product, but the methodology to collect results is standard. Indicators are derived from program logic models. These models describe the sequences of cause and effect relationships that link IFC program activities to intended impacts. Each model has five basic components as illustrated in Figure 6.

Inputs refer to the resources used in program activities. *Activities* are the actions taken or work performed in particular projects using specified inputs. IFC technical assistance projects include activities such as assessments, advisory services, training, and public awareness campaigns. These activities are intended to result in *outputs* such as reports, advice, training events, and media coverage. In turn, these outputs are expected to

Figure 6: Basic Program Logic Model



Source: International Finance Corporation

62. See "Guide to Core Output and Outcome Indicators for IFC Technical Assistance Programs", January 2006.

yield certain *outcomes* in terms of changes in knowledge, behavior, and performance among beneficiaries in the target population. Finally, it is anticipated that programs will generate development *impacts* including higher productivity, greater income, and economic growth.

B. Tracking Impact through Indicators⁶³

The project manager and the team need to determine during the design phase of the project which indicators they want to measure to achieve the intended results. There are many outcomes and impacts that can be measured in a project like this. Therefore, the project manager will have to choose those indicators that are most appropriate for the project, depending on the objectives and expectations of donors and stakeholders.

The project team will need to track indicators for the different elements of the log frame illustrated in section 5.A. Section 5.B provides some guidance on what type of indicators could be used for each of the elements of the log frame: outputs, outcomes, and impact. However, this list is not comprehensive of all the indicators that exist for measuring the impact of a secured transactions and collateral registries project. The project team might consider that some of these indicators are not appropriate and could instead replace them with others.

1. Output Indicators for Secured Transactions and Collateral Registries

Output indicators aim to measure the magnitude of the activities produced directly by IFC and/or third parties under contract to IFC in advisory services projects. Table

Table 14: Output Indicators for Secured Transactions and Collateral Registries Projects

Expected Project Component/Activity	Output Indicator	Measuring Tool (Data Source)
1. Review of Legal and Institutional Framework for Secured Transactions	<ul style="list-style-type: none"> • Number of entities receiving advisory services [TARGET] • Number of entities receiving in depth advisory services [TARGET] • Number of new laws/regulations/amendments drafted or contributed to drafting [TARGET] 	Baseline Survey
2. Creation of Secured Transactions Infrastructure: Movable Collateral Registry	<ul style="list-style-type: none"> • Number of procedures, policies, practices proposed for improvement or elimination [TARGET] • Number of workshops, training, events, seminars, conferences, etc. [TARGET] • Number of participants in consultative workshops, training events, seminars, conferences [TARGET] 	Doing Business Report (Legal Rights Index)
3. Enabling Stakeholders to Use New Secured Transaction Systems Efficiently	<ul style="list-style-type: none"> • Number of women participants in consultative workshops, training events, seminars, conferences [TARGET] • Number of participants providing feedback on satisfaction [TARGET] • Number of participants reporting satisfied or very satisfied with workshops, training, seminars, conferences, etc. [TARGET] • Number of reports (assessments, surveys, manuals) completed [TARGET] 	ICR ROSC Registry Survey Program records

Source: International Finance Corporation

63. Taken from the "Guide to Core Output and Outcome Indicators for IFC Technical Assistance Programs", January 2006 with adaptations for secured transactions programs.

14 provides indicators that can be used for activities that are considered as outputs.

2. Outcome Indicators for Secured Transactions and Collateral Registries Projects

Outcome indicators for a secured transactions and collateral registries project aim to measure the changes that occurred

in the processes, and changes in knowledge and behavior due to the outputs. Table 15 provides guidance on the type of indicators that can be used to track the outcomes of such projects.

An example of how some of the outcome indicators are measured in practice is provided in Box 46 below with regard to IFC reform project in Vietnam.

Table 15: Outcome Indicators for Secured Transactions and Collateral Registries Projects

Expected Project Component/Activity	Outcome Indicators	Measuring Tool (Data Source)
1. Review of Legal and Institutional Framework for Secured Transactions	<p>Enactment of new/revised secured lending legislation</p> <ul style="list-style-type: none"> Number of recommended laws/regulations/amendments/codes enacted [BASELINE] [TARGET] Number of entities that implemented recommended changes [BASELINE] [TARGET] Score of Legal Rights Index [BASELINE] [TARGET] <p>Creation at the legal/regulatory level of new/re-reorganized registry</p> <ul style="list-style-type: none"> Number of entities that implemented recommended changes [BASELINE] [TARGET] Number of recommended laws/regulations/amendments/codes enacted [BASELINE] [TARGET] <p>Other/Non-Standard</p> <ul style="list-style-type: none"> Number of registries that are unified for all types of security interests in all types of movable property [BASELINE] [TARGET] 	<p>Baseline Survey</p> <p><i>Doing Business</i> Report (Legal Rights Index)</p> <p>ICR ROSC</p>
2. Creation of Secured Transactions Infrastructure: Movable Collateral Registry	<p>Implementation of enacted new/revised legislation</p> <ul style="list-style-type: none"> Number of recommended laws/regulations/amendments codes enacted [BASELINE] [TARGET] 	

Table 15: Outcome Indicators for Secured Transactions and Collateral Registries Projects (continued)

Expected Project Component/Activity	Outcome Indicators	Measuring Tool (Data Source)
2. Creation of Secured Transactions Infrastructure: Movable Collateral Registry (continued)	<p>Implementation of enacted new/revised legislation</p> <ul style="list-style-type: none"> • Number of recommended laws/regulations/amendments codes enacted [BASELINE] [TARGET] <p>New /reorganized registry becomes operational</p> <ul style="list-style-type: none"> • Number of entities that implemented recommended changes [BASELINE] [TARGET] • Number of new entities created [TARGET] • Score of Legal Rights Index [BASELINE] [TARGET] • Number of new registrations [BASELINE] [TARGET] • Number of searches made [BASELINE] [TARGET] <p>Other/Non-Standard</p> <ul style="list-style-type: none"> • Number of business completing a new reform procedure⁶⁴ [BASELINE] [TARGET] • Number of entities that implemented recommended changes⁶⁵ [BASELINE] [TARGET] • Number of registries that are unified for all types of security interests in all types of movable property [BASELINE] [TARGET] • Number of registries that are open to all public and are accessible on-line [BASELINE] [TARGET] 	<p>Registry Data</p> <p>Program records</p> <p>Training Participant</p> <p>Survey</p> <p>Data on Lending Volumes from Creditors</p> <p>Data from Central Bank</p>
3. Enabling Stakeholders to Use New Secured Transaction Systems Efficiently	<ul style="list-style-type: none"> • Number of New Business Models or New Financial Services Implemented [BASELINE] [TARGET] 	

64. "Businesses" in this context will mean banks, financial institutions and non-bank financial institutions.

65 "Entities" in this context refers to registries.

Table 15: Outcome Indicators for Secured Transactions and Collateral Registries Projects (continued)

Expected Project Component/Activity	Outcome Indicators	Measuring Tool (Data Source)
3. Enabling Stakeholders to Use New Secured Transaction Systems Efficiently (continued)	<p>Outstanding Loans</p> <ul style="list-style-type: none"> • Number of all outstanding loans [BASELINE] [TARGET] • Value of all outstanding loans (US\$) [BASELINE] [TARGET] <p>Loans Disbursed</p> <ul style="list-style-type: none"> • Number of all loans disbursed secured by movable collateral [BASELINE] [TARGET] • Value of all loans disbursed secured by movable collateral (US\$) [BASELINE] [TARGET] <p>Other</p> <ul style="list-style-type: none"> • Number of entities that implemented recommended changes [BASELINE] [TARGET] • Increase in percentage of loans guaranteed by movable collateral [BASELINE] [TARGET] • Increase in diversification of lending portfolio [BASELINE] [TARGET] 	

Source: International Finance Corporation

3. Impact Indicators for Secured Transactions and Collateral Registries Projects

Finally, the project team will have to measure the impact, which is the desired final change and is normally associated with the development impact, which includes higher productivity, greater income and economic growth. For any project related to improving access to finance, including secured transactions and collateral registries projects, the correlation between the project outputs and outcomes and the project impact (economic growth,

higher productivity, increased employment, etc) is not easy to demonstrate. Therefore, while the project should aim at achieving development impact, the main objective should be to improve access to credit by establishing a new secured transactions legal framework and a collateral registry. The indicator that better reflects this objective is provided in Table 16.

Box 47 provides information about some of the results measured by IFC Advisory Services in its secured transactions project in China. The results were measured using the above methodology with some specific adjustments.

Box 46: Secured Transactions Reform in Vietnam : On the Right Path to a Modern Secured Financing System

In 2006, IFC conducted a diagnostic of the secured transactions system in Vietnam and provided a report with recommendations to the Ministry of Justice on how to modernize the system. As of 2009, the Ministry of Justice has implemented, with the support of IFC, a number of these recommendations (including the passing of a new Secured Transactions Decree) and is currently working on the creation of a new electronic web-based movable collateral registry. The reforms introduced have already produced a substantial positive effect in the financial sector in Vietnam through:

- Improvement of the secured transactions legal framework with the promulgation of the Secured Transactions Decree (published in the official gazette in January 2007), which enhances creditors and debtors rights by increasing the scope of assets that can be used as collateral, making registration of security interest easier, protecting secured creditors, and by establishing a clear priority scheme in case of default and facilitating enforcement mechanisms.
- An increase in the number of registrations in the National Registry of Secured Transactions (NRAST), from 43,000 in 2005 (when the project started) to 120,000 by the end of 2008, which confirms that financing against movables has certainly increased after the reform. NRAST has also confirmed that 3,200 searches on existing security interests were done in 2008.
- Improved access to credit for businesses as reported by the *Doing Business 2008* report, in which the Legal Rights Index indicator that measures the strength of secured financing systems was increased from 4 to 7.
- Vietnamese stakeholders (including public sector and private sector/financial sector representatives) have increased their awareness about the new secured transactions system. The program has facilitated training through workshops to more than 200 practitioners and different stakeholders.

Table 16: Impact Indicators for Secured Transactions and Collateral Registries Projects

Expected Project Component/Activity	Impact Indicator	Measuring Tool (Data Source)
1. Review of Legal and Institutional Framework for Secured Transactions	Increased Financing <ul style="list-style-type: none"> • Value of financing facilitated by advisory services (US\$) [BASELINE] [TARGET] • Value of financing to SMEs [BASELINE] [TARGET] • Number of SMEs benefiting from new financing mechanisms [BASELINE] [TARGET] 	Baseline Survey
2. Creation of Secured Transactions Infrastructure: Movable Collateral Registry		<i>Doing Business</i> Report (Legal Rights Index)
3. Enabling Stakeholders to Use New Secured Transaction Systems Efficiently		Registry Data Program records Data on Lending Volumes from Creditors Data from Central Bank

Source: International Finance Corporation

Box 47: Impact of Secured Transactions Reform in China

Since 2004, China has embarked upon a reform of its movable collateral framework with support from the BEE and A2F Business Lines of IFC. The goal of reform was to encourage financing against valuable movable assets such as inventory and receivables. This was particularly important for China's large number of SMEs, whose assets are mostly in the form of inventory and receivables and who reported access to credit as their most significant business constraint.

Secured Transactions legal framework: Until 2007, secured financing in China was governed by the Security Law, which allowed giving security interests in very few types of movable assets. In 2005, the People's Bank of China (PBOC), in collaboration with the IFC team developed detailed recommendations for reforming the legal system, including the adoption of modern secured financing law in the Property Law, China's first comprehensive law on ownership. The involvement, from an early stage, of the National People's Congress (NPC) Legislative Affairs Commission – for which a study tour of movable collateral registries in the USA and Canada was arranged – proved crucial in garnering support from this key stakeholder.

As a result, in March 2007, the NPC passed the historic Property Law, which adopted a number of important principles of modern secured transactions laws. The chapter significantly improves the legal framework for asset-based finance in the country and is expected to put in circulation over US\$2 trillion of movable assets. Major improvements under the law include:

- Expanding the scope of movable collateral by adopting a single unitary security interest which applies to movable property of all kind, tangible and intangible, present and future, eliminating the positive list of assets that can be used and allowing all types of movables as collateral.
- Simplifying the formalities required for creating security interests and improving the publicity of the system by: allowing notice registration, eliminating the need to register the security agreement; allowing any person, natural or legal, to give a security interest; creating an electronic registry of security interests allowing public on-line access to information on security interests.
- A more transparent priority scheme for secured and unsecured creditors, by incorporating specific rules about priority by date of registration, rules on proceeds, buyers of collateral, special priority rules or super-priorities, etc.

Registry for pledges of receivables: With IFC's support, in October 2007 the PBOC Credit Reference Center (CRC) created a national on-line registry for pledges of receivables and inventory, the first of this kind for China. The new receivables registry is easy to use and efficient, incorporating all the key features of a modern movable collateral registry. In conjunction with the launch of the registry, the PBOC also issued receivables registry rules which have adopted modern collateral registry principles. As of June 2009, the Credit Reference Center has reported an impressive impact:

- Over 75,000 registrations of security interest in receivables, representing loans with a value estimated at over US\$570 billion.
- Of the US\$570 billion in financing, US\$240 billion or 40% of the total corresponds to SME financing.
- More than 100,000 searches on existing pledgers over receivables have been performed in the registry.
- The number of SMEs that are registered as secured debtors in the AR registry is around 40,000.
- The percentage of movable-based lending in China went from 12 percent, pre-reform and prior to the creation of the receivables registry, to 20 percent after the creation of it.
- The use of receivables as collateral has led to the development of a factoring industry in the country. The value of domestic factoring has reached a volume of US\$ 21 billion.
- Around 3,000 people have participated in workshops, trainings and awareness raising events.

