Information Sharing and SMME Financing in South Africa: A Survey of the Landscape



By: Michael A. Turner, Ph.D., Robin Varghese, Ph.D., and Patrick Walker, M.A. Research contributors: Joseph W. Duncan, Ph.D., Ed Roche, Ph.D. and Adam Rodman





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GLOSSARY

Adverse selection – In lending, an effect of information asymmetries in which low-risk applicants are driven out to some extent from the applicant pool if they are indistinguishable from high-risk applicants. This occurs because the low-risk applicants would be required to pay more for loans than their risk level should require (they are being overcharged). High-risk borrowers, on the other hand, are drawn to the pool because they as are being undercharged.

Factoring – Financing via purchase of accounts receivable.

Financial statement lending – Loans based on a borrower's financial statements.

FMCG – Fast moving consumer goods are products that are sold quickly at relatively low cost. Examples include soap, teeth cleaning products, shaving products, detergents, light bulbs, batteries, paper products, and plastic goods.

Full-file credit reporting – When both positive (on-time payments, balances, etc.) and negative financial are reported in a credit file.

Information asymmetry – When one party to a transaction has more or better information on crucial elements of the transaction than the other party. For lending in particular, only the borrower knows the borrower's ability and intent to repay a loan.

Moral hazard – When a party insulated from risk acts differently than if it were fully exposed to risk. For lending in particular, borrowers might spend their money recklessly, and not for what the loan was initially intended.

NCA – National Credit Act

Negative-only reporting – When credit agencies only publish information about delinquencies and defaults and not information about timely repayments.

Non-financial payment (alternative)

data – Payment data on consumer habits that come from non-financial sources such as utilities and telecom payments and rental payment data.

Relationship lending – Lending where loan decisioning is based on some quantitative factors such as balance sheets, a bank's knowledge of the borrower, the borrower's reputation in the community, and other intangibles.

Segmented reporting – When different credit bureaus report payment data from different sectors for the same data subject. For example, one credit bureau could report only bank credit card information, while another reports retail credit payment histories.

Small business credit scoring (SBCS) – Credit scores based on business' and/or business owner's financial data and transactions.

SMME – Small, Medium, and Micro Enterprises

Survivalists – A micro-enterprise where the primary motivation of the owner is economic survival. This is in contrast to an entrepreneur, who is more likely to reinvest money in the microbusiness than he or she is to spend it.

Trade credit – The provision of goods or services to be paid for at a later time.

Transaction cost – The cost involved in making an economic exchange. For lending in particular, transaction cost refers the expenses in finding out whether a borrower is trustworthy.

Executive Summary

Information sharing can contribute to the expansion of financial credit for small, medium, and micro-enterprises (SMME) and the efficient functioning of these credit markets. In particular, trade credit payment data from enterprises in the informal sector—data not traditionally reported to credit bureaus—can increase lending by large creditors to SMMEs in the informal sector. Such additional data permit the sophisticated and well-capitalized South African financial sector to more efficiently reach traditionally underfinanced enterprises.

This report focuses on the current state of credit access for SMMEs in South Africa. In particular, it examines barriers to credit access and viable near-term solutions to reduce or eliminate those barriers. Specific attention is paid to information exchanges in the context of commercial credit reporting, as South Africa moves to implement a National Credit Register of credit obligations.

South Africa's lending and financial services infrastructures are more advanced than many other upper-middle-income countries. In many respects, South Africa compares favorably with developed economies, although not across all segments of society. Credit access for South African SMMEs is a tale of two economies. The formal sector, or "first economy," has relatively easy access to credit. The very large informal sector, or "second economy," lacks such easy access. Information solutions can help bridge these two sectors of the economy and ease the transition of informal businesses to the formal sector. By putting needed data in the hands of established credit bureaus, South Africa can move the well-established credit infrastructure that "last mile" to smaller but vital businesses.

Greater information sharing of trade credit data, particularly in the informal sector, can greatly expand credit access for SMMEs. Although there are movements in the market toward sharing informal-sector trade credit information, these have been slow. The proposed National Credit Register can speed up the expansion of reporting of this trade credit data. It can do so provided that it:

(i) does not compete with bureaus but acts as an input into the bureaus;

(ii) keeps to a minimum the information that is to be reported so that potential data furnishers are not threatened by potential poaching from information sharing; and

(iii) is developed in consultation with potential data furnishers and their trade associations.

Furthermore, collecting data on pledged collateral could facilitate lending by reducing lender risk. Finally, given that personal loans have been used for business financing, regulators should consider shaping the guidelines of the "reckless lending" provisions of the National Credit Act to facilitate business lending through the personal-commercial interface while preventing consumers from becoming overextended.



KEY FINDINGS

» South Africa has a world-class information infrastructure. Compared with other upper-middle-income nations, South Africa has a highly advanced credit information system, and the capacity and skills to address any identified credit access problems. However, the country faces significant challenges in collecting data from the large, less formal economy.

» Large lenders, using information solutions, can profitably lend to small, medium, and micro-enterprises (SMMEs). It has been argued that only smaller lenders willing to make costly investments in relationship banking are able to profitably extend credit to SMMEs. There is good reason to believe, however, that larger lenders, using rich data sources and information solutions, can profitably lend to SMMEs. » Many SMMEs can not access credit owing to lack of information. As automated underwriting becomes more common, lenders increasingly rely on standardized data when extending credit. In automated underwriting, the default assumption is that insufficient information equals high credit risk. As such, most lenders view many entrepreneurs in South Africa, particularly in the informal economy, as too risky for credit, owing, in part, to insufficient credit information.

» Trade credit and non-financial payment data are underused in South Africa. Economies around the world routinely collect trade credit data for commercial lending, including the formal economy in South Africa. Countries are also beginning to collect non-financial payment data (such as utility and telecom payments) when standard credit information is unavailable. However, such information is rarely collected in South Africa. Collecting more trade credit data from the informal sector could greatly expand access to credit for small and micro-enterprises. » The proposed National Credit Register could enable the sharing of SMME credit information, particularly in the informal sector. To do so, it must: (i) not compete with bureaus but rather channel information into the bureaus in a neutral fashion; and (ii) keep to a minimum the information that is required to be reported so potential data furnishers are not threatened by potential poaching from information sharing. To manage these risks, South Africa's National Credit Regulator should develop the register in consultation with potential data furnishers and their trade

» A registry of collateral can minimize the risks assumed by lenders. The possibility that the same movable asset(s) has been pledged as collateral to multiple lenders increases the risk to the lenders. This is a risk that can be easily mitigated by information sharing.

associations.

» The guidelines that govern the "reckless lending" provisions of the National Credit Act (NCA) should take into account the possibility that consumer loans may be used for commercial purposes. The NCA's "reckless lending" provision may cause tension between borrowers in the informal sector who need credit and the need to prevent overextension. As information sharing develops and allows for greater lending, consumer loans may be used for commercial purposes. To the extent that this course of financing develops, guidelines should be adjusted to accommodate this interface between consumer and commercial lending.



1.0 Bridging the Gap between the First and Second Economies: The Problem of Small, Medium, and Micro-Enterprise Financing in South Africa

Access to credit is critical to any business. For small, medium, and micro-enterprises (SMMEs), which play an important role in the health of a country's private sector, access to credit and financing is crucial to their sustainability and growth—and ultimately to a country's economic growth, employment, and asset formation. As such, access to credit has become a key issue of concern for international development agencies, regulators, and policymakers in advanced and emerging economies alike. South Africa is no exception.

Even 14 years after apartheid in South Africa, access to small-business financing is still constrained for many. The path to asset building and wealth creation for most members of the large South African underclass leads directly to credit access. With such credit comes the opportunity for economic improvement for millions of South Africans.¹ Although changes to the South African economy have been extensive since the end of apartheid, and access to banking and credit services have expanded significantly for those once excluded, financing remains limited for SMMEs in the second economy—the largely nonwhite, underdeveloped market economy—and there is little interface with the extremely well developed financial sector in the first economy. A major issue for policymakers and regulators is how to extend the advanced financial services sector of the first economy to the second.

Lessons from the theoretical and empirical literature in economics and, more important, from experiences around the globe strongly suggest that a well-developed credit information-sharing infrastructure and an extensive practice of credit reporting can greatly increase access to credit in both the commercial and consumer arenas. Encouraging information sharing has been shown to be a lowcost for of intervention, one that serves to enhance financial competition, while rendering credit markets more efficient. Widening the scope of information sharing has been shown to expand lending to the pool of potential applicants by 5 percent or more in many studies, set in different economies (see below especially Table 4).

That better credit information sharing can expand credit access is well understood in South Africa. SMME lending may face several hurdles in South

¹ South Africa's informal economy is composed of 3.7 million laborers, or 31 percent of the total South African labor force. In 2001, more than 50 percent of South Africans were living on less than US\$2 per day, and more than 20 percent were living on less than US\$1 per day. See I. Valodia, *Informal Employment in South Africa* (Pretoria, South Africa: Human Sciences Research Council, August 2007), p. 11, available at http:// www.hsrc.ac.za/Research_Publication-6950.phtml. Statistics South Africa, *Labour Force Survey* (Pretoria, South African, September 2007), available at http://www.statssa.gov.za/PublicationsHTML/P0210September2007/html/P0210September2007.html.



Africa, but many projects and innovations in information sharing are underway, and these promise to improve lending and information on SMMEs and to lower the costs and speed of risk assessment. Furthermore, proposed regulatory efforts to encourage competition are expected to have profound effects on the structure and scope of lending. These improvements and an everexpanding set of new players and products in the financial sector will likely change the scope and scale of lending over time.

This study examines the landscape of SMME financing and information sharing in South Africa through a comparative perspective. It provides an overview of the state of SMME lending in South Africa, an account of some changes underway, how information sharing works both generally and specifically in the specific SMME environment, and lessons from the theory and experience of information sharing as South Africa deliberates the implementation of the National Credit Register. This study's objective is to provide policymakers a background on information sharing and to raises issues for consideration at the beginning of a reform process. This report, commissioned by the South African National Credit Regulator (NCR), examines information sharing from several angles to answer the following questions:

- » Does sharing financial information of SMMEs increase lending to the smallbusiness sector? If so, to what extent?
- » Does it improve the equitability of credit?
- » Does the sharing of financial information of SMMEs improve loan portfolio performance?
- » What is the current state of information sharing for SMMEs in South Africa? How is financial payment information used in the credit sector?
- » To what extent does small-business credit access remain a problem, particularly in low- to moderate-income areas?
- » How does the regulatory framework affect information sharing? What issues must be taken into account when considering regulatory reform?

To answer these questions, the report draws on:

(1) interviews with South African credit bureaus, lenders, nonprofit microfinance institutions, academics, and a regulator;

(2) a review of credit information-sharing practices worldwide and their effects on lending; and

(3) a review of the relevant theoretical and empirical research.



Section 2.0 examines the SMME sector, its size, and composition in South Africa. The section also examines issues of credit access for this sector and how the SMME sector in South Africa compares with those of similar economies worldwide.

Section 3.0 discusses information sharing as a solution to the problem of lending generally and SMME lending in particular, drawing on international lessons. It examines the theoretical and empirical understanding of credit reporting; explores lessons learned from study and experience of information sharing; and examines the state of information sharing in South Africa. Commercial credit reporting is of particular concern, including its current condition, value-added services, and how it interacts with the second economy.

Section 4.0 examines the role of current regulation and related issues, and Section 5.0 concludes with issues to consider and recommendations for policy.



2.0 A World-Class Infrastructure in a Developing Economy: Overview of the SMMEs Landscape and Commercial Credit in South Africa

No matter what definition of small, medium, and micro-enterprises is used, South Africa has a remarkable level of SMME activity compared with similar economies. Yet SMME owners report that access to financing is a major problem. However, entrepreneurs in South Africa consider access less of an issue than do entrepreneurs in other countries. This difference might stem, in part, from the vibrant use of trade credit. The increased collection of trade credit data used in the informal sector has the potential to set off a virtuous cycle of SMME investment in the informal sector by stimulating greater lending via small-business credit scoring and, also, relationship banking.

Businesses are classified as micro-enterprises, small, or large businesses by a number of different criteria. This study uses Coetzee's 2008 definitions of micro-enterprises as having turnovers of less than R1,000,000; small businesses as having turnovers between R1,000,000 and R10,000,000; and medium-sized enterprises as having turnovers between R10,000,000 and R50,000,000.²

Others have delineated these categories slightly differently. The 2006 FinScope's survey of small businesses in Guateng, South Africa, does not use a single, straightforward definition of SMMEs, but instead segments small and micro-businesses by measures such as formality, education level of the business owner, and turnover. The 2006 FinScope survey implicitly considers micro-enterprises as those with annual turnovers of less than R500,000.³ The World Bank defines South African SMMEs by number of employees, following Falkena and colleagues. In their scheme, micro-enterprises are those with fewer than 10 employees, small enterprises are those with 10–50 employees, and medium-sized businesses are those with 50–100 employees. ⁴

² Gerhard Coetzee, "ABSA Micro Enterprise Finance." Presentation. Johannesburg, January 2008.

³ Finscope, *Small Business Survey Report - Gauteng 2006* (Johannesburg: Finscope, 2006), available at: www.finscope.co.za/ documents/2007/SmallBus_report.zip.

⁴ Marta Kozak, "Micro, Small, and Medium Enterprises: A Collection of Published Data" (Washington, DC: International Finance Corporation, January 26, 2007), available at http://rru.worldbank.org/Documents/other/MSMEdatabase/msme_database.htm; Hans Falkena et al., (Pretoria: National Treasury of South Africa, Task Group of the Policy Board for Financial Services and Regulation, no date).

