Obstacles to Developing Indigenous Small and Medium Enterprises:
An Empirical Assessment

Brian Levy

The article reports the results of field surveys conducted in Sri Lanka's leather industry and Tanzania's furniture industry. It outlines an approach to learning how small and medium enterprises (SMES) perceive the impact of financial, regulatory, technical, marketing, and other input constraints, and to evaluating the results in relation to other empirical indicators. Lack of access to finance emerges as the binding constraint for smaller, less established firms in Sri Lanka and for all of Tanzania's SMES—not only is informal financing limited for Tanzania's firms, even firms of adequate size and experience have difficulty borrowing from banks, and, if they do borrow, have difficult relations with their lenders. In Tanzania, regulatory and tax constraints appear largest for the smallest firms, declining somewhat as firms grow: because enforcement is comprehensive, the bureaucratic burden of negotiating with government officials is greatest for small firms. By contrast, in Sri Lanka the regulatory burden rises with firm size, because enforcement is more stringent for the larger and more visible firms. Constraints on physical inputs continue to inhibit Sri Lankan SMES—a legacy of excessive vertical integration by parastatals. Technical constraints are appraised as most significant by relatively educated entrepreneurs with some involvement in high-quality market niches.

This article reports on field research on constraints confronting small and medium enterprises (SMES) in Sri Lanka and Tanzania and draws some lessons for reforms to help develop an efficient indigenous private sector in developing countries. Although the choice of Sri Lanka and Tanzania was dictated by operational considerations, together these countries richly depict the constraints SMES face in the transition from failed experiments with state control of economic activity to less interventionist economic policies. Other recent World Bank studies have sought to learn what SMES in Ghana, Mali, Malawi, and Senegal perceive as major constraints on operation and expansion; see, for example, Steel and Webster (1990). For some recent surveys of empirical work on SMES, see Liedholm and Mead (1987), Liedholm (1990), and Schmitz (1982).

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I. The Empirical Approach

Field research was conducted in Sri Lanka and Tanzania in 1989–90. Reforms had been initiated in Sri Lanka in 1977, and by 1990 the embrace of liberal, pro-private sector policies was virtually complete. Tanzania’s policy reforms had begun in 1984 and had proceeded only haltingly. Even so, the reforms had eased binding SME constraints of access to foreign exchange and to imported inputs.

Sample Selection

Firm-level interviews in both countries sought to learn what SMEs viewed as the major constraints on enterprise operation and expansion. All interviews combined open-ended and survey approaches. Interview protocols (revised after the initial interviews) were used to guide the discussion and to gather data usable in quantitative analysis. Because research based on interviews can be expensive, a number of compromises had to be made. Each of these compromises implies a need for caution in generalizing from the results.

The first compromise was that the sample size was small and the measures were often qualitative; thus the data lend themselves more to cross-tabulation than to rigorous tests of hypotheses. The second was that the interviews were conducted only in the two capital cities and their environs, so the results may not apply to smaller towns or to rural areas. The third was that the surveys focused on a narrow group of subsectors in which the country had some potential for comparative advantage, small-scale entry was possible at the smallest scale, and enterprises could expand incrementally to quite large size. This subsectoral approach enables the interviewer to learn in some detail about the setting in which the SMEs operate, and penetrate beyond superficial responses. The risk is that results might not apply broadly, and there would be sharp differences in constraints across sectors. In practice, as the empirical analysis below reveals, input constraints, regulations targeted to individual sectors, and technical and marketing constraints tend to be sector-specific, whereas constraints associated with imperfections in the market for finance and with industry-wide regulations are likely to be similar across sectors.

To balance the strengths and weaknesses of subsectoral and broadly based approaches, interviews were conducted in three subsectors in each country—leather products, ceramics, and gemstone calibration in Sri Lanka, and furniture, construction, and horticulture in Tanzania. For Sri Lankan leather products and Tanzanian furniture, the enterprise sample was large enough to permit the quantitative analysis reported below. Analysis in the remaining subsectors was qualitative, but suggested that the impacts of financial and (non-sector-specific) regulatory constraints were broadly similar to those observed in the sectors analyzed in more detail.
Leather Products Enterprises in Sri Lanka

As of mid-1990, Sri Lanka's leather industry comprised a diverse array of participants, both upstream and downstream. Upstream there were a dozen or so tanners. The state-owned Leather Corporation (accounting for about 35 percent of the 11 million square feet of leather tanned each year) was the largest, followed by two midsized firms (together accounting for an additional 35 percent) and an additional nine, smaller, private tanners. Downstream enterprises, most of which produced footwear for the local market, comprised three major suppliers (the multinational enterprise Bata, a downstream division of the Leather Corporation, and a private Sri Lankan firm), some medium-sized enterprises (some producing for their own retail outlets, and others engaged in subcontracting), and a host of smaller producers, including thousands of cobbler. Two enterprises—one Japanese, the other Korean—exported leather footwear from Sri Lanka's export processing zone. The subsector included producers of other leather products, largely for exports and the local tourist market; these enterprises varied in size from quite large operations to smes with fewer than 30 employees. Interviews were conducted with the Leather Corporation, two private tanners, Bata, and 38 locally owned producers of leather products and footwear in greater Colombo.

Sri Lanka's competitive advantage in the leather industry lies in an abundant supply of labor skilled in the fabrication of high-value added, labor-intensive products. Exports of these goods—by the two enterprises located in the export zones, by two other large producers, and by a half dozen or so smes—accounted for more than 90 percent of Sri Lanka's leather exports in 1987. However, with total leather exports under $15 million, Sri Lanka had barely begun to tap its export potential. Aside from the two firms in the export zones, no Sri Lankan producer had yet begun to export footwear, although Bata apparently was beginning to explore export markets, and had set an export target of 10 percent of total sales by 1992. The analysis that follows identifies some of the reasons for this limited export performance.

