



The Development Impact of Small and Medium Enterprises: Lessons Learned from SEAF Investments

VOLUME I: MAIN REPORT



**Small
Enterprise
Assistance
Funds**

THE DEVELOPMENT IMPACT OF SMALL AND MEDIUM ENTERPRISES: LESSONS LEARNED FROM SEAF INVESTMENTS

Small and medium enterprises (SMEs) are generally thought to play a crucial role in driving economic growth in both developing and developed countries. As a group, they generate more new jobs than large firms or micro-enterprises. They introduce innovative ideas, products, and business methods. And they can push economic reform and the modernization of uncompetitive economies. But very little microeconomic research has been done to find out what impact these enterprises have on growth and poverty or how such impact occurs.

A new evaluation study by the Small Enterprise Assistance Funds—SEAF—traces the developmental impact of investments in ten small and medium enterprises. The study yields encouraging insights on the potential of SMEs as a vehicle for growth and poverty reduction and some policy guidelines for the design of interventions to maximize this potential.



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EXECUTIVE SUMMARY

SEAF is a not-for-profit corporation that sponsors the establishment and oversees the management of commercially sustainable, for-profit private equity funds in emerging markets. Much of SEAF's funding comes from international development finance institutions. SEAF funds provide small and medium firms in developing and transition countries with (1) debt and equity growth capital to allow them to expand their productive capacity, and (2) post-investment business support in financial management, marketing, and operations, to help the firms to increase their sales, particularly export sales, and to improve their operational efficiency. SEAF funds typically invest in areas of the global economy that are ignored by purely commercial investors. Yet SEAF has repeatedly found that a focus on smaller companies and developing and transition economies can generate positive financial returns.

From its inception, SEAF has tracked and measured the financial returns on its investments, reflecting the interest of its own investors in reaping financial returns. But this new evaluation study is the first to focus on the other part of the story: the developmental impact of SEAF investments. The study looks at how these investments have affected the local economy and the lives of the people who work for the SMEs in which SEAF has invested.

RATIONALE FOR SUPPORTING SMALL AND MEDIUM ENTERPRISES

Proponents of public support to small and medium enterprises (SMEs) emphasize the contribution these enterprises can make to economic growth and poverty reduction, by providing jobs, many of which are suitable for semi-skilled or unskilled workers; introducing business methods, products, and services that help to restructure weak agricultural sectors or other uncompetitive transition economies, thus absorbing workers who would otherwise drop into the ranks of the poor; and by linking participants in the supply-chain—connecting small-scale producers with lucrative urban, national, or export markets and, in the reverse direction, connecting large urban businesses with mass consumer markets in remote areas.

Despite these presumed benefits of SMEs, low-income and transition countries tend to have a substantial gap between the smallest micro-enterprises and larger firms.¹ The reason for this “missing middle” may be that the governments or markets in these countries effectively discriminate against SMEs in favor of larger firms. Capital market failures often receive the most attention from development

¹ Whereas smaller, informal enterprises are generally able to avoid paying taxes and other social charges, governments are more likely to enforce such laws in the case of formalized SMEs. Larger firms can afford to obtain and implement expert advice on tax-efficient structures and strategies that minimize their burden.

An in-depth case study approach

assistance institutions, but there are important problems in other areas, including labor markets, training and education, health services, manufacturing and exporting, and the effective tax burden. Given the promise of SMEs for growth and poverty reduction, a case can be made that these market failures deserve correction, through support for SMEs that serves to “level the playing field.”

DESIGN OF THE STUDY

Theories about the developmental rationale for supporting SMEs can only be confirmed through evidence. SEAF used a case study approach to this question, evaluating the impact of its investments in ten firms—five in rural and five in urban areas. The ten firms were selected on the basis of data availability and the agreement of the entrepreneurs and employees to be interviewed; shortages of data and difficulties with methodology precluded a comprehensive rigorous study at this stage.

Five of the firms studied are in Central and Eastern Europe and five are in Latin America. Their annual sales range from US\$ 0.3 million to US\$ 17 million. Their businesses range from hand-embroidered children’s clothes to electronic components and media products, though many are in food production and processing. Their numbers of employees range from 4 to 308.

Using the approach developed by the International Finance Corporation for the economic analysis of projects, the study measured the incremental economic effects of each investment over time on the stakeholders affected by the investment: investors, employees, customers, producers of complementary goods or services, suppliers, competitors, new entrants to the industry, local communities, local governments, and financial institutions such as local banks, pension funds, and insurance companies. Extensive interviews were conducted both within the firms and with their stakeholders. The interviews with employees also gathered information on changes in their household living conditions.

RESULTS

SMEs have a large positive impact on their communities. There are inherent reasons for this, including SMEs’ difficulty in attracting the “best” workers (who normally go to work for multinationals, banks, and governments), and their consequent need to train and retain those employees they have invested in. In addition, SMEs work hard to maintain good relations with the local authorities and communities upon whom they depend more heavily for their success. The ten case studies demonstrate the multiple paths by which these SMEs have affected their communities:

- The economic impact of investment in SMEs is significant. On average across all the case studies, every dollar invested by SEAF generates an additional ten dollars in the local economy, with a range from \$4 to \$24. Virtually all the firms have achieved a significant positive economic rate of return, even before the investment

is brought to term. Even in investments from which SEAF has exited at a relatively low internal rate of return, the economic impact is significant.

- Of the quantifiable results among stakeholders, the greatest share of benefits from the investments goes to employees, followed by governments.
- Two-thirds of total employment in the sampled firms goes to low-skilled workers, confirming the hypothesis that SMEs generate new jobs that are suitable for the poor.
- Employees' annual real wage growth can be high: up to 28 percent for low-skilled workers and 34 percent for high-skilled workers.
- The enterprises provide substantial non-salary benefits, which are valuable to low-skilled workers who would not receive them were they self-employed.
- Many of the enterprises invest heavily in training their workers during employment. Being forced to hire people with relatively low skills, they tend to invest disproportionately in training their employees.
- The training creates a substantial asset for employees, as it permits wage increases and a skill mobility premium.
- Employees benefit from the stability of employment. Along with the payment of health and social security benefits, this helps them to accumulate tangible assets and plan or save for their children's education, hedging themselves against poverty and providing a path out of poverty for their children.
- SMEs can provide access to formal markets for informal sector and rural producers; they form linkages between small-scale producers and lucrative national and export markets.
- When SMEs expand, they pay more taxes—which represent up to 20 percent of these firms' total revenues.
- SMEs are an integral part of the communities in which they operate and contribute actively to community development.

*The economic
impact of SMEs
is significant*

POLICY IMPLICATIONS

Though these are preliminary findings from a small group of firms, and should not be generalized, they suggest that it is well worthwhile for the development community, and indeed for socially responsible commercial investors, to put more effort into SME financing. In the past, development finance institutions have participated heavily in micro-lending programs, but many are now looking to broaden their efforts with mechanisms for more extensive support to SMEs.

*Achieving
development with
financial returns:
three approaches*

The ability to track the developmental effects of SME investments across different groups of stakeholders means that these effects can also be targeted as part of a development—or development assistance—strategy. This makes it possible for financial intermediaries supporting SMEs to adopt transparent strategies aimed at achieving developmental returns simultaneously with financial returns. The mixed approach—targeting both development and financial returns—may be attractive to development-oriented investors.

To leverage SME investments so they can have their greatest effect on poverty without compromising the financial return objective of fund investors, three approaches show particular promise:

- ***Work through the SME entrepreneur as a cost-effective delivery mechanism for poverty alleviation.*** The positive impact of the SMEs studied here on their employees' levels of skills and health suggests that there are potential advantages to using SMEs as a delivery mechanism for poverty-alleviating services. Thus donors might establish programs to partially offset the costs that local SMEs incur in offering practical (approved) training or health and other benefits for their employees. Using SMEs as a delivery mechanism might have cost advantages over some alternative approaches, which require extensive investment to locate suitable program recipients and to track progress and results. SMEs, for their part, would be motivated to target the programs efficiently and to seek and track results, as such interventions would enhance their employees' morale and longevity of employment with the company, as well as enhancing business success.
- ***Identify effective poverty programs and work with partners.*** One strategy could be for SEAF, entrepreneurs, and donors to identify common interests and objectives and to capitalize on the experience and network of SMEs to address those objectives, as SEAF has done in Macedonia or Peru, for example. Particularly in rural areas, SMEs might work to provide a point of purchase for farmers who take part in donor-assisted programs to raise their productivity but require a reliable mechanism to monetize their increased output. Implementing such programs could require additional non-fund resources from donors, as investors may not wish to use fund resources for non-core activities.
- ***Cultivate socially responsible entrepreneurs and sectors.*** The case studies show a strong correlation between the development impact of firms and the quality of entrepreneurs. By identifying and working more with socially responsible entrepreneurs—who treat employees fairly, generate employment without compromising the company's financial viability, and support the local community by leveraging the investments needed for business—and by investing in sectors with a beneficial impact on the poor, developmental intermediaries such as SEAF could amplify the development impact of their investments. Training entrepreneurs in understanding the benefits of such relatively enlightened programs and in administering them more effectively could be expected to increase the developmental impact.

In an investment strategy with dual motives, cost is an important concern. At least for small funds, the kind of work that must be done to add value to SMEs will cost more than can be covered with a fee structure at the going rate of 2-3 percent of capital under management. At the same time, the size of funds—and, therefore, the number of investee companies in the portfolio—must not be so large as to make the necessary monitoring and technical assistance impracticable, or the time required to invest the committed capital too lengthy. In a dual strategy, therefore, focused funding from development finance institutions for technical assistance to SMEs becomes critical. Experience suggests that to be effective, such technical assistance must be integrated with fund management rather than conceived as a stand-alone program, given the superior linkage between the entrepreneur and the financial partner.

*Integrate
technical
assistance
with fund
management*

FUTURE EVALUATION PLANS

Part of the goal of this study was to validate the methodology and approach to data collection for a more rigorous longer-term impact evaluation effort that will cover all SEAF portfolio companies. Given the promising results, SEAF plans to strengthen its tracking and monitoring system so as to collect accurate time-series data that will throw light on the developmental impact of all its investments. These data will be stored in SEAF's worldwide investment database, and a comprehensive impact evaluation will be conducted when enough data have been collected. To the extent possible, SEAF will use its own resources to cover the data collection effort. However, since SEAF investors cannot be expected to pay for such incremental work, SEAF will need additional resources to analyze the data, undertake periodic interviews, track down unavailable or missing data, and consolidate the results.

1. INTRODUCTION

SEAF is a not-for-profit corporation that sponsors the establishment and oversees the management of commercially sustainable, for-profit private equity funds. Much of the corporation's funding comes from development finance institutions. SEAF equity funds focus on providing small and medium enterprises in developing and transition countries with (1) appropriately structured debt and equity growth capital to allow them to expand their productive capacity, and (2) extensive post-investment business support in financial management, marketing, and operations, to help the enterprises to increase their sales, particularly exports, and to improve their operational efficiency. SEAF-sponsored funds represent the world's most comprehensive portfolio of SME private equity investments. (Box 1.)

SEAF-sponsored funds typically invest in businesses in areas of the global economy that are overlooked by commercial venture funds because of their relatively remote location, small size of local market, lack of alternative sources of capital for small and medium firms, cultural differences, or fragmentation within regional markets. SEAF has repeatedly found that a focus on smaller companies and developing economies can generate positive returns. Its experience is that small and medium enterprises (SMEs) frequently have significant competitive advantages—including an ability to build businesses with market leadership positions, differentiated products and services, and sustainable cost advantages—that are derived from local human and other resources and provide the basis for compelling investment opportunities.

Since its inception, SEAF has tracked and measured the financial returns on its investments and to investors, reflecting the interest of its own investors in generating financial returns.

Financial returns, however, tell only part of the story. This evaluation study is the first to focus on the other part of the story: the impact that SEAF-supported firms have on the local economy and on the lives of the people affected by the investments.² The study was made possible by grants received in spring 2003 from the UK Department for International Development, the Ford Foundation, and the Swiss Government's State Secretariat for Economic Affairs.

*Financial returns
are only part of
the story*

² Speaking at a conference sponsored by the IFC in May 2003, Alan Patricoff—the noted US venture capitalist—commented on the paucity of meaningful measures of the impact of development finance. For example, in looking at what would constitute a successful investment made in Africa, Mr. Patricoff suggested that the primary return should not be financial, but instead should be the change in the quality of life on the part of the portfolio company's employees, such as the type of roof they had over their heads at night or the quality and level of training and education they and their dependents might be able to obtain. Such measures would be much more indicative of whether the developmental finance institution was achieving its mission than would be the financial rate of return—which was unlikely, on a risk-adjusted basis, to approach what could be achieved in the more developed markets.

To assess the development impact of SEAF's portfolio companies, the study analyzed the direct and indirect channels through which this impact occurs, quantifying changes wherever possible, and undertook qualitative evaluations of the impact of ten SEAF investments. SEAF does not intend to generalize the results of the study, but they give encouraging insights into the potential of SME development as a pro-poor growth strategy.

Box 1: SEAF at a glance

SEAF has sponsored private equity funds totaling approximately US\$175 million of capital commitments, investing in 23 countries in Central and Eastern Europe, Asia, Central Asia, and Latin America. As of December 31, 2003, SEAF's total invested capital exceeded \$80 million through 209 completed small business investments.

SEAF began as the CARE Small Business Assistance Corporation, which was founded in 1989 by the international humanitarian organization, CARE. Following the receipt of an initial \$300,000 grant from the United States Agency for International Development (USAID), SEAF developed rapidly with the fall of socialism in Central and Eastern Europe. International donor agencies were convinced that small and medium enterprises (SMEs) were a vital aspect of the transition from a centrally planned economy to that of a resilient economy driven by the private sector. In 1995, as SEAF made its first annual profit from current income in its Polish fund, CARESBAC-Polska, it separated from CARE to pursue a strategy focused on investing in commercially sustainable companies.

Headquartered in Washington, DC, SEAF maintains local offices in the countries where its funds operate, as well as a European office for business development activities in support of portfolio companies. SEAF frequently works through volunteer organizations that seek to provide local management with access to new customers and global market opportunities, insight into industry best practices, and advanced training and strategic planning skills.

Investors in SEAF-sponsored funds include the World Bank Group through the International Finance Corporation; USAID; the Secretariat for Economic Affairs (SECO) of Switzerland; the Finnish Fund for Industrial Development (Finnfund); the Norwegian Fund for Development (Norfund); the European Bank for Reconstruction and Development; the German Development Corporation (DEG); the Multilateral Investment Fund; Corporacion Andina de Fomento; New York Life Insurance Co.; the Ford Foundation; the pension fund for the German Lutheran Church in Hesse and Nassau; Calvert World Ventures Fund; Merifin; and other independent financial institutions.