Ntsika Enterprise Promotion Agency developed a turnover-based definition of SMMEs in addition to employment thresholds.⁵ Businesses with less than R50,000 in turnover are considered microenterprises. Small enterprises are those with between R50,000 and R5,000,000 turnover. Those with between R5,000,000 and R50,000,000 are medium-sized enterprises. By Ntsika's estimation, 98 percent of all firms in South Africa are small or micro-enterprises, with more than 70 percent micro-enterprises. Since this report, there have been revisions to these thresholds, as indicated above.

Although surveys of small and micro-businesses find that obtaining start-up capital is often a problem, a more in-depth survey of medium businesses is necessary to determine when financing becomes a concern. FinScope's survey of small and micro-enterprises identifies the segments within these strata that have financing problems, and as such are areas of policy concern. Whether and the extent to which the larger and medium-sized firms face financing problems (in both access and costs) have important policy consequences.

The broad picture that emerges from the various surveys of SMME lending strongly suggests that business owners in South Africa view access to financing as a significant problem for business activity. Nonetheless, South Africa witnesses a robust level of SMME activity in the formal and informal sectors, facilitated by a vibrant system of trade credit. The evidence suggests that trade financing may be serving as a substitute. This fact may explain the high levels of South Africa SMME activity in the informal sector, particularly when compared with other middle-income countries, in the face of what entrepreneurs find to be very high costs of capital and very restricted access.

This is not to suggest that lack of access to financial credit does not limit economic growth and employment, or that this lack of access does not limit the growth and employment of a firm. There are reasons to believe that the system of trade credit provides an informational basis to facilitate access to financial credit, as will be shown in later sections.

2.1 SMME Activity in South Africa in Comparative Perspective

By World Bank standards, South Africa has a remarkable level of SMME activity compared with similar economies. Figure 1 shows the number of small, medium, and micro-enterprises per 1,000 inhabitants for upper-middle-income countries, that is countries for which gross national income per capita is between US\$3,596 and US\$11,115, and for which data are available.⁶ Only countries

⁵Ntsika Enterprise Promotion Agency, *State of Small Business Development in South Africa. Annual Review 2001*, edited by Hakim Malagas (Pretoria: Ntsika, 2001).

⁶Kozak, "Micro, Small, and Medium Enterprises." Data for South Africa is drawn from FinScope, Small Business Survey Report Gauteng 2006, p. 10. The FinScope survey is restricted to small and micro-businesses. We include Botswana, which while upper-middleincome, shares considerable regional similarities with South Africa. Upper-middle-income parameters are drawn from the World Bank "Country Classifications," worldbank.org."

with surveys in the last eight years are shown. Of these economies, only Mauritius has a higher level of SMME activity. The previous South African survey conducted in 1997 showed 22 small businesses per 1,000 people. In a decade, that figure has more than doubled, to 58.⁷

At odds with some of these findings is that of *Global Entrepreneurship Monitor (GEM) 2006 South Africa* surveys, which find that South Africa is average in business formation compared with other countries.⁸ The FinScope Survey of small businesses in Gauteng found that more than one-half of entrepreneurs surveyed started their businesses out of opportunity rather than necessity. Approximately 34 percent did so because they could not find a job. As expected, this motivation is prevalent among lower-income segments and smaller businesses.⁹ The survey found that business launched owing to opportunity were more likely to survive; 56 percent of those started out of opportunity had been in business more than three years compared with 45 percent started out of necessity.



FIGURE 1: SMME per 1000 Inhabitants for Selected Upper-Middle-Income Economies

⁷ The source for 1997 statistics is Falkena et al., "Access to Finance in South Africa."

⁸ See, Gideon Mass and Michael Herrington, *Global Entrepreneurship Monitor, South Africa, 2006* (Cape Town: University of Cape Town, 2006, Tables 8 and 9).

⁹ FinScope Small Business Survey Gauteng 2006, p. 40.

Although South Africa ranks high in SMME activity among similarly situated economies, much of the activity derives from necessity or lack of opportunity. There are policy options that can expand small business activity and elevate its level beyond that of a means to a very basic income. These options are discussed in greater detail in Section 4. First, the next section provides a closer examination of the composition of SMMEs in South Africa.

2.2 The Composition of South African SMMEs

The vast majority of small and micro-enterprises in South Africa are informal, meaning the vast majority of businesses in South Africa are informal. Table 1 breaks down SMMEs by their status overall and by province. In 2001, small, medium, and microenterprises (both formal and informal) accounted for 54 percent of private-sector employment (including survivalists, such as street merchants barely subsisting).¹⁰ Small and medium-sized firms accounted for 28.6 percent of all firms and 41.7 percent of all employment in the private sector.

TABLE 1: Formal and Informal Businesses inSouth Africa

Source: FinScope Small Business Survey Gauteng 2006, p. 10.

	Formal Business	Informal Businesses	Population	Informal Business/ Total Businesses	Informal Businesses per Capita	Formal Businesses per Capita
Western Cape	78,000	111,000	4,760,000	58.7%	2.3%	1.6%
Eastern Cape	22,000	209,000	6,500,000	90.5%	3.2%	0.3%
Northern Cape	5,000	17,000	818,000	77.3%	2.1%	0.6%
Free State	13,000	126,000	2,740,000	90.6%	4.6%	0.5%
KZN	54,000	580,000	9,770,000	91.5%	5.9%	0.6%
North West	11,000	175,000	3,800,000	94.1%	4.6%	0.3%
Gauteng	199,000	616,000	9,450,000	75.6%	6.5%	2.1%
Mpumalanga	15,000	191,000	3,250,000	92.7%	5.9%	0.5%
Limpopo	10,000	266,000	5,410,000	96.4%	4.9%	0.2%
Total	407,000	2,291,000	46,498,000	84.9%	4.9%	0.9%

10 Hans Falenka et al., *Competition in South African Banking*. Task Group Report for the National Treasury and the South African Reserve Bank (Pretoria: South African Reserve Bank, April 2004).

FinScope offers a more nuanced breakdown of small businesses. It uses a business sophistication measure (BSM) that categorizes businesses by type, size and turnover, value added, premises of operation, business structure, accounting practices, use of banking services, access to credit by type, regulatory compliance, and other factors. This breakdown by level of sophistication helps in understanding both the credit needs of different segments of SMMEs and allows for a closer examination of the impact of information sharing among these segments. (See Section 3 for more information.) The classification also marks firms by their formal status, thereby identifying possibilities for and hurdles to different types of credit. Table 2 describes different BSM categories by key variables. Level of business sophistication increases numerically. BSM1 is less sophisticated than BSM7 in Table 2.¹¹

	BSM1	BSM2	BSM3	BSM4	BSM5	BSM6	BSM7
Business Activity	Stall Traders - Survivalists	Stall Traders	Sale of Goods		Unregistered individuals/ Sole Prop		CC/ Partnership
Operate from	Footpath		Home	Home	Home	Home	Office block
Cell phone	No	Yes	Yes	Yes	Yes	Yes	Yes
Education Level	Some H/S	Some H/S	Some H/S	Matric	Matric	Post Matric	Post Matric
Number of Employees	0.1	0.14	0.23	0.47	0.85	1.78	8.88
Annual Turnover	R9 113	R10 723	R16 793	R24 710	R27 841	R66 597	R463 747
Note: BSM – business sophistication measure, from less to more sophisticated.							

TABLE 2: Small and Micro-Businesses by Sophistication Segment

Source: FinScope, Small Business Survey Report Gauteng 2006 (Johannesburg: Finscope, 2006).

¹¹Gerhard Coetzee, "ABSA Micro Enterprise Finance." Presentation. January 2008.

Similarly, a breakdown by the sectors of activity also helps us to understand both credit needs and information possibilities. Figure 2 depicts the distribution of businesses by sector for each BSM. At the lower end, the majority of businesses (64 percent) are involved in the sale of goods, mainly "fast-moving" consumer goods. An additional 19 percent operate in the service sector, but these are more prominent in the higher BSMs.



FIGURE 2: Distribution of Firms Across Sector by BSM

Note: Bars with no numbers account for less than 1 percent.

Source: FinScope, Small Business Survey Report Gauteng 2006 (Johannesburg: Finscope, 2006).

2.3 Credit Access in the Two Economies

Much like other emerging markets across the globe, financing remains a problem for South African SMMEs. Levels of lending are difficult to measure, in part because many small-business loans are consumer loans used for business purposes, particularly in the informal sector. Given that these loans are not recorded as business loans, they are hard to separate from consumer loans and cannot be accurately measured. A second limitation is that loan data are not reported to the South African Reserve Bank or the Department of Trade and Industry.

By contrast, data on the formal sector are plentiful. This report uses the Investment Climate Assessments and World Business Environment Surveys to examine the state of access to finance for small and medium enterprises in the formal sector. This portrait provides a benchmark for the operation of the formal sector and suggests the possible impact of information sharing in the South African context. Although the formal sector differs considerably from the informal sector, a review reveals important facts about the South African financial sector, and business lending in general. The findings from these surveys can be compared with responses from lenders and experts on lending to SMMEs, particularly in the informal sector, to suggest applicable and relevant inferences and identify salient differences.

This report relies on two extensive surveys for data on SMMEs in the informal sector. The first is the 2006 FinScope *Survey of Small Businesses in Guateng* and the second is the *Global Entrepreneurship Monitor (GEM) 2006 South Africa*. These surveys provide detailed information on SMME activity and access to finance. Both, and particularly the FinScope survey, capture extensive information on informal firms.

2.3.1 Credit Access in the Formal Sector

By some accounts, financial access by small- and medium-sized firms in the formal sector is generous relative to similar economies elsewhere. Indeed, South African firms appear to be and have been less concerned about access to and cost of financing than those in other upper-middle-income countries. Moreover, surveys on the availability of financing suggest that firms in the formal sector fare better than firms in the United Kingdom and nearly as well as firms in Canada.

The 2000 World Business Environment Survey, though dated, is valuable in that it asked consistent questions across diverse economies. This report uses six questions from the World Business survey to gauge access to finance for commercial activities.

¹⁴Ibid.

¹² George Clarke et al., South Africa: An Assessment of the Investment Climate (Washington, DC: World Bank, 2005).

¹³Data from *World Business Environment Survey* (WBES) 2000 (Washington, DC: World Bank, 2000). Interactive web tool, available at http://info.worldbank.org/governance/wbes/#wbes

How problematic are obstacles in the business environment in the following areas?

01	Finar	ncing
×-		6

- Q2 Collateral requirements of banks and financial institutions
- Q3 High interest rates
- Q4 Banks lack money to lend
- Q5 Lack of access to lease finance
- Q6 Inadequate credit information on customers



Figure 3 compares the responses of South African firms with the averages of those in the same income category in other countries. The responses to these questions suggest that South African firms face fewer obstacles to credit than do firms in countries with similar average income levels. However, there are limits to the comparability of the answers. Other concerns, for example, crime, corruption, etc., may make credit appear to be less of a problem. Nonetheless, other indicators suggest that access to finance is less of a problem for SMMEs in South Africa than it is in other middle-income economies. Proxies to measure ease of accessibility, presented by some World Bank studies, also reveal a business friendly and modern banking sector for SMMEs.¹⁵

FIGURE 3: Business Environment Obstacles, South Africa in Comparison to Middle-Income Country Average



Note: Green bars signify world averages, and blue bars are data for South Africa.

¹⁵ Ibid.



High interest rates are a significant concern of the formal sector in middle-income countries. A greater share of firms in South Africa indicates high interest rates to be a problem than the middle-income country average. Although the difference may not be great, that South Africa performs relatively well on the other measured dimensions of financing obstacles—such as collateral requirements, access to lease financing, lack of money for lending- raises a puzzle as to why interest rates are a greater concern in South Africa. Nearly all observers of the South African financial sector note the lack of competition as a major concern for access to and the price of credit. Given that credit information on SMMEs in the formal sector is viewed as quite adequate in South Africa, researchers and policymakers should examine the causes of high interest rates. Such an examination is beyond the scope of this study, however.

Table 3, which examines measures of business banking obstacles for upper-middle-income countries, shows that on one very important metric days to process a business loan—South African banks perform better than all others and, with the exception of the Slovak Republic, do so by a considerable margin. This responsiveness speaks to both a modern banking system and a modern information-sharing system, given that time to process a business loan is largely determined by the steps needed to measure risk.

	Physical access		Affordability			Eligibility				
Country	Number of banks respond- ing	Loan market share 2004 (respondent share of to- tal system)	Locations to submit loan applications (out of 5)	Minimum amount business loan (% of GDPPC)	Fee business loan (% of min. loan amount)	Minimum amount SME loan (% of GDPPC)	Fees SME loan (% of min. loan amount)	Days to process business loan applications	Days to process SME loan applica- tions	General Finance Obstacle
Brazil	4	48.61%	4.85	19.19	2.10	8.08	2.10	10.32	3.63	2.71
Bulgaria	3	31.65%	3.42	130.35	2.05	95.79	2.27	21.38	13.38	3.13
Chile	2	36.05%	5.00	178.74	3.57	121.70	1.09	10.00	13.87	2.43
Croatia	4	63.69%	3.43	146.24	0.94	22.58	1.30	11.89	4.65	3.34
Dominica	2	42.61%	4.67	89.32	1.25	43.52	1.32	6.67	_	2.58
Gabon	3	N.A.	4.76	0.00	100.35	0.00	100.35	15.08	15.08	
Hungary	3	42.43%	3.29	58.00	3.31	58.00	1.51	10.04	7.66	2.67
Lebanon	3	38.00%	4.60	4470.83	5.40	1154.76	4.95	15.61	15.61	_
Lithuania	5	86.77%	4.25	17.54	0.88	17.54	0.67	9.83	8.62	2.88
Mexico	3	45.74%	4.20	101.93	1.27	87.80	1.61	15.70	9.86	3.40
Poland	2	28.77%	3.43	0.00	2.35	0.54	2.31	12.00	12.43	2.41
Romania	4	24.66%	2.00	124.83	1.03	124.83	1.06	12.45	12.45	3.30
Slovak Republic	3	51.93%	3.64	50.91	1.13	57.89	1.13	3.06	3.54	3.31
South Africa	3	<i>69.39%</i>	5.00	15.98	0.65	15.98	0.65	2.73	4.13	2.45
Turkey	3	38.33%	4.15	74.26	1.94	18.57	1.41	13.75	4.61	3.13
Uruguay	4	59.16%	2.26	32.62	0.00	32.62	0.00	31.52	31.45	2.72
Venezuela, RB	2	29.26%	2.00	0.00	0.00	0.00	0.00	11.40	11.40	2.49
Minimum	2	24.66%	2	0	0	0	0	2.73	3.54	2.41
Median	3	42.52%	4.15	58	1.27	32.62	1.32	11.89	10.63	2.72
Average	3.12	46.00%	3.82	324.16	7.54	109.42	7.28	12.55	10.77	2.86
Maximum	5	86.77%	5	4470.83	100.35	1154.76	100.35	31.52	31.45	3.4

Note. The first column provides the number of banks that responded to the survey from each country.

