

## Human Capital and Economic Opportunity Global Working Group



# Human Capital and Economic Opportunity Network Conference Call

### Early Childhood "Pay for Success" Social Impact Finance April 26, 2012

#### **Participants:**

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#### **Conference Call Notes**

- I. Origins of the PKSE Bonds and Early Childhood "Pay for Success" Social Impact Finance
  - a. In the Spring of 2003, Rob Dugger, Jim Heckman and Art Rolnick had conversation about areas where America needed to invest resources that would have positive rate of return
    - i. Concerned with GDP being paid for by increasing the debt. Knew this was unstable, and needed to identify areas where resources could be invested with significant positive returns. Looked at various areas and agreed on education.
  - b. Formed the Invest in Kids Working Group
    - i. Grew from 5 people to 1000 people in about 18 months
    - ii. Organized into a partnership with Pew Charitable Trust called Partnership for America's Economic Success
  - c. Focused on five areas of childhood interventions:
    - i. Microeconomics
    - ii. Macroeconomics
    - iii. Sector definition
    - iv. Financing
    - v. Advocacy
      - 1. Partnership for America's Economic Success (PAES) decided to focus on business advocacy after three years of research
        - a. Job creation, work force competitiveness
  - d. The affiliation with Pew ended this year and moved to America's Promise Alliance where this work is done in conjunction with the Kauffman Foundation
- II. Review of the Presentation: Social Impact "Pay for Success" Finance": A PKSE Bond Example

- a. State and Federal Budgets are under pressure and education is being cut at every age level
  - i. One answer to this is the "pay for success" bond program
  - ii. An area where for-profit and non-profit incentives align
- b. The PKSE captures the early differences between the return on preschool and the return on k-12 schooling
- c. PKSE Bonds provide three bottom line returns
  - i. Societal: create coalitions of business leaders who can support effective early childhood programs and shape policy
  - ii. Economic: higher third-grade reading and math scores, fewer teen pregnancies, better employment and future earnings stronger economic and per capital income growth, etc.
  - iii. Financial: competitive interest rates. First found special-education savings as percent of philanthropic investments are 100%
- III. The PKSE bonds are a kind of social impact bond
  - a. Used to pay for quality Pre-k to reduce special-education costs
  - b. In order for these bonds to be attractive, there needs to be strong state and local state philanthropic investor support
  - c. Need to have rigorous demonstrations and benefits
    - The statistical studies that underlay the savings, calibrate the contract between the social impact bond issuing organization (SIBIO) and the school systems
  - d. Bonds need to have familiar terms
    - i. The more plain vanilla the better in terms of marketability
  - e. Need good working relationship with the investment, underwriting, institutional and foundation investor sectors
- IV. Early Education Trials Show Pre-k reduces public school special-education costs
  - a. Randomized Control Trials
    - i. Abecedarian and Perry Preschool studies
  - b. Case Control Trials
    - i. Chicago Child-Parent Centers studies
    - ii. Louisiana LA 4 evaluation
  - c. Statistical Projection Trials
    - i. Pennsylvania Pre-K Counts and the Granite School District studies
  - d. These all show that quality pre-k for three and four year olds is associated with very significant reductions in special education costs when children are in k-12 public school education
    - Looks at the students in the program and based on past experience of children who have been assigned usually ends up to be around 18% based on national statistics
    - ii. The pre-k counts program are **projected** to be assigned at a 2.5% assignment rate to special-education, which is a great reduction

- iii. We need to track the graduates and confirm that these rates are materially lower than they are without the program
  - This needs to be done in each jurisdiction with various socioeconomic industry conditions that would affect specialeducation assignment rates in that area
  - 2. This is a very localized project

#### V. Program parameters

- a. Assume that the Pre-k does not reduce all assignment to special education
  - i. Rate of 70%
- b. The number of years in special education
  - i. The numbers are based on a national distribution
  - ii. When they enter they enter in the early years when public school assignment occurs
  - iii. They are assumed to be in special-education for 8-9 years
  - iv. Participation in special-education drops in high school towards the last 3 years mainly because of high school drop outs
- c. Use 5% discount rate
  - i. Higher than most social discount rates because it's more of a capital investment rather than a government program
  - ii. Not truly a venture capital (where 20% discount rates)
  - iii. Thought it was a conservative number which begins to put this in a proper risk context from an investor standpoint
- d. Mentoring
  - i. Person who goes and works with parent of child and helps them select the best preschool for their child
- e. Monitor
  - i. School readiness partnership
- f. Savings rate
  - i. Assume as they are accumulated can be reinvested at 3%
  - ii. Bond repayment is out of accumulated savings
- g. Program Related Investments (PRI)
  - i. Build this into the program
    - 1. Signaling tool
      - a. If these people are Kellogg, or Gates foundation or any foundation that is looking at these processes very carefully
      - b. The fact they might buy these indicate that the PKSE program meets basic best practices standards
- h. Bonds
  - i. 2 Tranches
    - 1. 3 yr olds