Critical to SEAF's long-term success, the Corporation has shown an ability to exit investments in challenging economic and political environments. Through negotiated trade sales, management buyouts, and dividend and other cash payments, SEAF has achieved full and partial exits from 69 investments, generating a gross IRR of 25 percent in US dollars with a multiple of two times invested capital. The annualized gross IRR on realized and unrealized investments across the relevant SEAF-sponsored portfolio, as estimated in accordance with guidelines issued by the European Venture Capital Association, is 19 percent.

Part of the goal of this first study was to validate the methodology and approach to data collection for a more rigorous longer-term impact evaluation effort that will cover all SEAF portfolio companies. With additional resources, SEAF intends to institute a system-wide monitoring methodology that will throw light on the developmental impact of its investments. Developmental data will be stored in SEAF's worldwide investment database, and a comprehensive impact evaluation will be conducted when enough data have been collected. As the data thus generated will be public goods, it would be helpful if SEAF could obtain additional funding in the future to support its work, as well as that of outside consultants and experts, in measuring the development impact of these investments.

*Planning for a
more rigorous
long-term
evaluation*

This report is in six chapters. Chapter 2 explores the theoretical basis for public intervention to support the development of small and medium enterprises, and Chapter 3 reviews the empirical literature on the contribution of these enterprises to poverty reduction. Chapter 4 describes the methodology for the study and presents the results from the impact evaluation of ten firms assisted by SEAF. Chapter 5 draws implications for the design of public and private interventions to amplify the development impact of SME investments. Chapter 6 outlines SEAF's proposed follow-up work in impact evaluation. Chapter 7 briefly concludes.

2. THE DEVELOPMENT IMPACT OF SMALL AND MEDIUM ENTERPRISES: WHAT THEORY TELLS US³

The rationale for public support to small and medium enterprises, and the model on which SEAF predicates its activities, derives from their potential as a vehicle for growth and poverty reduction. Growth and modernization in the SME sector are often associated with successful economic development, particularly in lower-income countries. In turn, such growth and modernization are associated with general poverty reduction. Proponents of SME development argue that these enterprises play a crucial role in driving economic growth in both developing and developed countries. SMEs typically generate the most new jobs; introduce locally (and sometimes globally) relevant innovative ideas, products, and business methods; and can push economic reform and the modernization of uncompetitive economies.

SME development is also often seen as a critical component of pro-poor growth strategies:

- SMEs generate many of the new jobs in the economy. Since many of these jobs are suitable for semi-skilled or unskilled workers, they can be taken up by the poor.
- SMEs introduce business methods, products, and services that help restructure weak agricultural sectors or other uncompetitive transition economies, thereby absorbing labor that would otherwise drop into the ranks of the poor.
- SMEs help spread the benefits of economic growth by engaging low-income groups in national development. They form dynamic supply-chain linkages between small-scale producers and lucrative urban, national, or export markets. In the reverse direction, they link large urban businesses with mass consumer markets in remote areas.⁴

*Developing SMEs
as a vehicle for
growth and
poverty reduction*

³ This section draws heavily on a working paper commissioned for this study from Professor Stephen C. Smith of George Washington University, Washington, DC: "Facilitating and Assessing the Poverty Alleviation Impacts of SME Assistance: Framework and Strategies", February 2004. This is available from SEAF on request.

⁴ See *Joining up donors' approaches to small and medium enterprise development*, DFID's discussion document for the donor committee for small enterprise development.

A. EFFECTS OF SMEs ON POVERTY

Effect on poverty through growth. If SME promotion increases growth, this by itself is likely to imply reduced poverty. By correcting important but neglected market failures, SME promotion can help a developing private sector economy function more efficiently, and, other things equal, the faster growth that results can itself promote poverty reduction, as growth tends to be good for the poor (Dollar and Kraay, 2002).

Removal of bias against labor-intensive production. The removal of market distortions that lead to a bias against labor-intensive production techniques should have a clearly positive impact in reducing poverty. Moreover, reducing poverty may improve the environment for SME expansion, so that these efforts can be expected to be mutually reinforcing. And although the expansion of SMEs may not be sufficient for poverty reduction, the likely positive effects through the families of the SMEs' employees, the better utilization of more general aid-donor interventions across firms, and the resulting acceleration of human and community development, make it plausible to suppose that there is an enormous "bang for the buck" in fighting poverty through investing in SMEs.

The effect of employing relatively more low-skilled workers. Since it is likely that both SMEs and their suppliers, on average, employ a greater share of local, low-skilled workers than do large firms or the suppliers to large firms, and since to the extent that SMEs hire less skilled workers, these workers plausibly spend a larger share of their income on other products produced by less skilled workers, there is more likely to be a positive multiplier effect on the alleviation of poverty through SME support than through development projects that lack this focus.

Linkage to small suppliers. It is plausible that SMEs have more supply links than large firms to the local economy, given their small size or lesser sophistication, which would generally inhibit sourcing directly from abroad. SMEs probably import fewer intermediate goods than large firms, suggesting a larger local multiplier effect. It is also a reasonable hypothesis that SMEs buy a greater percentage of these products from labor-intensive SMEs. This in turn should lead to a greater expansion of sustainable, local, employment benefits.

Security of employment. When employees leave micro-enterprises to accept SME employment, their wage incomes are likely to rise, but also to become less variable, making it easier to plan for their families' welfare.

Impact on children through employment of mothers. If investment in an SME raises the incomes of poor mothers with small children, the impact on poverty can be great. The development microeconomics literature consistently shows that a much larger fraction of an extra dollar earned by a mother goes to the welfare of her children than of an extra dollar earned by the father. This holds for spending on children's health and education, as well as on improvements in the home and other important factors. The impact is especially significant for daughters. Though no

*Benefiting
the poor
through jobs...*

*...and links to
small suppliers*

evidence is available to show that SMEs disproportionately employ mothers of young children, in comparison to large firms, based on SEAF's experience, this seems quite plausible.

Magnified impact on poverty reduction among very poor people. Targeting a small number of very poor people provides greater social benefits than targeting a larger number of less poor people.⁵ Thus, to the degree that SMEs hire relatively poor people, the impact of any given income increase on poverty would be magnified. Given the correlation between wage level and skill level, the tendency of SMEs to hire more unskilled people than do larger enterprises suggests that this magnified impact is likely at the SME level.

SME tax payments. To the extent that tax revenues are used to implement poverty-impacting programs such as local infrastructure improvements, health services, or school meals, and to the extent that SMEs contribute more tax revenue than do micro-enterprises (who in practice may pay few or no taxes) or large firms (which can often find loopholes or use their influence to pay less than statutory tax rates), support to SMEs could be expected to have a greater indirect impact on poverty reduction than other forms of developmental assistance.

B. SMEs AND MARKET FAILURE

Unlike developed countries such as the US, low-income and transition countries tend to have a substantial gap between the smallest micro-enterprises and larger firms. Moreover, countries that have successfully developed in recent decades have shown a marked expansion in the SME sector as they have matured.⁶

Markets in low-income and transition countries may systematically discriminate against SMEs and in favor of larger firms. If so, given the promise of SMEs for growth and poverty reduction, a case can be made that this market failure deserves correction. Public policy support for SMEs serves to "level the playing field," compensating for effective discrimination elsewhere in the incentive system. Capital market failures often receive the most attention from development assistance institutions, but there are also important problems in other areas, which are reviewed in what follows.

Capital market failure

The formal financial sector tends to discriminate against SMEs compared with larger firms. To clarify the economic and social role that should be played by SME equity funds and management assistance such as offered by SEAF, it is valuable first to identify the extent to which this bias reflects conventional market failure, rather than simple social prejudice.



*Public support to
SMEs levels the
playing field*

5 Using the standard Foster-Greer-Thorbecke (1984) P2 measure of income poverty, a given addition to the income of a person from a household living at half the per capita poverty line has an impact on poverty five times as great as when the same amount is added to the income of a person living at 90 percent of the poverty line.

6 South Korea is a good example; see Nelson and Pack (1998) and Levy et al. (1999).

*SMEs need debt
and equity capital*

The major contributors to capital market failures that may affect SMEs have been described by Stiglitz (1993). The problems are primarily those of adverse selection and moral hazard. Closure rates of SMEs are much higher than those of large firms, particularly for new entrants (Caves, 1998). As a result, lenders tend to discriminate against even a high-quality SME seeking a loan. Typically, an SME seeking to expand will have very limited collateral in relation to its borrowing needs. Especially those enterprises seeking to supply customers in developed countries—who are accustomed to long accounts-payable cycles as a matter of basic business management—will face severe working capital constraints, yet most traditional banks in developing countries will rarely lend working capital or will not do so on the terms needed by SMEs.

Most micro-finance institutions are able to cope with the problem of capital market failure by using some form of social capital, such as joint liability models (Ghatak and Guinnane, 1999) that rely on the “collateral of peer pressure” (Smith, 1997). The joint liability solution, however, is not feasible for SMEs, whose entrepreneurs operate at a much higher skill level and scale of operations and assets, and therefore have much larger capital requirements. In addition, SMEs tend to be too different and complicated for entrepreneurs to know each others’ firms well enough to accept joint liability. The success of micro-finance institutions has arguably increased the gap between the informal sector and the large oligopolies in many low-income countries.

For lenders to offset their perceived risk in lending to SMEs, the only recourse is to charge a very high rate of interest. This compounds the adverse selection problem, however, because only highly risk-oriented (or mediocre) entrepreneurs will be willing to take on such high-cost debt. Moreover, the borrowers of such high-cost debt have an incentive to focus on high-risk ventures with their possibilities for high profit, no matter what the ostensible original purpose of the loan, or to take advantage of inefficient or corrupt legal systems to default on the loan (moral hazard).⁷ Lenders’ response will be to offer too little credit for SMEs from the social viewpoint (Stiglitz, 1993; Bechri et al., 2001).

On top of this structural bias, under-financing may also result from the fact that some markets do not yet even exist.⁸ Existing capital market participants may believe (rationally or irrationally) that they cannot profit by investing in SMEs, or they may lack imagination about how to do so. One role for government policy, or for development agency-supported activities, is to create new markets.⁹

*...but have
difficulty raising
funds*

7 Thus many SMEs have abused credit guarantee schemes or special lines of credit in transition countries, where legal systems frequently lacked mechanisms that would identify collateral specifically and centrally, or where legal systems that were designed to encourage new enterprise formation allowed existing companies to repeatedly strip assets in one enterprise to establish new enterprises, always staying ahead of the bailiff and the (overworked) court system (to say nothing of rapidly devaluing currencies and related problems).

8 For example, many transition countries do not have leasing laws in effect, let alone any system in which angel investors exist, as is frequently the case for start-ups in the developed nations.

9 For example, the US government has successfully created secondary markets for home mortgages and student loans.

SEAF's ability to create and structure some of these different instruments to provide capital to SMEs, or to match up local enterprises with foreign customers who are willing and able to "make" a new local market in the country in question, can help direct resources to SMEs.

Labor market distortions

Labor market distortions, endemic in developing economies, have a negative impact on SMEs, particularly those in the formal sector. In most developing countries, especially in urban areas, the formal wage is well above the social opportunity cost of labor, reflecting urban bias in the allocation of government infrastructure and other investments; excessive urban minimum wages; social costs associated with formal employment or labor union concentration in cities; and equilibrium unemployment.¹⁰

This above-social opportunity cost wage rate does not apply in the unregulated informal sector, where highly competitive labor market conditions generally prevail. Nor does the wage distortion have as pernicious an effect on large firms, which may be better placed to utilize efficiency-wage strategies, attract the most productive employees, substitute capital for labor, depend on special influence in government, or simply share rents with workers. More generally, since SMEs tend to operate in a more labor-intensive manner than large firms, the higher cost of formal employment will represent a systematic bias against the growth of most SMEs.

Taken together, the labor market distortions found in developing economies constitute an additional case for stimulating faster job creation in SMEs. The classic proposal is to directly subsidize employment through government transfers. However, for governments these transfers are costly in themselves, costly to administer, and highly vulnerable to corruption. For the past dozen years or so, the leading strategy has been to encourage micro-enterprises in the informal sector through micro-finance institutions, but this approach has had limitations. Against this background, creative strategies to encourage SME development through commercial ventures may be particularly attractive.

Given the comparative underfunding of SMEs, *on the margin*, and depending on the extent of market (or even political) bias against SMEs, investments in these enterprises seem likely to offer higher yields than investments in larger firms, and so targeted loans and equity investments from foundations and development banks may be successfully carried out in many cases at market rates.¹¹

*SMEs are more
labor intensive
than larger firms*



10 Such urban bias is compounded when rural biases against production in such areas exist, such as lack of reliable power, land reforms that decrease the size of average land plots beyond a sustainable level and thereby can make it difficult for owners to acquire the necessary capital equipment to profitably farm the land; price controls on agricultural or other raw material inputs, etc. These forces are examined in the economics literature in the Harris-Todaro model of rural-urban migration. For an introduction to the literature see Todaro and Smith (2003), and for a review of some new formal models see Bardhan and Udry (1999). The observation that there are excessively high formal sector wages has also been the foundation for project appraisal by UNIDO and other bodies for the last three decades, in which the social cost of labor is valued at less than the market wage rate (see, for example UNIDO 1971).

11 While, of course, subsidizing support for SMEs should be minimized to the extent possible, it bears pointing out that the existing market failures enumerated will make the effect of such subsidies possibly as efficient. It should also be pointed out that most developed economies have significant government subsidies to the SME sector.

*Partnering helps
firms understand
new rules of
the game*

Market failures in training, education, and health

SME entrepreneurs often have less formal education and training than managers hired by large firms. These educational disadvantages will frequently interact with financial market failures. In emerging markets, it is difficult for students to get loans for education, despite the fact that the extra earnings that schooling makes possible generally more than compensate for the total costs of their education. Those entrepreneurs who are well educated will tend to favor their counterparts in business dealings, providing them access that few of the less educated can hope to have. Given the investment bias of governments and development banks towards large firms and the tendency of NGOs to focus on micro-entrepreneurs, it is a reasonable assumption that training for SME entrepreneurs has been undersupplied compared with other development program activities. The flip side of this is that, once again, the rate of return may also be higher for this type of investment in SMEs, on the margin. In practice, we see that many of the better SMEs train their initially low-skilled employees, acting as an alternative educational track.