Loan market share is the total loans of all the banks in the sample divided by total loans of the banking system of a country. The data on bank loans are from Bankscope.

Locations to submit loan applications take the value 1 if the application can be submitted at headquarters only; 2 if at headquarters or a branch; 3 if at headquarters, branches, or nonbranch outlets; 4 if at headquarters, branches, nonbranch outlets, or electronically; and 5 if at headquarters, branches, nonbranch outlets, electronically, or over the phone.

Minimum amount of business (SME) loan is the smallest amount of loan banks make to businesses

Fees business (SME) loans are the fees associated with business loans.

Minimum loan amount and fees are expressed as a share of gross domestic product per capita (GDPPC).

The last two columns show the number of days banks take to process a typical business loan and a typical SME loan application.

General Finance Obstacle variable is a response to the survey question: "How problematic is financing for the operation and growth of your business?"

Answers vary between 1 (no obstacle), 2 (minor obstacle), 3 (moderate obstacle), and 4 (major obstacle).

N.A. = data are not available.

Source. Data are available at http://econ.worldbank.org/programs/finance. Data set for World Bank, *Finance for All? Policies and Pitfalls in Expanding Access* (Washington, DC: World Bank, November 13, 2007), available at http://go.worldbank.org/S3EWEOI440. Data for General Finance Obstacles are from Thorsten Beck, Asli Demirguc-Kunt, and Vojislav Maksimovic, "Bank Competition, Financing Obstacles and Access to Credit." Policy Research Working Paper No. 2996 (Washington, DC: World Bank, 2003), p. 34.

The limit of this comparison is, of course, that the South African formal sector may have more in common with OECD economies than with uppermiddle-income economies. Yet a comparison with the United Kingdom and Canada (Figure 4) suggests that firms in South Africa face relatively few obstacles in accessing finance.

FIGURE 4: Business Environment Obstacles: South Africa vs. the United Kingdom and Canada

To recall, the questions are:

How problematic are obstacles in the business environment in the following areas?

- Q1 Financing
- Q2 Collateral requirements of banks and financial institutions
- Q3 High interest rates
- Q4 Banks lack money to lend
- Q5 Lack of access to lease finance
- Q6 Inadequate credit information on customers





Save for concerns about the cost of finance, South African firms appear to fare better than their British counterparts, and do nearly as well as well as their Canadian peers. Of course, these results may hide significant differences, particularly among much smaller firms. Or, as noted earlier, other concerns such as crime, corruption, and so forth may make credit appear to be less of a problem in South Africa than in Canada and the UK.

2.3.2 Credit Access in the Informal Sector

There is certainly the widespread and well-informed perception that improved access to finance for SMMEs in the informal sector can improve their financial health, and through them, alleviate poverty, unequal distributions of wealth or income, and unemployment. The vibrant picture of entrepreneurial activity in the formal sector contrasts sharply with underdeveloped smallbusiness activity in the informal sector. This judgment may appear at odds with the FinScope survey of small business, which indicates a very high rate of small-business activity, at least by the standards of an upper-middle-income country. But a good number of these firms are "survivalists," or very small traders whose businesses provide a meager income and which are started out of necessity. Others are small vendors in a

comparable position. Both FinScope (in BSMs 1 and 2) and Ntsika estimate that these survivalists account for approximately 20 percent of all small businesses, and nearly 20 percent of all businesses.¹⁶

Both the FinScope and GEM surveys suggest that SMME access to credit is poor in the informal sector, and such access is perceived to be a major problem by small-business operators. But such a perception is not universal, and it is not a larger problem among South African entrepreneurs than among entrepreneurs in other countries.¹⁷

The GEM, as well as other studies, identifies better access to finance as a factor than can improve entrepreneurial activity. ¹⁸ Although respondents to the GEM survey as well as all interviewees for this study indicated that South African has sufficient funds, access to these funds at rates that reflect opportunity costs of capital was a major problem, particularly for SMME lending.



¹⁶ FinScope Small Business Survey Gauteng 2006, p. 23.

¹⁷ John Orford, Michael Herrington, and Eric Wood, editors, *Global Entrepreneurship Monitor: South Africa Report 2004* (Cape Town: University of Cape Town, 2004).

¹⁸Gideon Mass and Michael Herrington, *Global Entrepreneurship Monitor: South Africa Report 2006* (Cape Town: University of Cape Town, 2006) pp. 19-20).

The GEM survey measures total early-stage entrepreneurial activity, an index that gauges the share of individuals aged 18–64 who are starting a new business, either on their own or in collaboration with others. The survey reveals that funds available for nascent enterprises from "informal investment" (i.e., friends, family, the entrepreneur, "foolhardy strangers") account for approximately 14 percent of total funding for the ventures.¹⁹ The survey results do not report the extent to which personal savings meet start-up capital requirements.

The FinScope suggests that SMME access to credit is poor in the informal sector, and such access is perceived to be a major problem by small business operators. By contrast, SMMEs in the formal sector enjoy greater credit access and efficient lending services compared with economies in the same income grouping.

This finding is slightly at odds with conclusions of the FinScope pilot survey of small businesses in Gauteng province. Some of the more notable contradictions between the two reports include: Although about 120,000 small business said they needed start-up capital of more than R5,000, most small businesses said they needed much less. These very small sums suggest that capital from formal sources (such as banks or venture capital) may not be the appropriate focus. Only 2 percent (or the equivalent of approximately 13,500 firms) said they took out a loan to start their business.

Government should rather seek to stimulate the supply of capital from friends and family (easily the biggest source of start-up after personal savings).²⁰

The GEM study further revealed that 36.8 percent of respondents indicated that informal investment was their most important source of funding, greater than banks or financial institutions (27.7 percent). Government programs were the most important source for 24.6 percent ²¹ of respondents.

The FinScope survey found, by contrast, that only about 2 percent of business owners took out loans from formal financial institutions to start their business.²² This compares with 75 percent of firms in the formal sector that applied for a loan from a financial institution.²³ Borrowing in the informal sector also raises another problem, namely,

²² FinScope, , p. 72.

¹⁹ William D. Bygrave, *Global Entrepreneurship Monitor: 2006 Financing Report* (London: London Business School, 2006), Table 5, p. 13.

²⁰FinScope, *Pilot Study Survey Highlights Including BSM Model: FinScope Small Business Gauteng 2006* (Johannesburg: FinScope, 2006).

²¹ Gideon Mass and Michael Herrington, *Global Entrepreneurship Monitor: South Africa Report 2006* (Cape Town: University of Cape Town, 2006), Table 30, p. 35.

²³ Clarke et al., South Africa: An Assessment of the Investment Climate, p. 77.

finding start-up funds. The most significant problem facing new entrepreneurs, at least for BSMs ranking 3, 4, 5 and 6, is obtaining startup or "seed" capital.²⁴ At BSM3, 27 percent of firms stated that finding money for starting their business was a major problem, and 44 percent at BSM6 faced such difficulties.

Continuing access to financing may also remain a problem, thereby inhibiting future expansion. The FinScope survey found that only 1 percent of businesses borrowed money (exclusive of start-up capital), mostly for expansion or for working capital.²⁵

Although the exact scale of need is difficult to measure, it is clear that access to financing is a major issue for firms in the informal sector, as indicated by responses to the FinScope survey question regarding significant problems facing new entrepreneurs.²⁶ Direct measures, such as a rate of businesses that did not commence owing to deficient financing, are lacking. Moreover, it is unclear how many businesses are smaller than they would be if capital had been available. That formal financing is prevalent among formal businesses but largely absent among informal firms suggests pentup demand by the latter group. FinScope concludes that the "extension of credit to small business by the formal institutions is extremely low" possibly owing to:

- » lack of documentation
- » lack of fixed income
- » customer uncertainty
- » not having financial records, or
- » measurement and forecasting.

From the perspective of a lender, almost all of these are information gaps that prevent the assessment of risk. ²⁷



²⁴ FinScope Small Business Survey, p. 41.

²⁵ Ibid., p. 72.

²⁶ There is a larger question of whether formalization of the enterprises to enter the South African formal sector, where credit is more accessible, is worth it. The answer depends heavily on tax burdens, and other regulatory costs. For many micro-enterprises, the taxes that would be paid on revenue are small or nonexistent, as are taxes paid on employee salaries. For others, these may not be trivial. Again, this issue is beyond the purview of this study, but whether the costs to an entrepreneur of greater credit access, in the form of taxes and other regulatory obligations, via formalization outweighs the benefits is an issue worth keeping in mind.

²⁷ FinScope Report Gauteng 2006, p. 72.4.

2.3.3 Trade Credit in the Formal and Informal Sectors

Examinations of access to finance rarely take into account access to and use of trade credit. In most economies, trade credit is the largest source of capital for a majority of businesses. Trade credit also provides an important avenue for small-business financing by providing an information base that lenders can use to assess risk.

> FIGURE 5: Business Use of Trade Credit in South Africa and Select Comparison Countries

Figure 5 shows trade credit use for select countries in the upper middle-income bracket and in sub-Saharan Africa. The data are from the Investment Climate Assessment's survey of firms in the formal sector.

As Figure 5 reveals, use of trade credit is very well developed in South Africa. Interviews with experts and banks with lending experience in the informal sector also indicate that trade credit is widely used in the informal sector as well, particularly among retailers of fast-moving consumer goods.²⁹



²⁸George Clarke et al., , p. 76.

²⁹ Interviews with: TransUnion ITC, personal interview on 22 January 2008; Capitech Bank, personal interviews on 31 January 2008 and 11 March 2008; and ABSA, personal interview 5 March 2008.

Supplier-producers such as SAB Miller and Nestlé have substantial accounts receivable from vendors in the informal sector. Payment data maintained on such accounts (such as sales and amounts outstanding) are used to manage relationships with these vendors and increasingly as measures of risk. It may be the case that the comparatively robust small-business activity in South Africa is facilitated by the wide use of trade credit. As such, trade credit may provide an informational, and perhaps even distributional, channel for greater access to financial credit. (See the discussion of Capitec Bank's SMME financing pilot in Section 3.7.4.)

Trade credit plays a similar role in many economies. Trade credit can and is used to measure the risk profile of loans for much commercial lending. How it is used in the credit reporting and credit allocation system varies by reporting systems.

This current report emphasizes trade credit because first it is another form of credit in addition to formal bank loans and crucially it permits manual and automated risk assessments for further accessing credit, crucially financial credit. How trade credit can help to expand access to financial credit depends on how the information sharing system works. Using these data to broaden and deepen credit access within South Africa's informal sector is explored below.



3.0 Information Sharing in Theory and Practice: Details Matter

What is relevant for an economy is not simply whether bureaus or credit registries share information, but what specific types of information are collected and available. Is it segmented, is it negative-only, what proportion of the population is covered, and is the information reliable? In short, the details of information sharing are important. Not surprisingly, the more people covered in databases, the more comprehensive is the data across sectors of the economy, and the more reporting is full-file, as opposed to negative-only, the better risk can be evaluated and the broader credit can be extended.

To outline and assess the state of information sharing on SMMEs in South Africa, it is necessary to examine:

- » the reasons for information sharing
- » how variations in information sharing affect outcomes
- » the salient dimensions of national information-sharing systems.

Section 3.1 briefly outlines the theory of information sharing in the financial sector. This brief description illustrates the mechanisms that policymakers should heed and factors to consider when intervening in the system of information sharing. Section 3.2 describes the salient differences between consumer and commercial credit. Section 3.3 examines empirical studies of information sharing from other economies. These lessons point to the importance of information sharing on both credit access and stability in lending. This section also describes the distributional effects of information sharing. Section 3.4 explores how the structure of credit bureau ownership can affect economic outcomes. Evidence suggests that ownership structure is an important factor in the expansion of lending.

Section 3.5 examines the role and structure of trade credit data in commercial reporting. Section 3.6 is an overview of small-business credit analytics, it history and development. Specifically, it looks at small business credit scoring (SBCS) as a technology for originating loans and maintaining accounts by lenders. SBCS is emerging in many economies as a prominent means of allocating credit. It has also, to the surprise of many, helped allocate scarce resources in expertise and business advice in lending. The results are more efficient than practices formerly associated with face-to-face relationship lending. This emerging market shapes how, and to what degree, information sharing increases stable access to credit. Section 3.7 surveys the state of credit reporting and credit analytics in South Africa, with a focus on small-business

financial and trade credit. It outlines the extent of information sharing, notes the gaps, and surveys the experiments in the collection of trade credit in the informal sector as lessons for policy.