Furniture Enterprises in Tanzania

Field research on Tanzania's furniture industry concentrated on Dar es Salaam and its environs. At the time of the interviews, the industry comprised five medium-to-large enterprises whose owners were of Indian origin (or—in one case—an expatriate European) and that employed up to 200 workers each; five to ten medium-sized firms (also Indian-owned); about half a dozen long-established, indigenously owned small-to-medium ventures; and hundreds of indigenous enterprises that entered the industry in the 1980s, apparently with some acceleration in entry since the initiation of structural adjustment reforms in 1985. Some of the newer, indigenous smes had grown quite fast and at the time
of the interviews employed up to 70 workers. Twenty-four firms were inter-
viewed, including three that were medium-to-large.

Tanzania's furniture enterprises served submarkets that ranged from large-
volume orders for government agencies and the export of processed wood prod-
ucts at the top end of the market, to roadside sales of household furniture at the
bottom end. Between these extremes, firms produced furniture for sale in their
own retail showrooms, supplied high-quality custom-designed furniture to
higher-income consumers, and produced household furniture on tender to gov-
ernment agencies and parastatals (the agencies, in turn, distributed the furniture
as a fringe benefit to higher-level employees). Interviews uncovered quite sub-
stantial mobility among submarkets: seven indigenous SME interviewees won
their first tenders to supply government agencies in the 1980s, all but one
winning their first tenders in the two years prior to the interviews. Although very
few retailers purchased from independent manufacturers for subsequent resale,
at least one expanding enterprise established a makeshift showroom some dis-
tance from the workshop. One reason for the absence of intermediation at the
retail level may be the prevailing sales tax regime, which treated a sale from
manufacturer to retailer and then from retailer to final customer as two, sepa-
rate taxable transactions, but a sale from a manufacturer through his own
showroom to a final consumer as only one transaction.

Some larger enterprises were moving from the midrange of the market to the
top end. One enterprise had recently abandoned furniture manufacture for the
production for export of parquet flooring and other wood products; a second
enterprise had reduced the share of wood furniture in total sales from 50 percent
to 10 percent and had shifted into metal office furniture for the domestic market
and exports of other wood products. So, rather than being "crowded out," new
market opportunities continually emerged for expanding SMEs.

An Overview of the Constraints

Table 1 groups into four categories the constraints on expansion identified by
survey respondents in Sri Lanka's leather SMEs and Tanzania's furniture SMEs:
financing constraints; regulatory constraints; constraints on physical, technical,
and marketing inputs; and cost constraints. Entrepreneurs were asked to rank
each constraint on a scale of 1 to 5 according to its degree of severity. They were
encouraged to score across the full 1–5 range, and special care was taken to
ensure that there was at least some dispersion.

The rankings in table 1 provide information on the respondents' perceptions
of both the absolute and the relative severity of individual constraints. One
entrepreneur might rank the entire set of obstacles within the 1–3 range (signifying
a judgment that the absolute severity of even the most binding constraint is
only moderate), and another—with identical perceptions of the relative severity
of the obstacles—might rank the entire set in the 3–5 range. Because nothing
useful for policy can be learned from differences among entrepreneurs in their
perceptions of the absolute magnitude of obstacles, the scores were normalized
Table 1. The Constraints on Expansion Identified by Leather SMES in Sri Lanka and Furniture SMES in Tanzania (average normalized score)

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Sri Lankan SMES</th>
<th>Tanzanian SMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of access to finance</td>
<td>0.58</td>
<td>0.97</td>
</tr>
<tr>
<td>Regulatory constraints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential changes in tax status</td>
<td>0.25</td>
<td>n.a.</td>
</tr>
<tr>
<td>Bureaucratic procedures</td>
<td>0.09</td>
<td>0.67</td>
</tr>
<tr>
<td>Labor regulations</td>
<td>0.07</td>
<td>n.a.</td>
</tr>
<tr>
<td>Policy uncertainty</td>
<td>0.10</td>
<td>n.a.</td>
</tr>
<tr>
<td>Lack of access to industrial sites</td>
<td>n.a.</td>
<td>0.64</td>
</tr>
<tr>
<td>Constraints on access to nonfinancial inputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical inputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of access to materials</td>
<td>0.41</td>
<td>n.a.</td>
</tr>
<tr>
<td>Lack of access to spare parts</td>
<td>n.a.</td>
<td>0.38</td>
</tr>
<tr>
<td>Lack of access to wood</td>
<td>n.a.</td>
<td>0.16</td>
</tr>
<tr>
<td>Lack of access to equipment</td>
<td>n.a.</td>
<td>0.26</td>
</tr>
<tr>
<td>Technical and marketing inputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scarcity of competent workers</td>
<td>0.21</td>
<td>0.14</td>
</tr>
<tr>
<td>Lack of technical skills</td>
<td>0.19</td>
<td>0.11</td>
</tr>
<tr>
<td>Not enough domestic buyers</td>
<td>0.11</td>
<td>0.28</td>
</tr>
<tr>
<td>Cost constraints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of finance</td>
<td>0.73</td>
<td>0.72</td>
</tr>
<tr>
<td>Cost of materials</td>
<td>0.61</td>
<td>0.63</td>
</tr>
<tr>
<td>Cost of equipment</td>
<td>0.49</td>
<td>0.58</td>
</tr>
</tbody>
</table>

n.a. Not applicable.