- Among the registry's 5,000 users are banks, guarantee companies, law firms, finance companies and pawn shops. The user experience with the registration system has been overwhelmingly positive.

Remaining challenges: These efforts to expand the scope of permissible movable collateral under the Property Law and to improve the movable security registry have opened the door for the development of a modern secured financing system in China. However, a few challenges remain:

- (i) The Property Law remains vague in a few areas, notably rules regarding registration, given the parallel system of registries that exist. The Property Law fails to consolidate more than 15 movable collateral registries into a single nationwide system. The IFC project only focused on creating an electronic registry for security interests in receivables, but could not focus, due to lack of political support, on centralizing all types of security interests on movable assets into one single electronic registry, by unifying the 15 registries for machinery, equipment and inventory. The result of this is that, at the moment, receivables are registered in PBOC's new electronic registry created with the support of IFC, but the rest of security interests on movable assets (machinery, equipment and inventory) are registered in 15 decentralized registries, including the Administration of Industry and Commerce (AIC). The issue with this is that not all the information on pledges of assets is contained in a single depository, where financial institutions can search for existing pledges. In addition to this, the 15 decentralized registries are not accessible online and, therefore, the search for existing pledges in real time is not possible, creating additional risks to financial institutions when lending accepting movable assets as collateral. In the second phase of this project IFC will focus on working with the State Council (responsible for the 15 decentralized registries) in trying to merge all the registries into one and make the information available online to users.
- (ii) The enforcement process remains court-oriented, while private enforcement or out of court enforcement is not permitted. The critical issue of how to improve the judicial enforcement process is still left primarily to the judicial system to address.

Source: FIAS, International Finance Corporation

C. When to Measure?

There are three specific times when a measurement of performance indicators should be made throughout the secured transactions reform project. The first stage is at the diagnosis phase when the assessment of secured transactions systems is being made. The second measurement exercise should occur when results can or should be expected (e.g. months) during the implementation of the project and after the project has been completed. This measurement is intended to determine whether the reform introduced has actually resulted in improvements. The third measurement period takes place in the immediate years after the project was completed and the measurement is usually done by the owner of the reform or client.

During the diagnosis or design phase, the project team will need to ensure that performance is measured from the very inception of the initiative to guarantee that performance targets are met. Without accurately recording data, the project team will not be able to determine whether the introduction of a new secured transactions regime has met its goals. To determine whether a reform process has been successful, it is necessary to conduct an evaluation, essentially taking "before" and "after" snapshots of performance. To do this, the diagnostic phase should include a benchmarking exercise to capture performance indicators prior to the process design. Normally, the reform team should undertake baseline surveys (see Annex 1) in the design phase to obtain statistics regarding the indicators provided in the previous tables. These baseline indicators will be used then to compare results after the reform process.

D. How to Measure? Monitoring Tools and Data Collection⁶⁶

Successful measurement depends on the quality of data collected through program records, surveys, and secondary sources. Data should be collected in a consistent manner using agreed definitions and procedures, and stored in appropriate computer databases to facilitate data access, analysis and reporting.

Table 17 lists the sources of data needed to calculate core indicators and the recommended frequency of data collection efforts. Program records detailing the nature and magnitude of activities undertaken by IFC and associated outputs should be continuously updated. Surveys used to

assess client satisfaction and learning outcomes should be conducted upon project completion as needed. Other surveys should be undertaken before programs are initiated to establish needed baselines and repeated annually (as budget allows) in order to monitor changes. Data should also be collected from secondary sources on an annual basis.

Program records: The project teams should maintain complete and accurate records. This should include data on the characteristics of organizations receiving advisory services from IFC or third parties under contract to the IFC, including intermediaries and private enterprises. It should also include data on particular projects, including the type of activity (assessment, advisory services, training and information dissemination), participants, service providers, date of initiation and completion, and budget expenditures.

Table 17: Monitoring Tools and Frequency of Data Collection

Data Sources	Timing and Frequency of Data Collection
Program Records	Ongoing, during the whole project cycle
Surveys	
Baseline Survey (Needs Assessment)	Diagnostic phase, one time
Client satisfaction	Upon project completion, one time
Training participants	Upon completion of training during whole project cycle
Creditors	Diagnostic phase and annually thereafter
Registry	Diagnostic phase and every 6 months thereafter
Borrowers	Diagnostic phase and annually thereafter
Secondary Sources	
World Bank, <i>Doing Business Data</i>	Diagnostic phase and annually thereafter
World Bank other: ICR ROSC, FSAPs, enterprise surveys	Diagnostic phase
Government Ministries, Central Banks, Courts	Diagnostic phase and annually thereafter
Other Reports	Diagnostic baseline and annually thereafter

Source: International Finance Corporation

66. See "Guide to Core Output and Outcome Indicators for IFC Technical Assistance Programs", January 2006.

1. **Surveys:** As noted, the project teams will need to conduct a variety of surveys to collect requisite data. To ensure the quality of data, the following procedures are recommended:
 - *Questionnaires:* Project managers should use instruments that contain questions needed to obtain data required for relevant indicators. Questions should be worded in the same manner with any translations checked to ensure that meanings have not been altered inadvertently. The standard survey instruments provided in this Toolkit could be used.
 - *Sampling:* The goal is to have a sample that is representative of the population and therefore can be used to make valid generalizations. Unless a census is appropriate, project managers should survey a random sample of organizations drawn from the appropriate set of program participants or the target population as a whole. A random sample is where each entity in the sample frame has a known and independent probability of being selected for the sample. The size of the sample should be large enough to provide sufficient statistical power. Although there are no formal standards for statistical power, project teams should aim to draw a sample that would provide a power of 0.8 or greater.
 - *Administration:* Given the nature of the information sought, most surveys should be administered in person (as opposed to mail or telephone) with a strict promise to protect the confidentiality of the respondents and their responses. Field personnel should be trained to conduct the surveys. All surveys should seek to achieve a high response rate (at least 60 percent) to reduce potential response bias. To help ensure a high response rate, the project team should obtain the commitment of participants to respond to surveys as a condition of program participation.
- *Data entry:* The team should establish specific procedures for dealing with completed surveys. This includes tracking responses so that individuals failing to respond initially can be contacted and encouraged to complete the questionnaire. The quality of data entry should be verified by checking all or a sample of questionnaires for accuracy and by carefully examining data for responses that are not consistent. All questionable entries should be checked for problems and verified. Original copies of written questionnaires should be kept on file.
- *Survey schedule:* March is generally a good time to administer surveys to businesses because it allows sufficient time for companies and institutions to close their books after the end of the fiscal year and have fresh data for the last fiscal year. (Most fiscal years end December 31.)
2. **Secondary sources:** Data required to calculate certain indicators will need to be obtained from secondary sources such as government institutions, courts, and surveys conducted by multilateral organizations (WBG, IMF) and other donor organizations. The project team will need to work with these organizations to ensure that data are accurate and provided in a consistent manner.

Annex 1: Diagnostic Survey – Baseline Data

Project Needs and Impact Questionnaire

The purpose of this questionnaire is to collect baseline data at the beginning of each project and to get a holistic view of the shortcomings in the secured lending framework. It is especially critical to collect data about the volume and characteristics of asset-based financing from financial institutions (section A), as they will determine the success of the project after completion. The same questionnaire will be used two years after the completion of the project to assess and measure the project impact.

A. CREDIT MARKETS

A.I. Volume of Credit

Item no.	Item	US\$ ^a or Percent
1	Volume of <i>consumer</i> loans secured by movable property (US\$)	
	Of which, volume of loans to male borrowers (US\$)	
	Of which, volume of loans to female borrowers (US\$)	
2	Volume of <i>corporate</i> loans secured by movable property (US\$)	
	Of which, volume of loans to SMEs (US\$)	
	Of which, volume of loans to large firms (US\$)	
3	Percent of all loans secured only by <i>movables</i> (by loan values)	
4	Percent of all loans secured only by <i>immovables</i> (by loan values)	
5	Percent of all loans secured by a combination of movables, immovables and/or any personal or third party guarantees (by loan values)	
6	Unsecured loans as percent of total loan value	

a. Dollars in millions

A.II. Cost of Credit

Item no.	Item	Percent
1	Average effective lending interest rate for loans secured by movables	
2	Average effective lending interest rate for loans secured by immovables	
3	Average effective lending interest rate for unsecured loans	
4	Spread between loans secured by real estate and loans secured by movables	

67. For example, two years and three months would be 3/2.

A.III. Default Rates by Type of Borrower

Item no.	Default Rates by Loan Volume for	Percent
1	Average delinquency rate for loans secured by movable collateral	
2	Average delinquency rate for loans secured by immovable collateral	
3	Average delinquency rate for unsecured loans	
	Default rates by Loan Volume for:	
4	Large borrowers	
5	Small borrowers	
6	State-owned companies	
7	Private companies	

A.IV. Credit Recovery and Credit Risk Management

Item no.	Credit Recovery Mechanisms	Yes/No
1	Does your institution have a credit recovery department that handles collection of credits secured by movables upon default of the debtor?	
2	At what point is a credit transferred to the credit recovery department for action?	
3	Do the same credit policies apply to defaulted loans secured by movables and immovables?	

A.V. Defaulted Loans: Enforcement and Credit Recovery Process

Item no.	Procedure Commonly Followed to Enforce Secured Claims (percent of total enforcement cases)	Percent
1	Debt rescheduling	
2	Outside courts (e.g., informal workout arrangement between debtor and creditor/s, Alternative Dispute Resolution mechanisms, sale of credit to 3 rd party)	
3	Through the courts but outside insolvency proceedings	
4	Through insolvency proceedings	
5	Conversion of debt to equity	
6	Other (please specify)	
	Time required to secure a default judgment (court judgment)	Months/years⁶⁷
7	on loans secured by movable collateral	
	Cost of enforcement	As percent of loan value
8	Usual cost to enforce secured claim including costs of litigation, lawyers, valuation reports, auctions, etc.	
	Recovery rate	Percent of total loan value
9	Average recovery rate as a percent of the total credit due, including interests, for credits secured by movable collateral	

10	Average recovery rate as a percent of the total credit due, including interests, for credits secured by immovable collateral	
	Modes of disposition of the reposed collateral	Percent
11	By public auction	
12	By judicial auction	
13	By private sale	
14	Assets retained by the institution	
15	Other (please specify)	

B. LEGAL FRAMEWORK

B.I. Types of Movable Collateral

Item no.	Type of Asset	Financial Institution Please indicate (yes/no) which of the following the financial institution accepts as collateral	Legal Review Please indicate (yes/no) whether the legal framework has any restrictions on the acceptance of these as collateral
A	Tangible movables accepted as collateral		
1	Machinery and equipment		
2	-industrial and non-agro machinery		
3	-agro-machinery and equipment		
4	Motor vehicles		
5	Agricultural products		
6	-crops and other agricultural yields		
7	-livestock, fish farm, etc.		
8	Consumer goods		
9	-personal computers		
10	-furniture		
B	Intangible movable property		
1	Investment property (stocks and securities, options and futures, derivative products, etc.)		
2	Intellectual property (e.g., patent rights, trademarks)		
3	Insurance policies		
4	A single accounts receivable		
5	Multiple accounts receivable		
6	Inventory, i.e., goods for sale		
7	Membership and partnership interests in business entities and cooperative shares		
8	Futures (e.g., crop futures, future acquisitions of collateral described in the agreement, and unborn livestock)		
9	Other: specify		
10	Other: specify		
11	Other: specify		

B.II. Types of Obligations

What obligations are capable of being secured?

- (1) Present obligations?
- (2) Future obligations?
- (3) All the debtor's obligations?

B.III. Procedures for Creation of Security Interests

What procedures / formalities are involved in the creation of security interests

B.IV. Priority Rules

In competing claims (multiple security rights on the asset) other than statutory claims (e.g., taxes, workers' salary, etc), which secured creditor has priority?

