

# Stanford SOCIAL INNOVATION<sup>Review</sup>

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*Supplement*

**Tough Love**

By Dennis Price & David Bank

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# Tough Love

How a dose of banking discipline strengthened financing for smallholder farmers.

BY DENNIS PRICE & DAVID BANK

In more than a decade as a lender to small farmers and agricultural co-ops in Africa and Latin America, Root Capital has gained a reputation as an effective organization that has delivered genuine impact in a tough sector. In 2012, however, Root hit a speed bump. It was just a temporary breach of a technical agreement—Root probably could have not reported it, and no one would even have noticed.

But the nonprofit financing firm's minor violation of the terms of its own \$10 million debt sent a signal of possible trouble ahead. One of Root Capital's biggest lenders, the Bill & Melinda Gates Foundation, picked up the signal and moved to make sure that one of its key partners in agricultural finance began fixing any problems.

Some lenders keep hands off when such things occur in the feel-good world of nonprofit social-impact lending. But in the sometimes-tense 15-month engagement with executives at Root Capital, the in-house investment team at the Gates Foundation was decisively hands on.

That brief financial stumble in 2012 ultimately helped Root Capital grapple with the dangers of rapid growth in a field in which scaling up is considered the *sine qua non* of organizational success. The episode led to new accounting systems, a strict financial "diet," explicit milestones, and management changes that challenged the firm's identity and forced the lender to make hard choices. The organization chafed at some of the mandates and pushed back on some of the reforms urged by the foundation's Program Related Investment team.

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In the end, Root Capital's leaders say that the Gates Foundation's tough love helped Root become clearer about its role in the complex value chains of smallholder agriculture in developing countries. Subsequent investments in systems and people made Root a stronger and more sophisticated financial manager. For the foundation, the strict oversight was part of a broader strategy of making markets work for the poor by bringing social innovation and social enterprise into the major leagues.

## FINANCING FARMERS

Root Capital made its first loan to a coffee cooperative in a remote corner of northwestern Guatemala in 1999. Today, it has a loan portfolio of about \$100 million. During the intervening years, Root has extended nearly \$1 billion in credit to more than 600 organized groups of small farmers, including co-ops, small businesses, and other producer groups. Through its lending, Root has reached more than 5.3 million farmers and their family members. Higher prices and better yields for millions of farmers selling coffee, cocoa, and other crops mean more money for food, health care, and school fees for millions of low-income families in Latin America and sub-Saharan Africa.

In 2015 alone, Root Capital's lending helped to unlock \$1.2 billion in sales to global and regional buyers. That's impressive scale. It has helped attract other banks and financial institutions that now see the once too-risky rural agricultural markets as a lendable opportunity.

Root, other social lenders, and local banks now meet an estimated 40 percent of the addressable demand from smallholder farmers in export-oriented value chains. But with a continuing annual financing gap of more than \$500 billion for smallholder

farmers, including those selling into local rather than export markets, Root Capital has long felt urgency to raise and lend as much money as it could.

A typical Root Capital loan works like this: Say a coffee farmer cooperative receives an order from an international buyer for Starbucks. With this contract as security, Root makes a loan to the co-op so it can buy the raw product from individual farmers at the time of harvest. When the cooperative delivers the product, Starbucks pays Root, which then deducts the loan principal and interest owed and passes the balance back to the cooperative.

For such buyers, the arrangement means that they don't have to get into the financing business and tie up their balance sheets with loans to farmers. For Root Capital, lending to cooperatives instead of individual farmers brings scale and efficiency. With one loan, the lender can help improve the livelihood of hundreds, or even thousands, of farm households.

Root Capital exists because such farmer cooperatives and other agricultural businesses are too big for microfinance but too risky, and too small, for commercial banks. Access to working capital allows cooperatives to purchase crops from farmers and pay for their products promptly with cash. As the producer groups repay Root's loans, they establish a track record that eventually enables them to borrow from local banks.