3.1 Theory of Information Sharing

The modernization of lending markets has occurred hand in hand with the development of sophisticated information-sharing systems. Information sharing extends credit to the private sector, lowers the average price of credit, and in many places lowers the costs of processing loans, while improving loan performance.

Yet, the choice that economies face is not simply between information sharing and no information sharing. A society's choice over which information is shared, how it is shared, with whom, under whose auspices, and under what regulatory conditions shapes the magnitude of these outcomes considerably. This is no less true of commercial credit than it is of consumer credit information sharing. To understand how the specific structuring of an information-sharing system shapes outcomes, it is necessary to understand some of the inherent problems in lending and how information sharing addresses these problems.

Credit bureaus are institutional responses to the problem of information asymmetries in lending. Ronald Coase has suggested that when there are costs to transacting, markets have suboptimal outcomes.³⁰ These "transactions costs" include the cost

³⁰Ronald Coase, "The Nature of the Firm," *Economica* 4 (November 1937): 386-405.

of searching, contracting, monitoring, and enforcing a market exchange, often stemming from the lack of information and resulting from the price of gathering it.

In extending a loan, a lender faces the problem that only a borrower precisely knows his or her intention and capacity to repay. The lender must, therefore, infer the risk profile of the borrower. Such assessments are crucial because a loan involves an agreement to pay in the future, a fact that has far-reaching consequences for lending markets. When lenders can assume only the average risk for any given borrower, borrowers of above-average quality will over time be driven out and will threaten the viability of the market.³¹ One long-run consequence is that credit in loan markets can be rationed because of insufficient information, meaning that given borrowers with identical risk profiles, one will receive a loan and another will not.³² Given these information asymmetries, banks rely on a combination of pricing (interest rates) and rationing to maximize returns. However, higher interest rates, while covering the risk of borrower default, are also likely to result in adverse selection. That is, higher interest rates attract borrowers seeking to make risky investments with the potential for high rates of return. This is the classic moral hazard problem.

Credit bureaus are institutional solutions to these two ubiquitous problems in lending, adverse selection and moral hazard. Credit bureau data allow for better risk assessment, reducing the problem of adverse selection. Moreover, by threatening borrowers with higher costs of future borrowing or even inhibiting future borrowing if they do not fulfill their obligations, information sharing helps mitigate moral hazard. In presenting information about potential borrowers to a lender, creditreporting agencies reduce these asymmetries and related dilemmas to allow: (a) low-risk borrowers a lower rate; (b) greater lending through reduced rationing; and (c) lower rates of delinquency and default. Relatedly and crucially, credit bureaus, by rendering information more homogenous, reduce the information rents that lenders can derive, and thereby facilitate competition. Credit becomes more available and affordable as a result.³³

However, the extent to which these results occur depends on the structure of credit reporting, bureau ownership structure, and the kinds of information reported, as empirical studies have shown (see below). This finding appears to hold for credit bureaus generally, both commercial and consumer.

³¹George Akerlof, "The Market for Lemons." *Quarterly Journal of Economics* 84, no. 3 (1970): 488-500.

³³Tullio Japelli and Marco Pagano, "Information Sharing, Lending and Defaults: Cross-Country Evidence." Working Paper no. 22 (London: Centre For Studies in Economics and Finance), available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=183975

³²Joseph Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information." *The American Economic Review*, Vol. 71, No.3 (June 1981),393-410. Also see Marco Pagano and Tullio Japelli, "Information Sharing in Credit Markets," *Journal of Finance* (December 1993): 1693-1718; and Dwight Jaffee and Thomas Russell, "Imperfect Information, Uncertainty and Credit Rationing," *Quarterly Journal of Economics* 90, no. 4 (November 1984): 651-666.



3.2 Consumer and Commercial Reporting: Similarities and Differences

Perhaps the most acute difference between consumer and commercial borrowing is business risk, in the sense that commercial loans incur business risk as well as personal risk. Lenders and regulators understand that the risk and debt profiles of consumers and small businesses are different, and this understanding is reflected in regulation. The NCA's "reckless lending" prohibitions, for example, do not apply to small businesses that otherwise would fall within the purview of the act.³⁴ One implicit reason is that businesses are risk-taking ventures and as such may exhibit stages of greater indebtedness, for example, during a period of building capital stock.

The most salient difference between consumer and commercial borrowing is the preponderance of trade credit for commercial transactions in many reporting systems, particularly those in advanced economies.³⁵ That is, a considerable amount of the credit payment data on a business is input (stocks and supplies) purchased on trade credit. Consumer files are more restricted in scope and verification.

Yet, on the whole, the logic behind lending practices is the same. Lenders use borrower behavior to subjectively or statistically measure the risk of default. Past payment and other account information is a good predictor of future payment behavior. In this sense, risk assessment is a practical, rather than explanatory, exercise. Using borrower behavior as a guide is also evident in one of the clearest overlaps between consumer reporting and commercial reporting-the use of the personal credit information of the owner or operator to assess the risk of a business loan. The practice of using personal credit information in lending to small businesses is common in many economies, notably in the United States. For very small businesses, the financial stability of the business is often inextricably linked to the financial well-being of its owner or operator. Lenders are therefore often just as interested in the credit profile of the business owner/operator as they are in the business plan and business financials.

Because of this critical linkage, Experian, one of the three major credit bureaus in the United States, relies on both its National Business Database and its Business Owners Link (BOL)

³⁴National Credit Act. Section 78 (1).

³⁵ Lenders also must often consider immeasurable subjective qualities such as business acumen or a sense that earnings are more likely to be reinvested than consumed. This "sense" comes increasingly into play as the venture becomes riskier. Sandra Beswick and Jane Nothnagel, personal interview, January 23, 2008. Sandra Beswick is Principal Officer Incubator Fund ABSA Corporate and Business Bank; Jane Nothnagel is Risk Manager for the Incubator Fund.

database. The latter contains basic identifying information of the business owners/operators for those small businesses also included in the National Business Database. The BOL database contains information on millions of small businesses, defined as businesses with fewer than 25 employees and less than \$10 million in sales. The personal information includes titles, names, home address, gender, and government identification numbers of the owners and operators (officers) of the small businesses. This easily allows for lenders to append personal credit data to the National Business Database.

Because the logic and theory behind commercial and consumer reporting are similar, the differences in outcome witnessed by the specific structuring of credit reporting systems on the consumer side likely also holds for systems on the commercial side. Moreover, it is common for small-business owners/operators to use consumer credit for business purposes, and the personal credit history of the owner/operator or entrepreneur can also loom large when underwriting small business or start-up loans. Therefore, the next section explores how variations in credit reporting affect credit access and loan performance, with much of the evidence coming from consumer lending.



3.3 Salient Variation in the Structure of Credit Reporting

This section focuses on the effect of three variations in the structure of credit reporting:

> 1. Full-File vs. Negative-Only: whether the files include timely payments, outstanding balances, credit limits (full-file) or only derogatory information (negativeonly);

2. All Financial Sectors vs. Separate Financial Sectors: whether the files contain information across a wide array of sectors (comprehensive) or are restricted to a limited number of sectors (segmented); and,

3. Comprehensive vs. Financial Only: whether the files contain both financial and non-financial payment information (comprehensive) or contain primarily only financial payment information (financial-only). The examination of these differences draws on a growing body of empirical studies.³⁶ Past research examines these impacts in two ways. The first approach statistically estimates the impact of different systems of credit reporting worldwide, controlling for factors such as wealth and the legal system (particularly rights in collateral, bankruptcy, and property rights).³⁷ The second approach uses individual credit files from an economy that engages in full-file reporting and simulates a restricted system by removing certain information.³⁸ Both sets of files are then scored. These scores, or predictions of default, made using the restricted and full data sets are then compared with actual outcomes in the observation period, usually a period of a year or two. The cost of the information restriction or the benefit of the information inclusion can then be measured in terms of the trade-offs between extending credit and worsening loan performance. Smaller trade-offs are to the benefit of all.

3.3.1 Full-File Payment Information versus Negative-Only Data

To most accurately judge risk, lenders generally must know more than the past credit failures of the applicant. Systems that only report serious delinquencies do not capture many moderately late payments (30 to 60 days past due) that are often indicative of a borrower's risk. In addition, positive credit information (including on-time payments) provides information that a person may be a good risk, since the lack of negative information could either mean that or simply that the person has no payment or credit experience. Full-file reporting also allows creditors to measure a borrower's capacity to carry a loan and prevent overextension by revealing the individual's existing lines of credit, associated balances, and credit limits.

3.3.2 All Financial Sectors vs. Separate Financial Sectors

In many ways, the issue of comprehensive reporting versus segmented reporting is akin to that of full-file and negative-only reporting. More information allows for better predictions. In addition, comprehensive reporting provides a low-cost method of gathering data on those who apply for loans in another sector. Special instances of this dynamic of information sharing in one sector leading to greater access to credit in another include the reporting of non-financial payment information, such as utilities and telecommunications payments. For small businesses, it also includes trade credit data and leasing arrangements.

³⁶ IFC, *Credit Bureau Knowledge Guide* (Washington, DC: IFC, 2006) provides a detailed overview of standards and best practices in credit reporting.

³⁷ Simeon Djankov, Caralee McLiesh, Andrei Shleifer, "Private Credit in 129 Countries." Working paper no. 11078 (Cambridge, MA: National Bureau of Economic Research, January 2005), available at http://papers.nber.org/papers/w11078.

³⁸ John M. Barron and Michael Staten, "The Value of Comprehensive Credit Reports: Lessons from the U.S. Experience." In *Credit Reporting Systems and the International Economy*, edited by Margaret M. Miller (Cambridge, MA: MIT Press, 2003), pp. 273-310.

3.3.3 Comprehensive Reporting Versus Financial-Only Reporting

Given how credit-reporting systems have developed, the practice of full-file reporting of non-financial services is relatively uncommon. This near exclusion of non-financial payment data can be viewed as a special case of segmented reporting, in which payment information from the non-financial segments are not reported. These non-financial services, such as utility and telephone services, are usually more common than are financial payment data, particularly in less developed markets, where the number of cell phone users may far outstrip the number of credit card users, for example. The use of non-financial data in credit files offers the promise of extending reasonably priced credit to the millions who have not previously accessed formal credit. Individuals are thus able to build their credit without first going into debt.



3.3.4 Evidence: The Impact on Access to Credit

Simulations have used anonymous credit files from different economies to gauge the impact on credit of wider access to information. The first of these, conducted by the pioneers of this method, John Barron and Michael Staten, used U.S. files to simulate the impact of a system in which only negative information is provided and, separately, a system in which only retail payment information (i.e., segmented reporting) is provided.³⁹ Barron and Staten, using a 3 percent default target (that is, when a lender aims to have a nonperformance level that is no more than 3 percent), found that a negative-only reporting system would accept 39.8 percent of the applicant pool, whereas a full-file system would accept 74.8 percent. The difference in the number of borrowers is equal to 35 percent of the applicant pool (see Table 4, col. 1). This difference represents an increase of 87.9 percent, also shown in Table 4. With more information, fewer "good" risks are likely to be mistaken for "bad" ones, the most common lending error, and thus lenders can increase their lending without affecting portfolio performance.

Several studies have verified this trade-off. Three are notable. The first, by PERC's Information Policy Institute, uses U.S. data with commercial scoring models and includes one negative-only simulation, in which payment data less than 90 days past due were excluded.⁴⁰ The second and

³⁹ Ibid., p. 298.

⁴⁰ Michael Turner, *The Fair Credit Reporting Act: Access, Efficiency, and Opportunity* (Washington, DC: The National Chamber Foundation, June 2003), Table 11, p. 50, scenario C results. Available also online at http://infopolicy.org/pdf/fcra_report.pdf. third studies use Latin American files—one using Brazilian and Argentinean files and the other using Colombian files.⁴¹ The results from these simulations are shown in the columns 2–5 in Table 4.

The most modest improvements in lending at the 3 percent default rate would accept an additional 7 percentage points or increase the number accepted by nearly 22 percent, depending on how improvements are measured. Either way, these are significant improvements. **There appears to be a fairly broad consensus in the results that greater use of full-file data materially improves and increases lending.**

Similar results are found when comparing segmented and comprehensive reporting. With a 3 percent target default rate, Barron and Staten found a 10.6 percent increases in acceptance rates when switching from retail-only information to full-file using U.S. data (see col. 6 in Table 4).⁴²

PERC's Information Policy Institute examined credit reporting in Japan by using Canadian files to simulate Japanese reporting practices and a commercial-grade generic scoring model to compare them with a full-file scenario. Levels of indebtedness and default rates in Canadian credit markets resemble those in Japan. The results are similar to the U.S. model (see col. 7, Table 4).⁴³ As suggested above, the logic extends not simply to credit issuing sectors but also to those goods and services for which consumers make regular payments to a supplier for goods or services. Both PERC and the Brookings Institution have examined the effects of using utility and telecommunications payment data in credit reporting.⁴⁴

As shown in Table 4 (cols. 8 and 9), including non-financial data significantly increases access to credit. There is little reason to believe that this dynamic would not hold true with other types of non-financial payment data. What makes these results interesting, however, is that much of the increase in acceptance rates is not from simply more accurately gauging risk with more information, but from including in to the system the many potential borrowers who were not previously in the mainstream financial system.

Unlike in many economies, significant amounts of non-financial payment data are reported in Colombia. PERC's Information Policy Institute analysis of credit files and score performance in Colombia also examined how different levels of full-file information (relative to negative-only) from non-financial data providers affect the trade-

⁴¹For the Brazilian study, see Giovanni Majnoni, Margaret Miller, Nataliya Mylenko, and Andrew Powell, "Improving Credit Information, Bank Regulation and Supervision." Policy Research Working Paper Series, no. 3443 (Washington, DC: World Bank, November 2004), available at http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2004/12/17/000.160016_200412171710 24/Rendered/PDF/WPS3443.pdf. For the other two studies, see Michael Turner and Robin Varghese, *The Economic Impacts of Payment Reporting in Latin America* (Chapel Hill, NC: Political and Economic Research Council, May 2007).