First creditor to either register or take possession	YES	NO
First creditor to notarize	YES	NO
First creditor pursuant to the date of agreement	YES	NO
First creditor to provide finance	YES	NO
First creditor to register	YES	NO
Other		

B.V. Enforcement

1. Default rates vary by types of borrower.	True	False
2. Small borrowers have higher default rates than larger borrowers.	True	False
3. Private companies have higher default rate than state-owned companies.	True	False
4. Loans secured exclusively by immovable assets: _____ (% of loan value)		
5. Loans secured exclusively by movable assets: _____ (% of loan value)		
6. Unsecured loans: _____ (% of loan value)		
7. Loans secured exclusively by third party guarantees: _____ (% of loan value)		
8. What procedures are commonly followed to enforce secured claims?		
8.a. Outside courts (e.g. informal workout, sale of credit to 3 rd party) _____ (% of the total enforcement cases)		
8.b. Through courts but outside insolvency proceedings _____ (% of the total enforcement cases)		
8.c. Through insolvency proceedings _____ (% of the total enforcement cases)		
9. How long does it usually take to secure a default judgment on movable property collateral? _____ months		
10. How much does it usually cost to enforce secured claims? Court-related cost [_____]% of the loan value		
11. Taxes/fees incurred when collateral is sold by judicial auction. Please specify. _____		
12. Are there simplified / summary proceedings for enforcing secured claims?	Yes	No
If your answer is yes, please answer the following:		
13. How often is a simplified / summary procedure used?		
13.1. Among state-owned enterprise clients _____ % of the cases		

13.2. Among joint stock and limited liabilities enterprise clients _____ % of the cases				
13.3. Among foreign-invested enterprise clients _____ % of the cases				
13.4. Among individual borrowers _____ % of the cases				
14. Which cases are qualified to be processed through a simplified / summary procedure?				
14.1. The loan value is less than certain amount	True	False		
14.2. The ownership of the property is properly documented	True	False		
14.3. The security is properly registered	True	False		
14.4. The debtor is a sole proprietor or a household business	True	False		
14.5. Other, please specify				
15. How long does it usually take to enforce a non-complicated movable security claim through a simplified / summary procedure?			___ months.	
16. How much does it usually cost to enforce claims in a summary procedure?			___% of the loan value	
17. What is the public perception on the following items?	Completely agree	Basically agree	Basically disagree	Completely disagree
17.a. Law does not fit commercial needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.b. Law does not clearly establish priority rules among possible competing creditors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.c. Immature market for movable assets (i.e., it is difficult to resell collateral)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.d. Regulation is difficult or expensive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.e. High court enforcement cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.f. Intervention from government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.g. Long enforcement time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.h. Complex enforcement process requires creditor to first apply for a judgment and then apply to have judgment executed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.i. Cumbersome judicial sale procedures that require appraisal and multiple auctions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.j. Resources of judicial system are limited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.k. Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. REGISTRY

C.I. Basic Information on Registry Structure

1. Is there unified registration and data storage for all security interests on movable assets at the national level?	Yes	No
2. If yes, number of security claims filed in the past five years		
3. Number of inquiries (to verify security interest)		
If no, what are the means of publicizing security interests?		

C.II. Providing and Accessing Information in the Registry

1. Indicate the ways in which collateral can be registered and what percent of registrations (numbers of filings) are done by each means.	Way to register	Available	%
	In-person	Yes No	_____
	Internet	Yes No	_____
	Fax	Yes No	_____
	Total		100%
2. Indicate the ways in which a security interest can be queried and what percent of queries are done by each means.	Type of Query	Available	%
	In-person	Yes No	_____
	Internet	Yes No	_____
	Fax	Yes No	_____
	Total		100%
3. What are the restrictions on access to information in the registry? Mark all that apply.	<input type="checkbox"/> No restrictions, all information is available to the public <input type="checkbox"/> Requires having the registration number or other pertinent information on the security interest <input type="checkbox"/> Requires signature of borrower <input type="checkbox"/> Requires signature of lender <input type="checkbox"/> Requires notary or lawyer to certify request <input type="checkbox"/> Other requirement _____		

C.III. Time Required to Use Registry

How long it takes (business days or hours) in terms of statutory limits and duration in practice to:	Statutory limits	Duration in Practice
1. Register a security right for a piece of equipment, after the documents are delivered to the registry	_____	_____
2. Register a security right for an automobile, after the documents are delivered to the registry	_____	_____
3. Retrieve information from the registry to verify a security right	_____	_____

C.IV. User Fees and Cost Recovery

	To register a security interest	To inquire about a security interest
1. Is there a fee?	Yes No	Yes No
2. If there is a flat fee, please indicate amount & currency.	Flat fee (amount): _____ Currency: _____, as of _____(date)	Flat fee (amount): _____ Currency: _____, as of _____(date)
3. If the fee is a percent of collateral value, please provide percent, and typical range of fee paid.	Percent of collateral: _____% Typical fee: __ Less than US\$10 __ Between US\$10 and US \$50 __ Between US\$51 and US\$100 __ Between US\$101 and US\$250 __ More than US\$250	Percent of collateral: _____% Typical fee: __ Less than US\$10 __ Between US\$10 and US \$50 __ Between US\$51 and US\$100 __ Between US\$101 and US\$250 __ More than US\$250
4. If the fee is determined in another manner (neither flat fee nor % of collateral) describe fee basis below and give typical fee range. <u>Fee basis:</u>	Typical fee: __ Less than US\$10 __ Between US\$10 and US \$50 __ Between US\$51 and US\$100 __ Between US\$101 and US\$250 __ More than US\$250	Typical fee: __ Less than US\$10 __ Between US\$10 and US \$50 __ Between US\$51 and US\$100 __ Between US\$101 and US\$250 __ More than US\$250
5. Do fees vary by way of accessing information—i.e., by Internet, in person, by phone	Yes No If Yes indicate most, least expensive Most: _____ Least: _____	Yes No If Yes indicate most, least expensive Most: _____ Least: _____
6. Does the registry cover its cost of operations?	Yes No	
7. If the registry doesn't cover its costs, who covers the shortfall?	_____Government (Please specify what agency / ministry)_____	
	_____Affiliated organization (Please specify organization)_____	
	_____Registry is in debt	

C.V. Operations / Procedures

1. Registration requires completion of an application for registration form.	True	False
2. Registration requires notarization of one or more registration documents.	True	False
3. The registry officials review the authenticity of the information in the security agreement and principal agreement before registering a security right.	True	False
4. The registry guarantees the validity or legality of the security right or agreement registered.	True	False
5. Registration requires the signature of the debtor.	True	False

6. Registration requires the signature of the creditor.	True	False
7. Registration requires specification of the value of the obligation for which security is granted.	True	False
8. Registration requires specification of the value of the security property (or collateral).	True	False
9. Valuation of security interest by a third party is mandatory.	True	False
10. Amendment to registration requires physical presence of both parties of the contract in the registry.	True	False

C.VI. Problems with the Registry

	Yes	No
1. It requires very specific description of collateral, so precludes securing collateral that may change over time.	<input type="checkbox"/>	<input type="checkbox"/>
2. It requires documents proving the ownership or right to use of collateral, but it is not very clear what type of proof can be used.	<input type="checkbox"/>	<input type="checkbox"/>
3. It is difficult to determine the place to register.	<input type="checkbox"/>	<input type="checkbox"/>
4. Documentation requirements are excessive and burdensome.	<input type="checkbox"/>	<input type="checkbox"/>
5. Registration requires determination of the value of the collateral, making it impossible to secure interests in collateral that varies in value.	<input type="checkbox"/>	<input type="checkbox"/>
6. Registration is only issued after substantive review, which is complicated and time consuming.	<input type="checkbox"/>	<input type="checkbox"/>
7. Historical registration records are incomplete and hard to search	<input type="checkbox"/>	<input type="checkbox"/>
8. Information in the registry is not readily available to all who may need it.	<input type="checkbox"/>	<input type="checkbox"/>
9. It takes too long for a registration to be processed.	<input type="checkbox"/>	<input type="checkbox"/>
10. Fees are too high.	<input type="checkbox"/>	<input type="checkbox"/>
11. Requirements and procedures differ between offices of the registry.	<input type="checkbox"/>	<input type="checkbox"/>
12. Registration and searching cannot be done on-line but require a visit to the office of the registry.	<input type="checkbox"/>	<input type="checkbox"/>
13. There is no unified registration and data storage system.	<input type="checkbox"/>	<input type="checkbox"/>

Annex 2: Model Survey to Assess Registry Capacity

World Bank Group Survey on Secured Transactions Registries (Movable Collateral Registry, Charges Registry)

Note on Definitions

Please note that a reference to “security interest” in this survey includes any interest in movable property (referred to as “collateral”) of a debtor given to or reserved by a creditor to secure an obligation. The most common types of transactions providing for security interests are security agreement (generic), chattel mortgage, floating charge, title reservation sales agreement (conditional sales contract), pledge without dispossession agreement, hire-purchase agreement, charge agreement, and security lease.

As used herein, the term “registry” includes what is often called a “filing office” for notices of security interest. Similarly, the verbs “register” and “file” may be used interchangeably in this survey.

“Collateral” means the movable property used to secure the obligation.

I. Contact Information

1.1 Name of the registry	
1.2 Address – street	
– city	
– country	
1.3 Phone - email	
1.4 Fax	
1.5 Web site	
1.6 Official in charge of registry – name and title	
1.7 Official responsible for completing survey – name, title, phone and e-mail (to facilitate contact if needed to clarify survey responses)	

II. Basic Information on Registry Structure

II.1 Year registry founded	
II.2 Number of full-time registry employees Of which, number of full-time employees working on security interests in movable property (collateral registry, charges registry)	_____ _____
II.3 The day-to-day operations of the registry are performed by:	An office of the executive branch of the government [] Private parties [] NGOs [] Courts []
II.4. Which ministry or institution in the government has oversight responsibility for the registry?	

II.5. If the registry is not operated within a government agency, is it a for profit or not-for-profit entity?	For Profit	Not-for-Profit
II.6. If the registry is not a government agency, is it independent or owned by another institution or group, such as the Chamber of Commerce?	Independent Owned by other: _____	

III. Number of Filings in Past 10 Years and 2009 Projected Filings

Year	Total new filings / registrations	Amendments	Continuation / extensions	Searches	Terminations / discharges
2008					
2007					
2006					
2005					
2004					
2003					
2002					
2001					
2000					
1999					
1998					
1997					

Please also provide any other form of statistics that you may have collated on registry functions (e.g. annual reports, periodic statistical bulletins, periodic updates etc.).

IV. Types of Movable Collateral in the Registry

Please indicate which of the following types of movable collateral **can** be filed with your registry and also indicate if, in fact, they **are currently** filed with your registry.

Type of collateral	Accepted at registry		Currently in registry		% of total number of filings in 2007*
	Yes	No	Yes	No	
IV.1. Universal security over all present and future assets	Yes	No	Yes	No	
IV.2. Machinery and equipment	Yes	No	Yes	No	
IV.3. Motor vehicles	Yes	No	Yes	No	
IV.4. Ships, boats	Yes	No	Yes	No	
IV.5. Planes, aircrafts	Yes	No	Yes	No	
IV.6. Agricultural products	Yes	No	Yes	No	
IV.7. Crops and other agricultural yields (plants and trees on land)	Yes	No	Yes	No	
IV.8. Livestock etc	Yes	No	Yes	No	
IV.9. Investment property (stocks and securities, options and futures, derivative products, etc)	Yes	No	Yes	No	

IV.10. Documents of rights, financial instruments (bank notes and drafts, commercial bills, etc)	Yes	No	Yes	No	
IV.11. Intellectual property (e.g. patent rights, trademarks)	Yes	No	Yes	No	
IV.12. A single account receivable	Yes	No	Yes	No	
IV.13. Multiple accounts receivable	Yes	No	Yes	No	
IV.14. Inventory (i.e., goods for sale)	Yes	No	Yes	No	
IV.15. Membership and partnership interests in business entities and cooperative shares	Yes	No	Yes	No	
IV.16. Future (e.g., future crops, future acquisitions of collateral described in the agreement, and unborn livestock)	Yes	No	Yes	No	
IV.17. Other. Please specify:					

*Please round estimated % of filings to nearest 10%

V. Operations / Procedures

V.1. The registry requires the use of standard form(s) that are separate from the security agreement.	True	False
If true, forms need to be signed by the parties.	Yes	No
If true, they need to be kept in the registry in original or copies.	Yes	No
V.2. Registration requires one or more of: notarization, signature guarantees or certification or stamp taxes of one or more registration documents.	True	False
V.3. The registry officials review the authenticity of the information in the security agreement and principal agreement before registering a security right.	True	False
V.4. The registry guarantees the validity or legality of the security right or agreement registered	True	False
V.5. Registration requires the physical presence of a party	True	False
V.6. Registration requires filing a copy or the original loan and/or security agreement.	True	False
V.7. Registration requires specification of the value of the obligation for which security is granted	True	False
V.8. Registration requires specification of the value of the security property (or collateral).	True	False
V.9. Evaluation of collateral by a third party is mandatory.	True	False
V.10. Amendment to registration requires physical presence of both parties of the contract in the registry.	True	False

VI. Time Required to Use Registry

Please estimate how long it takes (business days) in terms of statutory limits and duration in practice to:	Statutory limits	Duration in Practice
VI.1. Register a security right for a piece of equipment, after the documents are delivered to the registry	_____ Hours/Days	_____ Hours/Days
VI.2. Register a security right for an automobile, after the documents are delivered to the registry	_____ Hours/Days	_____ Hours/Days
VI.3. Retrieve information from the registry to verify a security right	_____ Hours/Days	_____ Hours/Days

VII. Providing and Accessing Information in the Registry

VII.1 Indicate the ways in which security interest can be registered and what percent of registrations (numbers of filings) are done by each means.	Way to register	Available	%
	In-person	Yes No	
	Internet	Yes No	
	Fax	Yes No	
	Postal mail	Yes No	
	Total		100%
VII.2 Indicate the ways in which a security interest can be searched and what percent of searches are done by each means.	Type of Query	Available	%
	In-person	Yes No	
	Internet	Yes No	
	Fax	Yes No	
	Postal mail	Yes No	
	Total		100%
VII.3 What are the restrictions on access to information in the registry? Mark all that apply.	<input type="checkbox"/> No restrictions, all information is available to the public		
	<input type="checkbox"/> Requires having the registration number or other pertinent information on the security interest		
	<input type="checkbox"/> Requires signature of borrower		
	<input type="checkbox"/> Requires signature of lender		
	<input type="checkbox"/> Requires notary or lawyer to certify request		
	<input type="checkbox"/> Payment of a fee		
	<input type="checkbox"/> Other Requirement _____		
VII.4 Indicate the relative distribution of use of the registry for registering security interests and for searches.		Registrations of movable collateral	Searches
	Commercial banks	%	%
	Non-bank fin. Inst.	%	%
	Private firms	%	%
	Individuals	%	%
	Government agencies	%	%
	Other	%	%
VII.5. Please provide a standard form for filing and a typical report that would be provided to a search on a particular item.			

