The Real Revolution of Pay for Success: Ending 40 years of Stagnant Results for Communities

George Overholser and Caroline Whistler
Third Sector Capital Partners

Pay for Success (PFS) contracting, social impact bond financing, collective action, impact investing, human capital performance bonds–these are all fascinating and powerful ideas. But the big idea that unites them is progress.

Over the years, most sectors of the U.S economy have displayed a long and steady march of progress, where innovation builds on innovation, relentlessly driving efficiencies and effectiveness to ever-higher levels. A particularly striking example is Moore's Law, which has for 40 years correctly predicted a re-doubling of computer processing speeds and memory size every 24 months.[1] The gains we have seen in medicine, leading to a 50 percent reduction in the US death rates from coronary heart disease and childhood cancers in the last half-century,[2] are no less impressive. Even from the broadest perspective, where America's real GDP per capita has more than doubled since 1970,[3] the steady march of economic progress seems almost inexorable.

And yet, as Jon Baron, president of the Coalition For Evidence-Based Policy, pointed out in a November 29, 2012, *New York Times* op-ed, much of our social sector seems frozen in time.[4] Forty years after Lyndon Johnson declared a War on Poverty, real median incomes among the poorest 20 percent of Americans have not budged. Nor have our national test scores on math and reading.

Why has the War on Poverty gone so poorly, while Richard Nixon's War on Cancer has made steady progress? Baron's response is to point out the powerful role that rigorous evidence has played in determining which medical innovations are adopted and which are not.

This, indeed, is the *really big idea* behind PFS. Done properly, PFS will create the rigorous feedback loop we need to correctly allocate government's abundant social sector resources. We say "abundant" because government already dedicates tremendous amounts of money and talent towards addressing our most intractable social problems; vastly more money, for

1 For more information see www.mooreslaw.org.
2 Jon Baron. "Applying Evidence to Social Programs". *New York Times* "Economix" blog. November 29, 2012, available at http://economix.blogs.nytimes.com/2012/11/29/applying-evidence-to-social-programs/.
3 Catherine Mulbrandon. "Long Term Real Growth in US GDP Per Capita 1871-2009". Visualizing Economics. March 8 2011, available at http://visualizingeconomics.com/blog/2011/03/08/long-term-real-growth-in-us-gdp-per-capita-1871-2009.
4 Baron. "Applying Evidence". *New York Times* "Economix" blog.

example than all of philanthropy combined.[5] But we too often fail to direct these resources towards the innovations that work best or to redirect resources when new and better innovations come along. This is the real promise of PFS contracting: redirecting and refocusing our abundant resources, relentlessly, toward the innovations that demonstrate an ever-improving ability to deliver the results our communities need.

Big Data Is Revolutionizing the Science of Impact Evaluation

Historically, randomized control trials, virtually the only reliable and accurate way to truly measure social impact, have been multi-million dollar affairs, involving expensive survey-based ways of collecting data and disruptions to social service operations. Now, in the age of *Freakonomics* and "big data," we are able to harvest huge quantities of information from administrative databases that are a natural byproduct of running government programs and that passively "observe" social programs in action without disrupting or denying services. The presence of big data is by no means a panacea as local variation in database quality is significant and databases may not capture all types of outcomes or relevant information. Additionally, while big data can "observe" social programs in action, it has a limited ability to evaluate details of the implementation process that are also critical monitoring tools for social programs. Yet despite these limitations, quality government administrative databases are nevertheless an important enabler of significant progress in social service evaluation.

A compelling example comes from the John D. and Catherine T. MacArthur "Genius Award" winner in 2012, Raj Chetty, who was able to compile a database of teacher and classroom assignments from the 1990s for 2.5 million grade school students and to relate them to 18 million test scores.[6] Then, incredibly, for 90 percent of the students, he was able to match these data up with current tax returns. The results show compelling and rigorous evidence that superior teachers raise students' future earning power by an average of $50,000 per student. One might expect that a study like this would cost many millions to conduct. In fact, the data compilation and analysis cost less than $100,000.

Professor Jeffrey Liebman of Harvard's Kennedy School of Government has used a similar approach to arrive at comprehensive and ongoing measures of incarceration for the current Massachusetts PFS project. For decades, Massachusetts has used a state wide system called CORI, which provides law enforcement with criminal records of people whom they encounter. The great benefit of CORI is that it captures the incarceration data needed to undergird a randomized control trial. This data can be used to determine a program's impact, and therefore success payments in a PFS contract. Not only does the CORI database capture data in the same way for all people (whether in a test group or a control group), it is

5 Giving USA: The Annual Report on Philanthropy for the year 2011 (2012). Chicago: Giving USA Foundation, available at www.givingUSAreports.org.

6 Chetty, Friedman, & Rockoff. "The Long-Term Impacts of Teachers: Teacher Value-Added and Students' Outcomes in Adulthood." Cambridge: Harvard University December 2011, available at http://obs.rc.fas.harvard.edu/chetty/value_added_slides.pdf.

also ongoing. Most evaluations produce a snapshot of impact; CORI shows us a movie.