Root Capital may be improving the lives of smallholder farmers and their families in often-neglected parts of the world, but it still has to play by the rules it agreed to with its lenders. Root itself borrows money from lenders such as the US Overseas Private Investment Corporation, the International Finance Corp., Trillium Asset Management Corp., the Calvert Foundation, and the Gates Foundation.

Because the loans it makes are considered risky, Root Capital maintains a base of net assets (the nonprofit equivalent of a bank's equity) to cover the first losses on its loans. A commercial bank would build such equity from private investors. A nonprofit like Root establishes equity through grants from philanthropic donors. Those grant dollars leverage many more dollars in lending to businesses and co-ops that help small farmers. The cushion helps mitigate the risks for Root's lenders.

As part of its financial controls, Root Capital's board had initially set a debt-to-

equity limit of five to one. The limit, based on analyses of community-development financial institutions, microfinance institutions, and emerging market banks, means that for each dollar of equity, Root could borrow five dollars to lend to its clients. Some of Root's major lenders, including the Gates Foundation, formalized the debt-to-equity limit as a covenant in their loan agreements.

### SCALING UP THE MODEL

Starting in Latin America, Root Capital proved its model across a range of crops, and showed a default rate on its loans of

The first two disbursements carried an interest rate of 1 percent, increasing to 2.5 percent for the latter two disbursements. The lower initial rate kept Root Capital's cost of capital down as it ramped up its Africa lending.

Fueled by the Gates Foundation's loan and other backers, Root Capital's Africa portfolio grew to \$11.5 million by 2011. In 2012 Root launched a five-year growth plan. "It called for aggressive growth," says Catherine Gill, who oversees debt and philanthropy fundraising at Root Capital. "It was our moon shot." The growth plan was also intended to strengthen Root's internal operations. With

as much debt as it could to satisfy demand.

Rapid growth strained the financial systems and controls of the young social investment fund. Root Capital's processes were established when the firm was smaller and its operations less complex. As its lending grew, Root struggled to meet the level of accountability its own lenders demanded.

In May 2012 Root drew down a tranche of a loan from one of its lenders. Root was anticipating a grant check that would have boosted its equity cushion. The debt capital came in more quickly than expected, while the grant was slightly delayed, meaning that for several days Root hit a debt-to-equity ratio of 5.2 to one, violating its limit. The arrival of the grant days later brought Root back within the five to one ratio. Only in retrospect, as the organization was preparing its quarterly report, did Root's executives realize that the breach had occurred.

In advance of a routine quarterly performance report in August 2012, Root Capital sent a note to its lenders disclosing that during the quarter Root had briefly breached its debt-to-equity ratio. It reassured them that it was back in full compliance.

"Root is not a bank. We weren't doing cash management on a daily basis," says Gill. "There was no clear way that our lenders and other partners would have found out that this had happened." But "we were having a moral transparency moment," she says. "We decided to write a letter to our investors letting them know that it happened and that the situation was remedied."

### TWO PATHS

After its disclosure, Root Capital discussed the breach in depth with several of its lenders. Each approved a waiver for the event. "With the exception of one," says Gill.

David Rossow, the program investment officer at the Gates Foundation who managed the Root Capital investment, had worked as a leveraged buyout investor during the global financial crisis. He had seen what happened to banks that didn't pay attention to their leverage or tightly manage their cash flows. To Rossow, even a minor breach is like the canary in the coal mine. "When a breach happens, it might be a bigger problem," he says. "Step one in the process is to find an explanation." The foundation could have pulled its money. "We didn't want that," says Rossow. "But we said, 'Here are the new rules. We are going to force you to slow down.'"



A woman at the Dukundekawa cooperative in Musasa, Rwanda, prepares coffee beans for drying.

less than 3 percent. It began lending in Africa in 2005 and within five years had grown its portfolio there to \$6 million. By 2009, it was ready to expand.