In most low-income countries, government health services are poor and private health care is expensive, but the loss of trained or skilled employees to health factors can be devastating. Those SMEs that provide some form of employee health care can be expected to reap substantial savings from lower labor turnover rates. From the employee's perspective, reasonable health care prevents missing days from work which could be a major cause for involuntary dismissal and the risk of sliding into poverty.¹²

Market failures in manufacturing and services

SMEs with very limited capital cannot hope to enter value-added manufacturing or services industries because it is difficult for them to finance upfront costs with their own resources. In both manufacturing and services, success comes from being able to finance the upfront costs of either selling the capacity of a new machine or balancing production capacities where more than one machine is needed, or where the upfront development or marketing costs are needed before customers pay the full value of such services. Especially in transition countries that suddenly emerged from a centrally-planned economic system to a market-oriented one, or where the quality of manufactures had to take a quantum leap to compete in suddenly open markets, there are massive market failures, which cannot typically be offset by debt financing alone. Moreover, local entrepreneurs who are not accustomed to a new system will often need substantial business partnering and education to understand the new "rules of the game".¹³

¹² Nor are micro-entrepreneurs immune from this market failure. Disability or poor health can be devastating to families whose breadwinners are micro-entrepreneurs.

¹³ Thus, as a base case example, when SEAF first began investing in SMEs in Russia in 1993 it met entrepreneurs whose common reaction to declining demand for their product or services was to raise prices to that revenue would meet their own budget plans.

Export market limitations

Problems of information, credit, scale economies, quality, reputation, and a far too rosy belief in the market possibilities in developed nations interact to make exporting disproportionately difficult for most SMEs. At the same time, exporting provides special development advantages over producing for the domestic market: for quality products and services, it provides access to larger markets; and it is an effective way to absorb knowledge from abroad through customer and supplier links, so it provides special benefits to the economy (Smith, 1996). Many SMEs are too small to gather information about export opportunities individually; but bundled together in consortia or assisted by partners with Western market know-how, they can obtain such information cost-effectively.

Specifically, venture capital support for SMEs, when accompanied by technical assistance and, particularly, by export market access such as offered by SEAF, can bring special benefits to a developing economy. A country learns from exporting, from interacting with international firms with much greater market and technical information, and from gaining market feedback from international customers. As South Korea's experience has shown, "there is a tremendous efficacy in relying on export activity as a means of acquiring industrial competence. Exporting thus appears to offer a direct means of improving productivity" (Westphal, Rhee, and Pursell, 1981; see also World Bank, 1993). Sometimes this impact can be very direct. For example, developed country firms sourcing from developing country exporters may suggest to these exporters other products they might produce and export given their mix of skills, as the experience of Taiwan shows (Keesing, 1988). Moreover, market forces discipline exporting firms to produce in a labor-intensive manner, in accordance with developing country comparative advantages.

Colombia, Indonesia, and South Korea offer some successful examples of organized assistance for export expansion by SMEs, building on earlier experiences in Japan, South Korea, and Taiwan (Levy et al., 1999; Keesing, 1988). Much of the support for this purpose comes from government agencies, but some comes from industry associations, foreign and domestic buyers, and NGOs. Support mechanisms include directed credit, subsidized participation in trade fairs, technology training and transfer, and other manufacturing extension services such as management training. These centralized mechanisms do not replace direct dealing with importers and distributors, or direct coaching on, for example, packaging, design, or other changes designed to fit the market. Ultimately, there will be an issue of trust, which will be best resolved by an intermediary that is present in both the country of export and the country of import. Few, if any, investment funds focus on expanding the export capabilities of SMEs, but by doing so they may provide a bottom-line-focused mechanism that conventional public agencies lack.¹⁴

*Venture capital for
SMEs can yield
special benefits*



¹⁴ Many public agencies provide export promotion services but either they do not have a trusting working relationship with entrepreneurs or they are not present in the destination markets to be able to intermeditate the exchanges between buyers and sellers across borders.

Relative tax burdens

As noted above, micro-enterprises pay few if any taxes, while large firms often pay much less than statutory tax rates. This implies that SMEs are discriminated against de facto by the fiscal system; this is perhaps best characterized as a political market failure. A related observation is that expansion of the SME sector may result in a greater net fiscal contribution than expansion of the other sectors, which may or may not be a goal for the international donor community.

3. EMPIRICAL STUDIES OF THE DEVELOPMENT IMPACT OF SMES

Theories about the impact of SMEs on growth and poverty can only be confirmed through evidence. Thus far, relatively little empirical work has been done in this area.

In a recent working paper at the macroeconomic level, Thorsten Beck, Asli Demirguc-Kunt, and Ross Levine (2003), examine the impact of SMEs on growth and poverty using a cross-country growth regression framework. They conclude that there is no robust relationship between the size of the SME sector and the incidence of poverty or of income per capita or its growth rate.

Few studies are available...

The Beck et al. study has several limitations, however. Considering data issues first, the data set covers 1990–2000, a very short period by the standards of cross-country regression analysis. Further, the data appear to be analyzed in terms of exchange rates, rather than of purchasing power parity (PPP), which is more relevant for studying the international incidence of poverty; unfortunately, credible PPP estimates extend only through 1992. The study uses a firm size of 250 workers as the cut-off for an SME—a firm size that is large for SMEs in low-income countries, and may be too large if one wants to focus on firms that are likely to have an impact on poverty. The study uses data on the official labor force in manufacturing, yet this may not be where the biggest impact on the poor takes place; SMEs involved in the semi-informal sector or in services may be a more relevant measure. The study also does not include India and China, which is a big omission. In fact, it could be argued that the study is missing 50 economies, because the provinces of these two countries are country-sized by any international standard.

In addition, the specification of the Beck et al. study raises some concerns. First, the growth rate of the SME sector might matter more than the sector's absolute size in any economy. Further, the dependent variable used in the study is the impact on the lowest quintile in the income distribution; thus the study measures the impact on inequality rather than on absolute poverty.¹⁵ Moreover, income inequality itself may affect growth prospects: there is substantial evidence in the literature that high inequality causes lower growth rates (see for example, Todaro and Smith, 2000, chapter 6). In addition, when the study examines poverty per se, it is in terms of its level, not its change over time. Additionally, one may want to look at the poorest countries as a group: poor countries grow more slowly, but if they are isolated as a

¹⁵ In many lower-income countries, the absolute number of people living below a dollar a day may extend above the lowest quintile.

group for the analysis, an effect may show up. Finally, Howard Pack's (1994) critique of the cross-country growth regression, the methodology that underlies the Beck et al. study, seems particularly relevant here.

Thus, it is not clear that these results have implications for SEAF's strategy, approach, or impact. Essentially, SEAF and its investors have an interest in the microeconomic question of how intervention can have an optimal developmental impact. In that the above study is based on a macroeconomic analysis of a static picture, it is unlikely to be as appropriate as a bottom-up microeconomic approach.

To date, there is essentially no microeconomic research addressing the impact of SMEs on poverty. There is a voluminous literature on the poverty impact of microfinance institutions, but a consensus seems to be emerging that the impacts of MFIs on poverty, at least on a cost-benefit basis, are not as great as once optimistically hoped. The overhead costs of MFIs are extremely high, notwithstanding the emphasis on financial sustainability. This is not to say that the impact would not be more apparent with better monitoring and evaluation techniques. Khandker (1998) presents fairly positive estimates of the impact of MFIs on poverty, but Morduch (1999, 2000) offers important reasons for caution in interpreting such results. Pitt and Khandker (1998) use an appealing quasi-experimental survey design to correct for the bias from unobserved individual and village-level heterogeneity, and find that program credit has a larger effect on the behavior of poor households in Bangladesh when women are the program participants.¹⁶ For example, incomes increase more for women, though incomes increase for men as well. Similar results might apply to women engaged in SME employment, and similar techniques could be used to identify any such effects.

*...to show the
microeconomic
impact of SMEs*

Coleman (1999) analyzes a quasi-experiment in Northeast Thailand in 1995-96. In this study, the eventual program participants were selected one year before receiving loans. Surveys were then conducted of these control group (future) MFI members, of members in villages with current MFI programs, and of nonmembers in both current and future MFI villages. Coleman argues that his survey design allows straightforward estimation of impact, and concludes that "the results indicate that program loans are having little impact, although 'naïve' estimates of impact that fail to account for self-selection and endogenous program placement significantly overestimate impact."

Cohen (2000) reviews studies that are relatively rigorous, but less so than studies using randomized trials. She finds the Bangladesh studies of Khandker (1998) and Morduch (1999, 2000) more convincing than studies undertaken in other regions. Cohen stresses that far too little is known about the impact of MFI programs on various types of clients. But she draws three general if tentative conclusions from the literature: (1) employment is generated primarily among the larger enterprises; (2) households invest in housing and education across income levels; (3) benefits are

¹⁶ For review of the literature on experimental design for measuring impact, see Smith (2004).

often greater for better-off clients than for poorer clients. She also finds that studies that link levels of client participation in programs to how the programs affect them reveal three trends: (1) the cumulative value of loans may be an important determinant of positive change; (2) while clients may use first loans for working capital for lower-risk, existing, or known economic activities, once they have a steady flow of income they may use subsequent loans for housing and riskier investments; (3) to mitigate risk, the poor split the use of their loans between production and consumption.

Three observations are key here: (1) employment is generated in *larger* micro-enterprises; (2) the poor face very high risks in micro-enterprises and farms, most severely in Africa but throughout in the developing world; and (3) micro-finance institutions tend not to reach and substantially benefit the poorer citizens—and certainly not the poorest of the poor. As noted elsewhere, employment generation is valuable to the poor in part because a wage—even if low—generally carries lower risk than micro-enterprise and farming activities. These observations are tentative, but they point to valuable topics to investigate in future research on the poverty impact of SMEs.

*Employment
generation is
valuable to
the poor*

4. TEN CASE STUDIES OF SEAF'S DEVELOPMENTAL IMPACT

Both lack of data and methodological difficulties preclude a rigorous comprehensive study of the impact of SEAF's investments. Thus, the present evaluation uses case studies to analyze the parameters that drive development impact. These case studies cannot provide conclusive evidence, but nevertheless, they have yielded encouraging insights useful both for the debate about the links between SME development and growth and poverty reduction and for decisions about SEAF's own policies.

A. METHODOLOGY

SEAF selected ten enterprises out of its portfolio to examine the developmental impact in depth (Table 1), bringing out effects on the local economy that are normally overlooked by investors in their decisions on where to allocate resources. The selection of firms for the case studies was not randomized, but was made on the basis of data availability and the agreement of the entrepreneurs and employees to be interviewed. SEAF did divide the choice between rural and urban enterprises, as well as

Table 1: Development impact case studies

Country	Project name	Core activity	Date of SEAF initial investments	Total SEAF investments USD in '000
Poland	PPZP	Genetically improved pork production; sale and distribution of crib feed	1993	1,194
Poland	Symbio	Organic fruits and vegetables production and distribution	1998	427
Romania	Telezimex	Distributor of electronic components, media products and do-it-yourself tools	2001	279
Romania	Artima	Establishment of modern retail grocery chains in secondary cities in Romania	2002	3,097
Bulgaria	Ken-4 AD	Meat processing	1995	594
Peru	Nuevo Molino	Processor of extruded cereals	1997	313
Peru	Printop	Manufacturer of inks for silk screening and plastic industry	1997	330
Peru	Victoria Classics	Manufacturer of hand embroidered children's clothes	1999	245
Peru	Tambo Inca	Marigold flour producer	1999	808
Bolivia	Fideos	Manufacturer of organic pasta and snacks using traditional Andean grains	2002	410

between Central and Eastern Europe (CEE) and Latin America. To the extent that the people who agreed to take part in the study were generally open with their interviewers and conscious of the development impact in the local economy, the results could be biased. Accordingly, SEAF does not intend to generalize the results.

SEAF undertook its analysis at both the enterprise and the household levels.

Enterprise level: the stakeholders' framework

The development impact of the sample firms was assessed using a stakeholders' approach. This approach, developed by the Economics Department of the International Finance Corporation,¹⁷ is based primarily on the well-developed project analysis tradition; it recognizes that, when viewed from the perspective of the society as a whole, the project's benefits and costs may differ from the benefits and costs when viewed from the private perspective. Thus, it takes a "bottom-up" project-oriented view, complemented by a "top-down" or strategic view, where appropriate, to determine the valuation of some of the project benefits. It also recognizes that of the relationships that come into being as a result of the project, not all are mediated exclusively through a market transaction, and not all have their value fully reflected in the prices paid. Such effects are variously referred to as externalities, public goods, or consumer surplus. Common to all of these situations is that the project (in this case, SEAF's investment in an SME) is affecting someone else in the society, and that the value (or cost, if negative) to that person may be greater or less than the price he or she pays or receives. These excess values, when aggregated over all members of society, must be added to the net profits of the project financiers themselves to assess the value of the project to the society as a whole. It is the overall value that represents the total development impact resulting from the investment.¹⁸

The framework that is used for assessing development impact is summarized in Figure 1. The approach is to identify each of the groups that will be affected, directly or indirectly, by the project, and then examine and measure the impact on that group beyond what has already been counted in the financial analysis (summarized by the financial rate of return, FRR).

The following describes how each of the groups can be potentially impacted through SME investment:

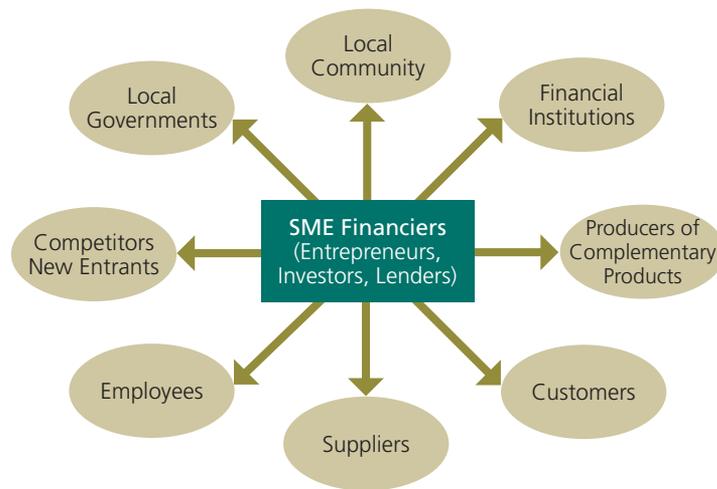
- **SME financiers** should receive a private return, as measured in the traditional FRR.
- **Employees** may receive higher wages than they might have received elsewhere (that is, higher than their opportunity cost or, in the case of unemployment,

*Using the
stakeholders'
framework*

¹⁷ See "Assessing Development Impact": at www.ifc.org

¹⁸ Ronald Coase has argued that these excess values (and costs) are pervasive in the real world, and in general private costs and benefits will not equal social costs and benefits. And Albert Hirschman has argued that what matters most when assessing a project from a developmental perspective is precisely the "side effects" the project generates, that is the effects that the private project financiers themselves have no concern with. See "Assessing Development Impact": at www.ifc.org.