These are not isolated examples. The Coalition for Evidence Based Policy recently listed five examples of "gold standard" randomized control trials in which "study costs range from $50,000 to $300,000, with random assignment itself comprising only a small portion of this cost (between $0 and $20,000)."[7]

As the cost of conducting randomized control trials plummets, and as evaluation methods move from taking snapshots to making movies, the evidence-driven march of social sector progress becomes possible. This tremendous (actuarial) breakthrough is strengthening social science techniques to a point where they are becoming inexpensive enough and reliable enough to (literally) be bankable.

The Danger of Conflating Financing with Contracting in Social Innovation Financing

Social innovation financing is another important breakthrough. But it is wrong to conflate financing with contracting. The distinction is this: PFS contracting means providers cannot be paid until after their level of impact has been assessed. This inherently introduces significant delays in payment. If providers' balance sheets are very strong, they can self-finance the delays, essentially borrowing money from themselves. But more typically, they will need to borrow from other parties. This bridge financing is precisely what social innovation financing provides, through mechanisms such as the social impact bond (SIB). Technically, the SIB is not actually a bond, but rather a loan to finance the multi-year delays that happen between when service provision expenses are incurred and when government success payments are finally made. SIBs also take on the risk that government payments never materialize.

Outcomes-Based Contracting and Financing Are Not New Ideas

Outcomes-based contracting with government, and the financing it necessitates, have been around for a long time, just not in the social sector. A typical outcomes-based contract might involve the building of a highway. If and when the goal of building the highway is met, the government rewards the builder by sharing toll receipts, which might be high or low depending on the highway's popularity. But in the interim, the cost of building the highway is financed by investors, who earn market-rate returns on the capital they put at risk. Over time, this form of financing has developed into a multi-billion dollar project finance industry. While social outcomes are potentially more nebulous and difficult to measure than highway construction, PFS deals are not that different.

7 Coalition for Evidence-Based Policy. "Rigorous Program Evaluations on a Budget". Washington, DC: Coalition for Evidence-Based Policy March 2012, available at http://coalition4evidence.org/wp-content/uploads/2012/03/Rigorous-Program-Evaluations-on-a-Budget-March-2012.pdf.

Financing From Mainstream Investors? Yes, But Not Yet.

Just as with highways and power plants, we believe that mainstream investors will one day routinely finance PFS deals. Some particularly profitable nonprofit providers may even self-finance using their own balance sheets. But not yet. Currently, most interventions are not yet cost-effective enough to support the economics of mainstream capital markets. Nor are they proven enough for potential investors to understand the nature of the risks they present. That is why, for a period of time, the PFS industry will need to tap into below-market sources of risk capital: philanthropic donors and impact investors.

Consider the field of micro-finance. It took more than 20 years and $20 billion of combined philanthropic support and below-market impact investments to fully mature.[8] Today, the micro-finance industry is large ($39 billion in loan volume)[9] and commercially viable (one-half of the industry functions well in a for-profit mode.) Is PFS contracting on a similar path? Only time will tell, but it is worth noting how close we already may be, at least in certain subsectors.

Incarceration avoidance provides a tantalizing example. Soon, we expect to see a PFS arrangement in which: (1) a state saves money as levels of incarceration are reduced, (2) the state shares a portion of the savings in the form of PFS payments, and (3) those payments are more than enough to cover for the expense of the social intervention. In other words, projects like these already show signs of being mildly profitable.

Although these mild profits are not yet sufficient to pay a commercial market rate of return for both the equity and debt capital required to finance the project, they are large enough to provide a modest rate of interest on the debt portion of the financing. In the scenario illustrated in Table 1, we estimate a need to borrow money for three years, with an average loan balance of $4 million. Based on projected levels of social impact, the project might generate $11 million in PFS payments against a $10 million cost structure, generating a surplus of $1 million. This puts the project in a position to pay a 7 percent annual rate of interest on the debt, and to provide a return of capital, but only minimal surplus, to philanthropists who provide additional equity-like financing. This is well below market for such an unproven and risky proposition. On the other hand, for the philanthropists, the retained surplus represents gains over and above a replenishment of their original grant – a vastly better financial outcome than the 100 percent loss they generally experience when they make a donation. Still, it is not enough to attract for-profit equity investments.

But consider the "march of progress." Suppose the program becomes more efficient over time or is replaced by a succession of superior innovations. Two things happen. First, a

8 Monitor Group. "From Blueprint to Scale: The Case for Philanthropy in Impact Investing". Mumbai, India: Acumen Fund. April 2012, available at http://www.monitor.com/Portals/0/MonitorContent/imported/MonitorUnitedStates/Articles/PDFs/Monitor_From_Blueprint_to_Scale_April_2012.pdf.