The Gates Foundation made its first loan to Root Capital in 2009 as part of a \$10 million commitment to expand Root's lending in Africa. At the time, the Gates Foundation was the sole dedicated backer of Root's Africa portfolio. The foundation also provided a \$4 million grant to support Root's operational costs and the technical assistance it provides to loan recipients.

The Gates Foundation made its loan in the form of a program-related investment, or PRI. The below-market loan was in part intended to educate the foundation itself about strategies for financing in agricultural markets and in part to attract other lenders.

a larger loan portfolio, the economics of its model made more sense. Revenues from interest came closer to covering Root's expenses. Operational self-sufficiency was important not only to Root, a social enterprise, but to some of its grant-equity funders as well.

Root Capital's growth at the end of the last decade was propelled by an unusual bull market for coffee, the primary crop for more than half of Root's borrowers. Higher coffee prices meant larger loan sizes and higher repayment rates, which gave Root itself access to additional capital. Coffee prices rose sharply in 2012. This meant that Root Capital's borrowers required more financing per volume of crop. A coffee contract that Root thought would be worth \$100,000, for example, was suddenly worth \$130,000. Anxious not to let its clients down, Root brought on

The plan put Root Capital on a “diet.” Following the breach, the Gates Foundation invoked its right to reduce the allowable debt-to-equity ratio, from five to one, to 4.5 to one. That tightened Root’s ability to lend just when Root wanted to loosen it in order to achieve even greater scale.

To Root Capital the penalty felt onerous. The Gates Foundation was a lender without a board role. Root could have chosen to repay the foundation and was in a position to do so. But Root opted to negotiate, convinced the process would strengthen the relationship and strengthen Root as an organization.

From the Gates Foundation’s point of view, Root Capital’s initial responses only made matters worse. Willy Foote, Root’s charismatic founder and CEO, initially appeared to downplay the seriousness of the issue. He appealed to the foundation’s commitment to their shared mission. He pushed back on whether the breach was really material, given its short duration and the organization’s clear willingness to share the problem in full transparency.

The Gates Foundation didn’t budge. “This is banking 101,” says Rossow. “Their response was asking us to sign a waiver and move on as if nothing had happened.” It wasn’t the size of the overdraft that concerned the foundation, but rather the lax controls that had allowed it to happen at all.

The Gates Foundation team requested a meeting. Root Capital pushed for clarification on the rationale for the lowered debt-to-equity ratio. A lower ratio, Gill explained, could force Root to let its clients down just when prices were at historic highs, causing poor farmers to miss an opportunity to improve their livelihood. In this context, Gill asked, why reduce Root’s ability to make loans with a 4.5 to one ratio? Why not expand lending by making it six to one?

To Rossow, that was the wrong question. Root Capital had a decision to make, he insisted. Who did it want to be in the market: a small, mission-driven nonprofit or a serious financial institution driving systemic change? The answer would determine the appropriate level of risk, and therefore the right ratio. Then the organization could manage to that limit.

Even more concerning to Rossow, Root Capital didn’t have the machinery to manage to any limit with precision. Root’s investments in its systems and people hadn’t kept pace with the growth in its portfolio

and business complexity. Confirming that concern, on the day after the meeting, the Gates Foundation team discovered that Root had missed an interest payment on its loan. Root had failed to notice.

“A car essentially has four things: an accelerator, a steering wheel, windows for visibility, and a brake,” Rossow says. “Root Capital has the accelerator: the pressure to grow, the good story. They’re the industry darlings. They have the steering wheel: Willy, the team, the board. They are making good decisions for the poor, with an eye on sustainability.” What concerned Rossow was that Root had no brakes. “They had no empowered voice advocating for more rational, slower growth,” he says. “And their visibility was all rearview. They didn’t have strong enough systems to look forward and be proactive.”

As the weaknesses in Root Capital’s systems became more apparent, Rossow and the Gates Foundation went quiet. For weeks Rossow dug deeper into Root’s governance, speaking to two Root board members and a representative from its accounting firm. Then he sent what Gill calls the “iconic” email.