VIII. User Fees and Cost Recovery

	To register a security interest	To search a security interest
VIII.1. Is there a fee to register and/or search?	Yes No	Yes No
VIII.2. If there is a flat fee, please indicate amount and currency.	Flat fee (amount): _____ Currency: _____, as of _____(date)	Flat fee (amount): _____ Currency: _____, as of _____(date)

VIII.3. If the fee is a percent of the value of the secured debt, please provide percent, and typical range of fee paid.	Percent of secured debt: _____% Typical fee: ___ Less than US\$10 ___ Between US\$10 and US \$50 ___ Between US\$51 and US\$100 ___ Between US\$101 and US\$250 ___ More than US\$250	Percent of secured debt: _____% Typical fee: ___ Less than US\$10 ___ Between US\$10 and US \$50 ___ Between US\$51 and US\$100 ___ Between US\$101 and US\$250 ___ More than US\$250
VIII.4. If the fee is determined in another manner (neither flat fee nor % of secured debt) describe fee basis below and give typical fee range. Fee basis:	Typical fee: ___ Less than US\$10 ___ Between US\$10 and US \$50 ___ Between US\$51 and US\$100 ___ Between US\$101 and US\$250 ___ More than US\$250	Typical fee: ___ Less than US\$10 ___ Between US\$10 and US \$50 ___ Between US\$51 and US\$100 ___ Between US\$101 and US\$250 ___ More than US\$250
VIII.5. Do fees vary by way of accessing information, i.e., by Internet, in person, by phone?	Yes No If Yes indicate most, least expensive Most:_____ Least:_____	Yes No If Yes indicate most, least expensive Most:_____ Least:_____
VIII.6. Is there remote automatic filing over the Internet?	Yes No If Yes, what is the additional fee?_____	Yes No If Yes, what is the additional fee?_____
VIII.7. Do the registry revenues cover its cost of operations?	Yes No	
VIII.7.a If the registry doesn't cover its costs, who covers the shortfall?	___Government (Please specify what agency / ministry)_____ ___Affiliated organization (Please specify organization)_____	
VIII.8. Please provide additional information on the funding structure of the registry.		

IX. Laws and Regulations

IX.1 Is there a specific law relating to security interests on movable collateral?

YES NO

IX.1a Please provide the name / no. of the law _____

IX.2 Is there a regulation/s specific to registration of security interests on collateral?

YES NO

IX.2a Please provide the name / no. of the regulation _____

IX.3 Which secured creditor has priority over other secured creditor on the same collateral? [other than statutory claims (e.g. taxes, workers' salary, etc)]

First creditor to either register or take possession	YES	NO
First creditor to notarize	YES	NO
First creditor pursuant to the date of agreement	YES	NO
First creditor to provide finance	YES	NO
First creditor to register	YES	NO
Other _____		

X. Technical and operational issues

X.1. Limitations to access to the registry via the Internet negatively impacts the efficiency of the registry.	True	False
X.2. Blackouts of electrical power disrupt and limit the use of the Internet.	True	False
X.3. The payment system limits collection of registry fees in efficient ways (credit card, bank account, check).	True	False
X.4. The registry has data entry backlog of filings of security interests in movable property. If true, how many filings are backed up?	True	False
If true, what is the longest period between receipt of a registration and its availability for searching?	True	False
	_____	_____

XI. Registry Support and Upgrade

XI.1. An Internet-database system for my registry will improve services.	True	False
XI.2. A computer database for registration will improve errors, omissions, or fraud at my registry.	True	False
XI.3. My registry would like to eliminate stored paper, microfiche, or document images of security interest filings, and instead run only a digital database.	True	False
XI.4. Free public access to information of security interests would reduce the workload.	True	False
XI.5. We would like to outsource some or all of the registry's operations.	True	False
XI.6. We would like to authorize private lenders to process filings of security interests in our database.	True	False
XI.7. We would like to rent Internet computer servers to hold our database of security interests and provide Internet access.	True	False
XI.8. We would like Internet backups of our database of security interests in other countries.	True	False
XI.9. We would like our registry/archive/database of security interests to be administered by private parties and we think we would be a viable institution to supervise a registry run by private parties.	True	False
XI.10. Notaries and lawyers complain to us when we upgrade from paper to computer systems.	True	False
XI.11. We would like to discontinue our present database and use an Internet database administered outside our office.	True	False

XII. Additional Information

XII.1. The following other institution(s), not our office, would be more appropriate to run a registration system of security interests in movable property:	
XII.2. Other comments / problems:	

Annex 3: *Doing Business* Methodology for the Legal Rights Index⁶⁸

Doing Business constructs measures of the legal rights of borrowers and lenders. The Legal Rights Index indicator describes how well collateral and bankruptcy laws facilitate lending. The data on the legal rights of borrowers and lenders are gathered through a survey of financial lawyers and verified through analysis of laws and regulations as well as public sources of information on collateral and bankruptcy laws. Survey responses are verified through several rounds of follow-up communication with respondents as well as by contacting third parties and consulting public sources. The survey data are confirmed through teleconference calls or on-site visits in all economies.

Strength of Legal Rights Index

The strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. Two case scenarios are used to determine the scope of the secured transactions system, involving a secured borrower, the company ABC, and a secured lender, BizBank.

Several assumptions about the secured borrower and lender are used:

- ABC is a domestic, limited liability company.
- ABC has its headquarters and only base of operations in the economy's largest business city.
- To fund its business expansion plans, ABC obtains a loan from BizBank for an amount up to 10 times income per capita in local currency.
- Both ABC and BizBank are 100 percent domestically owned.

The case scenarios also involve assumptions. In case A, as collateral for the loan, ABC grants BizBank a non-possessory security interest in one category of revolving movable assets, for example, its accounts receivable or its inventory. ABC wants to keep both possession and ownership of the collateral. In economies in which the law does not allow non-possessory security interests in movable property, ABC and BizBank use a fiduciary transfer of title arrangement (or a similar substitute for non-possessory security interests).

In case B, ABC grants BizBank a business charge, enterprise charge, floating charge or any charge or combination of charges that gives BizBank a security interest over ABC's combined assets (or as much of ABC's assets as possible). ABC keeps ownership and possession of the assets.

The strength of legal rights index includes eight aspects related to legal rights in collateral law and two aspects in bankruptcy law. The index ranges from 0 to 10, with higher scores indicating that collateral and bankruptcy laws are better designed to expand access to credit. A score of 1 is assigned for each of the following features of the laws:

1. Any business may use movable assets as collateral while keeping possession of the assets, and any financial institution may accept such assets as collateral.
2. The law allows a business to grant a non-possessory security right in a single category of revolving movable assets (such as accounts receivable or inventory), without requiring a specific description of the secured assets.
3. The law allows a business to grant a non-possessory security right in substantially all of its assets, without requiring a specific description of the secured assets.
4. A security right may extend to future or after-acquired assets and may extend automatically to the products, proceeds or replacements of the original assets.

68. <http://www.doingbusiness.org/MethodologySurveys/GettingCredit.aspx>

5. General description of debts and obligations is permitted in collateral agreements and in registration documents, so that all types of obligations and debts can be secured by stating a maximum rather than a specific amount between the parties.
6. A collateral registry is in operation that is unified geographically and by asset type and that is indexed by the name of the grantor of a security right.
7. Secured creditors are paid first (for example, before general tax claims and employee claims) when a debtor defaults outside an insolvency procedure.
8. Secured creditors are paid first (for example, before general tax claims and employee claims) when a business is liquidated.
9. Secured creditors are not subject to an automatic stay or moratorium on enforcement procedures when a debtor enters a court supervised reorganization procedure.
10. The law allows parties to agree in a collateral agreement that the lender may enforce its security right out of court.

Annex 4: Model Memorandum of Understanding with Government to Reform Secured Transactions Regimes

MEMORANDUM OF UNDERSTANDING⁶⁹
between
[COUNTRY COUNTERPART]
and
INTERNATIONAL FINANCE CORPORATION (IFC)

Dated DD MMMMMM, 20YY

69. This MOU is just an example and by no means constitutes a legal contract between IFC and a client. When WBG staff sign an MOU with a client they should consult with the appropriate legal officers in charge.

This MEMORANDUM OF UNDERSTANDING (the "Agreement") is signed on DD day of MMMMM, 20YY, by and between:

- (1) MINISTRY OF [Counterpart Ministry], a government agency organized and existing under the laws of [Country];
and
- (2) INTERNATIONAL FINANCE CORPORATION (IFC), an international organization established by Articles of Agreement among its member countries, including [Country].

WHEREAS:

- A. International Finance Corporation, a member of the World Bank Group, is an international organization whose mission is to promote sustainable private sector investment in developing countries, helping to reduce poverty and improve people's lives. For the purpose of this project, IFC's DFO facility [Name of Facility] will undertake the project. The [Facility] is a multidonor funded initiative set up by the IFC in [Country or Region], to reduce poverty through sustainable private sector development. The Financial Sector Development Program is one of IFC's key programs and strengthening financial infrastructure in [Country] is an important objective.
- B. The MINISTRY OF [Counterpart Ministry] is a government agency of [Country] and the key government agency responsible for drafting the [secured transactions law] [implementing decree for the secured transactions law] [regulation]. The Government of [Country] has established a drafting committee which consists of the representatives from [Counterpart and other ministries, central bank, et.al.] to prepare the [secured transactions law] [implementing decree] [regulation].
- C. [Counterpart] and IFC intend to cooperate in the development of financial sector practices and regulations in [Country].
- D. The purpose of this Agreement is to set out the main terms and conditions of the cooperation between [Counterpart] and IFC.

NOW, THEREFORE, in recognition of their interests and objectives, [Counterpart] and IFC hereby confirm their understanding in respect of the following:

I. BACKGROUND AND INTRODUCTION

Access to credit remains a significant constraint for private sector growth in [Country]. The lending environment is heavily reliant on collateral, and private firms are restricted in applying for credit because of the firms' inability to effectively translate movable assets like equipment, receivables, and inventories into collateral. This significantly diminishes the ability for all businesses, but especially SMEs, to access credit.

To address these shortcomings, [Counterpart] of [Country] asked IFC to provide technical assistance in preparing the [secured transactions law] [implementing decree] [regulation] for the secured transactions law and developing the secured transactions registry system in [Country] by a letter of request on MMMMM DD, 20YY.

In this respect, [Counterpart] and IFC have agreed that the technical assistance will be provided in three following areas :

1. To prepare the [secured transactions law] [implementing [decree] [regulation] for the existing Secured Transactions Law]
2. To devise the administrative and technical design of the registry system
3. To draft specifications for the registry system to enable procurement of software
4. To build the capacity of users of registry and create awareness about the newly introduced system

Details of the project's activities and expected timeline are explained below

II. PROJECT DELIVERABLES AND TIMELINES

The project will start in MMMMM 20YY and all of the following will be delivered by the end of MMMMM 20YY.

1. Assistance in preparing the [Secured Transactions Law] [implementing [decree] [regulation] for the existing Secured Transactions Law]

IFC will assist the [Country] drafting committee in preparing the draft [law] [implementing decree] [regulation] in line with international best practice. Below are task activities to be carried out by the IFC expert team, which consists of the local and international experts:

- IFC expert team will prepare a first draft of the [law] [decree] [regulation] for consideration by the [Country] drafting committee.
- IFC expert team will present recommendations to the drafting committee and key stakeholders to get their feedback and comments.
- After incorporating feedback from the drafting committee and key stakeholders, the IFC expert team will assist the drafting committee to prepare the discussion draft.
- IFC expert team and the drafting committee will organize a consultation workshop and present the draft to key stakeholders in a detailed review of each feature.
- IFC expert team will assist the drafting committee to finalize the [law] [decree] [regulation] based on feedback from key stakeholders

2. Assistance in devising the administrative and technical design of the registry system

IFC expert team will develop a proposed technical design of the registry that is suitable conditions of [Country] and present it to [Counterpart] for approval.

3. Assistance in preparing technical specifications for registry software

The IFC expert will prepare detailed specifications for the application software required to support the technical design that is approved by [Counterpart] to enable preparation of tender documents for the software.

4. Assistance in building capacity of users and registry

The IFC expert will prepare training and public awareness programs and materials and work with [Counterpart] and registry staff to publicize commencement of operation of the registry under the [law] [decree] [regulation] and to train the end users and the registry staff on use of the registry system.