⁴² John Barron and Michael Staten, "The Value of Comprehensive Credit Reports," Table 8.6, p. 303.

⁴³Michael Turner, Robin Varghese, and Patrick Walker, *On the Impact of Credit Payment Reporting on the Finance Sector and Overall Economic Performance in Japan* (Chapel Hill, NC: Information Policy Institute, March 2007), Table 5, p. 43.

⁴⁴Michael Turner et al., *Give Credit Where Credit Is Due* (Washington, DC: Brookings Institution, December 2006).

off between default rates and acceptance rates. The findings are consistent with U.S. results; namely full-file reporting of non-financial data improves the ability of lenders to gauge risk. **TABLE 4:** Percentage Point Change in the Acceptance Rate by Shift in Reporting Regime (percentage change shown in parentheses) ⁴⁵

	Negative-only to Full-file					Segmented (Bank-onl Comprehe Reporting	d y) to ensive	Inclusion of Utility Data	Inclusion of Telecom. Data
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Default Rate	Barron and Staten, U.S. files	Turner et al., U.S. files	Turner and Varghese, Colombian files	Majnoni et al., Argentinean files	Majnoni et al., Brazilian Files	Barron and Staten, U.S. files	Turner, Canadian files	Turner, Lee et al., U.S. files	Turner, Lee et al., U.S. files
0.5%							16.5 (52.7%)		
1%							8.2 (13.1%)		
2%		13.4 (47.0%)			15.9 (32.3%)		7 (8.8%)	5.2 (11.0%)	4.6 (11.9%)
20/	35	9.2	7.4	10.7	26.4	8.0	9.1	5.5	4.1
3%	(87.9%)	(23.0%)	(290.6%)	(21.7%)	(47.3%)	(10.6%)	(10.9%)	(10.0%)	(9.1%)
4%	9.5 (12.9%)	8.4 (17.8%)			6.7 (7.9%)	10.0 (12.4%)		5.8 (9.7%)	4.2 (8.7%)
5%	4.3 (5.1%)	4.9 (8.8%)	36.2 (702.9%)	0.6 (0.1%)	1.9 (2.0%)	2.2 (2.3%)		6.0 (9.5%)	4.3 (8.4%)
6%	2.3 (2.5%)	3.3 (5.5%)						6.3 (9.6%)	4.1 (7.7%)
7%	0.5 (0.5%)	2.3 (3.6%)	45.2 (332.5%)	1.76 (2.1%)				6.6 (9.7%)	4.4 (8.0%)

⁴⁵ (Columns 1 & 6) John Barron and Michael Staten, "The Value of Comprehensive Credit Reports," Table 8.3, p. 298, and Table 8.6, p. 303. (column 2) Michael Turner et al., *The Fair Credit Reporting Act*, Table 11, p. 50; (column 3) Michael Turner and Robin Varghese, *Economic Impacts of Payment Reporting Participation in Latin America*, Table 6, p. 31; (columns 4 & 5) Giovanni Majnoni et al., "Improving Credit Information," Table 4, Panel A.; (column 7) Michael Turner et al., *On The Impact of Credit Payment Reporting*, Table 6, p. 44. (columns 8 & 9) Michael Turner et al., *Give Credit Where Credit Is Due*.

3.3.5 Evidence: The Impact on the Distribution of Credit Access

Some of the studies discussed in the previous section also examined how different systems of reporting affect the distribution of credit among different groups. The first two use U.S. credit files and the third uses Colombian files. The first three columns of Table 5 present results of studies using U.S. files, with columns 1 and 2 showing the distributional effects of adding utility and telecommunications payment information, and column 3 the effects of switching from negative-only to full-file.⁴⁶ These studies also use a 3 percent target default rate. All three changes (inclusion of utility data, inclusion of telecommunications data, and the shift to full-file data) are associated with higher acceptance rates for groups that have been traditionally underserved by the financial mainstream. That is, the young, ethnic minorities, and those with lower household incomes benefit the most from including positive and non-financial information in credit files. Thus, credit can both be expanded and distributed more equitably.

The last column in Table 5 shows results using Colombian files, with a 7 percent target default rate. ⁴⁷ As in the United States, the switch to full-file credit files from negative-only files improves acceptance rates to a much greater extent for groups traditionally underserved. In this case, they are younger borrowers and women. The extreme changes in value for the Colombian simulations are because the models also measure delinquencies on non-financial payment lines, such as telecommunication, utilities, and rental payments. These trades, at least telecommunications and utilities, see frequent delinquencies among some consumers.

Those least likely to be in the credit mainstream, not having had multiple credit accounts in the past, are those most likely to benefit from the inclusion of non-financial data in credit files.



⁴⁶ Michael Turner et al., *The Fair Credit Reporting Act*; Turner et al., Give Credit Where Credit is Due.

⁴⁷ Turner and Varghese, *The Economic Impacts of Payment Reporting in Latin America*, Figure 3, p. 34.

	U.S., with Utility Data (without = 1.00)	U.S., with Telecom. Data (without = 1.00)	U.S. Full-File (Neg. only = 1.00)	Colombia Full-File (Neg. only = 1.00)	
Ethnicity					
Asian	1.14	1.08			
Black	1.21	1.11	1.28		
Hispanic	1.22	1.17	1.37		
Other	1.11	1.11			
White	1.08	1.08	1.22		
Age					
18-25	1.14	1.1	1 47	10.21 ()	
26-35	1.06	1.06	1.4/	18.31 (C)	
36-45	1.05	1.06	1.22	6.48 (d)	
46-55	1.06	1.06	1.21	4.54 (e)	
56-65	1.06	1.06	1.20	2.05 (0)	
>65	1.14	1.13	1.19	3.85 (f)	
Household In	come (000)		·		
<20	1.26	1.22	1.36 (a)		
20-29	1.15	1.14	1.3 (b)		
30-49	1.1	1.08	1.24		
50-99	1.06	1.05	1.21		
>99	1.03	1.03	1.18		
Gender					
Female	1.09	1.08		12.39	
Male	1.08	1.08		5.91	

TABLE 5: Change in the Acceptance Rate with Reporting Regime Change

(a) Actual Range is <15,000; (b) Actual Range is 15,000-29,000; (c) Actual Range is 18-32; (d) Actual Range is 32-42, (e) Actual Range is 42-50; (f) Actual Range is > 57.

These results are notable. Those least likely to be in the credit mainstream, lacking multiple credit accounts in the past, are those most likely to benefit from including non-financial and positive data in credit files. Including such data can lead to a more equitable distribution of credit and a generally improved macroeconomic performance—the pie will be both bigger and more evenly divided. This twin benefit of improved equity and efficiency is often difficult to achieve.

	Full-file to Negative Only					Comprehe to Segmer Reporting	ensive nted	Removal of Utility Data	Removal of Telecom. Data
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Acceptance Rate	Barron and Staten, using U.S. files	Turner et al., using U.S. files	Turner and Varghese, using Colombian files	Majnoni et al. using Argentinean files	Majnoni et al., using Brazilian Files	Barron and Staten, using U.S. files	Turner, using Canadian files	Turner, Lee et al., using U.S. files	Turner, Lee et al., using U.S. files
20%			4.94 (140%)						
30%		0.8 (62%)	4.94 (120%)					0.2 (22%)	0.2 (18%)
40%	1.84 (170%)	0.6 (33%)	8.96 (183%)	0.92 (60%)	1.48 (114%)	0.57 (108%)	0.18 (43%)	0.3 (25%)	0.5 (29%)
50%		0.3 (10%)	8.54 (146%)				0.19 (36%)	0.5 (28%)	1.3 (39%)
60%	1.45 (76%)	0.4 (8%)	8.1 (113%)	0.83 (28%)	1.53 (83%)	0.72 (61%)	0.24 (35%)	1.2 (40%)	2.7 (36%)
70%		0 (0%)					0.26 (27%)	2.7 (50%)	3.8 (31%)
75%	1.03 (34%)					0.84 (39%)		. /	
80%				0.96 (19%)	0.86 (30%)		0.68 (47%)	4.3 (45%)	5.0 (31%)
90%							2.83 (114%)	3.9 (28%)	3.4 (19%)

TABLE 6: Percentage Point Change in the Default Rate in Reporting Regime Switch (percentage change shown in parentheses)

3.3.6 Evidence: The Impact on Loan Performance

The counterpart to higher acceptance rates at a given default rate is lower default rates at a given acceptance rate. Table 6 reports the changes in the default rate for the nine simulations discussed in Section 3.3.4.⁴⁸

As noted above, Colombian simulations included delinquencies on non-financial trade lines such as rent and utilities and are not, therefore, strictly comparable, although the direction of changes shown in Table 6 is. The other four negative-only to full-file simulations show the default rate increasing by as little as 0.3 percentage points (or a 10 percent increase), which is still a considerable degradation of portfolio performance, to as much as 1.84 percentage points (a 170 percent increase) in cases restricted to financial accounts only.

Majnoni and colleagues' simulation using Brazilian files reveals that even at an extremely high acceptance target of 80 percent, the default rate increases by 0.86 percentage points (or 30 percent). At a 60 percent acceptance target, the default rate nearly doubles (an 83 percent increase) under negative-only reporting compared with full-file reporting. These effects are significant for a lender and, moreover, as aggregated they can have a sizable effect on an economy's financial stability and growth.

Comparisons using segmented and comprehensive files show similar shifts in performance as were evident in the shift from full-file to negative-only. The more modest shifts show an in increase in the default rate of 30 to 40 percent, a considerable deterioration in performance. While evidence strongly supports the use of fully reported transactions in credit files from all creditors (comprehensive), the use of trade credit in small-business credit scoring is relatively underanalyzed. Later sections explore this opportunity in more detail.

3.4 Ownership Structure Issues to Consider

In the past, analysts and others believed that whether a credit bureau was publicly or privately owned was immaterial to the performance of the financial sector. Recent research has suggested otherwise. Margaret Miller's survey of differences in information collected suggests that private registries collect a broader spectrum of information, but collect similar information on both consumers and businesses. She found greater divergences in the commercial credit information collected.⁴⁹

⁴⁸ (Columns 1 & 6) John Barron and Michael Staten, "The Value of Comprehensive Credit Reports," Table 8.2, p. 297, and Table 8.5, p. 302. (column 2) Michael Turner et al., *The Fair Credit Reporting Act*, Table 10, p. 49; (column 3) Michael Turner and Robin Varghese, *The Economic Impacts*, Table 6, p. 31; (columns 4 & 5) Giovanni Majnoni et al., "Improving Credit Information," Table 4, Panel A.; (column 7) Micahel Turner et al., *On The Impact of Credit Payment Reporting*, Table 6, p. 44. (column 8 & 9) Michael Turner et al., *Give Credit Where Credit Is Due*.

⁴⁹Margaret J. Miller, "Credit Reporting Systems Around the Globe." In *Credit Reporting and the International Economy*, edited by Margaret Miller (Cambridge, MA: MIT Press, 2003), pp. 25-79.

Public registries were more likely to collect data on pledged collateral, whereas private firms were more likely to collect detailed information on owners, balance sheet information, and income and tax statement data. These issues are less of a concern in South Africa as private bureaus work and work well. Nonetheless, the lessons from the research on the ownership structure of credit bureaus and economic performance are important to keep in mind, especially as South Africa moves forward with the implementation of a credit registry.

Although there is no theoretical reason why a public bureau cannot behave like a private one, there are practical reasons. Public bureaus have been set up largely and primarily for supervisory purposes. That is, the accounts of loan performance maintained by public bureaus are collected as a way for the state to monitor the safety and soundness of the financial sector and determine whether reserves are sufficient. As a result, they capture information from supervised institutions, usually banks, and unlike private bureaus typically do not collect information from retailers, telecommunications providers, or other sources.

The World Bank survey of public and private credit registries finds that private and public commercial banks and public development banks are more likely to provide data to a public bureau than a private one.⁵⁰ By contrast, credit unions and credit cooperatives, financing and leasing corporations, credit card issuers, firms providing government loans, merchants, and retail credit issuers are more likely to report to private bureaus and often by a considerable margin. With respect to commercial data, private bureaus are more likely to collect information on the principal, data on the business group or conglomerate, tax information, balance sheet data, and income statement information considerably more frequently than public bureaus.

Unlike private bureaus, public bureaus are not established primarily to facilitate greater and sustainable lending. Private bureaus, by contrast, are set up to ease lending and provide credit checks to lenders. That is, the need for data by private bureaus is primarily to reduce information asymmetries and improve risk assessment in lending. By this account, private bureaus are complements to public bureaus. Operating in a for-profit market, private bureaus often have considerably more resources and staff than do public bureaus, and they are usually much better funded. Perhaps more important, they are more technologically dynamic and up to date on data collection, security, transmission and value-added services. Although there have been no systematic studies to date, there may be positive effects of the interaction between public bureaus and private ones. They may complement each other to expand lending. They may also compete with each other, and in so doing foster innovation and lower prices for services. These outcomes may be sensitive to the number of private bureaus given a public bureau. Nonetheless, research indicates that private bureaus do make an observable difference.