Note: Survey respondents' scores were normalized along a scale of 0 to 1, in which constraints ranked close to 0 are least severe and those ranked close to 1 are most severe. Figures are averages for all firms surveyed. The number of firms in the sample was 38 for Sri Lanka and 20 for Tanzania, but one firm in Tanzania did not provide usable responses to the relevant questions.

along a scale of 0 (least severe) to 1 (most severe), and the normalized scores for each constraint were averaged across entrepreneurs. The normalization, aggregation, and averaging of individual scores provided cardinal estimates of the severity of the constraints in relation to one another for a given country and subsector: an average score of 1 implies that the relevant constraint was ranked most binding and a score of 0 that it was ranked least binding by all sample firms.

Before reviewing and interpreting the results for each constraint group, three preliminary points need to be made. First, the entrepreneurs' perceptions as to the impact of different constraints represent an important—but not definitive—source of information. To cross-check, the field research examined other, complementary data sources. By and large the results were mutually reinforcing, as the analysis that follows makes clear.

Second, although all of the various cost constraints scored relatively high for both industries, they will not receive any further attention here, because their high scores need not signal any government or market imperfection. On the
contrary, SMES' reports of high prices on inputs can be interpreted as a signal of significant competitive pressure and an associated squeeze on profits, both of which are desirable if they induce enterprises to innovate and become more efficient.

Third, there is much more variation in the average scores for individual constraints for Tanzania than for Sri Lanka. And the three most binding noncost Tanzanian constraints (lack of access to finance, lack of access to industrial sites, and bureaucratic procedures) all score higher than the most binding (noncost) Sri Lankan constraint (lack of access to finance). As will become apparent below, these differences reflect the contrast between the Tanzanian environment, which is characterized by a few, rigidly binding nonprice constraints inhibiting SME expansion, and the significantly less restrictive environment for SMEs in Sri Lanka.

II. FINANCIAL ACCESS CONSTRAINTS AND REFORMS

As the constraint scores in table 1 reveal, lack of access to finance emerged as the leading (nonprice) constraint on SMEs in both Sri Lanka and Tanzania, albeit with a significantly higher absolute score in Tanzania. Lack of access to finance was identified as the most severe constraint on expansion by 18 of 19 Tanzanian furniture firms, accounting for the score of 0.97 (out of a feasible maximum of 1). Yet evidence of financing constraints need not imply that there exist imperfections in financial markets that warrant attention by policymakers; there are some financially constrained enterprises to which it would be imprudent for any financial intermediary to lend. Additional empirical analysis is required to evaluate whether the constraint scores signify a serious market failure.

Sources of SME Finance and Their Difficulties

Table 2 summarizes the sources of finance for the Sri Lankan and Tanzanian SMEs. Consistent with the pattern observed worldwide, the entrepreneurs' own savings represent a dominant source of SME finance in both countries; all but one

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>Sri Lankan leather SMEs</th>
<th>Tanzanian furniture SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own savings or retained earnings</td>
<td>100.0</td>
<td>95.0</td>
</tr>
<tr>
<td>Family</td>
<td>34.2</td>
<td>25.0</td>
</tr>
<tr>
<td>Partners</td>
<td>2.6</td>
<td>45.0</td>
</tr>
<tr>
<td>Formal financial institutions</td>
<td>42.1</td>
<td>45.0</td>
</tr>
<tr>
<td>Informal financial institutions</td>
<td>28.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Trade credit</td>
<td>28.9</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Note: The number of firms in the sample was 38 for Sri Lanka and 20 for Tanzania.
of 58 SMEs drew on the savings of the proprietor. Trade credits and informal financial intermediaries were each used by about 30 percent of the Sri Lankan firms sampled, also paralleling patterns observed worldwide. Interestingly, 12 firms (32 percent of the sample for Sri Lanka) reported using at least one of these sources of informal credit prior to securing finance from the formal banking sector.

By contrast, none of the indigenous Tanzanian enterprises used either trade credits or informal intermediaries. (The picture is quite different for Tanzania’s entrepreneurs of Indian origin, who apparently have well-developed informal mechanisms of financial intermediation.) Widespread use of partnerships in Tanzania could represent a substitute channel of informal financing. The absence of trade credit can in part be accounted for by Tanzania’s pervasive banking inefficiencies (on which there is more below) and a legal system that affords only protracted and uncertain recourse (Biggs 1988; Stone, Levy, and Paredes 1992). The absence of other informal lending mechanisms for indigenous enterprises signals a gap evident throughout East Africa.

As table 2 shows, more than 40 percent of firms in the two countries enjoyed access to formal finance. Table 3 disaggregates all Sri Lankan and Tanzanian SMEs and those with access to formal bank loans by the size and age of the enterprises. In Sri Lanka there were eighteen firms that had five or fewer employees or were less than three years old; only one of these had access to formal bank credit. Of the seven SMEs in Tanzania with five or fewer employees or that were less than three years old, only one had access to formal bank credit. These patterns are consistent with the finding that incentives for formal financial institutions to lend to SMEs are weak (Little, Mazumdar, and Page 1987). Because loan sizes are small, the costs of processing are high in relation to loan amounts. In addition, the track record and reputation of a putative SME borrower is likely to be limited (as is the system of financial accounting), which adds to the costs of
loan processing. And the probability of failure is high even for well-conceived new ventures. Only after an SME has some record of success is it generally able to tap into the resources of the formal financial system.