Figure 1: A Framework for assessing development impact



Source: www.IFC.org

their shadow price), and they may receive training (which improves their human capital and thus raises their value in the labor market).

- **Customers** may receive a new good or service, not previously available, with a value to them that is greater than the price they pay; or they may receive a better quality product at the same price as before; or they may pay a lower price than they did before due to the increased supply on the market (resulting in an increase in their consumer surplus).
- **Producers of complementary goods or services** may see an increased demand for their own products, and hence higher sales and profits.
- **Suppliers** may see an increased demand for their goods, and hence increased sales and profits. A network of new suppliers may come into being, and the company may extend assistance to the suppliers (both new and old), for example through help on management or technology, or in the availability of finance.
- **Competitors** may see a reduction in the demand for their product, but this is not a loss from the viewpoint of society as a whole but rather a shift in surplus to consumers. Competitors may gain from the demonstration effects of the project, or from the reputation of products sold by the company, as well as from network gains resulting from the bigger market or improved suppliers.
- **New entrants** to the industry may develop as a consequence of the demonstration effect of the project (a project may demonstrate that producing a new

product, investing in capital, or implementing new production methods can be viable) or as a consequence of the network effect.

- **Local communities** may be impacted in several ways. There may be environmental gains (or losses), new physical infrastructure may become available or become more congested, and a new social infrastructure may develop. In addition, as most SMEs are intensely local, one could expect to find the entrepreneurs helping in less obvious ways, such as donating to local schools or improving the purity of the community's water supply.
- **Local governments** may benefit from the value of profit or value-added tax revenues generated by the SME. Benefits to the government are also generated by import taxes that the company pays on its inputs and by the taxes that are paid by domestic companies producing input goods. For products produced and sold by the SME, benefits to local government accrue by the amount paid in sales or excise taxes on these products (the consumer values the product at the price he pays, but the producer gets the price after tax). For import-competing products produced and sold by the SME, the analyst should reduce benefits to the government by the amount of tariffs (or tariff equivalent) that would have been collected if the product were imported. Finally, subsidies paid by the government to the SME will also need to be subtracted from the final benefit.
- **Financial institutions** such as local banks, pension funds, and insurance companies may benefit from SME investment. SEAF often seeks additional financing for its portfolio companies, and local banks may be more comfortable providing a loan to an SME with SEAF as shareholder. Increased wages for managers and employees may result in higher savings placed in banks and/or pension funds (in turn, the banks/pension funds can then generate additional sources of financing for further development). Higher wages and better practices may also result in increased purchases of insurance, both at the corporate and individual level.

Wherever possible and appropriate, SEAF attempted to interview the stakeholders associated with each investment—owners, managers, suppliers, competitors, employees, and consumers—to seek quantifiable results. The selection of interviewees was not strictly randomized, since there tended to be relatively few potential interviewees in each class. Instead, SEAF attempted to give a broader perspective for each stakeholder. For example, when interviewing employees, SEAF attempted to cover high skilled and low-skilled workers, men and women, regular employees and contract workers, as well as employees with different lengths of service.

All quantifiable information on costs and benefits is expressed in constant prices. The benefits and costs to each of the groups, expressed in constant dollar amounts, are then added to the model that is already used for calculating the project's financial returns. Adding these cash flows year by year, and then calculating the internal rate of return, yields the economic rate of return (ERR). The economic rate of



*...to trace the
impact of SMEs*

Quantitative effects are probably underestimated

return is estimated over a ten-year period, to include both actual and forecast financial and economic flows.

One shortcoming of the retrospective analysis, among others, is that the quantifiable data for externalities are normally only available for the period in which the interviews took place. To estimate the impact that incurred in past years, SEAF had to rely on people's memories for historical information, or had to make assumptions about sales levels, costs, or profits. The treatment of forward projections is similar; the benefits are estimated in relation to sales, costs, or profits.¹⁹

To estimate the development impact of one dollar invested in small and medium enterprises, SEAF uses present value (PV) analysis, setting different discount rates, notably at zero, five percent, and ten percent.²⁰ Where the impact is significant but not quantifiable, a qualitative assessment is made. For example, in most cases, it is difficult to quantify the demonstration effect of a project on new entrants to the market, or the effect on sales for complementary producers, or the effect on competitors, but these effects can be significant. In those cases, SEAF attempts to describe the effects qualitatively. The quantitative effects are thus likely to be significantly understated.

Finally, it should be noted that the analysis did not seek to make distributional judgments, whereby the impact on one group would be given greater or lesser weight than the impact on another.

Household level: effects on the lives of SME employees

For each of the sample firms, SEAF interviewed about 10 percent of the workforce. Questions were designed to assess the effect of employment with the firm on incomes, skills, workers' retention (and reasons for voluntary departure), non-wage benefits, and management treatment of workers. In addition, questions also explored the extent to which changes in household spending and asset accumulation were the result of stable employment and incomes from SEAF-supported enterprises (for both old and new employees).

The study did not survey a control group, because it was unclear whether or how such a group could be appropriately identified in the equity fund environment. Further, there is an issue of how reliable the data would be from companies with which SEAF does not have a relationship.²¹ To gain contextual information, the interviewers asked employees about, for example, their salary levels and working conditions before and after their employment with the respective SME (for

¹⁹ For the assumptions for each case study, see Volume II, available from SEAF on request.

²⁰ It is difficult to arrive at an appropriate discount rate for this exercise. In public finance, the discount rate would be at zero or very low, reflecting a public institution's relative indifference between benefits generationally, while for private financiers, the discount rate could be higher depending on the risk profile of the investment. For the purpose of this exercise, therefore, a sensitivity analysis uses discount rates as low as zero percent and as high as 10 percent.

²¹ SEAF's relationship with the entrepreneurs was a great factor in gaining access to employees and potentially sensitive data. Entrepreneurs' general trust of SEAF meant that they gave the SEAF personnel who conducted the surveys free and unsupervised access. SEAF did not, of course, share the individual comments with the entrepreneurs.

newly hired employees) or before and after the SEAF investment (for long-standing employees).

B. RESULTS

The economic impact of investment in SMEs is significant: across all the case studies, every dollar invested in SEAF's companies generates on average (weighted by revenue size) an additional ten dollars in the local economy.

Using the stakeholder methodology described above, the financial rate of return (FRR), which measures the private return for the company, and the economic rate of return (ERR), which measures the return to the society at large, are estimated for each case (Table 2). The benefit/cost ratio is also estimated for each case at discount rates of zero and 10 percent. The internal rate of return (IRR), which measures the return on capital to SEAF investors, is derived from SEAF's valuation of each company, based on European Venture Capital Association (EVCA) methodology. This methodology generally does not allow a write-up in the value of investments for the first two years after the investment is made, and even then only on certain, conservative, principles. Accordingly, a number of SEAF's more recent investees, such as Artima, will not yet exhibit the return to investors that SEAF is expecting.

Table 2 shows that virtually all SMEs in the sample have achieved a significant economic rate of return, even before the investment is brought to term. Even in investments with relatively low FRRs, such as Molino, Tambo Inca, Telezimex and Artima, the economic impact is significant.

*Every dollar
invested generates
ten more in the
local economy*

Table 2: Financial and economic returns of SEAF companies

Country	Project name	Date of initial investment	Total SEAF investments USD in '00	Investors' rate of return (%)	Financial rate of return (%)	Economic rate of return (%)	Benefit/cost ratio at zero discount rate	Benefit/cost ratio at 10% discount rate
Poland	PPZP	1993	1,194	48	32	54	14.34	5.00
Poland	Symbio	1998	427	43	46	245	14.86	10.90
Romania	Telezimex	2001	279	31	9	62	24.17	8.65
Romania	Artima	2002	3,097	38	12	122	6.81	3.94
Bulgaria	Ken-4 AD	1995	594	21	26	37	16.12	5.94
Peru	Nuevo Molino	1997	313	8	6	40	4.23	2.54
Peru	Printop	1997	330	5	27	70	10.14	6.41
Peru	Victoria Classics	1999	245	49	45	57	4.54	2.90
Peru	Tambo Inca	1999	808	31	6	90	3.76	2.28
Bolivia	Fideos	2002	410	-12	21	51	11.82	5.37
Weighted returns on investment (weighted by revenue)							10.62	5.19

*Even investments
with low financial
returns...*

- In the case of Molino, economic benefits come from the company's provision of food for school children in a remote area of Peru. The food is processed from local grains and hence benefits small farmers who lack market access. Had the investments not been made in Molino, the children could have been fed with imported products, but small farmers in the Ayacucho area, one of the poorest regions in Peru, would not be able to sell their grains for incomes.
- In the case of Tambo Inca, the main benefits come from the employment of farmers and seasonal workers in the surrounding area, who would otherwise have remained unemployed or would have needed to migrate to seek work. During the peak harvest time, as many as 5,000 workers could be mobilized.
- In the case of Telezimex in Romania, the company spends considerable resources on training staff. It pays them twice as much as the minimum wage for low-skilled workers, and three times as much as the same rate for high skilled workers.
- In the case of Artima, a modern grocery chain established in secondary cities in Romania, the main benefits are the value of training workers and the consequent skill mobility premium, which would not have been possible had investments not been made in Artima. The benefits for consumers in meeting their food needs predictably, conveniently, and reliably by the assortment provided by Artima are significant but not quantifiable. It is difficult to estimate the value of time saved versus some slightly higher prices they may have to pay in Artima supermarkets compared to purchasing goods in informal (black) markets. Likewise, the true cost of the black-market goods that may not be of consistent quality or that may not meet health standards is also difficult to estimate.

In other cases, high FRRs correlate with significant development impact:

*...can have high
economic benefits*

- In the case of Symbio, the main benefits come from the company's contract farmers, who receive Symbio's assistance from the company for the production and certification of organic fruits and vegetables.
- In the case of Victoria Classics in Peru, apart from improved benefits from training for employees, the small producers and other contract workers—mainly women—benefit significantly from the company. They are able to use their traditional and home skills (crochet and embroidery) to earn incomes while caring for small children or aged parents at home (daycare or other care is not estimated here as a quantifiable benefit).
- Competitors' benefits are perhaps most noticeable in the company that introduced improved pig farming (PPZP, Poland). The competitors purchase breeding pigs from PPZP, while competing with PPZP in selling pig carcasses.

Of the quantifiable results among stakeholders, employees, followed by governments, receive the most significant or highest level of benefits.

Table 3 provides the quantifiable results for stakeholders (all in constant US dollars). The quantifiable results are based on an opportunity cost analysis. Looking at the results for employees, for instance, SEAF estimated the difference between the company's wages and national/industry average wages (representing market wages), the value of training, and the skill mobility premium acquired as a result of employment with the company. For suppliers, the benefits come from increased profits from particular sales to the company; the suppliers would not be able to make such

Table 3: Stakeholders' benefits (in thousands of constant US\$)

At zero discount rate

Country	Project name	Financiers	Workers	Suppliers	Competitors	Gov't	Rest of society
Poland	PPZP	16,936	655	1,469	2,281	499	498
Poland	Symbio	8,979	42	4,560	n/a	654	n/a
Romania	Telezimex	759	112	n/a	n/a	3,526	127
Romania	Artima	15,484	10,181	n/a	532	13,280	3,936
Bulgaria	Ken-4 AD	3,468	172	n/a	n/a	1,506	n/a
Peru	Nuevo Molino	259	3	135	n/a	60	499
Peru	Printop	2,783	768	n/a	n/a	1,600	n/a
Peru	Victoria Classic	6,419	642	213	n/a	114	11
Peru	Tambo Inca	3,325	139	413	0	210	1,205
Bolivia	Fideos	2,860	964	36	n/a	2,832	250

At ten percent discount rate

Country	Project name	Financiers	Workers	Suppliers	Competitors	Gov't	Rest of society
Poland	PPZP	6,196	321	715	940	151	285
Poland	Symbio	3,574	27	2,772	n/a	350	n/a
Romania	Telezimex	268	62	n/a	n/a	2,099	68
Romania	Artima	7,780	6,607	n/a	408	8,396	2,977
Bulgaria	Ken-4 AD	1,261	85	n/a	n/a	748	n/a
Peru	Nuevo Molino	173	2	91	n/a	37	249
Peru	Printop	1,197	445	n/a	n/a	948	n/a
Peru	Victoria Classic	3,853	416	140	n/a	71	8
Peru	Tambo Inca	1,990	91	281	0	167	777
Bolivia	Fideos	1,499	589	22	n/a	1,630	180

Two-thirds of jobs are done by low-skilled workers

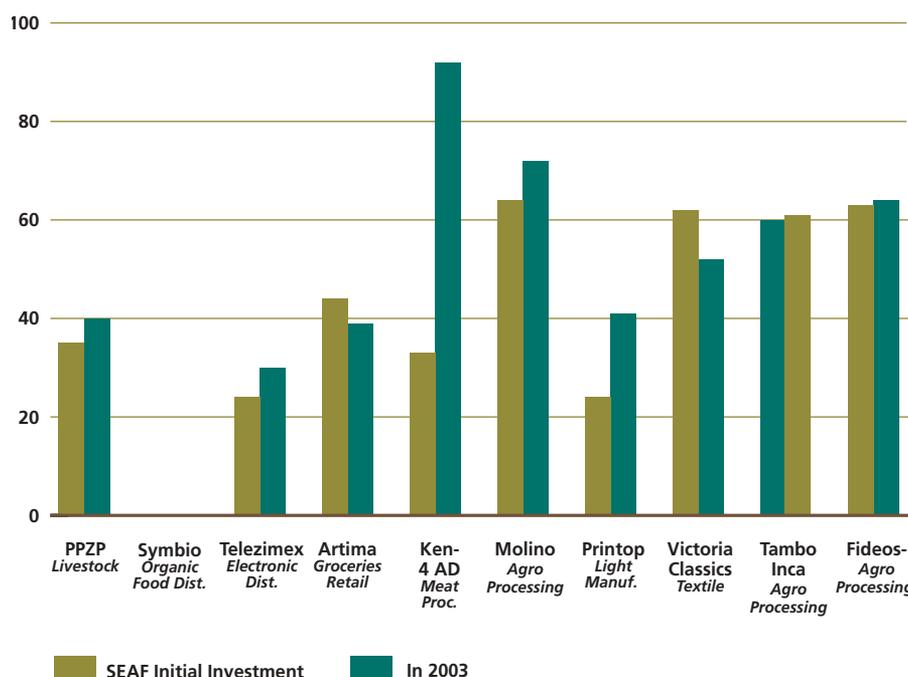
profits elsewhere. The results indicate that employees gain the most from the companies, relative to other stakeholders. Not surprisingly, governments come in second as all SMEs pay substantial amounts of taxes.

