Growth For Good
Marketplace of social impact

Brown Bag Lunch Session

at the Bridgespan Group San Francisco

Seung-chul Seo

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Problem definition

Social organizations	• Social organizations that successfully prove their business model's feasibility and start scaling their operations face with the **capital gap between highly constrained funding from philanthropic sources and commercial debt and equity financing**
Social investors	• Increasing number of social investors are becoming interested in maximizing social impact of their dollars spent, but there is **no established objective way to measure social impact** that can guide their investment decisions
End clients /Public	• There are very limited mechanisms to ensure **public accountability** of social organizations, through which the voices of end clients and other stakeholders are incorporated into the collective decision of prioritization and resource allocation

The social sector suffers from fragmentation, inefficiency and weak accountability due to lack of an effective social capital marketplace, which helps resources to be channeled to uses that produce the highest value

Competitive analysis

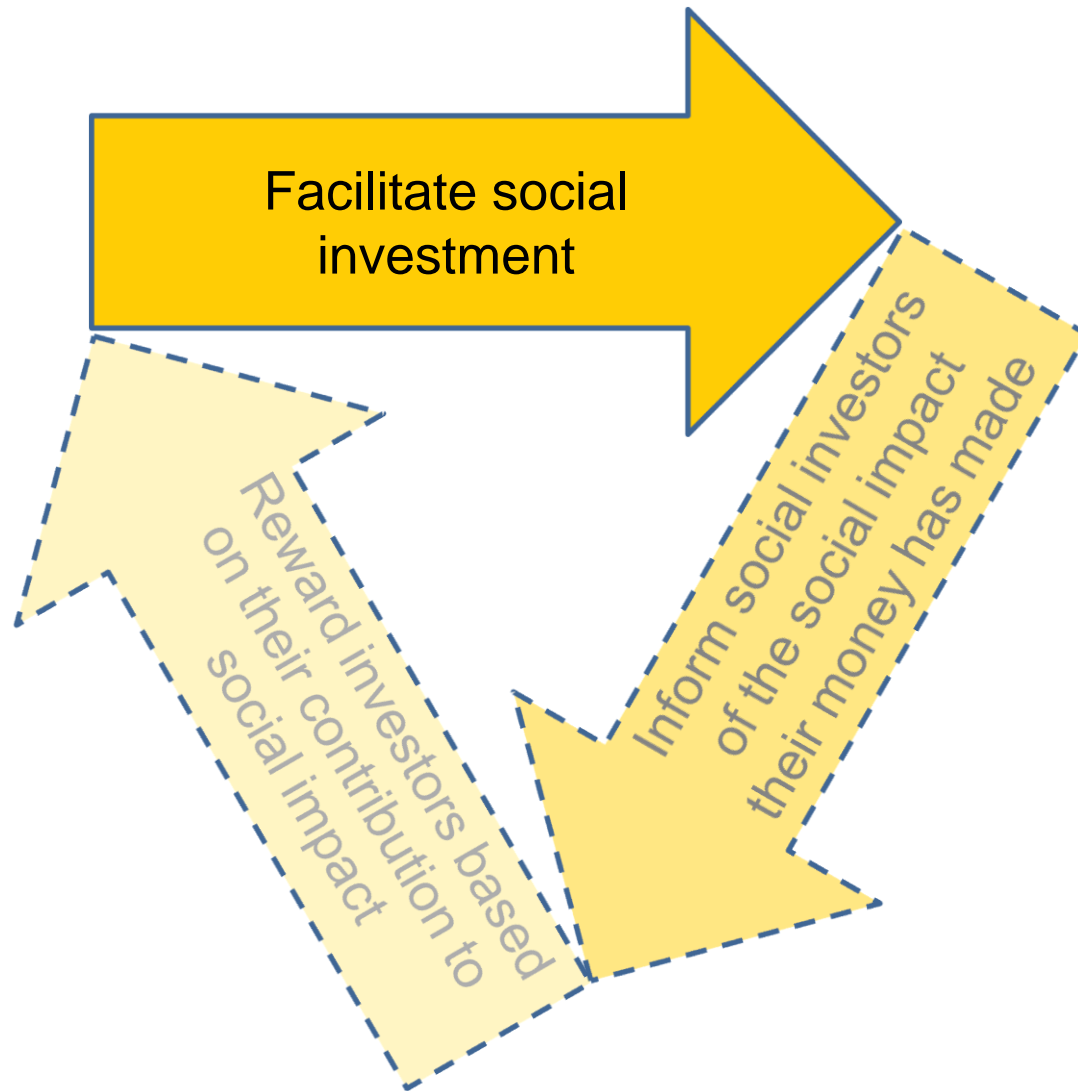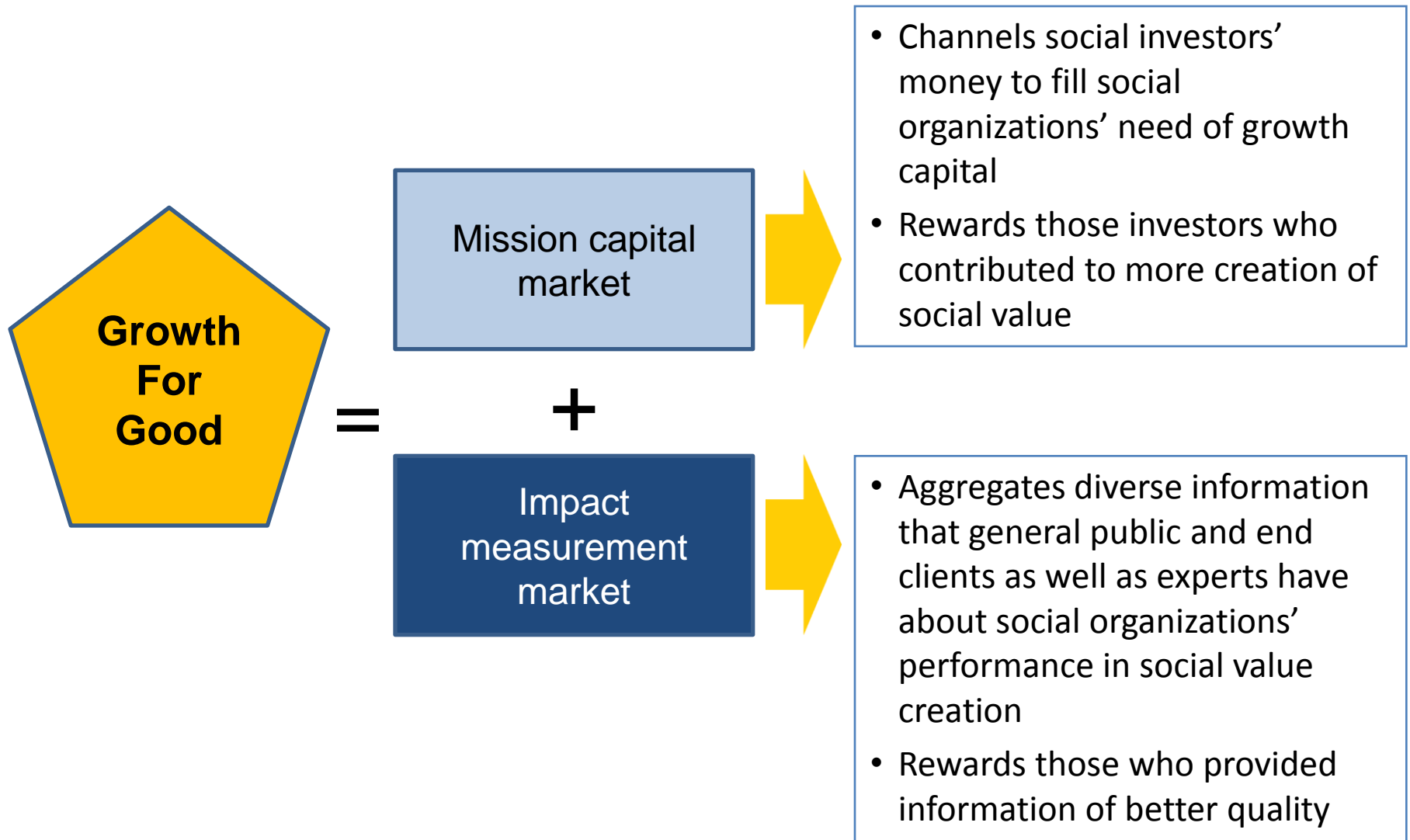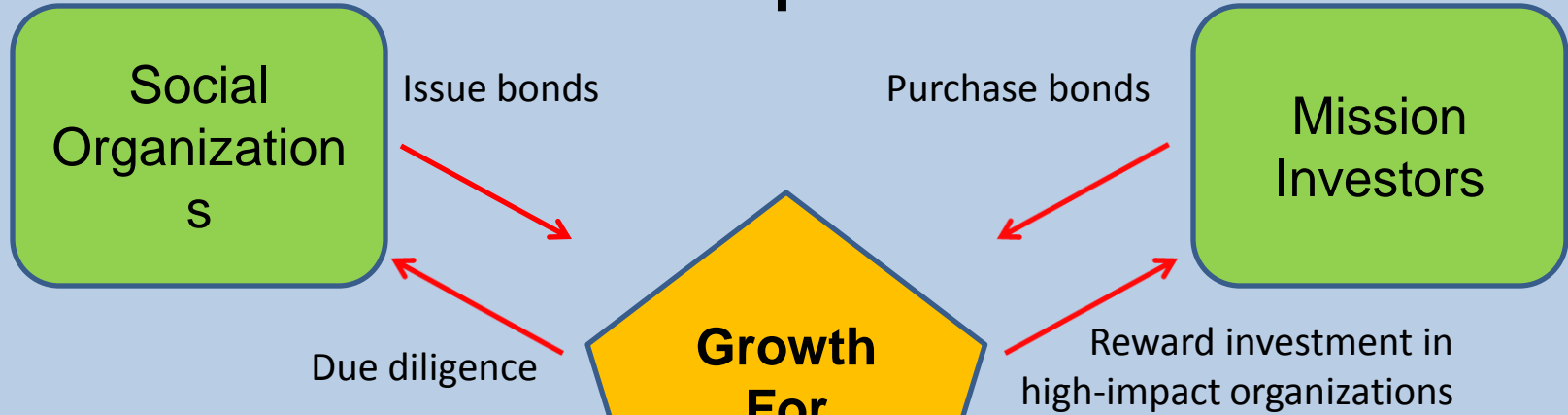|	Philanthropic donation platforms & intermediaries	Blended value investment platforms & intermediaries
Examples		
Existing gaps & limitations	• Mostly program/project specific funding that can't be used by social organizations as **growth capital** • High transaction cost due to **weak systematic valuation standard** that allows "apple-to-apple" comparison • Insufficient information on **monitoring and evaluation of results** • Lack of an adequate mechanism to retain and reinforce **participants' incentives** • Incapable of reflecting **views of end clients/the public** in collective decision of prioritization and resource allocation	• **Weak systematic valuation standard** that allows investors to make a objective decision to accept a lower-than-market rate financial return in exchange for a high social return • **Insufficient information on monitoring and evaluation of social return** • **Vague definition** of social business • High transaction cost due to **poor liquidity** • A separate platform may banish viable social businesses to the financial "wilderness" • The restrictions against speculation and the possibilities of gaining control are not conducive to vibrant financial market