Within the pool of “qualified” enterprises (those with more than five employees and at least three years of operation), coverage was similar in the two countries. Loans had been extended to 75 percent of such firms in Sri Lanka and about 60 percent of such firms in Tanzania. Yet there were sharp differences between the countries in the characteristics of qualified SMEs without loans. Four of the five qualified Sri Lankan SMEs without loans reported that they were not financially constrained and had no interest in borrowing from banks. Each of these four SMEs recorded 0 as their normalized score for access to finance as a constraint on expansion.

By contrast, all five of the qualified Tanzanian firms without loans identified lack of access to finance as among their leading constraints. The constraint score for lack of access to finance was the maximum possible—1—for four of the five firms, and 0.75 for the fifth. Three of the five were among the most successful and rapidly expanding SMEs sampled; all three had made initial approaches to the banks for loans, but without success. According to interviewees, loan applicants were required to provide fixed property as collateral. However, because the banks refused to recognize leasehold land title (the only form of land title permitted in Tanzania) as collateral, individuals could borrow no more than the value of the physical structures they owned. In addition, applicants had to provide detailed feasibility studies of their projected investments (even for overdraft facilities), as well as detailed financial statements. Even with collateral, feasibility studies, and financial statements in hand, firms reported that the processing of loan applications took an average of six months and might still require side payments as a precondition for processing.

All 16 of the Sri Lankan borrowers sampled appeared satisfied with bank service, but 8 of the 9 Tanzanian SMEs with loans complained bitterly about their relationship with the banks. The difficulties of three of the firms were related to the precarious financial condition of the enterprises themselves. But of the remaining six (healthy) firms, two reported that the bank disrupted the enterprise’s business plan by imposing its own arbitrary loan ceiling even though all prerequisites for a larger loan had been fulfilled. Two others reported that their banker temporarily shut down their overdraft facilities over disputes that were peripheral to the lending relationship itself. In all, Tanzania’s SMEs felt they were viewed by banks as unwelcome supplicants, to be dealt with only so long as stringent conditions were met and, even then, only so long as the enterprise respected without question the omniscient authority of the lending agency.

Enhancing Access to Finance

Sri Lanka offers a useful guide to the features of a formal banking sector that can lend effectively to SMEs (see Webster 1991). Some of these features are the familiar virtues of a well-functioning financial system: competition among inde-
dependent banks for borrowers (Sri Lanka has more than 30 independent financial institutions), positive real interest rates, and determined efforts at collecting outstanding loans (even with ongoing civil unrest, the recovery rate of Sri Lankan banks for loans to SMES has been in the 75 to 90 percent range).

But other features of formal bank lending in Sri Lanka are less consistent with laissez-faire dogmas of financial sector reform. The bulk of SME lending has come from targeted, World Bank–supported SME loans. Although both public and private institutions participate in the Bank-supported project, the largest lender has been the state-owned Bank of Ceylon, followed by the (also state-owned) People's Bank. Furthermore, although there is little difference in the recovery rates of the public and private banks, the public banks have more aggressively sought out borrowers that do not ordinarily have access to formal credit than have the private banks, which have serviced only the most obviously creditworthy SME borrowers. Finally, the Central Bank of Sri Lanka operates a credit guarantee scheme that provides partial coverage for SME lending and apparently was widely used at least in the initial years of SME lending. The Sri Lankan experience suggests it is premature to conclude that the unsupported, market-driven provision of nontargeted credit by competing private banks will be sufficient to secure access by SMEs to formal finance.

III. Regulatory Constraints and Reforms

Table 1 disaggregates Sri Lanka's regulatory constraints, separating labor and tax regulation from "bureaucratic procedures" (which includes local licensing and relations with public utilities). Access to adequate industrial premises is not included in the category of bureaucratic procedures; although scattered anecdotal information suggests that this lack of access might indeed represent a constraint for some SMEs, the Sri Lankan survey was not implemented in a way that could systematically shed light on the issue. Scores are relatively low for all three Sri Lankan regulatory constraints.

The Tanzanian firms reported regulatory constraints to be significant obstacles to expansion; scores were 0.64 and 0.67, respectively, for lack of access to industrial sites and bureaucratic procedures. The category "bureaucratic procedures" subsumes the relations of Tanzanian SMEs with a range of regulatory authorities, including sales and income tax authorities, town councils (which issue licenses), public utilities (power, telephone, and water), the National Provident Fund, and the Labor Ministry.

Regulatory Constraints and Firm Size

Table 4 decomposes the constraint scores by the SME's size and (for Sri Lanka) legal status and uncovers systematic variation in the impact of regulation among SMEs and across the two countries. In Sri Lanka the scores rise with firm size, the rise being somewhat larger for the tax constraint than for the others. In Tanzania the scores are largest for the smallest firms. To account for these divergent
patterns, it is useful to distinguish among three distinct burdens—fiscal, bureaucratic, and threshold.

The **fiscal burden** is the amount of tax that firms actually pay. The **bureaucratic burden** is the cost to SMEs of dealing with government agencies, importantly the opportunity cost of entrepreneurial effort diverted away from wealth-generating activities. The size of the bureaucratic burden is inversely proportional to the agencies' efficiency. Because governments presumably do not impose bureaucratic tasks only to torment entrepreneurs, the bureaucratic burden is produced jointly with the fiscal burden—or jointly with some other public task. It is likely to be disproportionately large for the smallest enterprises—in part because its fixed-cost elements are invariant with firm size, and in part because large, but not small, enterprises can hire managers to handle dealings with government officials. Even as a fixed cost, the bureaucratic burden can inhibit the expansion of operating enterprises that are too small to hire a manager. With entrepreneurship complementary to other inputs in production, a reduction of bureaucratic costs would free up the entrepreneur's time and lead to a downward shift of both fixed and variable cost schedules. The **threshold burden** is the discontinuity in the structure of costs that results when some fiscal or bureaucratic burden is imposed only on firms above a minimum size. This discontinuity can lead some firms to rein in expansion—or to expand ineffi-
iciently by creating quasi-independent enterprises, each smaller than the thresh-
old at which the tax and regulatory requirements are imposed.