III. IFC RESPONSIBILITIES AND RESOURCES

[Counterpart] and IFC have discussed and agreed upon detailed terms of reference for IFC assistance as described above.

IFC will provide its internal resources and expertise and will provide international and local experts to carry out the above mentioned activities. It will also cover expenses related to activities mentioned in the components of this Project listed in Section II above, including IFC experts' fees, translation of the [law] [decree] [regulation] and other administrative expenses of the workshop organization.

IV. [COUNTERPART] RESPONSIBILITIES AND RESOURCES

[Counterpart] is the [Country] Government partner to cooperate with IFC in this project.

[Counterpart] shall make its best efforts to ensure timely and full implementation of the project and provision of local support, including;

- (i) Obtaining all approvals as may be necessary;
- (ii) Making drafting committee members and other resources available for consultations and meetings with IFC;
- (iii) Making relevant laws and regulations available for IFC's comments as requested and necessary;
- (iv) Coordinating with related Departments within the [Counterpart] and other relevant external agencies, Ministries and government bodies; and
- (v) Providing organizational, logistical and other in kind support in organizing the meetings and consultation workshop.

[Counterpart] shall be independently responsible for paying its respective staff members dedicated to this Project.

V. CONFIDENTIALITY AND ACCURACY

1. Both IFC and [Counterpart] shall maintain in confidence all information provided to the other party during this Project.
2. During this assignment, IFC hereby represents that it will carry out its obligations under the Agreement with competence, care and diligence. However, IFC shall not assume responsibility for the accuracy or completeness of its support in relation to this Project, or in any other manner.

VI. SPECIAL CONDITIONS AND DISPUTE RESOLUTION

[Counterpart] and IFC hereby commit to cooperate on a basis of mutual understanding and respect, and agree to facilitate open and ongoing dialogue between the two parties while making adjustments as needed. In the event that a dispute arises out of or in connection with the implementation of this Agreement, it shall be resolved through friendly consultations. Should consultations fail to amicably resolve such a dispute, either party shall be entitled to discontinue the performance of their services by the provision of thirty (30) days prior written notification to the other party.

VII. NON-BINDING

The parties hereby acknowledge and agree that this Memorandum is not legally binding. It is not the parties' intention to create, and nothing herein shall be construed as creating, legal rights and obligations or any commitment whatsoever. Each party shall have the discretionary right to terminate at any time any discussion whatsoever regarding the Project or this Memorandum.

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed in their respective names as of the date first above written.

[COUNTERPART]

By: _____
Name:
Title:

INTERNATIONAL FINANCE CORPORATION

By: _____
Name:
Title:

Annex 5: The World Bank Principles for Effective Insolvency and Creditors Rights Systems (Revised 2005)

In the context of the joint World Bank (Bank) and International Monetary Fund (Fund) initiative on standards and codes, insolvency and creditor rights constitute one of the 12 areas that have been identified as useful for the operational work of the Bank and the Fund, and for which standard assessments are to be undertaken. Work toward defining an international standard on insolvency and creditor rights systems has been undertaken on two complementary fronts, led by the Bank and the United Nations Commission on International Trade Law (UNCITRAL).

The Bank-Fund initiative on standards and codes was developed in the wake of the financial crises of the late 1990s as part of a series of measures to strengthen the international financial architecture. The international financial community considered that the implementation of internationally recognized standards and codes would provide a framework to strengthen domestic institutions, identify potential vulnerabilities, and improve transparency. The Reports on the Observance of Standards and Codes ("ROSC") are designed to assess a country's institutional practices against an internationally recognized standard and, if needed, provide recommendations for improvement. The process of participation and the production of the report are intended to help spur reform and foster strengthened economic institutions in member countries.

In 1999, the Bank's initiative to develop benchmarking principles for core commercial law systems was launched, leading to the development of the Principles and Guidelines for Effective Insolvency and Creditor Rights Systems ("Principles"). Principles is designed as a broad-spectrum assessment tool to assist countries in their efforts to evaluate and improve the core aspects of their commercial law systems that are fundamental to a sound investment climate and commerce, including credit access and protection mechanisms, risk management and restructuring practices and procedures, formal commercial insolvency procedures, and related institutional and regulatory frameworks. Principles was elaborated in collaboration with partner organizations and experts serving on the Bank's Task Force and working groups. Advisory partners included: African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, International Finance Corporation, International Monetary Fund, Organization for Economic Cooperation and Development, UNCITRAL, INSOL International, and the International Bar Association (Committee J). The Task Force and working groups comprised more than 70 international experts. Principles was vetted in a series of regional roundtables involving more than 700 participants from 75 countries (mostly middle-income and developing nations), involving high-level officials and designated experts from the private sector. Principles was also posted on the Bank's web-site for international comment and discussed and approved by the Bank's Executive Directors in 2001 for use in a series of pilot country assessments under the ROSC program, subject to a review and updating of Principles based on that experience. In 2003, the Bank began a review of the ROSC experience on insolvency and creditor rights systems, and in 2005 the Bank concluded a revision of Principles, which both took stock of the lessons learned from that experience and reflected feedback from the international community in connection with the Global Forum on Insolvency Risk Management, the Forum on Asian Insolvency Reform, the Forum on Insolvency in Latin America, and the Global Judges Forum. The revision was also based on the Bank's collaboration with its original partners, the European Commission, Group of Twenty, Asia-Pacific Economic Cooperation, International Association of Insolvency Regulators, and others.

Following is a brief summary of the key elements in Principles on Creditors Rights.

Credit Environment

Compatible credit and enforcement systems. A regularized system of credit should be supported by mechanisms that provide efficient, transparent, and reliable methods for recovering debt, including the seizure and sale of immovable and movable assets and sale or collection of intangible assets, such as debt owed to the debtor by third parties. An efficient system for enforcing debt claims is crucial to a functioning credit system, especially for unsecured credit. A

creditor's ability to take possession of a debtor's property and to sell it to satisfy the debt is the simplest, most effective means of ensuring prompt payment. It is far more effective than the threat of an insolvency proceeding, which often requires a level of proof and a prospect of procedural delay that in all but extreme cases make the threat not credible to debtors as leverage for payment.

While much credit is unsecured and requires an effective enforcement system, an effective system for secured rights is especially important in developing countries. Secured credit plays an important role in industrial countries, notwithstanding the range of sources and types of financing available through both debt and equity markets. In some cases, equity markets can provide cheaper and more attractive financing. But developing countries offer fewer options, and equity markets are typically less mature than debt markets. As a result, most financing is in the form of debt. In markets with fewer options and higher risks, lenders routinely require security to reduce the risk of nonperformance and insolvency.

Collateral systems. One of the pillars of a modern credit economy is the ability to own and freely transfer ownership interests in property, and to grant a security interest to credit providers with respect to such interests and rights as a means of gaining access to credit at more affordable prices. Secured transactions play an enormously important role in a well-functioning market economy. Laws governing secured credit mitigate lenders' risks of default and thereby increase the flow of capital and facilitate low-cost financing. Discrepancies and uncertainties in the legal framework governing security interests are the main reasons for the high costs and unavailability of credit, especially in developing countries.

The legal framework for secured lending should address the fundamental features and elements for the creation, recognition, and enforcement of security interests in all types of assets—movable and immovable, tangible and intangible—including inventories, receivables, proceeds, and future property and, on a global basis, including both possessory and non-possessory interests. The law should encompass any or all of a debtor's obligations to a creditor, present or future, and debt obligations between all types of persons. In addition, it should allow effective notice and registration rules to be adapted to all types of property, and should provide clear rules of priority on competing claims or interests in the same assets. For security rights and notice to third parties to be effective, they must be capable of being publicized at reasonable costs and easily accessible to stakeholders. A reliable, affordable public registry system is therefore essential to promote optimal conditions for asset-based lending. Where several registries exist, the registration system should be integrated to the maximum extent possible so that all notices recorded under the secured transactions legislation can be easily retrieved.

Enforcement systems. A modern, credit-based economy requires predictable, transparent and affordable enforcement of both unsecured and secured credit claims by efficient mechanisms outside of insolvency, as well as a sound insolvency system. These systems must be designed to work in harmony. Commerce is a system of commercial relationships predicated on express or implied contractual agreements between an enterprise and a wide range of creditors and constituencies. Although commercial transactions have become increasingly complex as more sophisticated techniques are developed for pricing and managing risks, the basic rights governing these relationships and the procedures for enforcing these rights have not changed much. These rights enable parties to rely on contractual agreements, fostering confidence that fuels investment, lending and commerce. Conversely, uncertainty about the enforceability of contractual rights increases the cost of credit to compensate for the increased risk of nonperformance or, in severe cases, leads to credit tightening.

World Bank's Principles for Effective Creditor Rights Systems	
No	PART A . LEGAL FRAMEWORK FOR CREDITOR RIGHTS
A1	Key Elements
	<p>A modern credit-based economy should facilitate broad access to credit at affordable rates through the widest possible range of credit products (secured and unsecured) inspired by a complete, integrated, and harmonized commercial law system designed to promote:</p> <ul style="list-style-type: none"> • Reliable and affordable means for protecting credit and minimizing the risks of nonperformance and default; • Reliable procedures that enable credit providers and investors to more effectively assess, manage, and resolve default risks and to promptly respond to a state of financial distress of an enterprise borrower; • Affordable, transparent, and reasonably predictable mechanisms to enforce unsecured and secured credit claims by means of individual action (e.g., enforcement and execution) or through collective action and proceedings (e.g., insolvency); • A unified policy vision governing credit access, credit protection, credit risk management and recovery, and insolvency through laws and regulations that are compatible both procedurally and substantively.
A2	Security (Immovable Property)
	<p>One of the pillars of a modern credit economy is the ability to own and freely transfer ownership interests in land and land-use rights, and to grant a security interest (such as a mortgage or charge) to credit providers with respect to such interests and rights as a means of gaining access to credit at more affordable prices. The typical hallmarks of a modern mortgage system include the following features:</p> <ul style="list-style-type: none"> • Clearly defined rules and procedures for granting, by agreement or operation of law, security interests (mortgages, charges, etc.) in all types of interests in immovable assets; • Security interests related to any or all of a debtor's obligations to a creditor, present or future, and between all types of persons; • Clear rules of ownership and priority governing competing claims or interests in the same assets, eliminating or reducing priorities over security interests as much as possible; • Methods of notice, including a system of registry, which will sufficiently publicize the existence of security interests to creditors, purchasers, and the public generally at the lowest possible cost.
A3	Security (Movable Property)
	<p>Clearly defined rules and procedures to create, recognize, and enforce security interests over movable assets, arising by agreement or operation of law;</p> <p>Allowance of security interests in all types of movable assets, whether tangible or intangible (e.g., equipment, inventory, bank accounts, securities, accounts receivables, goods in transit; intellectual property and its proceeds, offspring, and mutations), including and with respect to present, after-acquired, or future assets (including goods to be manufactured or acquired), wherever located and on a global basis, and based on both possessory and non-possessory interests;</p> <p>Security interests related to any or all of a debtor's obligations to a creditor, present or future, and between all types of persons;</p> <p>Methods of notice (including a system of registration) that will sufficiently publicize the existence of security interests to creditors, purchasers, and the public generally at the lowest possible cost; and</p> <p>Clear rules of priority governing competing claims or interests in the same assets, eliminating or reducing priorities over security interests as much as possible.</p>
A4	Registry Systems

	<p>There should be an efficient, transparent, and cost-effective registration system with regard to property rights and security interests in the borrower's immovable assets. There should be an efficient, transparent and cost-effective means of providing notice of the possible existence of security interests in regard to the borrower's movable assets as well, with registration in most cases being the principal and strongly preferred method (with some exceptions). The registration system should be reasonably integrated, easily accessible, and inexpensive with respect to recording requirements and searches of the registry, and it should be secure.</p> <p><i>A4.1 Land and mortgage registries.</i> Registries pertaining to land (or land use rights) and mortgages are typically established solely for recording interests of this nature, although permanent fixtures and attachments to the land may be treated as subject to recordation in the place of the underlying real property. Land and mortgage registries are typically established by jurisdiction, region, or locale where the property is situated; ideally, they should provide for integrated, computerized search features.</p> <p><i>A4.2 Charge registries.</i> Registries pertaining to movable assets of enterprises should be integrated and established nationally, with filings made on the basis of the enterprise or business name, ideally in a centralized, computerized registry situated in the jurisdiction or location where the enterprise or business entity has been incorporated or has its main place of registration.</p> <p><i>A4.3 Specialized registries.</i> Special registries are beneficial in the case of certain kinds of assets, such as aircraft, vessels, vehicles, and certain types of intellectual property (such as trademarks and copyrights).</p>
A5	Commercial Enforcement Systems
	<p><i>A5.1 Enforcement of unsecured debt.</i> A functional credit system should be supported by mechanisms and procedures that provide for efficient, transparent, and reliable methods for satisfying creditors' rights by means of court proceedings or nonjudicial dispute resolution procedures. To the extent possible, a country's legal system should provide for executive or abbreviated procedures for debt collection.⁷⁰</p> <p><i>A5.2 Enforcement of secured debt.</i> Enforcement systems should provide efficient, cost-effective, transparent, and reliable methods (both nonjudicial and judicial) for enforcing a security interest over assets. Enforcement proceedings should provide for prompt realization of the rights obtained in secured assets, designed to enable maximum recovery according to market-based asset values.</p>

70. Enforcement under this principle aims primarily at the treatment with respect to proceedings to recover against corporate debtors. Where enforcement proceedings involve individuals or persons, reasonable exemptions may need to be adopted to allow individuals or persons to retain those assets indispensable to the subsistence of the debtor and his/her family. Any such exemptions should be clearly defined and narrowly tailored.