Results reported in Margaret Miller, "The Role of Credit Registries and Collateral Security in Managing Credit Risk." Presentation to the "Annual Seminar for Senior Bank Supervisors From Emerging Economies," Washington, DC, October 21, 2004, slides 18 and 19. Available at info.worldbank.org/etools/docs/library/154465/supervisors2004/pdf/miller.pdf

Djankov, McLiesh, and Shleifer examined private credit and credit reporting in 129 countries.⁵¹ In their estimates, private bureaus increased lending far more greatly than public bureaus, which had an ambiguous impact. In estimations that examined all countries, private bureaus increased lending by 21 percent (vs. 7 percent for public bureaus, although the latter was not a statistically significant increase). In estimations that restricted the data to poorer economies, private bureaus increased lending by 14.5 percent compared with 10.3 percent for public bureaus. Both coefficients are statistically significant.

PERC's Information Policy Institute found that 100 percent coverage of credit-eligible adults by a full-file private bureau can be expected to increase private-sector lending by more than 60 percent of gross domestic product (GDP), all else being equal.⁵² Removing observations with very high levels of private-sector lending, notably the United States and the United Kingdom, resulted in a coefficient of 0.475, which was still significant at the 1 percent level. In other words, after removing these observations, lending increased by 47.5 percent of GDP with a shift to 100 percent coverage from no coverage. (Coefficients on the other variables remained roughly the same.) However, although there are good reasons to accept these results, there are issues of endogeneity, meaning that economies that experience high levels of participation in reporting also have well-developed financial infrastructures.

A third study by Love and Mylenko addresses SMME lending explicitly. They examine more than 5,200 firms in 50 countries and compare the estimated impact of public credit registries on firm access to financing with the impact of private registries.⁵³ They find that private credit registries increase lending far more than public ones—nearly twice as much, all else being equal.

A fourth study by the Inter-American Development Bank (IADB) measured the impact of information-sharing on loan performance.⁵⁴ The IADB examined data from 170 banks in Bolivia, Brazil, Chile, Colombia, Costa Rica, El Salvador, and Peru to measure the impact of private and public bureaus on loan performance. It found that banks that loaned primarily to consumers and small businesses and that used private bureau data had nonperformance rates that were 7.75 percentage points lower than banks that did not. The authors found no such effect of any magnitude for the impact of public bureaus.

⁵¹ Djankov et al., "Private Credit in 129 Countries."

⁵² From Turner and Varghese, *The Economic Impacts*, Table 3, p. 18.

⁵³"In terms of the magnitude of the effect, we see that the existence of a private registry has larger effect on reduction in constraints than the existence of a public registry. Thus, the average constraints are about 3.04 in countries with no private registry and 2.57 in countries with private registry; the difference is equal to about 40 percent of a one standard deviation in the general financing constraints variable. For public registries the difference is much smaller: average constraints of 2.91 relative to 2.69, which is only about 20% of a one standard deviation in the constraints responses." Inessa Love and Nataliya Mylenko, "Credit Reporting and Financing Constraints." Policy Research Working Paper No. 3142 (Washington, DC: World Bank, October 2003), p. 12, available at: http://ssrn.com/abstract=610320.

⁵⁴ Inter-American Development Bank, *IPES 2005: Unlocking Credit: The Quest for Deep and Stable Bank Lending* (Washington, DC: IADB, 2004), p. 178, available at www.iadb.org/res/ipes/2005/index.cfm.

Finally, while there have been no studies of the impact of variations in the ownership structure of private bureaus, there are anecdotal accounts that raise concerns. Private bureaus can and do vary in ownership. The most salient dimension of variation appears to be whether the bureau is owned by a consortium of banks, i.e., the end users, or whether it is owned by a third party. The importance of this difference lies in the structure of incentives to provide homogeneous information to all lenders in a financial system and thereby reduce information rents and promote competition. Conceivably, ownership by a select group of end users, particularly the large ones, may create both the incentive and the strategic position to limit data to potential new entrants and smaller players. Again, no systematic study exists on this issue to the best of our knowledge, but the possibility of such an anticompetitive dynamic should raise attention to how variations in the ownership of private bureaus affect the structure of incentives over sharing information.

3.5 Trade Credit and Small-Business Credit Reporting

The most prevalent form of credit used by small and medium-sized businesses in most if not all economies is trade credit. Trade credit payment information provides an important basis for assessing risk in small-business loans. It constitutes the bulk of small-business credit files in South Africa, accounting monthly for at least R24 billion in total outstanding credit.⁵⁵ In addition to allowing banks a basis to measure risk, trade credit provides other trade creditors an opportunity to examine the risk associated with their borrowers. It is also possible to gauge potential growth and existing capacity of businesses from trade credit data because the data track amounts outstanding over time.

Trade credit data are often more difficult to collect than loan data. The reason for this is not particularly clear, and may be a function of particulars of the market and industry experience with reporting. One reason may be that trade credit data come from so many sources, and often these firms are ill equipped to report on their customers and suppliers, unless they are very large. Moreover, as with most data providers, trade creditors are often worried about "cream skimming," or their rivals targeting their best customers, which would leave a disproportionate number of risky clients in their portfolios.⁵⁶ Trade-credit information exchange systems are often structured in part or in whole as consortia. Only members have access to information in those systems. In other systems, some information is shared in credit files, while other information is provided in a "give to get" system among members of the consortia, whereby only those that provide a certain type of data (such as loan balances) to others can get such data from others.

⁵⁵ Brad Weininger, Strategic Account Manager, KreditInform , personal correspondence, April 25, 2008.

⁵⁶ Dan Meder, telephone interview, April 4, 2008. Meder is vice president of Experian North America.

3.6 Small-Business Credit Score and Credit Analytics

Lenders and others are increasingly using analytic services and small-business credit scoring to assess risk. Credit analytics apply decision models to credit information, usually in credit reports, application data, and other easily accessible sources, to measure the likelihood of default. The method is used for both loan origination and account maintenance.

Credit scoring has drastically reduced the costs of processing a loan. In economies with advanced communications and information infrastructures, the price of and time needed to originate a loan have declined steeply. The U.S. governmentsponsored mortgage broker Fannie Mae estimates that the costs of processing a loan have declined by more the 50 percent with automated systems. ⁵⁷

These statistical models have also permitted lenders to price by risk tier of the borrower, or engage in risk-based pricing. That is, prior to the development credit scoring, lenders largely priced risk in loans using average default rates. The result was that low-risk borrowers paid higher prices while high-risk borrowers were subsidized. Risk-based pricing reflects the risk associated with the specific consumer tranche. Over time, with more data, the number of these segments has grown.

Major and second-tier South African banks use credit scoring. African Bank, which lends to consumers, has modified its pricing structure from three risk tiers to approximately 50 through the development and diffusion of scoring. ⁵⁸

With some notable distinctions, the dynamics among small businesses are similar. Small-business credit scoring (SBCS), like consumer credit scoring, provides an efficient means of measuring or predicting the credit-worthiness of small businesses. However, owing to a general lack of financial transparency in small businesses, credit scoring as used by larger businesses is impractical. SBCS overcomes this lack of financial information by combining business data with other information, including the owner's personal credit history.

The first SBCS was introduced by Fair Isaac Corporation in the United States in 1995, using five years of data from more than 5,000 U.S. small-business loans from 17 banks.⁵⁹ The most recent

⁵⁷ Terry Davis, "Technology Pays Off in 2001." Mortgage Banking (October 2002), p. 112

⁵⁸ Leon Kirkinis, Chief Executive, African Bank, personal interview at meetings of the Center on Financial Services Innovation, South Africa Innovation Exchange, January 28, 2008.

⁵⁹ Ronald Feldman. "Banks and a Big Change in Technology Called Credit Scoring." Federal Reserve Bank of Minneapolis' *The Region* (September 1997) 19-25; and Loretta J. Mester, 1997. "What's the point of credit scoring?," Federal Reserve Bank of Philadelphia's *Business Review* (Sep/Oct 1997) 3-16

Fair Isaac scores used information from 32 participating banks and more than one million loans.⁶⁰ Nonetheless, SBCS has taken off far more slowly than consumer credit scoring.

The introduction of new, nontraditional consumer credit data has expanded access among low- and moderate-income entrepreneurs to mainstream credit markets by improving or expanding their personal credit histories. Fair Isaac's "start-up" score, designed for businesses less than two years old, relies heavily on the owner's personal credit information and application data. For such businesses, this start-up score outperforms either traditional small-business scores or consumer scores when lending to new businesses.⁶¹ As consumer payment data become more available, larger institutions may be better able to efficiently extend credit to start-ups and micro-enterprises, even in the informal sector.

Larger lenders have generally been a minor presence in small-business lending markets in many economies. Small-business lending has instead been dominated by relationship lending, which local and smaller banks specialize in. Small banks often look past quantitative measures and focus on "softer" information derived from a personal relationship. As calculating business risk is costly, lenders have often relied on the subjective assessment of the entrepreneurialism of the borrower, and assessment they were better positioned than larger lenders to offer. Large banks, in contrast, tend to use standardized quantitative criteria to make small-business loan decisions—essentially a cookie-cutter approach. Large banks are more likely to extend small-business credit when the firm keeps formal financial records, is larger, has a longer track record, and has greater cash reserves.

A greater presence by large banks in the smallbusiness sphere has gone hand in hand with the availability of reliable, standardized information on the business, and often the owner as well. Moreover, in recent years, information-sharing and automated models have allowed the larger banks to develop more focused relationship lending.

3.7 Information Sharing and SMME Financing in South Africa

The credit reporting system in South Africa, like the country's financial system, is well developed and advanced, although it is restricted to the first economy. In recent years, the system has attempted to broaden the base of SMMEs on which information is collected.

3.7.1 The Consumer Bureaus

The four consumer credit bureaus—TransUnion ITC, Experian, CompuScan, and XDS—collect credit information when credit data on consumers exist. Established for more than a century, the South African credit industry has databases that cover a large segment of the population,

61 Ibid.

⁶⁰ "Small Business Scoring SevricesSM (SBSS) SM 6.0."Fair Isaac Corporation. Available at: www.fairisaac.com/NR/rdonlyres/30FB9F27-E88B-4DB5-A19F-13A76241F82F/0/SBSS_6_PS.pdf

particularly by the standards of an emerging market. Nearly 50 percent of the adult population has a credit file (16.9 million files from an adult population of approximately 32 million), with information reported by banks and providers of retail credit.⁶² The latter, whose accounts constitute approximately 90 percent of trade line data in South African files, makes its data available to the four bureaus. ⁶³ As shown in Table 7, higherincome categories account for a disproportionate share of credit accounts. Lower-income categories represent a larger share of delinquencies.



TABLE 7: Consum-er Credit ReportsSeptember 2007

Source: National Credit Register, *Credit Bureau Monitor*, Tables 1, 3 and 4.

	Volume	Share of Total
Total Consumers	16.90 m	
Consumers earning < R3500 monthly	3.96m	23.5%
Consumers earning R3500–7500 monthly	7.54m	44.6%
Consumers earning > R7500 monthly	5.40m	31.9%
Good Standing	10.52 m.	63.6%
Current	7.87 m	47.5%
1-2 days past due	2.65 m	16.1%
Delinquent	6.38 m	36.4%
\geq 3 months past due	2.13 m	12.8%
Adverse listing	2.22 m	11.8%
Judgments and administrative orders	2.03 m	11.8%
Delinquencies by income category		
Consumers earning < R3500 monthly	2.0m	31.7%
Consumers earning R3500–7500 monthly	3.15m	49.4%
Consumers earning > R7500 monthly	1.2m	18.9%

⁶²National Credit Register, *Credit Bureau Monitor* (Johannesburg, South Africa: September 2007, Quarter 3).

⁶³Rashid Ahmed, personal interview, January 21, 2008, Johannesburg, South Africa. Ahmed, formerly of the National Credit Regulator, is senior manager at FinMark.

Personal credit information is fairly comprehensive, with both positive and negative payment data available across sectors. However, it remains unclear what extent individuals use personal consumer loans to fund SMMEs. The difficulty in finding funding for small businesses and the dearth of information on informal businesses would imply that some entrepreneurs turn to personal loans. The FinScope survey found that only 2 percent of small-business owners did actually turn to personal loans.⁶⁴ However, whether family and friends did so as well is unclear. For many in the information sector, who tend to come from more disadvantaged social sectors, securing personal loans at reasonable rates may be difficult.

In addition, the target populations may suffer from the same dilemmas on the consumer side that they do on the commercial side, namely lack of information among lenders. This problem only compounds existing issues of limited collateral or unvalued collateral. Moreover, because consumer loans are not exempt from reckless lending prohibitions under the NCA, as are loans to juristic persons, these types of business loans may very well be undersupplied.

3.7.2 The Commercial Credit Bureaus and Business Information Sharing

The commercial credit reporting market is dominated by two bureaus: KreditInform and TransUnion ITC. Each bureau reports company profiles on more than two million businesses. Many of these are historic data. The two bureaus also each have credit reports on approximately 500,000 to 600,000 businesses.⁶⁵ One of the bureaus reports 280,000 credit-active businesses in these files, while the other reports 600,000, or combined between 10 percent and 21 percent of the estimated number of active businesses in South Africa.

What is noticeable is the absence of information on collateral and security rights in movable property.

Bureau	Company Profile Reports	Credit Reports	
KreditInform	2,400,000	500,000	
TransUnion ITC	2,800,000	600,000	

⁶⁴FinScope, *Small Business Survey* Gauteng 2006, p. 72.

⁶⁵ Personal interviews with Brad Weininger and Kevin Vlietman, January 22, 2008. Weininger is the strategic account manager at KreditInform. Vlietman is a sales executive at TransUnion ITC.