- 2. 4 vr olds
- ii. Payments in the 10<sup>th</sup> and 11<sup>th</sup> year
  - 1. Draws down the savings available for future financing rounds
  - 2. Negative cash flow is dealt with by PRI's
- i. Maximize the amount of money at each round is to max future financing
  - i. When you have philanthropic PRIs you have a situation where you have significant funds available for the next financing round
    - 1. Done present value comparisons for component
- j. In the second round even though little money for reinvestment from the first round
  - i. The amount of money needed form PKSE bonds purchasers is steadily falling
  - ii. You can see with 1-5 rounds
    - 1. The amount of money needed to be borrowed is declining, when you get to year 5 and beyond, the savings gains can finance the program entirely
- VI. Better to offer a program and do it with PRIs
  - a. This reaches sustainability very quickly
  - b. Achieves sustainability it initial 38-48 months
- VII. Uncertainty
  - a. Uncertainty associated with local studies may prove to be the case that these can be reduced from 18% to 2% but its closer to 18% to 7% so it is better to go into discussions with (7%) because its more conservative

#### Questions, Comments and Guidance

- VIII. Reductions in special-education (Lance Lochner)
  - a. Regarding Pennsylvania numbers-- do you have similar rates of special-education in Alexandria, Virginia where you are planning on moving in with this?
    - i. We do, as a preliminary matter. When we look at one program in Alexandria, where we are doing a longitudinal study and not a project study as in Pennsylvania.
    - ii. Pennsylvania actually needs to set up a PKSE bond program, would need to do a longitudinal study of the Bethlehem study and track them into the elementary schools and see if indeed the rate of special-education assignments is materially different than the assignment for other children situated in that region
  - b. The PKSE Bond paper
    - i. We describe the school district with 15,000 children who would qualify them to be in the program but state budgets restrict them to 500-600 so it could quite clearly be increased significantly

- ii. The question for Bethlehem School district is that we need to look at the other 14,000 kids not in the program and see what the assignment rate is to special-education.
- iii. It's probably 15-20 % if the pre-k count has the effectiveness that the study finds, it will be south of the 5% it would be a financially very viable program. They have to track both categories of kids that did not get any pre-k at all and establish a baseline
- c. All the savings comes from reduction in special-education, what will happen to special-education teachers who will be out of a job?
  - i. Short run considerations
  - ii. PKSE will crawl before walk and walk before run
    - 1. If you were to introduce the program, you would be adding to pre-k program by 100, and reducing number of children (15,000x18%-->number of kids assigned) from 18% to 7.5%.
    - 2. This won't affect the budget in its large dimensions at all and won't affect the budget in a material away until you run programs affecting thousands of kids
  - iii. The natural attrition that comes from teachers retiring or changing work
    - Their life purpose, they might realize, is better achieved by being solid pre-k teachers rather than special-education teachers
    - 2. Reallocate capital to earlier years, the demand for pre-k will go up and there will be positions for the special-education teachers who are quite skilled and qualify to be good preschool teachers
  - iv. Would likely take 5-8 years to happen
  - v. Thus far we have not sensed resistance
- IX. Investment standpoint (Elizabeth Groginsky, United Way)
  - a. Are there conversations around capturing up through third grade and looking at remediation across savings as well as around special-education, cost savings captured if we extend the time and the investment period?
    - i. When we are having these conversations 5-7 years from now, this is a viable strategy
    - ii. They have the potential if done properly from the beginning that they could be for early care and education what mortgages were to housing (30 year instruments)
    - iii. The time period is not so much the issue it's the "collateral"
      - 1. With PKSE Bonds the collateral walks out the door. It needs to be captured fairly quickly and should be captured within the first 24-26 months whether you have a winner.

- 2. You will know that because you will see a reduced assignment rate in kinder etc. to know if you have a viable program or not
- b. Another project is Nurse Family Partnership
  - Gains here might be very high within 12 months, you will know whether prenatal care actually results in higher healthy baby deliveries
    - 1. Lower Medicaid delivery costs
    - 2. Lower welfare costs associated with abuse and neglect
    - 3. What's exciting about this is the medical costs associated with low birth weight babies is so high, it may work effectively on this alone
      - a. Reduce agencies with which you have a contract
      - b. The government takes savings and rebates back
      - c. Involves a lot of agencies -S-Chip, criminal justice costs, lots of agencies involved and all their costs you are attempting to reduce
      - d. Structuring the rebate contract so that each agency knows how much it writes a check for to the issuer.
        - That is the toughest part of the SIB bond design it's for that reason that we picked specialeducation because it involves one agency—the school district.
        - ii. The fundamental contract is the local school district and partnership the contract specifies in careful detail that the school district will write on the check that it hands to the SBIO to service the debt
    - 4. If PKSE bonds work it should not be a problem to get state authorizes to direct agencies to work with a conception to age 3 community investors
- X. Political economy: concern that the success of a program of this type would crowd out other government spending on early childhood (Steve Durlauf)
  - a. How do you ensure that the school district/county doesn't reduce their investments in response to this existence?
  - b. Endogeneity of the youth groups calculations. Would Migration rates increase? If program takes place
  - c. They know that it increases, the minute a struggling low income parent gets a scholarship for their child to go to a quality preschool the whole outlook changes
    - i. The mentor shows up at the door and their life attitudes change and society changes its relationship with them and they might feel more