Incomplete cycle

Facilitate social investment

Inform social investors of the social impact their money has made

Reward investors based on their contribution to social impact

Growth For Good: Two key components

Growth For Good = **Mission capital market** + **Impact measurement market**

Mission capital market
- Channels social investors' money to fill social organizations' need of growth capital
- Rewards those investors who contributed to more creation of social value

Impact measurement market
- Aggregates diverse information that general public and end clients as well as experts have about social organizations' performance in social value creation
- Rewards those who provided information of better quality

Growth For Good: Basic concept

Mission capital market

Social Organizations

Issue bonds

Purchase bonds

Mission Investors

Growth For Good

Due diligence

Reward investment in high-impact organizations

Give credit

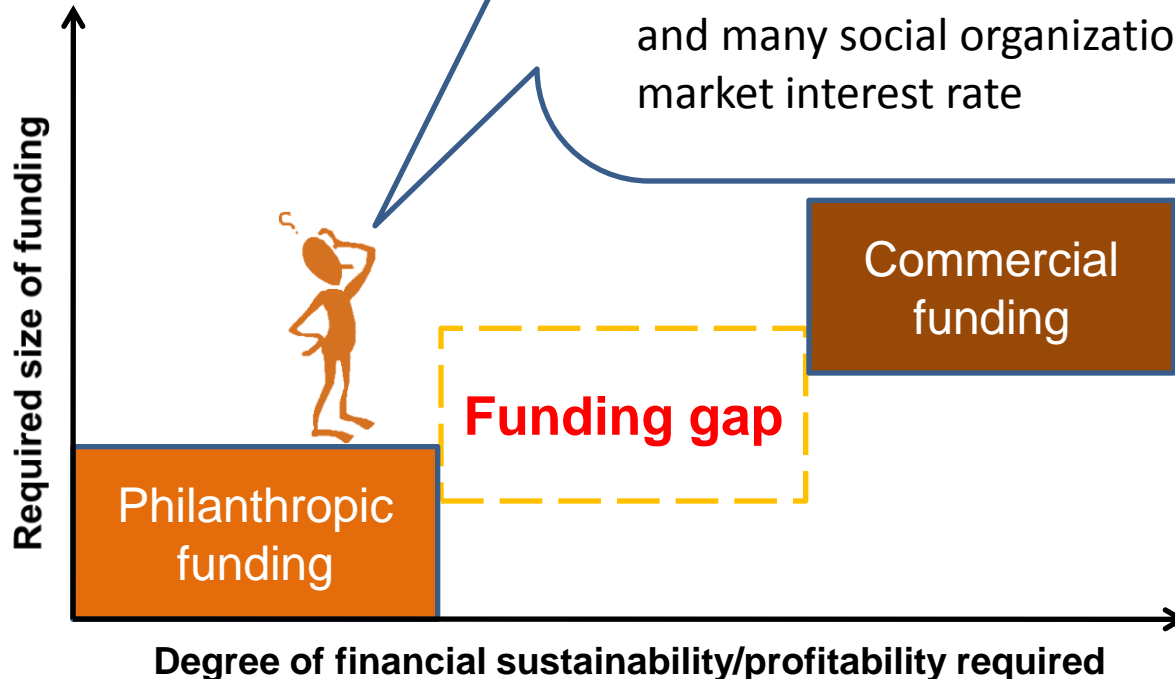Information on social organizations' impact

Prediction Contract Traders

Impact measurement market

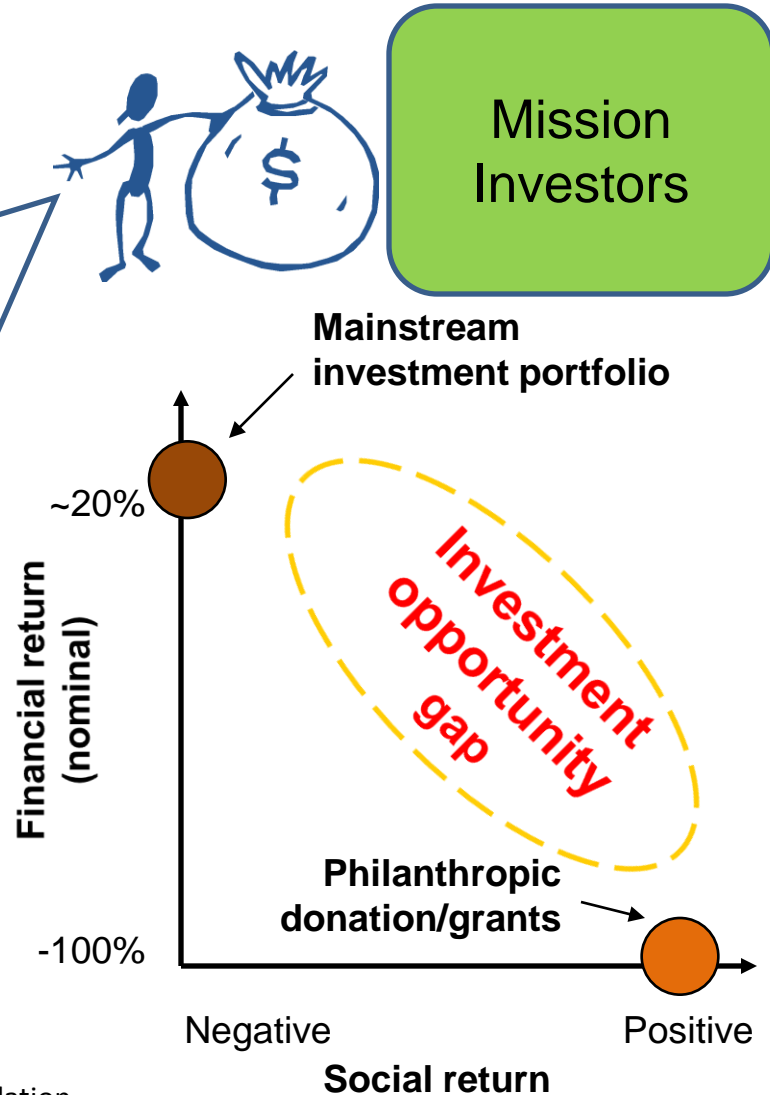# Social organizations need growth capital