Of course, more than one-half of all businesses are "survivalist" and small micro-enterprises. But even if only one-half of these firms are formal businesses, coverage remains moderate. The New Companies Act, with provisions for greater financial transparency, is expected to increase the number of firms with existing credit data.⁶⁶

Gaps also exist in the type of information shared. Most of what is not reported to credit bureaus is in line with international standards—for example, interest rates. However, the absence of information on collateral and security rights in movable property is notable.⁶⁷ Lenders and others in the industry have remarked that it is not uncommon to find that collateral (equipment, debtors' books, etc.) has been committed to multiple lenders. The absence of information in such areas renders rights in collateral and in bankruptcy less effective. As various studies have shown, rights in collateral and bankruptcy encourage lending by allowing lenders to mitigate risk.

Although the creditor has priority to collateral in bankruptcy proceedings, asserting this right is often difficult when more than one creditor is involved. The scale of the problem is unclear, but interviews with experts in the field suggest that creating such a registry would encourage lending by mitigating the risk that the lender's right to collateral is relatively firm and unlikely to be contested by another lender.

Even small firms in the first economy can have trouble accessing business credit. The discounted value of a debtor's book as collateral owing to the absence of a registry of collateral is one example of a hindrance to lending. In part, this is because South Africans in the top four Living Standards Measure (LSM) own 95 percent of the wealth. South African banks are very profitable and generate considerable revenue from bank services to consumers in the first economy. Loan pricing and expected margins are often based on decades of amortized capital invested to serve a "first world" economy. These expectations for returns price loans beyond the reach of most SMMEs, especially those in the second economy.⁷⁰ Investment Climate Assessments and GEM surveys find that South African entrepreneurs are dissuaded by the costs of funds, even when available.

The absence of information certainly raises the costs of lending given that it raises the costs of assessing risk. Information sharing can also reduce the price of loans and better reflect risk.

⁶⁶ Personal interview with Kevin Vlietman and Steve Monty, January 22, 2008. Vlietman is sales executive at TransUnion ITC. Monty is data director at TransUnion ITC.

⁶⁷ The absence was mentioned by a few interviewees. Rashid Ahmed, Senior Manager, FinMark Trust, personal interview, January 21, 2008. Sandra Beswick, Principal Officer Incubator Fund, ABSA Corporate and Business Bank, and Jane Nothnagel, Risk Manager for the Incubator Fund, ABSA Corporate and Business Bank, personal interviews, January 23, 2008

⁶⁸ The example was provided by Rudolph Willemse during a personal interview, March 5, 2008. Willemse is a regulatory consultant and has extensively worked on credit and banking issues in South Africa.

⁶⁹ Gary Pinshaw, personal interview, March 7, 2008. Pinshaw is a senior consultant at McKinsey Consulting.

⁷⁰ Gerhard Coetzee, personal interview, March 5, 2008. Coetzee is General Manager of ABSA Micro Enterprise Finance.

3.7.3 Commercial Credit Analytics in South Africa

The capacity for and use of information analytics is very advanced in South Africa. Moreover, banks have the skills and capacity to use this information. South African banks have used small-business credit scores for more than a decade—KreditInform introduced its KreditScore in 1996, almost immediately after Fair Isaac introduced its tool. ⁷¹ Both KreditInform and TransUnion have developed and marketed several business credit scores since then, including SMME and sole proprietor scores, which rely on both personal and commercial information.⁷² In addition, business failure scores, which can be used for account maintenance, are also available.

The major South African banks and some of the second tier banks, as noted, used credit scoring technology. In the wake of the power outages of 2007-2008, the bureaus reported requests to take energy disruptions as a risk factor in their models—i.e., lenders were quick to turn to scoring as risk environments shifted.

To further promote lending by large financial institutions to SSMEs, South Africa should expand the types and amounts of consumer payment information collected and encourage the reporting of trade credit information to credit bureaus. When such data are available, the bureaus and financial institutions can readily develop tools to maximally use the data.

3.7.4 Trade Credit in the Informal Sector and Information Sharing in South Africa

For those in the informal sector, trade credit data can provide an information base from which to extend financial credit. The South African credit industry does not systematically collect trade credit data on informal businesses, although promising pilot programs and regional efforts are underway.

Capitec Bank offers an example of a closed consortia approach.⁷³ Its pilot program has extended loans to approximately 2,400 vendors and small traders in fast moving consumer goods (FMCG). Capitec works with suppliers in the FMCG sectors to collect trade credit data. Suppliers share information within the consortia only. Lenders extend credit, both trade and financial, on the basis of the past performance of vendors' supplier trade accounts. Under the system as conceived, those suppliers that provide information receive beneficial treatment from Capitec.

Information sharing is often viewed as facilitating a move away from relationship lending. In the face-toface lending relations between banks and borrowers that prevailed before the advent of information sharing and automated underwriting, bankers would provide their creditors with connections to suppliers and clients⁷⁴ or business advice.

⁷¹Brad Weininger, personal correspondence, March 3, 2008. Weininger is strategic account manager of KreditInform.

⁷² Ibid. Kevin Vlietman, personal interview. March 3, 2008. Vlietman is a sales executive at TransUnion ITC.

⁷³ Carl Fisher, personal interviews, January 31, 2008 and March 11, 2008. Fischer is chief executive, marketing and corporate affairs for Capitec.

⁷⁴ Classic examples include industrial banks in Germany or, more illustratively, banking in Japanese kerestu's.



The limitation of the face-to-face system is its costs, which have reduced the scale of lending relative to low-cost systems such as automated underwriting. Its benefits have been fewer defaults, and not merely for reasons of selection. Defaults have been low because banks work with their customers. Recently, banks have used credit data to identify borrowers at risk of default. The banks use credit data to identify businesses for whom changes in loan payment patterns or (using volume of trade purchases) turnover patterns can predict default and thereby identify borrowers in need of attention. Although the Capitec experiment does not use statistically driven, relationship lending, it does use trade credit data to shape advice on stock volumes and composition for businesses in a region and sector. This information is used to forecast volumes and market growth.

The building industry in the Western Cape offers another example of a trade credit consortia. Status Credit Circle is a "give to get," membersonly system that covers approximately 17,000 business entities in the sector.⁷⁵ Members share payment information and public record data for credit decisions. The files include information on a principal's previous business and its performance. Members also use the data—because it is regularly updated—as early warning of a debtor's likelihood of default.

An example of a two-tiered system is Experian's National Business Database in the United States. The database contains information on more than 16 million businesses of the approximately 27 million businesses estimated by the U.S. Census to exist in 2004.⁷⁶ All types and sizes of businesses are in the Experian database. The sources for this information include Experian's proprietary trade credit contributors, banks, yellow pages, state and federal public records, marketing data suppliers and compilers, and Experian's televerification phone surveys.

The business credit reports produced from these data are similar in many ways to a personal credit report. The database and reports contain basic information on the business, its name, address, main phone number, size (in sales and employees), line(s) of businesses (Standard Industrial Classification codes), and type of business (sole proprietor, corporation, etc.). It contains payment and

⁷⁵Jack Brownrigg, personal interview, March 10, 2008. Brownrigg is principal and chief executive of Status Credit Circle, South Africa.

⁷⁶U.S. Census Bureau, "Statistics about Business Size (including Small Business) from the U.S. Census Bureau" available at http://www.census. gov/epcd/www/smallbus.html

balance information on accounts as well as type of accounts the business may have. These include credit and lease accounts. It also contains collections and public record information. The twotiered system creates an incentive for trade creditors to report while providing information to new entrants on the credit risk of the business.

Credit bureaus in South Africa are beginning to secure trade credit data for the informal sector as part of their efforts in product development in the commercial lending. Trade secrets curbed the amount of available information on such movements, but efforts by the two major commercial bureaus, KreditInform and TransUnion ITC, do indicate a quick response by the information sector in the information they seek to changes in the lending markets.



4.0 Implications of the National Credit Act for Information Sharing in SMME Credit

The National Credit Act (NCA) of 2005 and Regulations of 2006 overhauled the system of piecemeal legislation and regulation in South Africa that had been developed over decades. With the NCA, consumer credit regulation in South Africa was aligned with comprehensive credit reforms and new regulations of developed and emerging markets in much of the world.

4.1 The Limited Scope of the National Credit Act and Its Affect on SMMEs

The scope of the NCA is limited primarily to the retail market in consumer credit, defined broadly as a promise to pay in the future, but must also to bear a "charge, fee or interest."⁷⁷ The act also covers certain juristic persons—sole proprietorships,

⁷⁷National Credit Act 2005, Section 8(3)(b).

close corporations, trusts (with more than three trustees), and partnerships—with a value less than R1 million. Because consumer loans are sometimes used for SMME financing, and because micro- and survivalist enterprises may account for well over one-half of all businesses in South Africa, the NCA has had profound effects on the SMME lending market.

The principal focus of the act was to:

- » promote fair access and prohibit discrimination in the market for credit
- » widen access and ownership to credit and to the credit industry
- » protect consumers against predatory lending and overindebtedness
- » facilitate greater transparency in the credit market through, among other measures, the regulation of disclosure and information sharing.

Access, transparency, consumer protection, and fairness: these goals are in keeping with the objectives of credit regulation, and in institutionalizing these objectives, South Africa conforms with the standards found in advanced and many emerging markets.

4.2 The NCA and Credit Information Sharing

The NCA regulates information sharing in an effort to expand consumer rights to access credit data and credit decisions (to learn why credit was refused, for example), and to challenge information they believe to be incorrect. Such consumer rights are associated with greater competition—in that they encourage consumers to shop for better terms—and improved data quality, as consumers challenge information they believe to be inaccurate.⁷⁸

4.3 A Line through a Shade of Gray: The NCA and SMME Credit Access

Two sections of the act may have significant consequences for SMME credit access—the provisions on reckless lending and the establishment of a National Credit Register. The reckless lending provisions require lenders to make thorough assessments that loan applicants will not become overindebted as a result of the loan. Credit providers are required to conduct assessments on the basis of available information to ensure that the loan will not push the borrower into overindebtedness and to ensure that the consumer understands the risks and costs of the loan.

⁷⁸Dispute and verification systems, however, must be structured in ways that prevent gaming of the system. While the individual and credit risk of gaming has been a minor issue in most economies, the recent distortions of credit information in real estate transactions in the United States have contributed to considerable systemic risk. Of course, other factors, such as moral hazard problems in the second-ary markets, also contributed greatly to the current real estate crisis.

Juristic persons, or a legal entity that the law treats as a composite individual, are exempted from the reckless lending provisions of the NCA.⁷⁹ In principle, a lender may charge any interest rate when the borrower is an SMME under the provisions of the act. The act does allow the National Credit Regulator to issue guidelines that cover cases of lending to the informal sector. In exempting certain groups, the NCA recognizes that the credit needs and risk profiles of commercial enterprises differ significantly from those of consumers.

As noted above, individuals—particularly those just starting out in business with no credit history—may seek micro-credit and personal loans to finance business ventures, creating a gray zone between consumer and small-business loans. As the FinScope survey indicates, a plurality of small businesses note that finding start-up money is the biggest obstacle to starting a business. This is not to suggest that the costs of reckless lending provisions exceed benefits (research is needed to assess costs and benefits). Nor is it to suggest that lending to informal SMMEs was better prior to the recklessness in lending provisions, or that personal loans were used to a greater degree for commercial financing prior to the NCA only to have been curtailed by the reckless lending provisions. Rather, it is to note that the provision may draw a sharp line between what is often a gray zone, especially as information-sharing solutions permit and encourage greater lending to SMMEs in the informal sector, and to take the possibility of consumer loans

for commercial purposes when issuing guidelines. The experiments of lending to SMMEs in the informal sector noted above occupy a gray zone between commercial and consumer loans. As these practices spread, as they promise to, reckless lending guidelines may have to be adjusted.

4.4 The Structure and Function of the National Credit Registry

Section 69 of the NCA empowers the Finance Ministry to establish a national register of credit agreements. The register is a national database of the credit agreements of all natural persons and those juristic persons covered by the NCA. The primary purpose of the register is to allow lenders access to sufficient data to meaningfully assess a borrower's credit-worthiness and, in particular, whether a borrower risks becoming overindebted as a result of the loan. The register records the applicant's debt amount, the schedule of payments, transfers of rights, and whether the loan has been repaid. As such, it aims to make information on a consumer's credit obligations more consistent and available through the credit bureaus. It is not intended to capture payment data.⁸⁰ The register's other purpose is to improve the quality and quantity of credit information on SMMEs and make this information available to lenders through the bureaus to facilitate greater and more stable lending to this sector.

⁷⁹National Credit Act 2005, Section 78(1).

⁸⁰Personal interview with National Credit Regulator, January 21, 2008.

What is noticeable is the absence of information on collateral and security rights in movable property.

The arguments made for the register are several, but most notable among them is that certain categories of data are not collected at all. Information on collateral in movables is a case in point. Furthermore, many credit providers do not submit data, and given the recklessness in lending provisions, this information is needed to comply with the provisions. Finally, information on credit judgments is incomplete and often unreliable, leading to negative consequences for consumers. The register can ameliorate many of these problems to the extent that it facilitates the provision of consistent and reliable information. That is, the extent to which these problems can be solved depends largely on how the register affects data quality.

The arguments for the collection of SMME credit information are different from consumer credit, as reckless lending provisions do not apply. For commercial credit, the the register solves the issue of limited credit file coverage of SMMEs. As noted, though, the private sector is making considerable progress in collecting this data in the informal sector, given the difficulties of doing so.

That said, trade credit in the informal sector is not collected save for relatively small pockets. Given that the National Credit Register similarly collects trade credit data and consumer credit information, the differences between the two in market mechanisms of information sharing should be kept in mind. The inclusion of consumer information in the register, specifically retail credit information, is greatly facilitated by the Credit Providers Association (CPA), an information-sharing body of the retail credit providers. The CPA also provides data to the credit bureaus, easing the costs of information collection. In a very fragmented market, this market mechanism greatly lowers the cost of data collection and provides avenues to and through which data quality regulations can be directed and enforced. Although trade credit data in the formal sector are widely shared in South Africa, no equivalent to CPA exists for trade credit in the informal sector. On the one hand, the absence of such a mechanism may make the collection of trade credit data in the informal sector a challenge for the proposed National Credit Register The register, on the other hand, may be able to help create a comparable market mechanism or, more important, serve as a substitute for one in its absence.

