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## How Health Affects Small Business in South Africa

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## How Health Affects Small Business in South Africa

### Abstract

Preventable and treatable diseases have taken a devastating human and economic toll on many developing countries. That economic toll is likely to be underestimated because most studies focus on productivity losses in the formal, or largefirm, sector; yet, a large portion of the population of developing countries works in the informal sector in very small businesses, either as an owner-worker or as an employee. It is plausible that ill health might affect small businesses most severely, possibly putting the entire business at risk. This Issue Brief summarizes a three-year study that tracks small businesses in Durban, South Africa, and investigates the connection between the owner's health and business growth, survival, or closure. The results bolster the economic case for investing resources in the prevention and treatment of disease in developing countries.

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## *How Health Affects Small Business in South Africa*

Editor's Note: Preventable and treatable diseases have taken a devastating human and economic toll on many developing countries. That economic toll is likely to be underestimated because most studies focus on productivity losses in the formal, or large-firm, sector; yet, a large portion of the population of developing countries works in the informal sector in very small businesses, either as an owner-worker or as an employee. It is plausible that ill health might affect small businesses most severely, possibly putting the entire business at risk. This Issue Brief summarizes a three-year study that tracks small businesses in Durban, South Africa, and investigates the connection between the owner's health and business growth, survival, or closure. The results bolster the economic case for investing resources in the prevention and treatment of disease in developing countries.

*In sub-Saharan Africa, high rates of small business ownership and HIV/AIDS may interact to produce great economic hardship*

The economic impact of HIV/AIDS in sub-Saharan Africa has been well-documented, usually in terms of reduced economic growth and productivity. Economists point to increased labor costs, due to reductions in the size of the labor force and costs involved in replacing workers when they fall ill. However, the economic impact of ill health may be even greater for very small businesses, which are labor-intensive and often reliant on the owner's presence.

- Micro- and small enterprises (MSEs) are small businesses with up to 5 and 100 employees, respectively. By some estimates, MSEs provide nearly half of total employment in African countries.
- Virtually all small businesses begin as one person's idea, and develop through one person's efforts. Poor health of a key individual might make these businesses especially vulnerable to decline or failure.
- HIV/AIDS is the chief health threat to working-age adults in sub-Saharan Africa. For example, HIV prevalence in urban areas in South Africa may be as high as 30%.
- Although some economists have speculated on the threat that HIV/AIDS and ill health pose to the informal sector, there has been little research to document these costs or to include them in economic impact studies.

*Study tracks small business development and owners' health status over three years*

From 2002-2004, Chao and colleagues studied the relationship between MSE owners, health, and business outcomes in peri-urban Durban, South Africa. They selected Durban in part because of its high HIV prevalence and its large population at various levels of income, education, and business development.

*Continued on next page.*



South Africa

- The investigators first screened all households in six areas around Durban. The screening classified 653 households into one of five types: 1) never operated a business; 2) closed business; 3) single-person business owner; 4) multiperson static business; 5) multiperson growing business.
- The investigators then conducted detailed interviews with a sample of these households in different income categories, and conducted follow-up interviews with these households in the next two years. The interviewers collected demographic information, self-reported health status measures, and the operational aspects of 279 existing businesses.
- Follow-up interviews tracked the owner's health status and the opening, growth, or closure of MSEs in the sample.

***More than 30% of households in Durban, South Africa report owning a small business***

The screening survey confirms the prevalence and importance of small business in townships around Durban.

- Of the 653 households screened, 59% had never been involved in business activity, 10% had operated a business in the past but closed, and 31% had an active MSE in 2002. The most common type was a single person-business (46%) followed by multiperson static business (37%).
- Of all existing businesses, 66% were in retail trade (food stores, bars and restaurants, general stores), 16% were in manufacturing, and 15% were in the service industry (beauty shop, traditional health care, catering, taxis).
- Although there were twice as many women in the sample, men were more likely to operate multiperson businesses and to have a growing business.

***Better health is related to having a business, especially a multiperson one***

The initial survey asked participants to rate their overall health status, and also collected physical and mental health data with the SF-12, a widely-used, twelve-question instrument.