Rossow suggested that Root Capital faced a choice between two paths. One was to be a best-in-class nonprofit with low financial risk and a roughly three to one lending ratio. The other path was to become “an impact bank that combines higher leverage (roughly five or more times leveraged) and cross-subsidy to scale successful programs while systematically assessing new products for sustainability and inclusion in the broader portfolio.”

Rossow put the core question to Root: “Are you a nonprofit or a bank?” Root responded: “We’re both.” “Even as we said this in response to Gates, we were looking at each other here at Root, acknowledging just how hard it was to be both,” Gill recalls.

Rossow and the team at the Gates Foundation wanted to see a plan to improve Root Capital’s financial management systems, but left the details to Root. The foundation asked Root to develop a list of milestones for the next 12 to 18 months for improved financial governance and cash controls. The milestones should also distinguish between Root the nonprofit and Root the impact bank. In the meantime, Root would stay on its diet. If Root hit its own milestones, the debt-to-equity ratio would be restored to five to one. If it missed any, the ratio would be reduced further, to four to one.

The Gates Foundation and Root Capital agreed on tactical, practical steps. Fill the vice president of finance vacancy. Hire a corporate counsel. Add more banking expertise to the board. Implement new financial systems. “It was the scaffolding we needed as we worked through the larger existential questions about who Root wanted to be in the marketplace,” says Gill.

One milestone called for Root Capital to spin off its Sustainable Trade Fund, its primary lending portfolio. Separating the fund from the rest of the organization would allow Root the nonprofit to continue its philanthropic work of technical assistance, financial innovation, and industry thought leadership. Root the bank would have a structure that was much more familiar to investors. Lower expenses would enable it to become operationally self-sufficient.

As it happened, developments in the coffee market made it easier for Root Capital to stay on its diet. Coffee prices declined from their historic highs. An outbreak of coffee leaf rust diminished yields and reduced demand for loans. Rather than growing, Root’s lending business leveled year-over-year. That reduced Root’s need for additional debt; it never drew down the final \$2 million tranche of the Gates Foundation loan.

Root Capital stuck by its clients during the downturn. It remained committed to farmers and co-ops struggling with the coffee leaf rust and the plunge in commodity prices. But growth was no longer a goal in itself. The negotiations with the Gates Foundation, combined with the difficult market dynamics, caused Root to reconsider whether operational self-sufficiency, which presupposed growth, was essential to its mission after all. Not all of Root’s funders were happy with the recalculation, and some pulled out.

Over 12 months, Root Capital methodically worked its way through the milestones. In the end, Root, its board, and the Gates Foundation all agreed the timing was no longer right to spin off the Sustainable Trade Fund. The foundation waived the last milestone and restored Root’s debt-to-equity ratio to five to one.

#### CHANGE AGENT

Root Capital is still very much a nonprofit, functionally and in ethos. But it’s now a stronger financial manager too, better able to assess and manage the risk of lending to smallholder farmers in frontier markets.

Root's new business plan now speaks of "moderate" growth.

With Root Capital's disbursements in Africa more than \$47 million in 2015 and the firm on track to repay the Gates Foundation's loan, the investment itself has been a success. All told, in 2015 Root disbursed \$154 million to 277 businesses, which the lender claims generated \$1.2 billion in total revenue, the bulk of which was paid directly to agricultural producers

"It's no longer Root's goal to simply grow," says Gill. "There is a relationship between growth and ability to lead, but it need not be fast. In the end, you can't be all things to all people."

To Rossow, the question was never about Root Capital's dedication to the mission. Stronger financial controls, he felt, would enable the organization to be successful, to demonstrate the model, and to expand access to capital for smallholder farmers worldwide. Failure would undermine Root as a model for others.

"There's this tension between growth and good governance," says Rossow. "Organizations with a social mission must aim to be financially responsible. Without a financial success story, there's no social success."