Two-thirds of total employment in the sampled firms goes to low-skilled workers, confirming the hypothesis that SMEs generate new jobs that are suitable for the poor.

As noted in Chapter 2 above, proponents of SMEs often argue that SME development is pro-poor, as it is labor-intensive and generates employment and stable incomes for low-skilled workers. The results from the case studies show that on average about two-thirds of total employment in SEAF SMEs goes to low-skilled workers (Figure 2). As companies have expanded, as a result of SEAF investments, the proportion of low-skilled employment has risen in most cases.

SEAF's interviews with entrepreneurs indicate that they are able to raise the productivity of skilled workers with expansion and modernization, and to move trained low-skilled workers to the higher-skilled categories, while recruiting new low-skilled workers. As SEAF typically helps with management information and with the development of human resources, management becomes more efficient, and able to hire proportionately more unskilled workers. The labor-intensive nature of SEAF enterprises can also be explained by the fact that most of the case studies are

Figure 2: Low-skilled workers as percentage of total employees



Note: Symbio is a distribution company and it only employs 4 skilled workers. The company works with small-scale farmers and micro-producers.

in sectors that tend to employ low-skilled workers such as agro-processing, retail, textiles, and light manufacturing.

Employees benefit from the stability of employment and wage increases; annual real wage growth could be as high as 28 percent for low-skilled workers and 34 percent for high-skilled workers.

The main advantage for the employees in the sample firms is the stability of employment and income. In most cases, workers have received significant wage increases, reflecting the training that they have received from the company. SEAF's interviews with entrepreneurs indicate that as the training is relatively costly for them, they seek to preserve their investment (both money and the entrepreneur's own time) by giving trained workers the wage increases necessary to retain them. Perhaps as a result, in all case studies, the turnover rate is low, at less than 5 percent over a five-year period. In most cases, workers leave involuntarily, due to problems with work performance. This low turnover could also be explained by the high unemployment rate in the areas where the companies are located (for example 40 percent for PPZP, 52 percent for Molino), but certainly the wage increases that the workers receive over time are significant in environments with high unemployment.

*Job turnover
is low*

Annual real wage growth has been significant in companies where SEAF has been able to collect historical wage data, based on interviews with employees (Figure 3). However, there is no consistent pattern of wage increases for high-skilled and low-skilled workers across the sample firms. Wage growth has been significant for both Fideos (28 percent) and Victoria Classics, where wages have grown faster for low-skilled workers. In Ken-4 in Bulgaria, wage growth has been faster for high-skilled

Figure 3: Annual real wage growth since SEAF investment

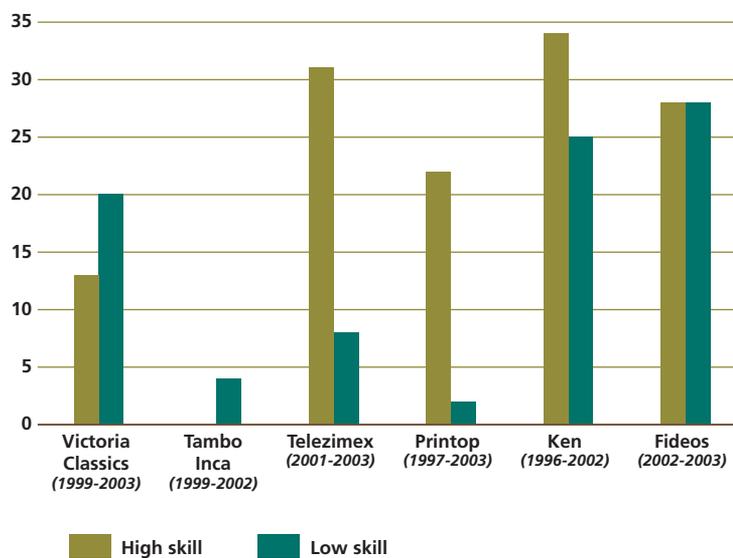
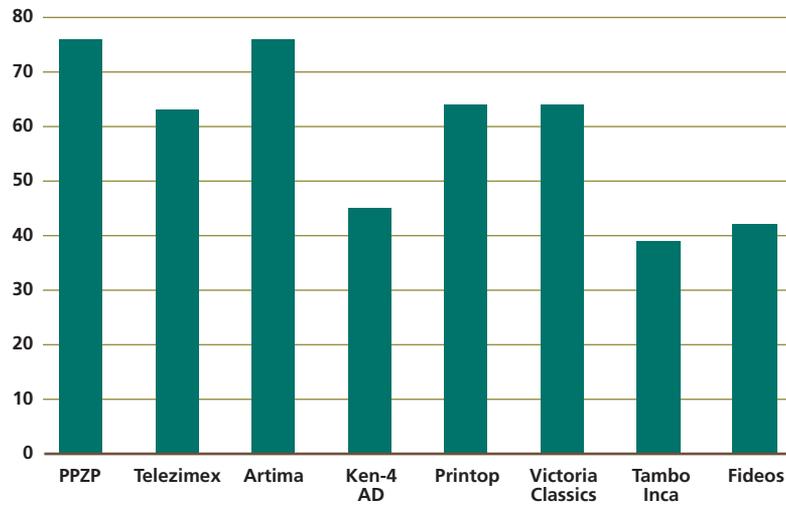


Figure 4: Non-salary benefits to low-skilled workers



workers, but low-skilled workers have seen increases (25 percent) higher than in all but one other case. In those firms where high-skilled workers' wages have grown faster than those of low-skilled workers, one can presume that the high-skilled employees have become valuable enough to the entrepreneur to make the increases worthwhile. This may reflect the relative paucity of good high-level managers in certain developing countries and the premium that an SME must pay to retain them.

Non-salary benefits are important too

Formal employment generates substantial non-salary benefits, which are valuable to low-skilled workers who would not receive them were they self-employed.

Another important benefit for employees from formal employment is the non-salary benefits that they receive (Figure 4). These non-salary benefits include employers' contributions to health insurance, on-site meals, bonuses, pension funds, emergency funds, and other fringe benefits such as use of cell phones, cars, or vouchers. Some employee benefits are required by law, but only from formal enterprises, while other benefits are companies' own incentives to retain employees. These non-salary benefits represent a significant cost to employers as the result of formal employment, and in most cases exceed 50 percent of the net salary. Employees indicate that in addition to stable income, they especially value these non-salary benefits, and particularly health insurance, which they would not receive were they self-employed or unemployed. From employers' perspective, these benefits are a means to keep salary levels down and at the same time to attract and retain good workers.

Training received during employment is a substantial asset for employees as it permits wage increases and a skill mobility premium.

All companies provide formal and on-the-job training for their employees (Table 4). Formal training ranges from external courses to in-house instruction from

experts and managers on various topics. The cost of training varies and is not always easily quantifiable. In companies where data are available, the cost of training ranges from 0.5 percent to 2 percent of general administrative costs, and generally increases after SEAF investments. SEAF's interviews indicate that to both employers and employees, training is valuable for skill mobility as well for retaining workers. Many companies recruit low-skilled staff at minimum wage, and then put them through a period of training for a week to three months. In many cases, they have to pass a test and are then put on the payroll (including non-salary benefits) and generally receive a wage increase. Because of the companies' small sizes, SME owners generally know most, if not all, employees personally. They identify good workers and help develop them. Interviews with employees showed that some have been able to upgrade their skills through formal training at technical schools, even at low skill levels (Box 2).



Security of employment helps employees accumulate tangible assets and save for children's education.

Most low-skilled workers indicate that they use their wages mostly for meeting basic needs. The stable income reduces the likelihood of being unable to meet the family's basic needs, a constant risk and source of stress with marginal self-employment. Over time, the predictability of the income stream allows employees to save some of their income to accumulate assets. The most prevalent form of asset accumulation is housing improvement and purchase of household furniture and appliances. Only top managers are able to purchase houses with their

Box 2: Creating a quality work force from employees' strengths—Fideos

Fideos owner Martha Eugenia Wille, a woman entrepreneur, is very dedicated to the welfare of her employees. Most of her employees have worked with her for more than five years and regard her business as a family business, and themselves as a part of that family. One of the areas that distinguish Martha from other employers is her dedication to upgrading her employees' skills. She has repeatedly identified good workers with a propensity to learn and paid for them to get applicable formal training. One woman came to Fideos with no skills and initially was employed bagging finished products. Martha and her production manager noticed that this unskilled worker was very interested in mechanics and was able to do some minor repair work on the machines. Martha encouraged the worker to enroll in a two-year technical engineering course and paid for her education. As Fideos is in the food business, Martha is very strict about quality and standards. Her workers have all been trained in food hygiene. She holds weekly meetings on Saturday to educate her workers on various topics related to health and hygiene. Martha is also concerned with the human capital development of her workers' families. She gives yearly awards to her workers' children to motivate them to excel in schools. She was proud to present the winner of the last two years' prizes, the daughter of an illiterate worker. Martha strongly believes that when you educate women, you educate a nation.

Source: SEAF interviews of owners and employees, June 2003.

Table 4: Training activities in SEAF companies

Country	Project name	Core activity	Formal training	On-the-job training
Poland	PPZP	Genetically improved pork production; sale and distribution of crib feed	Visits to improved pig farming facilities; cost accounting training organized by SEAF	Pig breeding, maintenance and operation of feed production facility
Poland	Symbio	Organic fruits and vegetables production and distribution	Visits to Western European farmers	Train farmers in organic production
Romania	Telezimex	Distributor of electronic components, media products and do-it-yourself tools	Management training	Customer relations, motivation
Romania	Artima	Establishment of modern retail grocery chains in secondary cities in Romania	Business (MBA) training for managers, accounting, visits to other facilities organized by SEAF	Operation of modern retail shops, cashier, management of stock
Bulgaria	Ken-4 AD	Meat processing	None	Operation of the meat processing plant
Peru	Nuevo Molino	Processor of extruded cereals	None	Food hygiene, operation of the facility
Peru	Printop	Manufacturer of inks for silk screening and plastic industry	Management, accounting, computer programming	Operation of the manufacturing facility
Peru	Victoria Classics	Manufacturer of hand embroidered children's clothes	Computer programming	Crochet, embroidery, knitting
Peru	Tambo Inca	Marigold flour producer	Management, accounting, computer programming, marketing	Pest and disease control, fertilization, and marigold flour processing
Bolivia	Fideos	Manufacturer of organic pasta and snacks using traditional Andean grains	Technical and mechanic training	Food hygiene, operation of the facility

incomes from the companies. Most of the employees either stay with parents/relatives or rent their homes.

Employees typically use their resources to upgrade their living conditions, for example by building extra rooms on their existing houses, or remodeling them. Saving for children's education is cited but is not as significant as other asset classes, since the companies are located in areas where public education is available. Some employees are concerned about the quality of education and have saved their incomes to send their children to private schools, even at the elementary/primary level.

SMEs can provide access to markets for the informal sector and rural producers; they form linkages between small-scale producers and lucrative national and export markets.

The case studies indicate that SMEs frequently provide a significant link between the informal and formal sectors. Sole proprietors, micro-entrepreneurs, and small farmers dominate the informal landscape and, for them, SMEs often provide the link to markets. For example, Victoria Classics outsources many of its production processes and is able to export to exclusive department stores in the US the work of some 100 sole proprietors, mostly women, who operate from their homes. Symbio has organized, trained, and provided steady incomes to 330 Polish farmers who produce organic fruits and vegetables for export to Europe and the US. Molino works with 100 farmers who in turn work with another 3,000 small farmers to provide grains to Molino for milling and packaging nutritious meals for children in remote areas. Fideos also works with some 6,800 small farmers, organized in ten cooperatives, producing Andean grains for use in organic gluten-free pasta and snacks.

When SMEs expanded, they paid more taxes—up to 20 percent of their total revenues.

As mentioned above, the expansion of the SME sector can be expected to result in a greater net fiscal contribution than will the expansion of other enterprise classes, at least when compared to informal micro-enterprises. SEAF companies paid taxes equivalent to between 1 and 21 percent of their total revenues in 2002 (Figure 5). After SEAF invests and the companies expand, they also pay more taxes. SMEs are more visible in the economy than micro-enterprises and, consequently, they see the importance of tax compliance, particularly those companies that import a significant volume of goods (i.e. Telezimex, Artima, Printop).

Table 5: Asset accumulation (after employment by SME)

Asset class	Percentage of interviewees
Housing improvement	100
Furniture/appliances	100
Land	33
Home purchase	27
Children's education (saving)	17
Currency (buy euros)	10
Precious metals	1

Source: Employees' interviews.



Box 3: Symbio—Linking Polish farmers to export markets

“Symbio Polska, a company comprising growers in south-eastern Poland, tells a happier story [as compared to another organic food co-operative, Ekoland in Poland]. Founded in 1998 with support from Caresbac Polska, [legal name for SEAF’s investment fund in Poland] a venture-capital fund, the company sets its sights on exports rather than Poland’s embryonic domestic market.

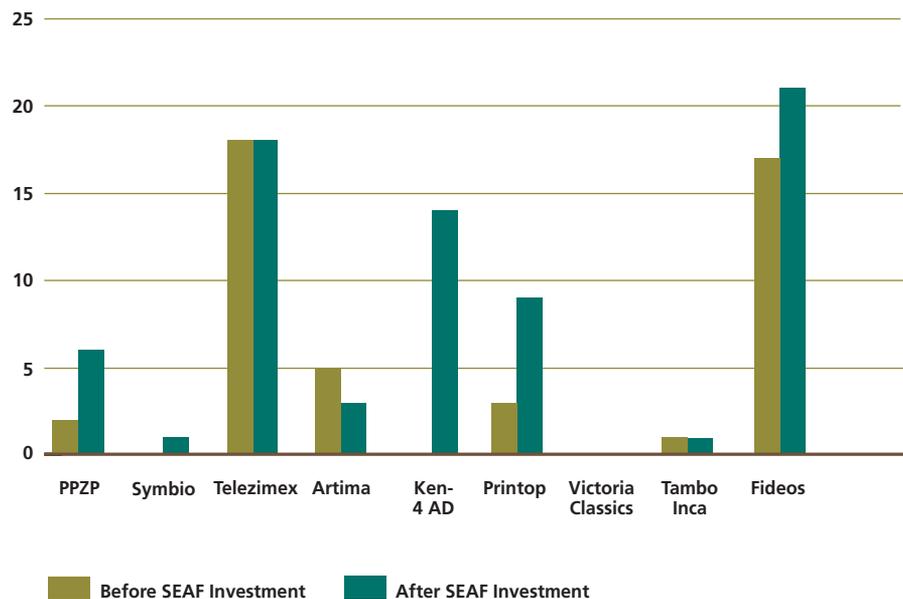
Focusing on ingredients for packaged foods, Symbio exports fruit and vegetables for use in processed organic products such as yogurt, jam, and baby food. Its biggest markets are Germany, the UK, and the Netherlands and it shipped its first batch of strawberries to the US last weekend.