Social Organizations

- Social organizations with a successful programs need not only expand their services but need to invest in more staff and facilities
- Most foundations and donors don't like this "overhead" and they prefer that their money goes to programs only
- The mainstream financial market is strict in terms and many social organizations can't afford the market interest rate

Required size of funding

Commercial funding

Funding gap

Philanthropic funding

Degree of financial sustainability/profitability required

Mission investors want to make sure their money is used for the best effect

- Growing number of donors are dissatisfied with simply giving their money away without knowing if it actually produces desired social impact

- Investors are increasingly interested in making social impact with their money instead of maximizing financial return

- There is no way for donors/investors to track how much difference their money contributed to make
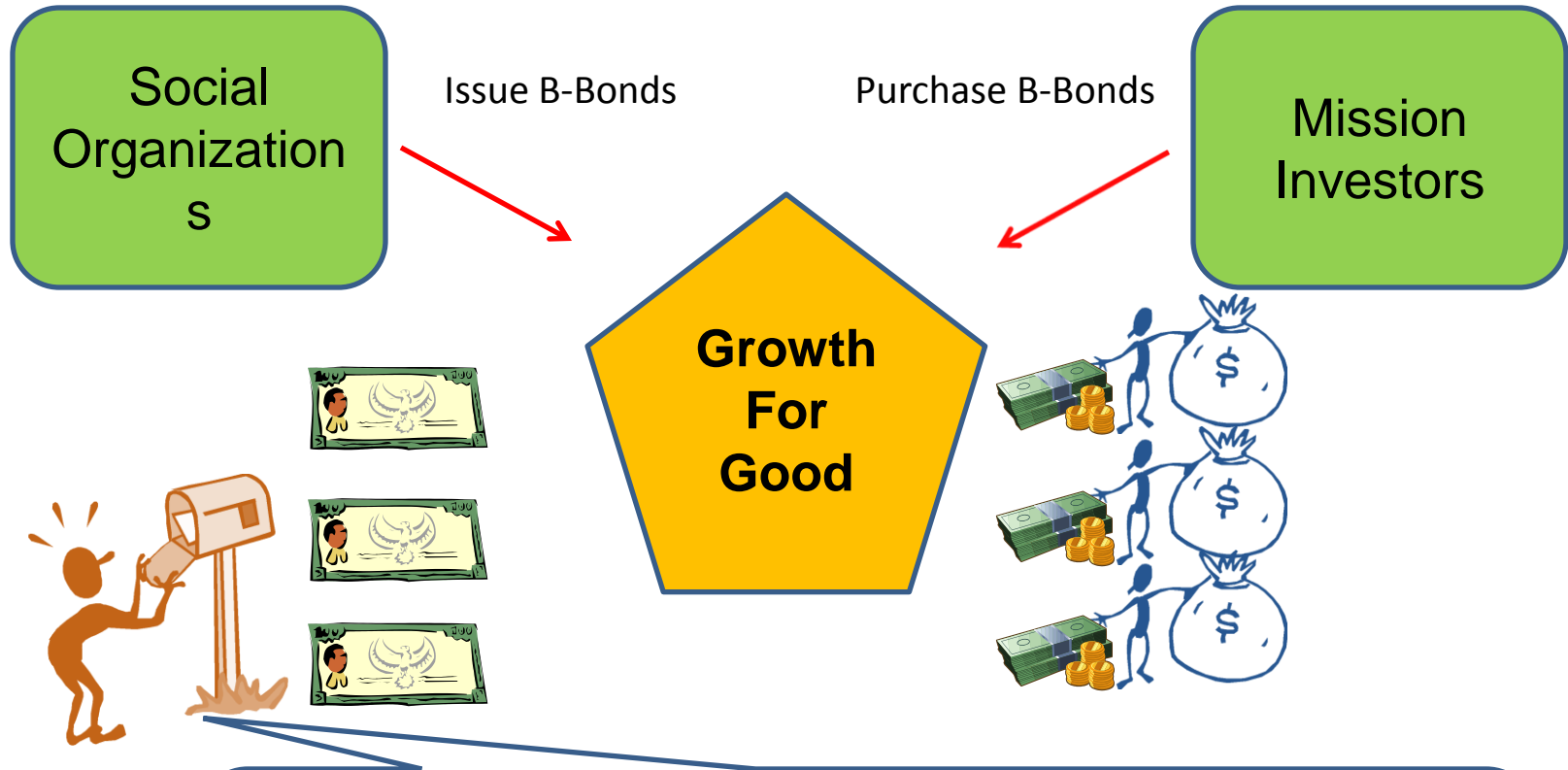
Mission Investors