Annex 6: Example of Regulation for Registry Procedures

REGULATION ON PROCEDURES OF THE COLLATERAL REGISTRY

This regulation is promulgated under the authority of Article NN of the Law on Secured Transactions. The regulation is promulgated by the Minister of AAAAA. It shall take effect on MMM DD, 20YY.

Article (1)

The Collateral Registry (registry) is established in the Ministry of AAAAA (Ministry).

Article (2)

1. The location of the registry is in the Ministry of AAAAA in [City].
2. The hours of operation of the registry are 8:00 a.m. to 4:30 p.m., Monday through Friday, except for official government holidays.
3. A help desk for persons who have questions or problems concerning registration is available during those hours by telephone. The telephone number will be posted on the registry's web-site.
4. The hours of operation of the registry for registration of documents and searching the database through the registry web-site are 24 hours per day, seven days per week.

Article (3)

Information in a notice will be entered in [language].

Article (4)

Notwithstanding that a termination notice may have been registered, the notice record will be maintained in the registry as if it were an effective notice for the period specified in the notice.

Article (5)

The registry will not inspect a notice to determine whether it is legally sufficient. A notice will be refused only as determined by logic in the registry software, which is based on the criteria set out in Article NN of the Law on Secured Transactions.

Article (6)

1. The registry will provide for registration of notices electronically through its web-site.
2. Notices will be effective immediately upon acceptance by the registry software.
3. The registry software will determine whether the information entered for a notice is sufficient for registration. If it is not sufficient, the registry software will immediately notify the registrant and identify the necessary corrective action. The notice will not be registered until it meets the minimum requirements for registration as defined by the law and this regulation.

4. When the information that is entered is sufficient for registration, the registry software will accept the notice and generate a confirmation of registration that the user may print as proof of registration. The confirmation will include the date and time of registration, the registration number assigned by the registry and all information on the registered notice.

Article (7)

1. Except as otherwise noted in this Article, the requirements for a notice of security interest will apply to a notice of lien.
2. A notice of lien may be registered by the government for a tax obligation, by a court for enforcement of a judgment against movable property, or by a receiver or court in an insolvency proceeding.
3. The registry will indicate that the notice is a notice of lien in the record of the notice.
4. For notices of lien, the government, court or insolvency receiver will be treated as a secured party, and the taxpayer, judgment debtor or insolvent person will be treated as a debtor.

Article (8)

1. For each initial or subsequent related notice that is registered, the registry shall generate a unique registration number. The number will have a fixed number of digits, including leading zeroes.
2. For each initial notice, the registry technology system will generate an additional two digits that will be appended to the end of the registration number and become a part of it. The additional digits are computed mathematically from the digits of the unique number, and are later used to automatically validate the number when it is entered on subsequent notices related to the initial notice.
3. The registry will relate each notice to a record identified by the number assigned to the initial notice. The record will indicate the date and time of registration of the initial notice.
4. The registry will maintain the record for public inspection.

Article (9)

1. For each amended notice, continuation notice, termination notice and notice of objection, the registry software will validate the registration number of the initial notice that must be entered by the registrant.
2. When the registrant enters the registration number of the initial notice, the registry software will determine what the last two digits should be by computing them from the preceding digits. The software will then compare them with the last two digits of the registration number that was entered by the registrant. If the numbers are not identical, the number has been entered incorrectly.
3. If the initial notice's registration number is determined by the computation to be correctly entered, the registry software will determine if the notice record identified by the number is effective.
4. If the initial notice's registration number is not entered, if the number entered is determined to be incorrect, or if the record identified by the number is not effective, the registry software will cause the new notice to be refused and will return an error message to the registrant stating the reason for refusal.

Article (10)

The registry shall provide internet access to all effective records in the database through the registry web-site. Any person may have access to the database for searching and viewing records of notices of security interest. The registry may provide access to a PC in the registry or in selected [district][provincial] offices of the Ministry for any person who does not otherwise have access to the Internet.

Article (11)

The registry shall provide a certified report of search on a registration number, debtor, or a serial number of [a motor vehicle][serial numbered equipment] upon request. The person who requests the certified search report will log in to the registry Web site, select the option to generate a certified search report, and conduct the search of the database. The search report will include a certificate of authenticity with the facsimile signature of the registrar and a unique certified search report number. If the person who requests the certified search report is a client whose account [balance is insufficient for the fee][is suspended or closed], or if the person is a non-client whose payment is insufficient for the fee, the certified search report will not be issued, and the person will be informed of the reason. The registry shall keep a record of the certified search report, which will include the date and time of the search and the criterion on which the search was conducted. If the authenticity of a certified search report is questioned in a judicial proceeding, the report may be retrieved by its certified search report number and reproduced and authenticated by the registrar. The record shall be retained in electronic form.

Article (12)

1. The fees of the registry shall be:

a. For registering an initial notice of security interest	XX
b. For registering an amended notice	XX
c. For registering a continuation notice	XX
d. For registering a termination notice	XX
e. For registering a notice of objection	XX
f. For the provision of a certified search report	XX
2. The Ministry will periodically review the revenues of the registry to determine if they are sufficient to cover the costs of operation of the registry. If they are found to be either too low or too high, the Minister may amend this regulation to adjust the fees to cover costs of operation.
3. There is no fee for a search conducted by any person using the electronic services of the registry.
4. There shall be no fees for registration of notices of lien and related notices by courts, government entities or insolvency liquidators, or for other services provided to them by the registry.

Article (13)

1. An individual or entity that regularly uses registry services may establish with the registry [a pre-paid][a post-paid] client account to which it may charge the fees for registrations and certified search reports.
2. The individual or entity will complete an application form on the registry's web-site to become a client of the registry. The application constitutes an agreement that the client is responsible for control of passwords used by individual users authorized by the client and is responsible for all transactions done by its individual users.

3. The registry will create a client account record for each client. Information in the record will include the name, address, contact information for the client, and the user name and password combination of each authorized user of the client's account. The registry will provide to the client its client account number, which it will use in combination with individual user IDs and passwords to identify its account and charge fees to the account. The client account record will also include a history of all transactions for which fees are charged to the account.
4. As the client conducts transactions, the registry will charge the fees to the account.
5. The registry will generate a monthly statement for each client. Statements will be posted in the client's account record, and may be viewed or downloaded by authorized users of the client account.
6. To pay on the client account, the client will [payment process and media options].
7. When a client makes a payment on the account, the registry will add the amount to the account balance and enter the payment in the transactional history in the client account record.
8. If a client account [balance is insufficient for the fee of a transaction that an authorized client user attempts to do][is suspended or closed when a user attempts to do a transaction], the registry will not permit the transaction to proceed, and will notify the user of the necessary corrective action.
9. If the client account is inactive for a period of NN months, the registry may close it for inactivity.

Article (14)

1. A person who does not have a client account may use the registry's web-site to register notices and request certified search reports.
2. The person may find the fees for the desired services on the registry's web-site.
3. The person will make the required payment by [payment process and media options].
4. The person will then log in to the registry web-site as a nonclient, and will enter the necessary contact information and payment information.
6. After the registry's technology system validates the payment information, the person may register notices or request certified search reports.
7. If the payment is insufficient to cover all of the transactions the person attempts, the registry will not permit further transactions after the amount is exhausted, and will inform the person that the payment was insufficient to proceed.
8. If the amount of a bank receipt is greater than the total of fees, the person may use the balance for future transactions or may request that it be refunded.

Annex 7: Example of Terms of Reference for Registry IT System

Terms of Reference for Registry IT System

Background

[Description of existing situation]

Scope of Services

Development of a web-based registry system for implementation and ongoing operations is a specialized activity, which requires a combination of proprietary skills and experience in the following areas:

- Secured lending registry that conforms to international best practices
- Data security, privacy protection and other legal compliance
- Data processing management
- Documentation and training support
- IT project management
- Software development and maintenance
- Data migration

[Purchaser] is seeking a technology partner with international experience to assist with the establishment of a “best practice” web-based secured lending registry system. In this respect, the required solution should be both functionally rich and flexible, but, at the same time, it should be priced at a level appropriate to the scale and sophistication of the local market.

It is anticipated that the system will support the following types of on-line users:

- Regular or recurrent users also known as “clients.” These include banks, finance companies, and other regular providers of financing secured by assets. A regular user will establish an account with the registry to which fees for registrations and request for certified search reports may be charged.

One-off users, also known as “nonclient.” These include those who want to register a notice of security interest or request a certified search report, but who do not have an account with the registry. This type of user has to make payment prior to requesting a paid service.

Web search users: These are all users who do their own web searches without logging into the system. They may search for information and print the results without charge or restriction, but do not receive certified results.

- Other types of users include registry’s bank, registry staff, and system administrators.

The solution must accommodate globally accepted best practice in terms of confidentiality, security and privacy principles.

As the long-term success and efficiency of the registry system is dependent more on the operational and organizational rules and principles than on the actual technological solution, the technology partner is expected to provide services in all of the following areas:

- Registry system development/customization and localization into [local] language
- Operational support of the system and correction of defects in the application software under a warranty for one year from the date that the registry accepts the application software as operational

- Provision of a complete technical infrastructure requirement to operate the registry system
- Support and advice in data centre technical and operational set-up
- Documentation, to include technical documentation for the application software and internal user documentation for registry system operations
- Knowledge transfer to the registry's technology staff on day-to-day maintenance and operation of the technology system, and internal user training on use and management of the system.

[Purchaser] believes that to meet the current market needs, it will be necessary to utilize a proven Web-based registry system and customize it to the specific needs of the registry. The solution should have the technical flexibility to meet future market needs (new type of registration, new type of user, value added products, etc.) and changing compliance issues. It is recognized, however, that the level of functionality and customization could have a significant bearing on costs. It is therefore anticipated that the solution provided may well be derived from an existing generic solution and localized to adapt to the local market needs.

Business Requirements

It is anticipated that the on-line registry solution will have, as a minimum, the following features / functionality, as more fully described in the attached Process Model Narrative:

On-line registration services

The system would be expected to support the following types of notice:

- Notice of security interest
- Change Notice
 - Amended notice
 - Notice of extension/continuation
 - Notice of termination/discharge
 - Notice of objection

Data requirements will differ based on the type of notice, while identification data required for the debtor will be based on the type of debtor.

Search logic

The system should employ search logic that is appropriate to the type of search criterion, i.e., exact match on numeric criteria and normalized match for alphanumeric criteria, and display all the records that match the search condition.

Where the search logic is one that may produce a search result that includes false positives, the operator should be presented with information, e.g., address of a debtor, that will permit false positives to be identified.

User access

- As a minimum, the required solution should be localized and support notice registration by on-line users [and entry of registration data on behalf of registrants who deliver notices on paper]
- Formatted input screens
- Standard SSL encryption
- User Log-on and password

Standard outputs

- Printable confirmation of registration returned for each notice
- Printable reports of search results generated for each search, whether or not certified
- Electronic reports and queries for use by registry administrators

Maintainable variable values

Variable values used in the system may be maintained by registry staff without technical support. Variable values may include fees charged by the system, table default values, report schedules, words to be dropped during normalization, aging periods, etc.

Search and access

The standard search criteria required for the system are as follows:

Search Category	Search Criterion
Registration number	Registration number
[Vehicle/Equipment number]	[Serial number]
Debtor	
Citizen	[National ID number][Name]
Foreigner	Name
Domestic or registered foreign legal entity	[Business Registration number] [Name]
Unregistered foreign legal entity	Name
Other entity	Name

Note: Name searches will use normalization algorithms for individual or entity names, as appropriate to the type of debtor.

Application security

This module is to perform various tasks to maintain and operate the system safely. It is used to manage security objects in the system. This module will enable the exclusive creation of user groups and affiliate in the system and assign privileges for each user group.

The system should maintain a comprehensive log file of all user activities.

Fiscal system

This module will manage service pricing, capture all revenues derived from registry services paid through various payment methods, generate statements, maintain account status, and so forth

The fiscal system will also provide a web interface to the registry's bank's users to enter payments by clients and non-client users.

Standard system reports and data presentation facilities

The system should provide for tracking of all payments to services or accounts, and maintain a permanent audit trail. It should also provide maintenance reports for use in data analysis by the registry. Reports should contain, as a minimum requirement, the following templates:

- Security violation report.
- Statistical reports (samples attached).
- Data center security policies
- The solution provider should, as a minimum requirement, address the following security/continuity aspects:
 - Physical data security
 - Change management security
 - Operating system security related to system administration
 - Data encryption
 - Back-up/disaster recovery

[Data migration]

[Description of existing registration data that must migrate to new registry system]

Documentation

The technical documentation of the system, including procedures, operating parameters, and maintenance requirements should be fully documented in [local language].