Leaving little to chance, Symbio locks in supplies via contracts with farmers and provides fertilizer and seeds, training and round-the-clock technical support. It also helps farmers to attain EU and Polish organic certification and in some cases provides shared processing equipment—doing everything, in short, except growing the product.”

Source: *Financial Times*, October 4, 2002.

*SMEs link formal
with informal
sector business*

**Figure 5: Taxes paid to local governments
(percent of company’s total revenues)**



SMEs contribute actively to community development and most SME entrepreneurs are highly conscious of their social responsibility to the community.

The development literature cites many examples of social responsibility on the part of large, well-known multinational enterprises. The SEAF case studies show that many of SEAF's clients have assumed responsibility for the social development of the areas in which they are located, since their employees and suppliers are there, and they care about their reputation in the community. Many of these areas are far away from the typical sites of multinational companies. Some of the activities may arise out of a business necessity, but are then shared with for the community. For example, the Polish improved pig breeding operation, PPZP, dug a well to supply purer water for its own use. Since the community surrounding PPZP had no reliable drinking water, PPZP installed a piping system connecting its well to the surrounding villages, to provide them with clean water. Artima, the Romanian supermarket chain, requires roads to its stores and outdoor lighting for clients' safety. These also benefit citizens living nearby, and in one city Artima partnered with the local government to build a town park and modern playground, which people have now dubbed Artima Park. Telezimex participates in a payroll deduction program to help finance school development in the community.

These examples are anecdotal and the community development participation is entirely voluntary. Nevertheless, they demonstrate the magnified impact on poverty, as viable and expanding companies are sharing their wealth with the less fortunate members of their communities.



*SEAF enterprises
share with their
communities*

5. GETTING THE BEST OF BOTH WORLDS: REDUCING POVERTY THROUGH INVESTING IN SMEs

The case studies show that not only are SEAF investments commercially viable, they also have a strong developmental impact. Though these are preliminary findings from a small group of SMEs, and should not be generalized, they suggest that it is well worthwhile for the development community to put more effort into SME financing. Even for socially responsible commercial investors, the development impact of SEAF's investments is important. In the ten cases analyzed, every dollar invested appears to generate at least ten additional dollars for the local economy. This significant impact could be the result of the type of firms that SEAF invests in: early-stage growth companies in labor-intensive sectors and in remote areas.²²



This chapter reviews the implications of the findings for development finance institutions considering their levels of support for SMEs, and suggests ways in which policy makers and investors can leverage the beneficial effects of SMEs on growth and poverty reduction.

A. STRATEGY FOR DEVELOPMENT FINANCE INSTITUTIONS

International Development Finance Institutions (DFIs) are the largest investors in SEAF's funds. To carry out their role as providers of development finance, DFIs have frequently relied on participation in microlending programs. While these programs typically require a great deal of technical assistance, they take up a relatively small amount of capital in all, while generating thousands of small loans and thus fulfilling the need to demonstrate significant program reach.²³ Micro-loans are short term and, in many countries, can be lent at high interest rates—given that the alternative sources of such short-term funds are loan sharks whose rates are even higher. Ironically, microlending programs have often generated better commercial returns than have the supposedly more commercial investment and post-privatization funds.

²² Many of these investments are not of a type that would appeal to purely commercial venture capitalists. Interestingly, the very positive developmental impact of the investments SEAF made in Peru was not of interest to the Board of Directors of SEAF's first Peruvian fund, who directed that SEAF move away from such investments and concentrate on more venture capital-type investments, such as new technology companies. SEAF was not able at that time to describe more systematically the developmental impact actually achieved—which might have altered the opinion of those earlier investors.

²³ It lies beyond the scope of this paper to examine the developmental results of these programs. However, a partial and predictable result of programs that sought to wholesale small loans to intermediaries, over which comparatively little control could be exercised, was that there was insufficient information as to the use of these funds by “on-lenders” and at least some suggestion of improper use by smugglers of contraband or by on-lending institutions for speculating in government bonds.

However, as noted in Chapter 3 above, a consensus is emerging in the recent literature that the development impact of micro-finance is not as great as had been hoped. Many conferences have highlighted the issues of micro-borrowers reaching their plateau, the high administrative cost of these programs, the competition among capital providers driving down the performance of many micro-finance institutions, the urban-biased impact of these institutions, and the limitations of providing capital unaccompanied by technical assistance.

For these reasons, many development finance institutions now see a need to broaden their portfolios beyond microfinance and are looking at mechanisms for supporting SMEs. But given that SMEs need equity as well as debt financing, the hurdle for many DFIs has been the need to show that SME financing has a significant economic development impact beyond the individual entrepreneur, given that a fund can invest in only a relatively small number of companies—far fewer than those reached by a typical microfinance institution.

SEAF's approach to measuring its developmental impact is to measure the incremental economic effects of an investment over time on the identifiable stakeholders affected by the investment. Since these effects can be measured they can also be targeted as part of a development, or development assistance, strategy. Further, funders or their auditors could use the track records and objectives in each targeted country to measure the effectiveness of a particular intervention against taxpayer expense, as well as across different types of intervention.²⁴ Investors could reflect their objectives in this methodology by assigning different weights to achievements in different countries. For example, if Rwanda is a priority country for an investor, then the investment team there might be accorded a higher weighting for its achievements there than, say, those of a large venture fund making \$5-10 million investments in Moscow or Shanghai.

The ability to track the developmental impact of SME investments on different groups of stakeholders could thus give financial intermediaries an incentive to pursue transparent strategies aimed at achieving developmental returns simultaneously with financial returns. At the same time, it would give the directors and auditors of development institutions a more accurate picture of what those institutions are doing to responsibly achieve their missions.

The mixed approach—targeting both development and financial returns—may be attractive to development-oriented investors. It is unlikely that most of the latter will have been able to achieve outstanding financial returns, especially in markets that have been deemed by policy makers as truly “developmental”. A number of development finance institutions have explicitly adopted the DAC I group of countries as their priority countries, thereby excluding such popular investment destinations as Brazil, Mexico, or Russia. Members of parliament or congress in aid-donor nations may criticize DFIs for losing money from their investments in, say,

*Since SME
development
impacts can be
measured...*

*...they can also
be targeted*

²⁴ While inevitably somewhat arbitrary, the suggested methodology would in any event improve the inconsistent treatment of DFI-funded projects today.

*Integrate technical
assistance with
fund management*

Bangladesh, Peru, or Rwanda. But if DFIs adopt transparent developmental as well as financial targets, it may be easier for them to show that they are accomplishing their mission. In this way of thinking, DFIs should be considered as specialized institutions that are tasked to achieve a broader set of goals than can be captured by the financial rate of return. The clearer the objectives the DFI community provides to its implementing agents, the truer the picture that can be painted of what has been accomplished.

Cost is a concern in an investment strategy with dual motives. When the objectives are more diverse and the measure of success is less easy to document and quantify, the costs of implementation inevitably rise. At least for small funds, the kind of work that must be done to add value to an SME costs more than can be covered with a fee structure at the going rate of 2-3 percent of capital under management. But if development finance institutions want to focus on SMEs, then the size of funds—and, therefore, the number of investee companies in the portfolio—must not be so large as to make the necessary monitoring and technical assistance impracticable. This is where focused funding from DFIs for technical assistance becomes critical. To be effective, such technical assistance must be integrated with fund management rather than conceived as a stand-alone program.

B. LEVERAGING SME INVESTMENTS TO AMPLIFY THEIR IMPACT ON DEVELOPMENT AND POVERTY REDUCTION

How can SME investments be leveraged to have their greatest effect on poverty? To address this question we use the coordination failures analytical framework. Modern development economics emphasizes problems of coordination among key actors in the development drama, such as groups of households, of firms, or workers, or one or more firms and their workers together.²⁵ In many important situations, investments of various types must be undertaken by many individuals if the results are to be profitable or sustainably beneficial for any one firm or individual. And in many cases, the presence of complementarities creates a “chicken and egg problem” of which comes first (for example, the skills or the demand for skills?). Often the answer is that the complementary investments must come at the same time, through coordination.

The coordination failures framework is useful for understanding why small firms and their (potential) workforce and their families often cannot pull themselves out of poverty on their own. It helps to identify the role that can be played by programs

²⁵ A coordination failure is a situation in which a set of related individuals' inability to coordinate their behavior (choices) leads to an outcome (equilibrium) that leaves all individuals worse off than in an alternative situation that is also an equilibrium. This may occur even when all individuals are fully informed about the preferred alternative state: they simply cannot get there because of difficulties of coordination, sometimes because people hold different expectations, sometimes because everyone is better off waiting for someone else to make the first move—so that nothing in fact happens. Coordination failures often emerge when there are complementarities between several conditions necessary for successful development, or several things must work well enough, at the same time, to get a desirable outcome. When complementarities are present, an action taken by one household, firm, worker, organization, or government increases or decreases the incentives for others to take action. These complementarities often involve investments whose return depends on other investments being made by other individuals or firms. (Murphy, Schleifer, and Vishny, 1989; Todaro and Smith, 2003; Hoff and Stiglitz, 2001).

to support SMEs, as well as by programs that work directly with the poor families from which the SMEs might draw their workers. This framework and its underlying principles suggest three areas in which SEAF and the investor/donor community could cooperate to promote development and reduce poverty through supporting SME development. These are now discussed in turn.

Using SME entrepreneurs to deliver poverty-reducing services

The positive impact of the SMEs studied here on their employees' level of skills and health suggests there are potential advantages to using SMEs as a delivery mechanism for poverty-alleviating services. Thus donors might establish programs to partially offset the costs that local SMEs would incur in offering practical (approved) training or health and other benefits for their employees. If it can be done at sufficient scale, using SMEs as a delivery mechanism might have cost advantages over some alternative approaches that require extensive investment to locate suitable program recipients and to track progress and results. SMEs, for their part, would be motivated to target the programs efficiently and to seek and track results, as such interventions would enhance their employees' morale and longevity of employment with the company, as well as enhancing business success.

Identifying effective poverty programs and choosing potential partners

Because SEAF is an investment fund with expertise in selecting investment opportunities, as well as in providing support services for entrepreneurs, it is probably unreasonable to expect it to develop the capacity to provide poverty services for the employees of investee enterprises, and particularly not for employees' families and the immediate community. It would also be unreasonable to expect SEAF or small and medium entrepreneurs themselves to fund poverty programs for employees and communities, given that the funding firms would not capture many of the benefits of these programs. For example, all firms in a community might benefit from the presence of services such as daycare, but would prefer for other firms to pay for them.

SEAF is, however, likely to have a comparative advantage in identifying actual or potential poverty problems, and in relating those problems and potential solutions to relevant experiences elsewhere, and selecting partner organizations that would be better placed to address these problems. (The appropriate partners are likely to vary by geographic region and the nature of the poverty problem in that area.) One strategy could be for SEAF, entrepreneurs, and donors to identify common interests and objectives and to capitalize on the experience and network of SMEs to address those objectives. An example here is SEAF's work with CARE in a project in Macedonia (Box 4). Foundations and other non-profit organizations with a social mission often have capital to invest, for short and longer terms. These program-related investments could be made in the form of risk capital or loans to SMEs to implement anti-poverty goals that go beyond their immediate needs. Particularly in rural areas, SMEs might work to provide a point of purchase for farmers taking part in donor-assisted programs to raise their productivity, but requiring a reliable mechanism to monetize their increased output.

*Three ways to
reduce poverty
through SMEs*



Box 4: Working with CARE to help small farmers

GICA is a limited liability company from Ohrid, Macedonia, whose core business is egg production. Being in the poultry industry for almost seven years, GICA has established a respectable network of contacts with other members in the industry as well as with small farmers in the Ohrid region and throughout Macedonia. In March 2003, SEAF provided almost \$1 million of equity capital to GICA to support the company's growth.

CARE International has signed a contract of EUR 50,000 with GICA as a partner to help small farmers with a broiler-raising project. While CARE provides small farmers with grants for working capital and equipment purchase, GICA is responsible for providing the know-how and veterinary help to farmers, as well as for monitoring the broiler raising process. Small farmers are expected to become self-sustaining after the first round of investment. Given the successful cooperation between CARE and GICA, a second contract is under consideration. This cooperation demonstrates the outreach impact of SMEs not only for their own production but also to other NGOs working on anti-poverty programs.



Cultivating socially responsible entrepreneurs and sectors

The case studies show a strong correlation between the development impact of firms and the quality of entrepreneurs. The owners of the firms care about the bottom line, but at the same time they all have a vision of building their companies to redress a social problem—whether that of providing secondary cities with modern retailing and quality goods, building a quality workforce through employees and their family members, improving the living conditions of a community, enabling access to markets for many small farmers in a remote region, providing income-generating alternatives to home-bound women, or helping poor children to go to school. They treat their own employees fairly.

While one can argue that micro-enterprises or large firms can also have similar effects in the community, SMEs are uniquely placed to make a difference, for the following reasons:

- they are visible in the community but not sufficiently large to be economically and therefore politically powerful in the local community. Therefore their reputation is more at stake than that of micro-enterprises or large companies; they need to show their support to the community;
- they are more *of* the community rather than simply located *in* the community, and thus they would want to contribute to the welfare of the community;
- their procurement costs are higher than those of large enterprises and it is in their interest to work with local producers to drive down these costs or to create a niche product;

- they are less prestigious to work for than large multinationals and less able to compete in the labor market, and therefore need to invest more in their people to keep them and help reduce the labor cost; and
- they are small enough to effect marginal change but large enough to achieve economies of scale for technology transfer.

By identifying and working more with socially responsible entrepreneurs and investing in sectors with a beneficial impact on the poor, developmental intermediaries such as SEAF could amplify the development impact of their investments. Training entrepreneurs in understanding the benefits of such relatively enlightened programs and in administering them more effectively could be expected to increase the developmental impact.