The proposed structure of the register should minimize the likelihood of competing with the private-sector bureaus. As it stands, the register is to be a "joint provider register," that is, one that is owned by industry and managed by an entity acting under contract. It will be an independent private entity that is self-funding. A Board of Governors comprised of representatives from stakeholders will provide oversight. The information contained within the register is to be accessed through the credit bureaus and only through the bureaus. The parameters on information collection, storage, transfer and access that apply to the register will be set by both regulation and company policy. Moreover, the register and the private entity that will manage the register (*in its role as* manager of the register) should be prohibited from any credit analytics such as credit scores. The CPA as a channel of data into the private bureaus serves as model for the role of the register, although not necessarily in other respects.

The National Credit Regulator's intended role is to set the basic guidelines on the information to be shared and to enforce the rules that govern the provision of information to and from the register. Ideally, these rules should be designed to minimize any disruptions to the market.

With respect to what data is to be collected on SMME credit, the lessons of Capitec, Status Credit Circle, and the Experian Small Business Database (USA) are instructive. Their experiences show that trade credit is largely but not completely provided in "give to get" consortia that are structured to minimize cream skimming, or poaching. The Experian case shows there is a basic level of information that can be shared without resorting to consortia, but that more detailed information may require closed systems of reciprocity.

The proposed register is to collect data on credit obligations, basic information on the underlying security, the amount borrowed, amount outstanding (to be updated periodically), collateral pledged, and information on any judgment pertaining to the obligation, for SMMEs with an annual turnover of R20 million or less. (This threshold covers the smaller of the medium-sized enterprises.) The question of whether monthend balances should be collected is an important one in that these balances stand to quickly proxy regular payment data when combined with initial loan data or trade credit information. On the one hand, this information will make the task of data collection for the bureaus easier. On the other hand, it does create a substitute for an SMME credit bureau, where only regulations against competition prevent it from entering the market. Furthermore, experience suggests that SMME information sharing, especially with trade credit, emerges through a structure of complex reciprocal obligations and safeguards to limit poaching.

The open question is whether the obligation to only share more limited data sharing of more limited data (i.e., underlying security, the amount borrowed, amount outstanding (to be updated periodically), collateral pledged, and information on any judgment) can also motivate SMME credit suppliers, including trade credit suppliers, to provide more detailed information to the credit bureaus in voluntary systems, whether open or give-to-get closed ones, or whether these credit providers will restrict themselves to the letter of the law. Consultations with organizations such as Capitec and Status Credit Circle that have conducted information and lending experiments with trade credit data involving trade associations and the larger trade credit providers in fast-moving consumer goods, construction, and the service industry (the three largest sectors for small businesses), as well as the credit bureaus operate in the formal and informal SMME space, can be beneficial in structuring the information requirements. Forced reporting may induce these potential data furnishers to incur set-up costs and thereby make it easier for them to report additional, more detailed data to the private commercial credit bureaus.

The economic consequences of mandatory reporting, voluntary reporting, and the relation between the two have not been systematically explored. Many economies rely on both, as credit data are reported to public registries for banking supervision needs, and as private bureaus serve the needs of private lenders. Private bureaus in these economies do thrive, but whether they do so because of or despite mandatory reporting is unclear.

There is certainly no evidence that mandatory reporting has inhibited voluntary reporting to a bureau. The two, in fact, may be independent. Credit providers and others who furnish data appear to report when they see the value of doing so. To take one example of mandatory reporting, Russian law requires that banks report to at least one bureau. Banks that preferred not to share information set up their own bureaus to circumvent the law. Yet despite these other bureaus, many private information systems have been emerging as information aggregators demonstrate the value of information sharing to lenders.⁸¹

On the one hand, when creditors are required to report data, they may be encouraged to report additional information to the bureaus. On the other hand, they may report only the regulatory minimum, leading to weaker, less useful, data sets. Given the existence of experienced and sophisticated bureaus and a tradition of information sharing, the latter is unlikely to happen in South Africa if the financial and trade information shared with the register is basic.



5.0 Conclusions and Policy Considerations

The information-sharing infrastructure (technological, economic, and regulatory) appears well developed in South Africa. At the same time, there is considerable unmet need for financing in the second economy. Although this need is not as acute as in other similar economies, it is real nonetheless.

Three issues warrant closer attention:

(1) The links between trade credit information and lending to SMMEs offer an opportunity to increase financial credit access in the second economy. Policymakers should therefore consider enacting measures that remove impediments to reporting trade credit information, or that actively encourage such reporting to private commercial credit bureaus.

⁸¹Personal interview with Marlena Hurley, April 3, 2008. Hurley is with TransUnion CRIF Decision Solution, in South Africa.

(2) To the extent that informal businesses rely on consumer loans, tensions may arise with the NCA's "recklessness in lending" requirements, which limit consumer lending used by entrepreneurs. Workarounds that keep consumer protections in place while enabling small businesses to access credit should be explored.

(3) A registry of collateral would improve lending at small costs, as lenders would have greater confidence in the value of collateral in the event of a default. Policymakers should encourage the creation of such a registry.



5.1 Using Trade Credit and Trade Credit Data to Drive Small-Business Growth

5.1.1 Trade Credit Data as a Means to Broaden Credit Access

FinScope's recent survey of small business suggested that the most plausible reasons for limited access to commercial credit for small businesses included lack of documentation, lack of fixed income, customer uncertainty, no financial records, or measurement and forecasting limitations. Given that several of these barriers to credit access are the result of information gaps, it stands to reason that efforts to address identified information gaps may result in broader, deeper, and fairer lending, particularly for those entrepreneurs operating on the margins in South Africa's informal economy.

One promising option is trade credit data fully reported to a private credit bureau, which could be used to broaden access to financial credit for small businesses in South Africa. In addition to serving as indicators of payment patterns, changes in the volumes of stock ordered, the cycles witnessed in ordering of goods, and indication of growth and income flow may be gleaned from trade credit data. As such, it can help overcome information-based hurdles to accessing credit.

Given the successful use of trade credit information in assessing small-business risk in the formal or "first" economy, there is good reason to believe that similar positive results could be achieved in the informal or "second" economy. For this reason, measures to promote the collection and use of trade credit information in better assess credit risk warrants further attention.

5.1.2 Trade Credit as a Substitute for Financial Credit

This report suggests that the well-developed system of trade credit in South Africa may ease the need for financial credit by small businesses in the second economy. This claim is supported by an Investment Climate Assessment survey of formalsector businesses, which found that three-fourths of respondents did not need a loan.⁸² In another survey of largely informal businesses, a plurality of these smaller, less sophisticated ventures found it hard to secure capital for their business, particularly among start-ups. Further, credit use in the first economy significantly eclipses that in the second economy. These findings suggest an unmet demand for credit in the second economy for business start-ups, a demand that will only grow as small businesses flourish.⁸³

Most critically, there is good reason to believe that promoting more robust information sharing—trade and non-financial payment data for commercial credit bureaus and non-financial payment data to consumer credit bureaus—could substantially broaden and deepen access to affordable sources of mainstream credit for SMMEs. Growth in privatesector lending sets in motion a virtuous cycle, whereby increased entrepreneurial investments lead to increased productivity, growth in capital stock, and sustainable economic growth. Such outcomes would lead to lower unemployment and greater growth in the South African labor force for broad segments of society, and particularly for those who historically have been excluded.

5.1.3 On the Inclusion of Trade Credit Data in the National Credit Register

For SMME lending, the content of mandatory reporting may have consequences to whether these data furnishers provide information to private bureaus. Given that the information to be collected for the National Credit Register is minimal, it is unlikely there will not be other useful information to furnish. That is, credit bureaus will have plenty of information on SMME financial and trade credit to collect. And given South African traditions and practices of information sharing, and so long as the information required to be reported to the register is basic, it is unlikely to derail attempts to establish financial and trade credit information sharing systems.

One danger lies in whether data furnishers believe that the information collected by the register allows for poaching. To some extent, this is unavoidable and perhaps even desirable if it facilitates competition. However, to the extent that it encourages data furnishers to share only the information required by law, antipoaching measures e.g., a prohibition on the use of register data for marketing purposes—may be needed. Again, we recommend that parties consult with the potential data furnishers (the larger *and* smaller ones and their trade associations). Consultation can also help to coordinate sectoral partners and minimize the chances that they will only report to the minimum degree required.

⁸² Clarke et al., South Africa: An Assessment of the Investment Climate, p. 77, Figure 32.

⁸³ FinScope, Small Business Survey Gauteng 2006, p.41.

SMMEs may resist the inclusion of trade credit data for fear that competitors will gain a competitive advantage. Informal SMMEs may resist also because of fears that tax authorities will be able to identify their business activity. The deeper concern is that the system of informal SMME financing based on trade credit may become jeopardized with information sharing mandates that may raise fears of competition among both the SMMEs and trade credit suppliers. Closer research of the system as it stands is needed before any conclusions regarding the inclusion of trade credit in the register are drawn.

5.2 Creating a Collateral Database

PERC analysts found that bank executives were hesitant to lend to small businesses owing to uncertainty over whether the small business's collateral had already been committed. To the extent that lenders cannot check on the status of collateral, lending becomes more risky. One potential solution to this hurdle, a registry of collateral, is relatively inexpensive. Registries of collateral are by and large separate from credit reports and the credit-reporting system. Because the information is not collected by credit bureaus in South Africa is neither surprising nor unusual by international standards. Nonetheless, a comprehensive assets database, e.g., developed as an information requirement for the National Credit Register, would offer an information-based solution that would lead to better decisions and expanded lending to entrepreneurs in the second economy.

5.3 Considerations for Guidelines for "Reckless Lending"

Information as a solution, however, can butt up against the regulatory protections designed to prevent reckless lending to individuals. To the extent that informal businesses take out personal loans in the name of the principal owner or family, the NCA's reckless lending provision may restrict credit to micro-enterprises, despite the exemptions for small businesses. As noted above, the National Credit Regulator can issue guidelines that take these factors into account and carve out exemptions. Commercial lending via the consumer loan channel is not currently extensive. But as information sharing widens and credit access broadens, this channel may become more prominent as a means of financing for SMMEs in the informal sector.

This is certainly not to suggest that the requirement does more harm than good. Rather, this tension is identified to illustrate the potential unintended consequences from provisions in the NCA designed to protect consumers from overextension.

Further study of how and to what extent the provision has limited SMME access to finance, and in which sectors, may be necessary in the future. Such a study would also help shape guidelines that carve out the appropriate regulatory space for lending to informal businesses and evaluate policy responses, including whether small businesses in the informal economy can be induced to register through a combination of increased tax exemptions and tax rebates with a sunset provision.

Appendix A: Persons Interviewed

» Brad Adlard, Thembani International Guarantee Fund

» Rashid Ahmed, Senior Manager, FinMark Trust

» Sandra Beswick, Principal Officer Incubator

Fund, ABSA Corporate and Business Bank

» Jack Brownrigg, Chief Executive Status Credit Circle

» Norman Buckham, Chief Executive Officer, Thembani International Guarantee Fund

» Frances Bundred, ABSA Micro Enterprise Finance

» Robert Campbell, Marketing Director, Kredit-Inform

» Gerhard Coetzee, ABSA Micro Enterprise Finance

» Gabriel Davel, National Credit Regulator

» Carl Fischer, Chief Executive, Capitec Bank Ltd.

» Marelene Heymans, Manager, Research and Statistics, National Credit Regulator

» Marlena Hurley, TransUnion CRIF Decision Solution in Eastern Europe.

» Remo Lenisa, Managing Director, CompuScan Holdings Ltd.

» Tato Make, Thembani International Guarantee Fund

» Dan Meder, Senior Vice President, Experian North America

» Steve Monty, Data Director, Credit Bureau, TransUnion ITC

» Nataliya Mylenko, Program Coordinator,

Financial Infrastructure and Institution Building

Group, International Finance Corporation

» Jane Nothnagel, Risk Manager for the Incubator

Fund, ABSA Corporate and Business Bank

» Gary Pinshaw, McKinsey Consulting.

» Brian Richardson, Chief Executive, WIZZIT

» Kevin Vlietman, TransUnion ITC

» Robin Wagner, Senior Consultant, Analytic and Decision Services, TransUnion ITC

» Brad Weininger, Strategic Account Manager, KreditInform

» Rudolph Willemse, Regulatory Consultant

» John De Wit, Chief Executive Officer, Small Enterprise Foundation

This report has also greatly benefited from conversations with the following participants at the Center for Financial Services Innovation's South African Innovation Exchange, January 26–30, 2008.

» Daryl Beghin, FinMark Trust

- » Ali Behardien, South Africa Credit Corporation
- » Colin Donian, Insight Worx
- » Leon Kirkinis, Chief Executive, African Bank
- » Marie Kristen, Development Bank and Small

Enterprise Foundation

- » Marietjie Lancaster, Postbank
- » Michelle Kelly Louw, University of South Africa
- » Astrid Ludin, FinMark Trust
- » Ilana Melzer, Eighty20
- » Totse Memela, Postbank
- » Mark Napier, FinMark Trust
- » Nlhanhla Nene, South African Parliament
- » Dare Okoudjou, MTN
- » George Roussos, Collections, African Bank
- » Gary Rowe, Investor Relations, African Bank
- » Kieth Smith, Payment System Consultants
- » Brenda Stewart, Senior Vice President, Marketing and Sales, Net1
- » Yolande Van Wyk, Strategic Products, First National Bank





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