**Regulatory constraints and firm size in Sri Lanka.** In Sri Lanka the threshold
burden accounts for the increase with firm size in the scores in table 4 for tax
and labor regulation constraints. The increase with firm size in the constraint
score for bureaucratic procedures is the result of administrative obstacles to
exporting—the average constraint score was 0.6 for the five exporting firms (all
in the largest category) but 0.0 for the remaining seven larger enterprises.

Taxes on manufacturers of footwear and leather products are relatively high:
turnover taxes of 15 percent of gross revenues, and a tax of 33 to 50 percent on
net income. (Officials at the Ministry of Finance reported that the 15 percent
rate had recently been increased to 20 percent; even so, interviewees continued
to report that they were subject to a 15 percent rate.) In practice, interviewees of
all sizes and legal statuses conceded that their tax payments were substantially
below the formally mandated levels. Unregistered firms paid no taxes. Where
partnerships and sole proprietorships were officially registered, they were not
required to maintain accounts; consequently they enjoyed significant discretion
as to their declared levels of revenue and profits.

Interviewees volunteered that enterprise size was an important determinant of
how thoroughly they might be investigated by the tax authorities. Limited lia-
bility companies have less room for maneuver, because they must maintain
audited accounts. But even these companies implied in interviews that a combi-
nation of a low profile and creative accounting could help to limit their tax
burden. As table 4 suggests, the increased visibility of limited liability companies
also makes them potential targets of enforcement of labor regulations. In all, the
field research suggests that as Sri Lankan enterprises grow (or shift to limited
liability status) they become vulnerable to large increases in tax and to other
regulatory strictures. As a result, many entrepreneurs rationally limit expansion.
One important exception is expansion into export markets, where earnings
presently are tax free.

**Regulatory constraints and firm size in Tanzania.** As in Sri Lanka, Tanzania’s
formal tax and regulatory requirements are demanding. However, unlike Sri
Lanka, there is no threshold burden, because enforcement is comprehensive,
albeit with pervasive lubrication and renegotiation of formal obligations. In
Tanzania the bureaucratic burden (enterprise licensing and taxation) imposes
substantial entry and expansion-deterring costs on all enterprises, having an
especially severe impact on the smallest firms.

Irrespective of size, all Tanzanian furniture enterprises must be licensed by
local authorities and are liable for very substantial payments of taxes. Enter-
prises with fewer than ten employees need a trading license; enterprises with
more than ten employees and enterprises that sell to government agencies need a
business license. The sales tax on furniture, payable by manufacturers (and
again by retailers if they operate independently of the producers), is formally set at a rate equal to 25 percent of sales revenue; income taxes are set at 50 percent of enterprise profits. In practice, all interviewees were licensed to operate by the Dar es Salaam City Council. Similarly, even the smallest furniture enterprises in the sample were regularly held liable for tax payment.

The combination of cumbersome and punitive formal tax and licensing requirements and ubiquitous enforcement create substantial opportunities for officials to extract side payments from even the smallest Tanzanian SMES. Licenses must be renewed annually. Although the fee is modest and is calculated on a sliding scale according to the size of the enterprise, each renewal is dependent on a host of prior clearances. In the best of circumstances, obtaining clearances and renewal eats into the scarce time of the proprietor. In circumstances in which not all clearances have been obtained, the proprietor is at the mercy of the licensing official. Although incomplete compliance has not been used to obstruct entry or to shut down enterprises, it is a vehicle for officials to extract side payments. Hence 7 of 13 interviewees reported that “lubrication” is needed each year to complete license formalities.

Side payments also are ubiquitous in the implementation of tax laws: only 1 of 13 firms characterized the system of tax collection (of both sales and income taxes) as legitimate; the remaining 12 firms confirmed instead that lubrication is pervasive. Because sales taxes are legally payable on a monthly basis, tax officials can visit enterprises and “negotiate” their tax burden 12 times annually. In practice, the number of negotiations is somewhat fewer: the number of sales tax visits to interviewees over a 12-month period ranged from a low of two to a high of ten, the average being five a year. Although income tax is payable annually, individual tax assessors can reexamine the accounts of any enterprise at any time on the grounds that inaccurate information has been filed—hence a reported average of two visits a year from income tax officials.

Reforming the Regulatory and Tax Regime

A well-functioning regulatory and tax regime is characterized by a minimum of bureaucratic requirements and by transparent, moderate obligations imposed across a broad spectrum of enterprises. Where the regime falls short of these desiderata, interactions among the fiscal, bureaucratic, and threshold burdens can offset the most egregiously harmful effects. So, in circumstances such as Tanzania’s, where an excessive fiscal burden is offset by pervasive lubrication, the environment for SMES could be worsened by introducing measures to make regulatory and tax enforcement transparent—thereby exposing SMES to their full (exorbitant) tax obligations. Conversely, moves in Sri Lanka toward universal coverage would eliminate the threshold burden, but replace it instead with a new bureaucratic and fiscal burden for the smallest enterprises.

Given these interactions, regulatory and tax reform needs to proceed simultaneously on four fronts. First, the prevailing web of regulations should be
scrutinized, and those that serve no social purpose should be eliminated. Second, where formal tax obligations are too high, they should be reduced. Third, measures should be taken to secure increased transparency of the regulatory and bureaucratic apparatus. Fourth, in parallel with fiscal and bureaucratic reform, decisions should be made on the appropriate coverage of tax and regulatory obligations.