*SMEs are
uniquely placed
to benefit their
communities*

6. EXTENDING THE EVALUATION OF DEVELOPMENT IMPACT

The experience with this first phase of evaluation allows SEAF to plan how to move forward for continuous monitoring of developmental variables in its investments and a more rigorous impact evaluation study in the future.

A perennial problem of impact evaluation is that of the counterfactual—what would have happened without the intervention that is being evaluated. In the SEAF case, it is not clear that what happens after SEAF invests is attributable to the SEAF investment; some of whatever growth takes place would probably have occurred anyway.²⁶

*The counterfactual
is a perennial
problem*

The most rigorous method we can hope to achieve, on the assumption that SEAF will have the necessary resources at its disposal, is to use a quasi-experimental approach to impact evaluation, relying on statistical models or design features to construct a counterfactual.

A. DOUBLE DIFFERENCING AND PROPENSITY SCORE MATCHING

Variables associated with SEAF companies, their employees, and communities can in principle be tracked against variables associated with control groups of workers, firms, or households, using double differencing or propensity score matching.²⁷ For each company that SEAF invests in, the basic approach would be to track and compare what happens to those households with a member working for the company, against what happens to a control group of households whose members do not work for the company but which have otherwise comparable starting conditions.

Using double differencing, we would compare the amount of improvement before and after the SEAF investment between those households associated with the SEAF-investee company and those in the control group. Other things equal, the difference in difference then reveals the net impact of SEAF's involvement. In practice, however, it is very difficult to find people who match up, characteristic by characteristic, among participants and non-participants in a program.

This is why propensity score matching (PSM) has become one of the most widely respected and increasingly used techniques for program evaluation. Under PSM,

²⁶ In fact we account for this partially through opportunity cost analysis.

²⁷ For an introduction to these two methods see Duflo and Kremer (2004), and Rawlings (2004).

the treatment group is matched with the control group by the use of a “propensity score”, which is the predicted probability of program participation given the observables, such as education, age, or skill level. In SEAF’s case, we can look at the group of people hired for a particular position in a SEAF investee company and compare what happens to them with what happens to those applicants who were not selected.

There may be problems with both the above approaches not only on the cost side but also on the human or political sensitivity side; not all entrepreneurs will be comfortable with such a “laboratory rat” approach, as its use may restrict them from hiring people whose applications they originally rejected. These considerations would need to be taken into account in the design of the proposed longer-term study.

B. PLANNING A LONG-TERM STUDY

Whatever methodology is ultimately chosen, any rigorous impact study should have a sufficiently long time frame. Sometimes an impact does not occur for some time (such as in the case of asset accumulation), and sometimes it does not become measurable for some time. SEAF’s impact evaluation case studies used many assumptions to project forward and relied partly on the interviewees’ memories to project backward. While this approach is not entirely valid, because the short-term effect of any treatment may understate or overstate the long-term impact, it is the best approach for a retrospective study.

Going forward, however, SEAF will need to develop its tracking and monitoring system to keep accurate time-series data on relevant parameters. SEAF has already developed a web-based accounting system that allows field personnel to input data, which are immediately centralized and analyzed. Building on this effort, a developmental data collection sheet could be used for implementation at each SEAF field location.

SEAF’s existing resources should be sufficient to cover the data *collection* effort that is needed to track development impact. However, SEAF will need additional resources to analyze the data, undertake periodic interviews, track down unavailable or missing data, and consolidate the results.

If it is to use the double differencing or propensity score matching methods, SEAF would need to mobilize additional resources to develop control groups, since this requires identifying observable entities that can be monitored over time. Similarly, the specific target setting and monitoring methodology would need to be carefully set up with the interested development finance institutions, possibly using some sources of subsidy to motivate the SMEs to “internalize” the relevant externalities.

*Options for
future evaluations*

7. CONCLUSION

This study is the first in which SEAF has examined the developmental impact of its investments. The results of the study are specific to ten firms, and should not be generalized, but they yield encouraging insights into the potential of small and medium enterprises as a vehicle for growth and poverty reduction.

Virtually all ten firms have achieved a significant economic rate of return, and even in those investments with relatively low financial rates of return, the economic impact is significant. On average in the ten firms, every dollar invested appears to generate at least ten additional dollars for the local economy.

Among the stakeholders in these investments—employees, suppliers, competitors, consumers, the community—employees receive the largest share of benefits. Two thirds of the jobs in the sampled firms go to workers at low skill levels, and as companies have expanded, the proportion of low-skilled employees has tended to rise. Job turnover tends to be very low in these enterprises; a common pattern is that business owners hire unskilled workers, invest actively in training them, and reward them over time with wage increases that keep them loyal to the company. Benefits other than wages also play an important role; they include employer contributions to health insurance, as well as pension contributions, bonuses, and onsite meals. Most of the workers use their wages for meeting basic needs. They accumulate assets over time, mostly in the form of home improvement and ownership.

Many of SEAF's client businesses make important contributions to the development of their communities. Owners of all the ten businesses cared about the bottom line, but they each independently expressed a vision of building their companies to redress a social problem—whether that of building a quality workforce through employees and their family members; improving the social amenities of a community; or enabling access to markets for producers in a remote region.

SEAF's experience has repeatedly shown that a focus on smaller companies and developing or transition economies can generate positive financial returns. A mixed approach, targeting both development and financial returns, may be attractive to development-oriented investors. Many development finance institutions now see a need to broaden their portfolios beyond microfinance. Given that SMEs need equity as well as loan finance, the hurdle for many DFIs has been to show that SME financing has a significant economic impact beyond the individual entrepreneur, since a given fund can only invest in a relatively small number of SMEs. The results of this study suggest that given the economic returns that can be achieved by SMEs, it may be well worthwhile for the development community to put more effort into SME financing.

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ANNEX 1: COMPANY PROFILES

ARTIMA RETAIL INVESTMENT COMPANY - ROMANIA

BUSINESS SUMMARY

Artima owns and operates a chain of retail supermarkets throughout the Banat and Transylvania region of Northwestern Romania.

COMPANY HIGHLIGHTS

- Artima's strategy to bring modern retail supermarkets with advanced technology and best practices into secondary cities with population sizes between 50,000 and 200,000 gives it a distinct competitive advantage.
- Since start-up in 2001, Artima has opened and now operates nine supermarket stores stocking about 5000 SKUs in a selling space of about 800-1000 square meters. Artima plans to open and operate 20 stores by 2010.
- Artima has secured the best locations by taking part in infrastructure projects that benefit the community as a whole.
- All employees, including managers, have to go through various types of training to service the modern retail shops.

EMPLOYEE HIGHLIGHTS

Ms. O. is a cashier for an Artima store. Before her employment with Artima, she worked as a sales clerk for a small textile shop in the black market. She heard about Artima through an advertisement, and went through an elaborate interview process. Artima was more interested in her personality and work ethic than her previous skills. She was attracted to work for Artima because of the legal status of the enterprise, the modern working environment, and the security of employment and non-salary benefits, which she did not have before. Artima has trained her in stocking products, taking inventories, taking care of customers, and teamwork. She began as a stocking clerk at a salary of EUR58; after six months she was promoted to cashier and is now earning about EUR88 per month. She considers herself lucky to be employed in Artima, as she has acquired skills that she could use elsewhere, although she does not intend to leave Artima. She has used some of her income to purchase furniture, which she could buy on credit because of her employment with Artima.



2003 Statistical Data

Revenues in 2003 (US\$)	18,358,746
Gross margin (%)	19
Net margin (%)	-1
No. of employees	271
% of low-skilled workers	39
Avg. wage for low-skilled (US\$)	77/m
SEAF investment to date (US\$)	3,096,525
Realized proceeds to SEAF (US\$)	106,188
Realized and unrealized (US\$)	3,973,353
Multiple of capital invested	1.28

Financial and Economic Benefits

Financial rate of return (%)	12 ^a
Economic rate of return (%)	122 ^b
Benefit/cost ratio (0% discount)	6.81 ^c
Benefit/cost ratio (10% discount)	3.94 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms



FIDEOS CORONILLA - BOLIVIA

BUSINESS SUMMARY

Fideos Coronilla uses traditional Andean grains to produce highly nutritious certified organic and gluten-free pasta and snack products, mainly for export markets.

COMPANY HIGHLIGHTS

- With natural and organic foods growing at more than 12 percent a year, outpacing sales of conventional items by more than 4 to 1, Fideos-Coronilla (Fideos) has strategically positioned itself to capture a substantial portion of the market by penetrating export markets.
- Fideos is a certified organic producer. Apart from products containing cañawa, which is not currently available grown organically, the company maintains organic certification for all export products through Imo Control, a Swiss certifying body. This ensures strict quality control and the exclusive use of certified organic raw material in organic products.
- To help Fideos secure its niche products in the US markets, SEAF has assisted Fideos in redesigning its packaging and in promoting Fideos' brand to organic stores in the US.

EMPLOYEE HIGHLIGHTS

Ms. T. has been with the company for the last five years. She started with a low-skilled job packaging finished products. She was interested in mechanics and helped the mechanical engineer in minor repair tasks. Her employer noticed her interest and paid for her to get a two-year degree from a technical engineering school. She attends school in the evening and continues to work in the factory during the day. She is highly motivated and believes that her job with Fideos and the education she is getting will move her out of poverty.

2003 Statistical Data

Revenues in 2003 (US\$)	367,193
Gross margin (%)	37
Net margin (%)	-26
No. of employees	29
% of low-skilled workers	64
Avg. wage for low-skilled (US\$)	85/m
SEAF investment to date (US\$)	410,000
Realized proceeds to SEAF (US\$)	42,880
Realized and unrealized (US\$)	350,379
Multiple of capital invested	0.85

Financial and Economic Benefits

Financial rate of return (%)	21 ^a
Economic rate of return (%)	51 ^b
Benefit/cost ratio (0% discount)	11.82 ^c
Benefit/cost ratio (10% discount)	5.37 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms

KEN-4 AD - BULGARIA

BUSINESS SUMMARY

Ken-4 AD produces mainly sausages and fresh meat cuts of beef and pork.

COMPANY HIGHLIGHTS

- Ken-4, started by three young entrepreneurs in the early 1990s, has reintroduced quality meat processing to a region dominated by inefficient state-owned plants and high unemployment (at 17%).
- SEAF's assistance to Ken includes marketing and distribution, an accounting and management information system, operational organization, and inventory control.
- As a result, the dollar value of revenues has grown 7-8 fold since the start of the project in 1996. Gross margins grew from 5-6 percent to 26 percent, and net margins increased from 2 to 4 percent.
- Ken has invested in a water and sewerage system and infrastructure for electricity that is used by 3-4 other companies (with a total of 300 employees) along the road in the industrial zone.

EMPLOYEE HIGHLIGHTS

Ms. R. had two years of professional training but she could not find a regular job in her hometown in Southern Bulgaria. She worked briefly for a state-owned nuclear power plant in Northern Bulgaria but was laid off due to a cutback in administrative personnel. Back at home, she tried to make ends meet by selling vegetables, working as a waitress during the day, and a bar attendant during the evening. Through a friend, she was offered an entry-level factory job at Ken as a common laborer, and four years later, she became a shift supervisor of a team of 15 sausage production workers. Ken provided her with on-the-job training in meat processing technology, food safety and hygiene. She now trains other employees in these skills and industry standards. Her monthly take-home salary is about BGL750 (US\$390) well above the national average. She is able to support herself and her mother, who lives with her in a small rented apartment in the city. She is saving to buy her own apartment. Ms R. said that beyond employment security, good pay, and social benefits, "Ken gave me a community of people who cared for each other, a positive philosophy for life, and self-esteem".



2003 Statistical Data

Revenues in 2003 (US\$)	5,952,381
Gross margin (%)	25.6
Net margin (%)	4
No. of employees	125
% of low-skilled workers	70
Avg. wage for low-skilled (US\$)	105/m
SEAF investment to date (US\$)	594,299
Realized proceeds to SEAF (US\$)	1,113,759
Realized and unrealized (US\$)	1,113,759
Multiple of capital invested	1.87

Financial and Economic Benefits

Financial rate of return (%)	26 ^a
Economic rate of return (%)	37 ^b
Benefit/cost ratio (0% discount)	16 ^c
Benefit/cost ratio (10% discount)	5.94 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms



MOLINO - PERU

BUSINESS SUMMARY

Molino owns and operates a grain mill in Ayacucho, Peru that produces flour, flakes, and split and peeled grains supplied by farmers in the region. The company recently diversified its business to produce meals to feed undernourished people in the region under a government-sponsored program.

COMPANY HIGHLIGHTS

- Molino participates in a community program that feeds approximately 100,000 children at local schools. This reduces the costs for families by US\$1 per child/meal and motivates children in remote areas to go to school.
- Molino procures all its products from about 3,000 small farmers in the region, which has given Molino a competitive edge in winning the government's contract to feed school children.
- Farmers in the region produce mainly for their own consumption. With stable orders from Molino, they are able to obtain loans from local banks to purchase seeds and equipment to produce marketable surplus.

EMPLOYEE HIGHLIGHTS

Ms. E. has been a contract worker for Molino for the last five years. She sifts flour and keeps the factory clean during the down time. She was attending junior high school when her father died and she had to work to take care of her mother, and now a seven-year old daughter. She is paid by the hour at about US\$4 a day, and could earn up to US\$170 per month during peak periods. She has thought about starting her own micro-business but is afraid to venture into this area as she needs a regular income. She does not have health insurance, being a contract worker, and must use her own money or borrow from friends to pay for health costs. Although she wishes to have a regular job, she feels fortunate to have found a job with Molino. The company pays well compared to others in town, she said.

2003 Statistical Data

Revenues in 2003 (US\$)	350,385
Gross margin (%)	29
Net margin (%)	13.2
No. of employees	26
% of low-skilled workers	60
Avg. wage for low-skilled (US\$)	142/m
SEAF investment to date (US\$)	312,921
Realized proceeds to SEAF (US\$)	215,991
Realized and unrealized (US\$)	368,488
Multiple of capital invested	1.17

Financial and Economic Benefits

Financial rate of return (%)	6 ^a
Economic rate of return (%)	40 ^b
Benefit/cost ratio (0% discount)	4.23 ^c
Benefit/cost ratio (10% discount)	2.54 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms

PPZP - POLAND

BUSINESS SUMMARY

PPZP owns and operates a pig farm in Poland for the express purposes of breeding and cultivating pork products.