After-sales technical support and maintenance

A critical aspect of this assignment will be the level of local support provided by the vendor, whether directly or through the vendor's local partner, both during the implementation stage and post implementation.

It is envisaged that a support and maintenance agreement will be executed with the solution provider, incorporating:

- General technical support
- Application maintenance support
- Operational consultancy

Knowledge Transfer

Prior to commencement of the project [purchaser] will nominate "product champion" who will act as the primary contact point for communications during the project. The vendor will make sure that this individual is actively engaged in the development process and is provided with both practical and theoretical training at appropriate key points.

Additional overview training should also be provided to key project team members, for example, IT staff, at the beginning of the project, and support staff after completion of the models.

Annex 8: Impact of Secured Lending in Gender Financing⁷¹

Summary

Step 1. Diagnostics

- 1.1. Analyze the lending market through a gender lens
- 1.2. Obtain gender-disaggregated private sector views
- 1.3. Analyze the legal and administrative framework

Step 2. Solution Design

- 2.1. Agree on gender-related program results
- 2.2. Undertake legal and regulatory reform to enable and encourage lending to women
- 2.3. Undertake awareness raising directed at women
- 2.4. Undertake capacity building for financial institutions and implementers of new laws

Step 3. Implementation, and Monitoring and Evaluation (M&E)

- 3.1. Ensure key information can be gender disaggregated
- 3.2. Incorporate output and outcome indicators that highlight gender aspects of the program

This module provides tools to enhance reforms to improve women's ability to use movable assets as collateral for loans.

The module (i) suggests methods to explore differences in women's and men's access to secured lending (step 1—Diagnostics), (ii) provides possible solutions to enable women to benefit from programs of secured-lending reform (step 2—Solution Design), and (iii) suggests ways to incorporate gender considerations into implementation as well as monitoring and evaluation of secured lending reform programs (step 3—Implementation, and Monitoring and Evaluation).

Why Gender Matters

Lack of access to finance is consistently cited by business owners as one of their most limiting constraints, and it disproportionately affects women. Most studies find that women are not more likely than men to be rejected for loans or be subject to higher interest rates. But women are less likely to apply for loans than men⁷² (see Box 8.1).

71. This annex corresponds to Module 5 of Sevi Simavi, Clare Manuel and Mark C. Blackden, "Gender Dimensions of Investment Climate Reform: A Guide for Policy Makers and Development Practitioners," Washington, D.C., World Bank, 2009).

72. See summary of evidence in World Bank. 2007. Millennium Development Goals Global Monitoring Report. Washington, D. C., 110.

Box 8.1

Although women entrepreneurs run nearly half of **Kenya's** micro, small, and medium-sized enterprises, they receive less than 10 percent of credit. And they receive only 1 percent of credit directed to agriculture, despite managing 40 percent of smallholder firms.⁷³

Women in **Uganda** own about 40 percent of their country's private enterprises, but receive only 9 percent of credit.⁷⁴

In **Tanzania** nearly 30 percent of male-headed enterprises have received bank finance, whereas only 8 percent of female-headed enterprises have. Only 10 percent of men are currently bank financed; the proportion of women is half that.⁷⁵

In a survey of women's businesses in the **Middle East and North Africa**,⁷⁶ most women owners did not have access to formal credit and were financing their businesses mainly through personal sources, such as savings, family, and friends and by reinvestment of their business earnings.

Microfinance has made a major contribution to enhancing women's access to credit. It is estimated that 8 out of every 10 microfinance clients are women. But the rigidities of microfinance can be limiting for women.⁷⁷ By definition, amounts lent are small, interest rates tend to be higher than commercial bank rates, and lending periods are short.

Lack of access to land title can be a major impediment for both men and women seeking finance in formal systems that are frequently highly collateralized. But the problem is likely to be significantly worse for women (see Box 8.2).

Box 8.2

More than 85 percent of loans in **Kenya** require collateral. The average value of the collateral taken is nearly twice that of the loan. In the vast majority of cases, the collateral required is land, usually land that has a registered title. Women hold only 1 percent of registered land titles, with about 6 percent of registered titles held in joint names.⁷⁸

Reforms to a country's secured-lending system to enhance the use of movable securities can have a significant impact on access to credit across the board (see Box 8.3).

Box 8.3

In 1999 **Romania** undertook a package of measures, including legal reform, to make it easier for a wider range of movable assets to be used as collateral. Since then, more than 200,000 notices of security interests have been registered, the number of borrowers has increased threefold, and the volume of credit has grown by 50 percent.

Following similar reform in the **Slovak Republic** in 2002, more than 70 percent of new loans to businesses are now backed by movable assets and receivables. Credit to the private sector has since increased by 10 percent.⁷⁹

73. A. Ellis, et al. 2007. Gender and Economic Growth in Kenya. Directions in Development, World Bank, Washington, D.C.

74. A. Ellis, et al. 2006. Gender and Economic Growth in Uganda. Directions in Development, Washington, D.C., World Bank.

75. A. Ellis, et al. 2007. Gender and Economic Growth in Tanzania. Directions in Development, Washington, D.C., World Bank.

76. Surveys conducted by IFC GEM in Bahrain, Jordan, Lebanon, Tunisia, and the United Arab Emirates in 2006. Women Entrepreneurs in the Middle East and North Africa: Characteristics, Contributions and Challenges. June 2007 The Center of Arab Women for Training and Research and IFC GEM.

77. DFID. March 2007. Briefing Note No. 5 Gender and Growth

78. World Bank. 2004. Kenya Investment Climate Survey.

79. World Bank. 2006. *Doing Business in 2006: Creating Jobs*. World Bank, Washington, DC, and IFC, Secured Lending Program.

Enabling movable assets—such as machinery, book debts, jewelry, and other household objects—to be used as collateral can benefit all businesses. But opening up this type of financing has the potential to be of particular benefit to land-poor women, enabling them to circumvent their lack of titled land and use the assets they do have to unlock access to formal credit markets (see Box 8.4).

Box 8.4

In **Sri Lanka** women commonly hold wealth by way of gold jewelry. This is accepted by formal banks as security for loans.⁸⁰

In **Tanzania**, Sero Lease and Finance, a women’s leasing and finance company, provides loans to women to purchase equipment for their businesses, using the equipment as security through leasing agreements.⁸¹ Sero has more than 10,000 exclusively female clients.⁸²

Women’s access to credit not only enables them to start or grow their businesses, but the impact on the household is likely to be profound. When poor women (rather than men) are the direct beneficiaries of credit, its impact on the various measures of household welfare (such as school enrolment rates⁸³) is greater.

Step 1. Diagnostics

Step 1 provides tools to explore (i) the extent to which patterns of secured lending are skewed in favor of men⁸⁴ and (ii) legal, regulatory, and administrative reasons for any such unequal distribution.

The critical steps to be taken during an initial project design phase (in the absence of a full diagnostic at that point) are highlighted in **orange**.

1.1. Analyze the Lending Market through a Gender Lens

** Critical initial project design step **

Key issues to assess:

- How important is collateral in the lending system? What percentage of lending requires collateral?
- What percentage of (secured) lending is to women and what percentage to men?
- What percentage of collateral taken is land title and what percentage is movable⁸⁵ assets?
- What percentage of registered land title is held by women?

Possible sources for this information may include the central bank, the national statistics office, the ministry of land or land registry (in relation to the question about land), and reports on the financial sector.

If a full diagnostic is being undertaken, overall information on the lending market could be supplemented by more detailed exploration of the issues with officials from commercial banks and other lending institutions.

80. M. S. Pal, 1997. Women Entrepreneurs and the Need for Financial Sector Reform. Economic Reform Today, Number Two.

81. Leasing is frequently regarded as a form of secured lending, and is often regulated as such. Strictly speaking however, title to the asset remains with the lending institution until full payment has been made.

82. A. Ellis, et al. 2008. *Doing Business: Women in Africa*. World Bank, Washington, DC.

83. Mark Pitt and Shahidur Khandker. 1998. “The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?” *Journal of Political Economy* 106: 958–96.

84. It is highly unlikely to be skewed in favor of women.

85. That is, assets that are not land.

There may be organizations in the country that provide secured finance primarily or exclusively for women—such as microfinance institutions, savings and loan cooperatives, or banks with credit lines directed at female-owned businesses (for example, Access Bank in Nigeria—see Box 8.5). These organizations may have interesting perspectives on women’s ability to access secured lending generally.

Box 8.5

Access Bank, one of Nigeria’s leading banks, is one of the first banks in Africa to dedicate lines for credit to finance female-owned businesses. The International Finance Corporation (IFC) provided the bank with a US\$15 million loan specifically to extend lines of credit to women entrepreneurs. In addition, the IFC provided comprehensive assistance and training to the bank to enhance its ability to reach out to the women’s market.

1.2. Obtain Gender-Disaggregated Private Sector Views

a. Consider existing private sector surveys for gender-disaggregated data.

**** Critical initial project design step****

Gender disaggregation of existing data may reveal differences in men’s and women’s abilities to access finance or secured lending and the reasons for any such differences. Good sources of information are likely to include Finscope™ Surveys,⁸⁶ investment climate surveys, household surveys, and enterprise surveys. The central bank may also have conducted relevant research and have survey information. If a published report does not contain gender-disaggregated data, it may be possible to access the underlying data (particularly if the research has been conducted recently), which may be susceptible to gender disaggregation.

National and international nongovernmental organizations (NGOs), particularly those with a focus on gender (which may not traditionally be consulted in investment climate work) should also be requested to provide any relevant survey evidence they may have.

b. Collect new data from the private sector.

Existing survey evidence can be supplemented by a more in-depth exploration of disparities and the reasons for them. This could be by way of a full-scale survey, focus group discussions (FGDs), or one-on-one interviews (see Box 8.6).

86. <http://www.finscope.co.za/about.html>.

Box 8.6

IFC undertook a study in **South Africa** to explore why women, particularly black women (more than 90 percent of whom run their own businesses), find it difficult to access finance. The study was based on (i) existing survey evidence, (ii) focus group discussions with businesswomen, and (iii) interviews with financial institutions. Key obstacles to women accessing finance were found to include

- lack of collateral;
- financial literacy: poor understanding of financial terminology and law;
- attitudes of banks (only one of South Africa's four major banks is contemplating a specific program to increase its share of female-owned enterprises);
- lack of awareness of availability of finance (few women in business know about the different institutions, their products, or how to access them—out of 170 women surveyed in four provinces, only seven were familiar with the offerings for small and medium enterprise finance from financial institutions in their province); and
- lack of financial confidence: women are more risk averse than men.

Evidence may emerge of discriminatory attitudes and treatment of women on the part of financial institutions (see Box 8.7):

Discussions may be held with men and women who have successfully financed their businesses through secured lending and those who have been unable to do so. Candidates for interview could be found through business associations (including women's business associations). Microfinance institutions may have successful (female) clients seeking to make the transition to the formal lending system, and their experiences may be relevant.

Box 8.7

Although banking laws do not discriminate against women borrowers, banks in many countries in the Middle East⁸⁷ ask for the husband to be a co-signer—even if he lacks financial resources or is not involved in the woman's business. The intent is to ensure that the woman's activities do not interfere with the wishes of her family or her husband.

1.3. Analyze the Legal and Administrative Framework

** Critical initial project design step **

Secured lending reform requires an understanding of the existing legal framework, in particular the extent to which it facilitates movable assets being used as collateral. Consideration should be given to the extent to which the legal framework enables women to own (and therefore use as collateral) movable assets and to whether the law discriminates in other ways against women when they seek to access finance (see Box 8.8 for examples).

87. Chamlou. 2007. "The Environment for Women's Entrepreneurship in the Middle East and North Africa Region." Pg. 47.

Box 8.8

In **Cameroon** married women have no property rights. The civil code states, “The husband alone administers matrimonial property . . . the husband shall administer all personal property of his wife” (articles 1421 and 1429).

Until very recently in **Lesotho** women were considered as minors and thus were ineligible to undertake legal transactions in their own right.

Local women lawyers’ organizations (for example, the local branch of the international women lawyers’ association, FIDA) or NGOs promoting women’s rights are often well placed to provide assistance in analyzing these issues.

The country’s international treaty obligations (see Box 8.9) and any guarantees of equality contained in the constitution should be examined. If legal restrictions on women’s property rights or ability to participate in secured lending conflict with these overarching obligations, the case for reform may be stronger.

Box 8.9

The Convention against the Elimination of All Forms of Discrimination Against Women (CEDAW) requires states to ensure that women have equal rights to obtain bank loans, mortgages, and other forms of credit.

The Beijing Platform for Action commits to providing women with access to finance and credit and eliminating biases against women in finance laws.

The Protocol to the African Charter on Human and People’s Rights on the Rights of Women in Africa commits states to create conditions to promote and support the occupations and economic activities of women.

Step 2. Solution Design

The diagnostic undertaken in step 1 will reveal the particular barriers that women face when seeking secured lending. Step 2 provides possible solutions to address them. These are not one-size-fits-all solutions, but, rather, examples of approaches that will need to be adapted for particular contexts.

The diagnostic may reveal barriers that are beyond the scope of secured-lending reform. For example, underlying social issues, such as intrahousehold relationships and allocation of resources, may affect women’s willingness or ability to apply for loans. A secured-lending program cannot address these issues directly, but it can mitigate these factors by providing an enabling legal, regulatory, and administrative environment.