How universal should coverage be? One common argument is that coverage should be wholly universal as a way of eliminating the threshold burden. However, universal coverage would transform the threshold burden from one that inhibits expansion into one that inhibits entry, and the effects would be equally pernicious—if less visible. A second argument is that universal coverage (especially of tax obligations) would broaden the revenue base and thereby permit lower tax rates and less disincentive to growth by taxpaying enterprises. The difficulty is that any new fiscal burden necessarily brings with it a corresponding bureaucratic burden. And universal coverage would extend this burden to small firms—precisely those firms for which the effects are most harmful.

Two implications follow as to the appropriate extent of coverage. First, the case for extending the regulatory net to encompass all enterprises is unambiguous only if the implausible assumption that bureaucracy is frictionless is a given. Put differently, the presence of “informal” firms may not only be a symptom of some underlying policy distortion, but may also signify a wise recognition that some costs of regulation fall disproportionately on the smallest enterprises. Second, there is no single optimal firm size below which tax and regulatory obligations should be excused. Rather, the reach of the regulatory net should vary with the administrative capabilities of individual countries: the weaker a country’s administrative capability is, the narrower the reach should be.

In both Sri Lanka and Tanzania the first task is to eliminate regulations that serve no useful social purpose. Subsequently, the agendas for regulatory and tax reform are entirely different in the two countries. In Tanzania, the priority for reform should be to eliminate the bureaucratic and fiscal burdens on the smallest enterprises by exempting them from regulatory and tax obligations. As a secondary measure, more transparent administrative procedures should be introduced; even with lower tax rates, this last measure could increase the fiscal burden for taxpaying firms. In Sri Lanka the priority should be to reduce taxes and the associated fiscal burden on large enterprises and thereby to reduce the disincentives for formality. To maintain the level of tax revenues, this reduction needs to be accompanied by a broadening of the reach of the tax and regulatory apparatus, thereby imposing new fiscal and bureaucratic burdens on previously informal SMEs. Even subsequent to reform, the smallest Sri Lankan firms should remain outside the regulatory and tax net. Because Tanzania’s bureaucracy is less efficient than Sri Lanka’s, the reach of the regulatory and tax apparatus should extend to smaller enterprises in Sri Lanka than in Tanzania—precisely the reverse of what is now the case.
IV. CONSTRAINTS ON PHYSICAL INPUTS AND REFORMS

Unlike regulatory or financial constraints, constraints in access to physical inputs tend to be sector-specific. Therefore, in addition to leather in Sri Lanka and furniture in Tanzania, this section will draw on the surveys of the gemstone calibration sector in Sri Lanka and the construction sector in Tanzania.

Constraints on Physical Inputs in Sri Lanka

For the 15 leather SMEs in Sri Lanka with five or fewer employees, the average score for constraints on physical inputs was a low 0.16, reflecting the firms' willingness to make do with odd lots of low-quality leather. The average for the 23 remaining (larger) enterprises was 0.55. Indeed, only 17 percent of firms with more than five employees reported that there was sufficient leather of adequate quality available.

Underlying the high constraint scores are some serious imperfections in Sri Lanka's market for leather. Historically, the expansion of footwear and leather products has been tied to the expansion of local tanning—despite a manifest absence of any comparative advantage in tanned leather. Prior to 1983, this policy took the form of indiscriminate support for the state-owned Leather Corporation, which was afforded preferential access to local hides, was provided a veto on the entry of potential private competitors, and was protected from foreign competition via a bar on imports. Furthermore, the corporation channeled two-thirds of its production to its own downstream footwear and leather products divisions. After 1983 the restrictions on entry and on access to hides and imported leather were liberalized, but a 60 percent nominal tariff was imposed on leather imports. Because of a 200 percent export tax on raw hides, the effective subsidy for tanners was substantially in excess of 60 percent. Interestingly, none of the SMEs interviewed reported that they used imported leather, raising the possibility that nontariff obstacles to the importation of leather continued to exist. Although some private tanners started up new businesses, most used their leather in their own downstream operations or sold on contract to two leading private producers of footwear. Only 25 to 30 percent of domestically tanned leather was sold at arm's length—that is, through more-or-less anonymous market transactions—to independent producers.

Although the imperfections detailed above are specific to leather, lack of access to materials emerged also in Sri Lanka's ceramics and calibrated gemstone sectors as leading constraints on SME expansion. This conclusion is a qualitative one, because the number of SMEs surveyed in the two sectors was too small for quantitative constraint scores to be useful. The state-owned Ceramics Corporation has a legal monopoly to mine the inputs for ceramics and has used that monopoly to shape the structure of the industry in favor of large enterprises. The State Gem Corporation controls both gemstone exports and imports of uncut stones for calibration and reexport. It regulates in a way that imposes a disproportionately severe administrative burden for smaller enterprises involved
in the export of calibrated gemstones, especially new entrants. One SME exporter whose experience apparently is not atypical reported that he personally spends two days processing the shipment of an export order and three days processing the clearance requirements prior to receipt of a parcel of gemstones sent by a foreign buyer on a no-foreign-exchange basis for calibration and reexport. In a typical month, he reported, he has no alternative but to devote fully 50 percent of his time to overcoming bureaucratic hurdles set up by the State Gem Corporation and by Customs (which operates a parallel apparatus to regulate international trade in gemstones).