COMPANY HIGHLIGHTS

- By contracting with a large improved pig breeding company (the Pig Improvement Company, a subsidiary of Dalgety PLC) and by implementing careful cost controls, PPZP could breed leaner (less fatty) and healthier (disease-resistant) pigs, which Polish pig farmers could purchase, and thereby improve their productivity while benefiting the consumer by turning out healthier products.
- Today, PPZP is the third largest pig breeding company in Poland, producing more than 48,000 pigs in 2003.
- The company is highly profitable but the owners are also socially responsible. They treat employees well and contribute to the welfare of the community by bringing in potable water supply, and participating in various civic activities to help children and disabled people.

EMPLOYEE HIGHLIGHTS

Mr. Y. started working for the company in 1993. He was with the state farm earlier and when it went bankrupt he found the job with PPZP. He started by helping clean pig stalls and moved to various jobs such as feeding, repairing sheds etc. His most recent job is as farm manager and he has also been trained in delivering piglets. Over the years, he has been able to save and purchase a small house and a car. Mr. Y is happy to stay with PPZP till he can retire as it is known as the most reputable company to work for in the area, and he is able to move up in his career to take more responsibility, including management.



2003 Statistical Data

Revenues in 2003 (US\$)	10,446,453
Gross margin (%)	26
Net margin (%)	1
No. of employees	205
% of low-skilled workers	40
Avg. wage for low-skilled (US\$)	234/m
SEAF investment to date (US\$)	1,194,455
Realized proceeds to SEAF (US\$)	1,751,547
Realized and unrealized (US\$)	6,235,752
Multiple of capital invested	5.2

Financial and Economic Benefits

Financial rate of return (%)	32 ^a
Economic rate of return (%)	54 ^b
Benefit/cost ratio (0% discount)	14.34 ^c
Benefit/cost ratio (10% discount)	5.00 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms



PRINTOP - PERU

BUSINESS SUMMARY

Sociedad Quimica Alemana S.A. (Printop) manufactures and sells screen-printing dyes and vinyl based paints and resins through its 15 franchises in Peru, and also exports to other countries in Latin America.

COMPANY HIGHLIGHTS

- Printop's sales strategy combines excellent customer service with a good brand image. This has led to increasing sales year after year.
- Printop sells about half its products to micro-producers of t-shirts and textiles. The company provides free training for these producers, and helps them to set up micro-businesses.
- Printop's products are sold mainly in Peru but in recent years, Printop has been expanding to neighboring countries such as Chile, Colombia, and Bolivia.

EMPLOYEE HIGHLIGHTS

Mr. T. has been with the company for the last 10 years. He started as a warehouse clerk with a salary of about 300 Peruvian Nuevo Soles (NS) in 1993. Currently he works as the production manager of 13 full-time workers and five contract workers. His salary has increased over the years with more responsibilities, and currently he earns NS1600 (about US\$457) per month. He got his training mainly from working side-by-side with one of the company's owners. He has set aside some of his income to build a house, using a small loan from the same owner. He has three children, ages 14, 18, and 20. The youngest one is at a public school and the two older ones are at university and technical schools, for which he pays. Even with his substantial salary increase, Mr. T. can barely pay for his family's basic needs and education. Nonetheless, Mr. T. is happy at Printop. He considers that the continuous learning and trust he has received from the management and owners motivate him to work hard. He could find a better paid job elsewhere but the security of employment and the owners' excellent treatment of all staff working in Printop are much more valuable to him than a few extra dollars.

2003 Statistical Data

Revenues in 2003 (US\$)	2,205,883
Gross margin (%)	48.7
Net margin (%)	7.5
No. of employees	51
% of low-skilled workers	41
Avg. wage for low-skilled (US\$)	260/m
SEAF investment to date (US\$)	330,000
Realized proceeds to SEAF (US\$)	105,267
Realized and unrealized (US\$)*	385,137
Multiple of capital invested	1.17

*at December 2001 when SEAF exited the fund

Financial and Economic Benefits

Financial rate of return (%)	27 ^a
Economic rate of return (%)	70 ^b
Benefit/cost ratio (0% discount)	10.14 ^c
Benefit/cost ratio (10% discount)	6.41 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms

SYMBIO - POLAND

BUSINESS SUMMARY

Symbio distributes and exports organic fruits and vegetables to Europe and the US.

COMPANY HIGHLIGHTS

- Symbio is successful in the organic fruit and vegetable business thanks to the intensive technical assistance it provides to farmers seeking to be certified organic producers according to EU standards.
- Symbio contributes to the rural sector through the interface it provides between Western high value markets and organic farmers in Poland's Northern and Eastern high-unemployment region. Symbio currently has contracts with about 330 farmers from 20 small regions in the vojvodship (district) of Lublin and Kielce.
- The certification process takes at least three years. With the growth in the number of certified farmers, sales from Symbio last year rose by 200 percent.

EMPLOYEE HIGHLIGHTS

Mr. and Mrs. P. work as contract farmers on one of Symbio's largest contracted farms. They started in 1999 growing organic vegetables on their own 15 hectares of land, and now have 50 hectares under operation, some of which they lease from other farmers in the village. They employ four full-time workers, and during the harvest time 30 to 40 seasonal workers, most of whom are small farmers in the village. Prior to their contractual arrangement with Symbio for organic production, they grew conventional wheat and potatoes and raised livestock. The revenues generated from this type of production were only enough to support the family and the farm. Now the family's handsome profits from organic production enable them to invest more in equipment and other inputs for further expansion. They are thankful to Symbio for having arranged for them to visit organic farms in Germany, Norway, and Denmark. They report that the only bad thing that comes with their success is that they are not able to take a vacation together.



2003 Statistical Data

Revenues in 2003 (US\$)	1,541,729
Gross margin (%)	27
Net margin (%)	3
No. of employees	4
% of low-skilled workers	0
Avg. wage for low-skilled (US\$)	n/a
SEAF investment to date (US\$)	427,103
Realized proceeds to SEAF (US\$)	178,455
Realized and unrealized (US\$)	1,370,706
Multiple of capital invested	3.2

Financial and Economic Benefits

Financial rate of return (%)	46 ^a
Economic rate of return (%)	245 ^b
Benefit/cost ratio (0% discount)	14.86 ^c
Benefit/cost ratio (10% discount)	10.90 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms



TAMBO INCA - PERU

BUSINESS SUMMARY

TAMBO INCA, of Peru, produces marigold flour obtained from the dehydration and milling of marigold flowers (*Tagetes erecta*).

COMPANY HIGHLIGHTS

- Tambo Inca produces marigold flour. It provides financial resources and technical assistance to the farmers from whom it buys the flowers directly, and sells the flour to clients in Mexico and Ecuador.
- The company has been in the marigold flour business since 1996, with the principals having been involved in the business for about ten years. Though the company suffered a setback in 1997 due to the El Niño Phenomenon it has managed, because of the fund's investment, to expand its sales and profits substantially.
- Tambo Inca acts as an interface between the export markets and the farmers from the Piura and Viru valleys, which are both afflicted by high unemployment.

EMPLOYEE HIGHLIGHTS

Mr. G. has grown mainly marigolds, along with some cotton and wheat, for the past 12 years. His only source of finance is Tambo Inca; despite his clean credit record and 22 hectares of arable land, he was unable to borrow from financial institutions. Banks are reluctant to lend to farmers in the Piura valley, considering agriculture too risky, and only a few selected clients (with interests in other business sectors) receive financing. The banks put no value on arable land as collateral.

Tambo Inca's financing allows him to harvest his full 22 hectares. In addition, he receives technical assistance from a field supervisor, who visits him every week, and an entomologist, who visits him once a month during harvest season.

Mr. G. now generates work not only for himself, but also for four more people on a full-time basis. During harvest (4.5 months), he employs about 25 workers. Every hectare cultivated yields him financial returns of US\$ 400-500. With such results, he maintains himself and his family for the whole year and has made improvements in his home and farm over the past ten years.

2003 Statistical Data

Revenues in 2003 (US\$)	2,506,838
Gross margin (%)	17.5
Net margin (%)	-5.4
No. of employees	34
% of low-skilled workers	60
Avg. wage for low-skilled (US\$)	152/m
SEAF investment to date (US\$)	808,000
Realized proceeds to SEAF (US\$)	994,791
Realized and unrealized (US\$)	994,791
Multiple of capital invested	1.23

Financial and Economic Benefits

Financial rate of return (%)	6 ^a
Economic rate of return (%)	90 ^b
Benefit/cost ratio (0% discount)	3.76 ^c
Benefit/cost ratio (10% discount)	2.28 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms

TELEZIMEX - ROMANIA

BUSINESS SUMMARY

Telezimex SRL, based in Cluj-Napoca, distributes electronic components and provides after-sale and repair services to the Romanian market.

COMPANY HIGHLIGHTS

- Telezimex's success factors are its wide assortment, its fast delivery, and its advice and support line for electronic components. It derives this value proposition through efficient inventory management, as well as exclusive relationships with ASWO, Maxell, and Kinzo.
- Telezimex's employees are paid well, at three times the national minimum wage for low skill, and six times the industry average wage for high skill.
- Telezimex was voted as Romania's best corporate citizen in 2003, due to its payroll deduction program, which supports charities as well participation in various civic activities, and the owner's concern with employment generation in remote areas.

EMPLOYEE HIGHLIGHTS

Mr. K. joined the company in 1993 as a warehouse clerk. In two years, he was promoted to production manager and now he is the purchase manager. His starting salary was about EUR100 per month and now he earns about EUR250 per month. He also has other non-salary benefits such as meal tickets (EUR30 per month), mobile phone allowances, a bonus, and paid health insurance, which amount to more than half of his take home pay. He has received on-the-job training from the company. He has stayed with Telezimex for a long time as he likes the working environment and the top management's style. He also stated that he was not an aggressive person in promoting himself in the company to get ahead, but that the management recognized his hard work and commitment and promoted him. He and his wife live in his grandparents' house and they have no children. He is using his savings to get formal training in information technology to allow him to find jobs in the EU markets. He believes that Romania will become a part of the EU and he wants to be prepared for employment mobility.



2003 Statistical Data

Revenues in 2003 (US\$)	3,653,475
Gross margin (%)	32
Net margin (%)	0
No. of employees	75
% of low-skilled workers	30
Avg. wage for low-skilled (US\$)	200/m
SEAF investment to date (US\$)	279,312
Realized proceeds to SEAF (US\$)	82,718
Realized and unrealized (US\$)	367,283
Multiple of capital invested	1.31

Financial and Economic Benefits

Financial rate of return (%)	9 ^a
Economic rate of return (%)	62 ^b
Benefit/cost ratio (0% discount)	24.17 ^c
Benefit/cost ratio (10% discount)	8.65 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms



VICTORIA CLASSICS - PERU

BUSINESS SUMMARY

Using 100% Pima cotton from Peru, Victoria Classics (VC) manufactures up-scale children's embroidered clothing and exports it to the US where it is distributed to department stores, boutiques, specialty stores, and gift shops.

COMPANY HIGHLIGHTS

- VC's success comes from producing high quality products that require traditional embroidery skills and a network of sales representatives in the US to penetrate upscale markets.
- VC employs some 97 contract workers, virtually all female, who work at home, enabling them to care simultaneously for children or old and sick relatives.
- VC's facility is one of the most modern textile factories with good lighting and pleasant working conditions. Contract workers are often fed when they come to get their assignments.

EMPLOYEE HIGHLIGHTS

Ms. Y. started with VC 5 years ago as a contract worker, and was converted to a regular worker in September 2002. She now works for the company full-time as a quality control supervisor. She learned embroidery from her grandmother and at a convent school. When working as a contract worker, she earned on average about NS 500 a month, but now her salary is NS 700 a month, plus health insurance and other non-salary benefits. This has become very helpful for her as she has been discovered to have breast cancer. Since health insurance does not cover her treatment costs, the owners help her with the payments, and her colleagues organized a fund-raising event to help her defray the cost. In spite of her illness, she works and saves in an informal saving club and pays for her one child to go to private school (about NS 60 a month) to enable her to get a better education.

2003 Statistical Data

Revenues in 2003 (US\$)	2,803,049
Gross margin (%)	71.2
Net margin (%)	47.6
No. of employees	48
% of low-skilled workers	52
Avg. wage for low-skilled (US\$)	220/m
SEAF investment to date (US\$)	245,000
Realized proceeds to SEAF (US\$)	436,415
Realized and unrealized (US\$)	436,416
Multiple of capital invested	1.78

Financial and Economic Benefits

Financial rate of return (%)	45 ^a
Economic rate of return (%)	57 ^b
Benefit/cost ratio (0% discount)	4.54 ^c
Benefit/cost ratio (10% discount)	2.90 ^c

a: return to the company

b: return to society

c: additional dollars generated for society from every dollar invested in the company in constant terms

ANNEX 2: SEAF INVESTORS

AFP Integra (Peruvian private pension fund)
AFP Profuturo (Peruvian private pension fund)
Baltic American Enterprise Fund
Baltic Special Investment Fund (governments of Sweden & Norway)
Belgian Investment Office (BIO)
Black Sea Trade and Development Bank
Calvert World Values International Equity Fund
Corporación Financiera de Desarrollo S.A. (COFIDE)
Corporación Andina de Fomento (CAF)
Deutsche Investitions—und Entwicklungsgesellschaft mbH (DEG)
Evangelische Kirche in Deutschland (EKD)
European Bank for Reconstruction and Development (EBRD)
Finnish Fund for Industrial Cooperation (Finnfund)
Ford Foundation
Foundation for the Development of Polish Agriculture
Fundación para Desarrollo Sostenible (FUNDES)
Fundapro of Bolivia
International Finance Corporation (IFC)
Islamic Corporation for the Development of the Private Sector (ICD)
L.A.I. Finance NV
Merifin NV
Multilateral Investment Fund (MIF) of the Inter-American Development Bank
Netherlands Development Finance Company (FMO)
New York Life International, Inc.
Norwegian Investment Fund for Developing Countries (Norfund)
Polish Cooperation Fund
State Secretariat for Economic Affairs (SECO) of Switzerland
SwedFund International AB
US Agency for International Development (USAID)

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This report has been prepared by a team of staff from SEAF headquarters in Washington DC and SEAF country offices for the relevant case studies. The team consists of MinhChau Nguyen (leader), Genta Arovas, Davis Broach, Hector Cateriano, Lyubomira Buresch, Peter Righi, and Nam Pham (consultant). Professor Stephen Smith from George Washington University in Washington DC provided SEAF with the conceptual framework on facilitating and assessing the poverty alleviation impacts of SME assistance, and worked with SEAF staff on one of the field trips to Peru.

All the photographs in this volume were taken by SEAF teams and are of activities in SEAF-invested companies.

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