- attached to locale that get the scholarships they will look for higher paying work where they will find it
- ii. To keep them in the school district, you may have to have a contract with parents requiring them to stay. We think that a rebate should go to the programs that provide these services, they need to go back to the capital partnerships that finance them in the first place.
- iii. If not you will need to set up the rebate programs in large counties where the migration is low enough
- iv. You will increase the productivity of the parents.
  - 1. Another benefit that should be calculated is the parental involvement from age three on probably means that grade retention will drop significantly

#### XI. State legislature

- a. We need to learn how to structure a state legislation to reduce the probability the county cuts back on similar services and the net benefit situation is that you haven't reduce social welfare costs at all in the community
  - i. Will the county cut back and the net result be that you haven't affected savings in the community at all and you haven't reduced costs at all in the community
- b. There would have to be some netting out and the result was that the benefit reduced spending on child and abuse expenditure was not attained. You would have to have something that prevents that in the contract or the state law.
- XII. The issue of gathering evidence on impacts (Orazio Attanasio)
  - a. The idea lives on the ability to capture the returns that are supposed to materialize
  - b. Crucial to have sound statistical evidence of where these returns are
  - c. Would be useful to have a concrete intervention
    - i. Should do a small RCT
      - ii. Measureable effects, once you think of the program at scale those effects can be very different because it becomes harder to run a program at that scale
        - 1. Migration
        - 2. Crowding
  - d. How to gather evidence on impacts?
    - i. Data
      - 1. Find in Northern Virginia that as a result of NCLB most children into kindergarten are given an entrance interview
        - a. Detail about previous health and socioeconomic circumstances
          - b. Benchmark interview set of results

- i. Where kid stands in an economic sense
- ii. The information is kept in the school on a year by year basis
- e. How does the assignment of kids to this program work?
  - i. Children selected at random into the child and family network centers, there are not enough slots for those qualified and wanting to go
  - ii. There are thousands of applicants and they can only accept a hundred or so at a time
    - 1. Applicants are children of motivated parents
    - 2. Suspect that parents that didn't apply are not motivated and did not know.
      - a. Parental involvement matters so much, we suspect strongly that in addition to looking at kids accepted into the program, there is no material difference to those that did and did not get accepted
        - i. Separate study
      - b. If you expand the slots by 100 a year (which is quite significant) you will be affecting the communities for which these children come
        - The mentors come into the communities and meet with families and more than likely the parents will talk
        - ii. They will find out what books are reading, activities, diet, etc. this will affect the quality of parenting by kids who are not in the program
          - 1. This should be monitored also
        - iii. One of the experts in special education is pointing to this demonstration effect is why special-education rates are coming down as a result of cumulative effects of broad range programs that are available
- XIII. Clarify on decreasing expenditures of school district and changes in revenue from state or federal sources
  - a. The money included in the PKSE Bonds
    - i. State public school budgeted spending
    - ii. Federal statute has a maintenance of effort statute (MOE)
      - Only under special circumstances could you reduce the money they are spending from one year to the next
      - 2. Argument is that the federal dollars would still be spent and you couldn't reduce the amount of money that the district receives.

- 3. There are permissions that indeed this is happening and their maintenance of effort could be reduced
- iii. Have not taken any federal money into account
  - Problem that they have been told by DOE, they will take up the question of granting waivers for school interventions which is a way they can reduce effort under IDEA part B
- b. If you have multiple agencies you need multiple contracts
  - i. Spinal cord of a SIB operation is the contract
    - 1. If you can't write the contract, you cannot have a program
    - 2. There are hundreds of programs with high economic returns, and there are few programs which you can build a contract and get the government to sign it.
    - 3. Needs to be written so that TO THE PENNY you have the correct amount of money on the check
  - ii. Look for program who have 1-3 agencies, if you have multiple agencies you have increased the difficulty of creating this program
    - Perhaps years from now, you can start to bundle but for now getting people to buy bonds or getting loans based on a contract with multiple agencies could be very difficult
- XIV. Regulatory Framework for Bonds
  - a. State could have a federal statue or agency that gives a good housekeeping seal
  - b. Needs to be secured by contract that garners the reduction in costs
    - i. Reductions need to be defined by clarity
      - 1. Paid to the issuer and the issuer uses that money to service the debt
  - c. If non-profits are issuing debts through an agency and the agency is the debtor, as the ultimate security we are talking about a standard municipal bond issuance
    - i. A public finance problem
  - d. State law might have provisions that might describe provisional partnerships or set up an agency to get bonds approved
    - i. Ultimate repayment is the responsibility of the capital partnership and not of the government