Constraints on Physical Inputs in Tanzania

In table 1 the low constraint scores reported by Tanzanian SMEs for lack of access to equipment, spare parts, and wood signify the existence of relatively well-functioning input markets for producers of furniture. Input markets did not operate as well in Tanzania’s construction industry, where lack of access to equipment was identified as the most binding nonprice constraint after access to finance and where lack of access to building materials also was reported as a significant obstacle. Even so, both construction and furniture firms reported that problems of access to physical inputs declined between the time of entry and of the interviews—most likely a result of the greater availability of imported items subsequent to adjustment reforms.

The constraint scores (calculated from a sample of 14 construction firms) for lack of access to equipment and lack of access to building materials as obstacles to expansion were 0.71 and 0.51, respectively; their respective scores as obstacles to entry were 0.94 and 0.86, the leading and second constraints at entry. For the furniture firms, the scores for lack of access to spare parts and to equipment as constraints on entry were 0.49 and 0.45, respectively.

Potential Reforms to Ease Constraints on Physical Inputs

By the time of the interviews, trade policy reforms in both countries had eased the most egregious constraints on access to imported inputs. Trade policy aside, the Sri Lankan research in particular points to another relevant constraint: in all three sectors a dominant state-owned enterprise has directly or indirectly promoted the emergence of large-scale, vertically integrated operations and thereby shaped industrial organization in a way that discriminates against SMEs. The question arises whether ongoing efforts at privatization (in Sri Lanka and elsewhere) can be carried out in a manner that redresses this bias.

More attention should be paid to how privatization could vertically restructure industry in a way that substitutes more-or-less arm’s length transactions for hierarchical relationships within integrated firms. Vertically integrated ties established to take advantage of transactional or technological efficiencies of integration or to capture economies of scope should not be disrupted. But vertical integration that emerged arbitrarily as a result of the decisions of state-owned entities, that is no more (although sometimes perhaps no less) efficient than
arm's length arrangements, and that inhibits the participation of SMEs should not be maintained. Levy (1991a and 1991b) illustrates how the same industries have entirely different patterns of vertical integration in Korea and Taiwan.

V. TECHNICAL AND MARKETING CONSTRAINTS AND REFORMS

The scores in table 1 for lack of technical skills, scarcity of competent workers, and not enough domestic buyers are low for both Sri Lanka and Tanzania. However, sample firms often evaluated the obstacles in relation to their existing markets, even though the relevant constraints are those that enterprises confront in relatively demanding markets.

The Impact of Market and Entrepreneur Characteristics on Technical and Marketing Constraints

Perceptions of technical and marketing constraints might be hypothesized to vary according to both the (market-driven) price and quality requirements of the specific market niches that enterprises seek to serve and the (entrepreneur-driven) ambition and market awareness of the enterprise proprietors. As table 5 summarizes, scores for lack of technical skills indeed vary systematically according to the size of the enterprise, the entrepreneur's education, and the quality of the market niche served.

Reflecting overall differences between the two countries in levels of education, interviewees in Sri Lanka considered entrepreneurs with 13 or more years of schooling to be educated, whereas interviewees in Tanzania considered entrepreneurs with 10 or more years of schooling to be educated. As for the classification of market niches, Sri Lankan enterprises were classified as serving a high-quality niche if they subcontracted to Bata or the second largest private producer and distributor of footwear (there were six firms in this category); if they had made some effort to export (five firms); or if they sold their products through established, relatively high-volume and high-quality retail footwear outlets (four firms). The remaining 22 enterprises in the sample—including nine enterprises with five or fewer workers that sold all of their output directly from their workshops—were classified as serving low-quality niches. The Tanzanian enterprises serving high-quality niches were defined as those that sold furniture to government agencies (there were ten firms in this category) or through retail outlets that were physically independent of the workshop (all four firms in this category also sold to the government); the remaining nine (low-quality niche) firms all sold their entire output directly from their workshops.

Most clearly for Sri Lanka, the sample enterprises fall overwhelmingly into one of two quite distinct groups: educated entrepreneurs that employ more than five workers, have some involvement in high-quality market niches, and appraise technical constraints as quite significant; and uneducated entrepreneurs with 15 or fewer employees, no involvement in high-quality market niches, and no perception that weak technical capabilities limit their expansion efforts.
Table 5. Average Normalized Scores for Lack of Technical Skills for SMES in Sri Lanka and Tanzania (number of firms is in parentheses)

<table>
<thead>
<tr>
<th>Country, market niche, and education of entrepreneur</th>
<th>Size of firm (number of employees)</th>
<th>1-5</th>
<th>6-15</th>
<th>16 or more</th>
<th>All firms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sri Lanka</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-quality market niche</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educated entrepreneur</td>
<td>n.a. (0)</td>
<td>0.52 (3)</td>
<td>0.36 (9)</td>
<td>0.40 (12)</td>
<td></td>
</tr>
<tr>
<td>Uneducated entrepreneur</td>
<td>n.a. (0)</td>
<td>n.a. (0)</td>
<td>0.08 (3)</td>
<td>0.08 (3)</td>
<td></td>
</tr>
<tr>
<td>Low-quality market niche</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educated entrepreneur</td>
<td>0.00 (2)</td>
<td>0.00 (1)</td>
<td>n.a. (0)</td>
<td>0.00 (3)</td>
<td></td>
</tr>
<tr>
<td>Uneducated entrepreneur</td>
<td>0.04 (12)</td>
<td>0.18 (7)</td>
<td>n.a. (0)</td>
<td>0.09 (19)</td>
<td></td>
</tr>
<tr>
<td>Average for all</td>
<td>0.32 (14)</td>
<td>0.26 (11)</td>
<td>0.29 (12)</td>
<td>0.19 (37)</td>
<td></td>
</tr>
<tr>
<td><strong>Tanzania</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-quality market niche</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educated entrepreneur</td>
<td>n.a. (0)</td>
<td>0.39 (3)</td>
<td>0.08 (3)</td>
<td>0.20 (6)</td>
<td></td>
</tr>
<tr>
<td>Uneducated entrepreneur</td>
<td>n.a. (0)</td>
<td>0.13 (2)</td>
<td>0.13 (2)</td>
<td>0.13 (4)</td>
<td></td>
</tr>
<tr>
<td>Low-quality market niche</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educated entrepreneur</td>
<td>0.00 (2)</td>
<td>0.00 (1)</td>
<td>n.a. (0)</td>
<td>0.00 (3)</td>
<td></td>
</tr>
<tr>
<td>Uneducated entrepreneur</td>
<td>0.08 (4)</td>
<td>0.00 (1)</td>
<td>0.00 (1)</td>
<td>0.06 (6)</td>
<td></td>
</tr>
<tr>
<td>Average for all</td>
<td>0.06 (6)</td>
<td>0.20 (7)</td>
<td>0.08 (6)</td>
<td>0.11 (19)</td>
<td></td>
</tr>
</tbody>
</table>