Step 2.1 is the starting point for solution design: a clear determination and agreement of the impact the reforms seek to achieve in relation to gender.

2.1. Agree on Gender-Related Program Results

The starting point for solution design is to be clear about what the planned package of reforms aims to achieve for women. It may be helpful to formulate these goals in discussion with female entrepreneurs and women’s business associations. The key desired outcome is likely to be an increase in the amount of secured lending to female-owned businesses, in terms of the numbers of women receiving loans as well as the value of the loans.

2.2. Undertake Legal and Regulatory Reform to Enable and Encourage Lending to Women

If the legal questions reveals discriminatory laws relating to banking, lending, or property rights, these provisions should be repealed. In addition, proactive legal reform should be considered as a method to enhance women's ability to access secured lending. This may include amending the regulatory framework for credit reference agencies to enable women to establish their own credit history, separate from their husbands'. Reform to prohibit gender discrimination in relation to credit applications may also improve women's access to secured lending (see Box 8.10). If this course is taken, careful consideration should be given to a realistic and sustainable enforcement mechanism.

Box 8.10

Many countries' constitutions (or other overarching law) outlaw discrimination on the grounds of gender. But such provisions may not apply to private transactions (such as banking). If this is the case, consideration should be given to extending nondiscrimination provisions so that they apply in the private sphere:

- The **UK** Sex Discrimination Act, 1975 (as amended), prohibits gender discrimination in private transactions to supply goods, facilities, and services, including credit.
- The **USA** Equal Credit Opportunity Act, 1974, prohibits discrimination on the grounds of gender (or race) in relation to credit applications. It was extended by the Women's Business Act, 1988, to include business loans.

Developing partnerships with organizations already providing credit to women may facilitate reform

2.3. Undertake Awareness Raising Directed at Women

If the diagnostic revealed that women have limited knowledge of or access to information about accessing finance for their businesses, a program of awareness raising may be necessary. This could include financial literacy schemes and education for women on the benefits of accessing finance (see Box 8.11).

Box 8.11

In the **United States** the Women's Business Act provided government funding for women's business center "demonstration sites" to provide training and access to capital exclusively for women. Now more than 100 centers exist across the United States.⁸⁸

Women's access to commercial credit increased from 20 percent of women business owners to 34 percent between 1996 and 2003. By 2006 majority female-owned firms accounted for two in five of all businesses. They generate US\$1.9 trillion in annual sales and employ 12.8 million people nationwide.⁸⁹

Possible partners for these types of initiatives include

- commercial banks (see Box 8.5);
- institutions involved in administering the new secured lending regime;

88. U.S. Small Business Administration, <http://www.sba.gov/aboutsba/sbaprograms/onlinewbc/index.html>.

89. National Women's Business Council, Center for Women's Business Research. For more information about women's business centers, see <http://www.sba.gov/aboutsba/sbaprograms/onlinewbc/index.html>.

- institutions familiar with lending to women—even if in a different context—such as microfinance institutions; and
- women’s business associations.

2.4. Undertake Capacity Building for Financial Institutions and Implementers of New Laws

The diagnostic may reveal a lack of familiarity on the part of financial institutions with the female market segment. Regulatory and other institutions involved in implementing, monitoring, and evaluating the new regime may similarly not be attuned to gender issues, so capacity building in relation to gender issues with these institutions may be appropriate (see Box 8.12).

Box 8.12

In 2000 four banks that had been recognized by the Organisation for Economic Co-operation and Development as “best practice” banks in reaching the women’s market in their countries formed a consortium called the Global Banking Alliance for Women. Member banks collaborate on identifying and sharing global best practices in financial service delivery to women. Initially started by banks from Australia, Canada, New Zealand, the United Kingdom, and the United States, the alliance now includes 15 members, including members from Africa, the Middle East, and Latin America.⁹⁰

Step 3. Implementation and M&E

The general points on implementation and monitoring and evaluation in core module should be applied to secured-lending reform programs. In addition, the following points should be considered in relation to M&E.

3.1. Ensure Key Information Can Be Gender Disaggregated

Although potentially challenging, it is vital to ensure that key data can be gender disaggregated so that the impact of reforms on women can be monitored and evaluated. The central bank and commercial lending institutions may not gather gender-disaggregated statistics on lending patterns. And it may be difficult with loans to determine whether a family business is owned by the husband or wife.

Despite possible difficulties, to the extent possible without imposing undue costs, data should be gender disaggregated. At the minimum it will be important to gather information about levels of lending to women following the institution of reforms. Discussions should be held with the central bank, with new institutions administering the new regime (such as movable property registries), and with commercial lending institutions to develop a suitable system. Institutions already focusing on lending to women may have useful knowledge to share about gender-disaggregated data collection systems.

90. U.S. Small Business Administration, <http://www.sba.gov/aboutsba/sbaprograms/onlinewbc/index.html>.

3.2. Incorporate Output and Outcome Indicators That Highlight Gender Aspects of the Program

Gender issues should be incorporated within the program’s M&E framework at the output and outcome levels. Table 8.1 provides a template for incorporating gender in indicators typically used in secured lending reform programs.

Table 8.1.

Indicator/Data Required	Gender Focus (Gender-Disaggregation)	Source of Data
Output Indicators		
<ul style="list-style-type: none"> Number of operational manuals produced Training and outreach 	<ul style="list-style-type: none"> Qualitative indicator: gender-inclusive focus (customer service); gender issues articulated and addressed Core indicator: number and/or percentage of men and women participating or benefiting 	<ul style="list-style-type: none"> Manuals produced Agency management FGDs Interviews with businesswomen
Workshops and outreach events to disseminate the new secured transactions reform and registry	<ul style="list-style-type: none"> Gender disaggregate the data on participants 	<ul style="list-style-type: none"> FGDs Agency management Women’s business associations Sample surveys
Outcome Indicators		
Changes in laws, regulations and procedures that discriminate against women	<ul style="list-style-type: none"> Do women have to obtain husband or other male permission to engage in business transactions (including opening a bank account or securing a loan)? 	<ul style="list-style-type: none"> FGDs Women’s business associations Women’s legal rights NGOs Country legal and social analysis
Average number of days to file a security interest	<ul style="list-style-type: none"> Number of days disaggregated by gender of business owner 	<ul style="list-style-type: none"> Tracking survey Agency management Regulatory Impact Assessment Survey FGDs Women’s businesses and associations
Average official cost to file a security interest	<ul style="list-style-type: none"> Cost disaggregated by gender of business owner (to capture corruption or other differences) Corruption incidence disaggregated by gender of business owner 	<ul style="list-style-type: none"> Tracking survey Agency management Regulatory Impact Assessment Survey FGDs Women’s businesses and associations
Movable property registry established or became operational	<ul style="list-style-type: none"> Percentage of filings of borrower 	<ul style="list-style-type: none"> Agency management FGDs Women’s businesses and associations
Improved user perceptions of services provided	<ul style="list-style-type: none"> Disaggregate by gender 	<ul style="list-style-type: none"> Agency management Regulatory Impact Assessment Survey FGDs Women’s businesses and associations

Annex 9: Bibliography

Albanian Law on Securing Charges.

Alvarez de la Campa, Alejandro. "How to Expand Credit to SMEs – Creative Solutions to the Puzzle of Collateral Lending." IFC Smart Lessons, Washington, D.C., International Finance Corporation, World Bank Group, 2007.

Alvarez de la Campa, Alejandro. "Private Sector Approach to Commercial ADR: Commercial ADR Mechanisms in Colombia." The World Bank Group. March 2009.

Asian Development Bank. "Law and Policy Reform at the ADB Vol. II, 2000 Edition." Manila, December 2000.

Bank for International Settlements. "Report of the Working Group on International Financial Crises." October 1998.

Bank for International Settlements. "Report of the Working Group on Strengthening Financial Systems," October 1998.

Baranes, Yair and Ronald C.C. Cuming. "Handbook on the Albanian Collateral Law." The World Bank Group, 2001.

Baranes, Yair and Ronald C.C. Cuming, "A Manual for Creating & Implementing Secured Financing Systems." 2006.

Beck, T. A. Demirgüç-Kunt and R. Levine, "Law and Finance: Why Does Legal Origin Matter?" World Bank, 2002.

Beck, T. A. Demirgüç-Kunt and Maksimovic, V. "Financial and Legal Constraints to Firm Growth: Does Firm Size Matter?" *Journal of Finance*, 60 (1), 137-77, 2005.

Berger, Allen N., and Udell, Gregory F. "Collateral, Loan Quality and Bank Risk." *Journal of Monetary Economics* 25:21-42, 1990.

Bosnian Framework Pledge Law.

Chaves, Rodrigo, Nuria de la Pena and Heywood Fleisig, 2004. "Secured Transactions Reform: Early Results from Romania". CEAL Issues Brief, Center for Economic Analysis of Law, September 2004.

Commercial Finance Association. "Annual Asset Based Lending and Factoring Surveys." June 2008.

Dahan, Frederique. "Securitising Mortgages in Transition Economies: The Challenge of Providing an Efficient Legal Framework." European Bank for Reconstruction and Development, 2008.

Dahan, Frederique, and John Simpson. "Secured Transactions Reform and Access to Credit." Elgar Financial Law Series, 2009.

De la Peña, Nuria, and Fleisig, Heywood. "SMEs and Collateral.". CEAL Issues Brief. Center for the Economic Analysis of the Law, Washington D.C., 2002.

Department for International Development (DFID), World Bank (WB), International Finance Corporation (IFC), and Organization for Economic Cooperation and Development (OECD). "Public-Private Dialogue Handbook: A Toolkit for Business Environment Reformers." 2006.

DFID, WB, IFC and OECD. "Charter of Good Practice in Using Public Private Dialogue for Private Sector Development", 2006.

Djankov, Simeon, McLiesh, Caralee and Schleifer, Andrei. "Private Credit in 129 Countries." March 2006.

- European Bank for Reconstruction and Development (EBRD) Model Law on Secured Transactions, 2004.
- EBRD, "Publicity of Security Rights – Guiding Principles for the Development of a Charges Registry", 2004.
- EBRD, "Survey of Charges Registries in the Balkans." 2004.
- Fleisig, Heywood, Mehnaz Safavian and Nuria de la Peña. "Reforming Collateral Laws to Expand Access to Finance." World Bank, 2006.
- Garro, Alejandro M. "Harmonization of Personal Property Security Law: National, Regional and Global Initiatives." *Uniform Law Review* 8:357-68, 2003.
- Helms, Brigit, "Access for All: Building Inclusive Financial Systems." Washington D.C., CGAP, 2006.
- IFC, "Emerging Collateral Practices in Countries with Reformed and Unreformed Secured Transaction Frameworks." December 2006.
- IFC, "Guide to Core Output and Outcome Indicators for IFC Technical Assistance Programs." January 2006.
- La Porta, R., Lopez-de-Silanes, F. and Schleifer, A. "What Works in Securities Laws?" *Journal of Finance*, 57, 2006.
- Madagascar Leasing Law.
- Organization for the Harmonization of Business Law in Africa's Uniform Act on Securities, 1997.
- Organization of American States (OAS) Model Inter-American Law on Secured Transactions, 2002.
- Pissarides, F., and M. Holger. "Impact of Collateral Practice on Lending to Small and Medium-Sized Enterprises." EBRD, 2000.
- Safavian, Mehnaz, Heywood Fleisig, and Jevgeniji Steinbucks. "Unlocking Dead Capital." The World Bank Group, Viewpoint Note no. 307, March 2006.
- Saskatchewan Canada Personal Property Security Act.
- Simavi, Sevi, Clare Manuel, and Mark C. Blackden, "Gender Dimensions of Investment Climate Reform: A Guide for Policy Makers and Development Practitioners." World Bank, Washington D.C. 2009.
- Tajikistan Civil Code.
- The People's Bank of China Credit Information Center. "Report on the Notice Registration System for Pledges of Receivables." Issue no. 6, March 6, 2008.
- United Nations Commission on International Trade Law (UNCITRAL). "Legislative Guide on Secured Transactions." 2008
- Udell, Gregory F. "Asset Based Finance. Proven Disciplines for Prudent Lending."
- Welsh, Allen. "Secured Transactions Law: Best Practices & Policy Options." IRIS, Paper Number 03/06, August 2003.
- Wohlers, Everett T. "The Registry: Essential Element in Secured Lending." 18 *Arizona Journal of International and Comparative Law* 711 (2001).
- Wood, Roderick J., and Ronald C.C. Cuming. "British Columbia Personal Property Security Act." Carswell, Canada, 1990.

World Bank. "Principles for Effective Insolvency and Creditor Rights Systems," Washington D.C. Revised 2005.

World Bank. "The Unfolding Crisis: Implications for Financial Systems and Their Oversight." Financial Systems and Development Economics Department, Washington D.C. October 2008.

World Bank Group. *Doing Business Report*. 2005-2009.

World Bank Group. "Enterprise Surveys Global Database".

World Bank Group. "Finance for All: Policies and Pitfalls in Expanding Access". Washington D.C. 2008.

Yaron, Jacob, McDonald, Benjamin, and Gerda, L.Piprek. "Rural Finance: Issues Design and Best Practices.", World Bank, 1997.