Finding the right blend of toughness and love in its relationship with Root Capital was the Gates Foundation's biggest challenge. Sitting back and ignoring the breach would have been irresponsible, given the role the foundation seeks to play as a lender and as a partner to Root. Being too heavy-handed and directive risked overstepping its role. The key, in the end, was to be consistent with its goals from the start, build a strong relationship with Root, and let the organization drive the changes.

"Playing a catalytic role in driving internal change? That's more valuable than our capital," says Rossow. "We could have pulled our cash. We could have told them how to run their business. We were impressed with how seriously they took our pushback. It became a board issue. They put resources against a plan."

Gill, meanwhile, has come to appreciate the Gates Foundation's clarity and discipline. "The Gates Foundation's aim is to crowd in capital, demonstrate the model, and achieve a proof point," she says. "They pushed on us hard and at a very interesting time for our organization. I believe we are the better for it." ♦

## Eyes Wide Open

Good reasons for a bad investment in a low-cost HIV test.

BY DENNIS PRICE

**H**ere's a riddle: When is a bad investment a good idea?

In 2011, the Bill and Melinda Gates Foundation made a \$10 million loan to a biotech startup with a potential breakthrough product—and a high likelihood of financial failure. On the basis of promising scientific progress, it made another \$6 million loan a year later, with similarly low expectations of financial success. And even when the company was on the verge of insolvency in 2014, the foundation provided an additional \$356,000 to keep the lights on for two more weeks. All that was in addition to \$7 million in grant money.

In all, the Gates Foundation poured roughly \$23.5 million into Fremont, Calif.-based Zyomyx Inc., which went out of business before it ever delivered on its considerable potential for global health gains.

The reasons behind the willingness of the world's largest foundation to continue to invest in a declining company illuminate both the promise and the peril in using philanthropic dollars to back high-risk startups with the potential for significant social benefit. Mindful of the lessons from the failure of its investment in Zyomyx, the Gates Foundation team has since made 13 other program-related investments in biotech startups, totaling \$167 million.

Members of the Gates Foundation in-house investment team do not quite embrace the *en vogue* notion that failure is good. Rather, they say they knew at the time that Zyomyx had a high likelihood of financial failure without considerable additional investment by the foundation. They went ahead anyway, because the potential social impact outweighed the financial risks. As it happened, the company failed to deliver. Even the foundation's team of scientists and

investment professionals couldn't rescue a struggling company in a difficult market.

The prize worth the risk of failure was Zyomyx's HIV test. As a way to count CD4, or T-cells, in the blood, the test promised to cost a fraction of other methods for determining when to initiate antiretroviral treatment. Because Zyomyx's test did not rely on electricity or highly trained personnel, it was considered a critical link in a broader strategy to decentralize HIV treatment and expand access to treatment for tens of millions of poor people living with the disease.

The Gates Foundation's dogged effort to bring the game-changing product to market started with a loan to a company that commercial investors wouldn't touch. The \$10 million secured loan gave the foundation certain rights to the company's assets—including intellectual property rights—in case of a bankruptcy. That the march of science and a changing marketplace mean that Zyomyx's patents and processes are not so valuable to the achievement of the foundation's objectives after all only sharpens the investment's lessons.

### BLOOD TESTS

An affordable and easy-to-use HIV test had been a Gates Foundation priority as early as 2005. That year, more than 33 million people worldwide were living with HIV, more than two-thirds of them in sub-Saharan Africa.

The "cocktail" of antiretroviral therapy, or ART, has been a lifesaver for people living with AIDS. At the time, such treatment reached fewer than half of those eligible for treatment in low- and middle-income countries. World Health Organization (WHO) guidelines targeted treatment to the sickest.

Because it was difficult to assess a patient's viral load directly, doctors instead looked at the specific white blood cells the virus targeted. The most effective way to identify the progression of the disease was

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