n.a. Not applicable.

Note: Survey respondents’ scores were normalized along a scale of 0 to 1, in which constraints ranked close to 0 are least severe and those ranked close to 1 are most severe. Figures are averages for all firms surveyed. The number of firms interviewed was 38 for Sri Lanka and 20 for Tanzania, but one firm in each country did not provide usable responses to the relevant questions.

Furthermore, market- and entrepreneur-driven influences each appear to have some independent effect: the perception of technical constraint among the SMES that serve high-quality niches is greater for the educated entrepreneur than for the uneducated one. Correspondingly, among the SMES with educated entrepreneurs, the perception of technical constraint is greater among those that serve high-quality rather than low-quality market niches.

Reform of Technical and Marketing Constraints

Interviews revealed that technical and marketing support systems—market and institutional networks (both private and public) external to the firm—were weak in both Sri Lanka and Tanzania. But how to strengthen these support systems remains unresolved. One possibility is that support systems are endogenous—that the weakness of these systems in Sri Lanka and Tanzania is a reflection rather than a cause of the rather simple market niches in which SMES are active, and that as SMES respond to new opportunities created by policy reform, the private provision of technical and marketing support will increase spontaneously. Alternatively, the weakness of support systems may signal some underlying market failure, which can be overcome only through government intervention. The putative market failure could plausibly be traced to the public-good character of technical and marketing information and its consequent
undersupply by private providers. Alternatively, the market failure could be traced to coordination problems that undermine the incentive to be the first entrant in circumstances in which participation on one side of a market creates positive externalities for participants on the other side; here the appropriate role for government is as a catalyst that provides the initial stimulus. Careful empirical analysis of successful experiences of SME and support system development can reveal which of these competing alternatives is closer to the truth.

VI. SME CONSTRAINTS AND THE SEQUENCING OF REFORMS

As the empirical analysis has shown, SMEs operate in a complex environment and confront a diverse array of constraints; it is chimerical to search for a single constraint, common across countries, that, once released, will lead to rapid development of SMEs. Not only is there substantial variation among countries as to which constraint is binding, but the release of one constraint is likely to bring to the forefront some other constraint whose inhibiting influence had not previously been evident. Yet for all of this complexity, the analysis has outlined an approach to learning how SMEs perceive the impact of the various nonprice constraints and to evaluating the results in relation to other empirical indicators.

The applications of the approach uncovered quite different patterns of SME constraints in Tanzania and Sri Lanka and, within Sri Lanka, between relatively large and small SMEs. The evidence seems unambiguous that lack of access to finance represents the binding constraint on expansion for all classes of SMEs in Tanzania, as well as for smaller, less established firms in Sri Lanka. Furthermore, this constraint appears more severe for the smallest Tanzanian SMEs than for their Sri Lankan counterparts: although formal banks do not lend to the smallest firms in either country, both informal finance and trade credits appear to be more readily available in Sri Lanka. In Tanzania, the financing constraint was followed—again for all SMEs, but with a disproportionately severe impact on the smallest—by the burdens of pervasive and nontransparent tax and regulatory obligations. By contrast, the smallest and least established Sri Lankan enterprises remained informal and reported no difficulties with regulatory authorities. Neither the smallest Sri Lankan nor any of the Tanzanian firms reported technical, marketing, or input constraints to be significant obstacles to expansion, although this appears to reflect more their narrow market and limited information than any underlying capabilities.

Which constraints are most binding is less clear for the larger, established SMEs in Sri Lanka. Although the financing constraint appears to ease as firms grow, a host of new obstacles—no one of which appears to be dominant—come to the fore. Larger Sri Lankan SMEs felt constrained by the limited availability of inputs, vulnerable to heightened scrutiny by tax and other government authorities, limited by weaknesses in their technical skills, and—for the subsample of enterprises that sought to export—frustrated by cumbersome bureaucratic procedures and weak linkages to the international marketplace.
Learning which constraints bind enterprises is only a first step in setting priorities for reform to promote efficient SME development. Some constraints may not be susceptible to reform. For others, the costs of effective reform may be too high to justify the resultant benefits. Finally, the absence of constraint may signal some undesirable weaknesses in, say, the regulatory environment. Even so, analysis of the kind described in this paper helps to ensure that SME reforms are not driven by preconceived views as to the obstacles to an indigenous supply response, but that the reforms target the constraints that are most binding in practice.

REFERENCES

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