9 Microfinance Information Exchange. "The MicroBanking Bulletin No. 19." Washington, DC: Microfinance Information Exchange. December 2009, available at http://www.themix.org/sites/default/files/MBB%2019%20-%20December%202009_0.pdf.

track record is established that reduces the project's perceived risk. In this case, the 7 percent interest rate no longer looks so far below market. Second, the project becomes more profitable. For example, suppose there is a 30 percent improvement in efficiency over a relatively short time period. This translates into a 30 percent increase of PFS payments (to $14.3 million) without changing the project's costs. That would generate a surplus of $4.3 million, enough to pay 10 percent interest to the lenders and still have $2.7 million of surplus left to reward the investors of equity risk capital. At this point, no one can say how many of America's social interventions are within shooting distance of becoming profitable in a PFS format.

Table 1. PFS Financing Example

	Current Economics	30% Progress on Impact
PFS Rewards	$ 11.0	$ 14.3
Project Expense	$ (10.0)	$ (10.0)
Surplus Before Cost of Debt	$ 1.0	$ 4.3
Interest Paid @ 7%	$ (0.9)	
Interest Paid @ 10%		$ (1.3)
Retained Surplus	$ 0.1	$ 3.0

Philanthropy's Role as an Interim Catalyst

PFS contracting and social innovation financing offer a particularly attractive opportunity to philanthropists, whether they are outright grant makers or impact investors who accept below-market rates of return on their loans. Either way, they have a rare opportunity to invest for a period of time and then enjoy permanent systemic change that no longer needs philanthropic support. In other words, philanthropists have a chance to truly act as catalysts.

Each issue area, whether it be recidivism, homelessness, child welfare, or another, needs its own march of progress. Some will prove to be already profitable; others will have a long distance to go. But one by one, specific interventions serving specific populations will eventually crack the impact and cost-benefit code and enter into a self-reinforcing mode of profitability and growth.

Our collective agenda should focus on harnessing the march of progress for PFS, using philanthropy to drive towards a sustainable market. Philanthropy's role is not only to support these journeys, but also to foster behaviors and interactions that will be needed to sustain PFS once philanthropy is no longer required. For example, even if a philanthropist has enough money to provide 100 percent of the financing needed for a proposed PFS

contract, it is good strategy to nevertheless recruit banks (at near market rates) into covering some portion of the financing. In this way, philanthropy can create the pathway that makes it possible to wean the system off philanthropic support. Philanthropy can also support a sustainable transformation in government transparency and data-driven decision-making by insisting on strict evidence standards and contracting disciplines as conditions to their PFS grant-making. Eventually, philanthropy may pave a march of progress all the way to self-sustaining economics and more efficient government contracting.

Changes Needed to Grow the Field

Several changes are needed to grow the field and build a mature financing market around PFS contracts:

Develop government capacity to measure outcomes through administrative databases and capture fiscal savings on an on-going (not pilot) basis. Sophisticated government databases across all issue areas will drive the ability to contract for outcomes.

Commit to impact that builds PFS contracts around meaningful outcome targets and validates them through transparent, rigorous, and independent evaluations that are cost-effective and feasible for government decision cycles. If absolute rigor is not the top priority, the march of progress will lose its way.

Avoid new recipe laws that take successful one-off pilots and, through political means, roll out the interventions based on programmatic design without keeping the outcomes evidence feedback loop intact. This would tend to refreeze the system into a "fund what once worked" mode.

Invest in scalable and spreadable innovations that have the potential to succeed not just once, but over and over again with PFS contracts.

Create openings for commercial capital to gain exposure and experience with the nascent PFS and social innovation finance field, so that over time it may become the primary financier of contracts. Of course, as government is the ultimate payer of PFS contracts, incentives for commercial capital must align with government expectations and commitments to pay.

Experiment with multiple structures to determine which intervention approaches and financing constructs enable PFS to become most effective in the long term. This includes experimentation with sole-provider versus collective action models and with varied levels of autonomous decision-making power for the intermediary.

Adhering to these principles will be difficult, and the evolution from an innovative idea to a robust market solution will take time. But the long march of progress certainly seems well worth the effort. We have a chance to break away from decades of relative stagnancy, and to transform the way government funds many of the most vital social services in this country. Not only will our taxpayers feel less burdened, but our most vulnerable communities may at long last begin to rise on the same tide that has lifted so many others to such great heights.

George Overholser is CEO and co-founder of Third Sector Capital Partners. Previously, he was a member of Capital One's founding management team and co-founder of North Hill Ventures, a Boston-based venture capital firm, before transitioning full-time to the social sector 12 years ago. An expert in finance, evaluation, and social entrepreneurship, he is a recognized leader in the emerging PFS and social innovation financing fields.

Caroline Whistler is a partner and co-founder of Third Sector Capital Partners. Previously, she worked at Nonprofit Finance Fund Capital Partners, where she developed growth capital campaigns for high-performing nonprofits and supported over $300 million in nonprofit financing.