- People from higher-income areas tended to report higher initial health levels than people from middle-income or low-income areas. Thirty per cent of people from low-income areas rated their health as fair or poor, compared to 18.3% of people in high-income areas.
- People with existing businesses had higher physical health scores than non-business owners or those with closed businesses. Fewer people in existing businesses considered themselves in poor or fair health (19.5%), compared to people without businesses (32.2%).
- Among existing businesses, owners of multi-person businesses had higher physical health scores than those with single-person businesses.
- Mental health scores did not differ significantly between business and non-business owners.

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### ***Single-person businesses may not survive the owner's ill health***

Chao and colleagues asked several questions about the hypothetical consequences of an owner's poor health for the operations of the business. They asked about the availability of substitute workers and effects on earnings.

- Among single-person businesses, 70% had no one to fill in if the owner were absent; in fact, only 29% indicated that the business would remain open in the owner's absence. In contrast, 85%-88% of multiperson businesses had a worker who could step in when needed.
- Just 32% of single-person businesses would have the same earnings if the owner were absent, compared to 67%-81% of multiperson businesses.
- The participants also provided sales volume in the last month and the number of days the business closed in the last month due to illness. Single-person firms had sales of 618 rand (roughly \$85 in today's dollars) and had closed for 3.5 days in the previous month, compared to sales volumes of 2,111-3,120 rand (\$290-\$428) in multiperson firms, which closed for an average of 1-1.8 days.

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### ***Health status is associated with business closure***

In the subsequent two years, businesses either survived, closed, or were lost to follow-up. While the initial interview asked about the hypothetical implications of a business owner's ill health, follow-up interviews tracked the contemporaneous health levels of the owners and described the relationship between health status and business closure.

- Of the original 164 businesses identified in the first year, 72 (44%) survived to the third year. In the same time period, just 9 of the 115 households without a business started one.
- Business owners with higher initial physical health scores were less likely to close their business than those with lower physical health scores.
- Owners of closed business had lower physical health scores over time than owners of surviving businesses. Mental health scores, however, did not have a significant impact on business performance.
- Controlling for other influences, the investigators modeled the effect of the owner's initial health and changes to health over time on the odds of business closure. An owner with a one-point higher physical health score at baseline had 6% lower odds of a business closure in the subsequent year. A one-point improvement in physical health score over time was associated with an additional 4% reduction in the odds of business closure.

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### ***Do health changes cause business closure, or vice-versa?***

Interpreting the relationship between health changes and business closure can be difficult, because it is not clear whether health changes cause business closure, or whether business closure might adversely affect health through material deprivation. Chao and colleagues offer two pieces of evidence to suggest that health changes lead to business closure, rather than the other way around ("reverse causality").

- If reverse causality were serious, it is reasonable to expect that the impact would be greatest in low-income areas, where people are likely to be living at subsistence levels. This was not the case; in fact, the relationship between business closure and health was stronger in both high and middle-income areas than in low-income areas.
- Methods designed to account for the timing of business closures as well as the fact of closure confirm that health changes over time are strong predictors of business closures.

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## **POLICY IMPLICATIONS**

This study has two key findings: first, that poor health was related to subsequent business closure, and second, that deterioration in health over time was related to the probability of business closure over time.

- These results suggest that illness is harmful to the economic health of a large segment of the population in sub-Saharan Africa employed by MSEs.
- Because closed businesses were not replaced by new ones, the services provided can be considered “lost” in each community. This suggests that there could be an economic case for investing resources in the prevention and treatment of disease in the lower-income informal sector in developing countries.
- Further research is needed to confirm these findings in larger samples and in other parts of southern Africa, especially those hardest hit by the HIV/AIDS epidemic.

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*This Issue Brief is based on the following article: L. W. Chao, M. V. Pauly, H. Szrek, N. Sousa Pereira, F. Bundred, C. Cross, J. Gow. Poor health kills small business: illness and microenterprises in South Africa. Health Affairs, March/April 2007, Vol. 26, pp. 474-482.*

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