Mainstream investment portfolio

~20%

Financial return (nominal)

Investment opportunity gap

-100%

Philanthropic donation/grants

Negative   Positive

Social return

Adopted from the presentation by Antony Bugg-Levine, Rockefeller Foundation

Mission capital market fills the gaps

Social Organizations

Issue B-Bonds

Purchase B-Bonds

Mission Investors

Growth For Good

Through the Growth For Good, social organizations can raise capital by selling **"B-Bonds"** to investors who care about the organizations' mission and who prefer to hold them accountable for their company's performance in terms of social impact

What is B-Bond?

B-Bond = Beneficial Bond

Blended value

- B-Bond is a debt instrument but the incentive to own it is "for-benefit", that is hybrid of for-profit and non-profit values, hence the name
- B-Bond is issued at par value (no discount) and yields no monetary interest
- Compared to a regular donation, this sum of money is **recyclable** since the investor retains an option to get the principal back at maturity

Impact-based rewards

- Every month, the B-Bond will pay an investor a virtual coupon, which the GFG calls the Social Benefit Coupon or "B-Coupon" (unit= B)
- Amount of each B-Coupon payment is variable and linked to the forecasted future performance of respective organizations*
- B-Coupon does not have any monetary value but only has a reputational value that **recognizes those who made intelligent investment in better-performing social organizations**

Patient capital

- Every year, a B-Bond holder can choose whether he wants to extend B-Bond's maturity by one year, based on his satisfaction with the organization's performance
- If an investor does not want to keep his money in this organization, he can choose not to extend the B-Bond maturity
- With this "rolling term" feature, the actual term of the B-Bond can far exceed the original term, which emulates the perpetual nature of a donation and **incentivizes social organizations to keep investors happy by performing well**

* Measured by monthly average price of the organization's prediction contract in the impact measurement market
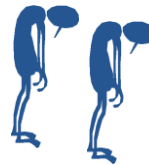
Why should anyone care about B-Coupon?

Social Organizations

Purchase B-Bonds

Mission Investors

Growth For Good

Reward investment in high-impact organizations

"Fast Company" Ranking of Top 100 Mission Investors

1) Tara Johnson (B50,320)
2) Laura Gibson (B49,640)
3) …
4) …
5) …
•
•
100) Eric Godfrey (B1,800)

2 Mission investors who are not happy with their organization's performance will let the B-Bond mature on schedule and reinvest their money in B-Bonds of other organizations that they believe are worthier of their money
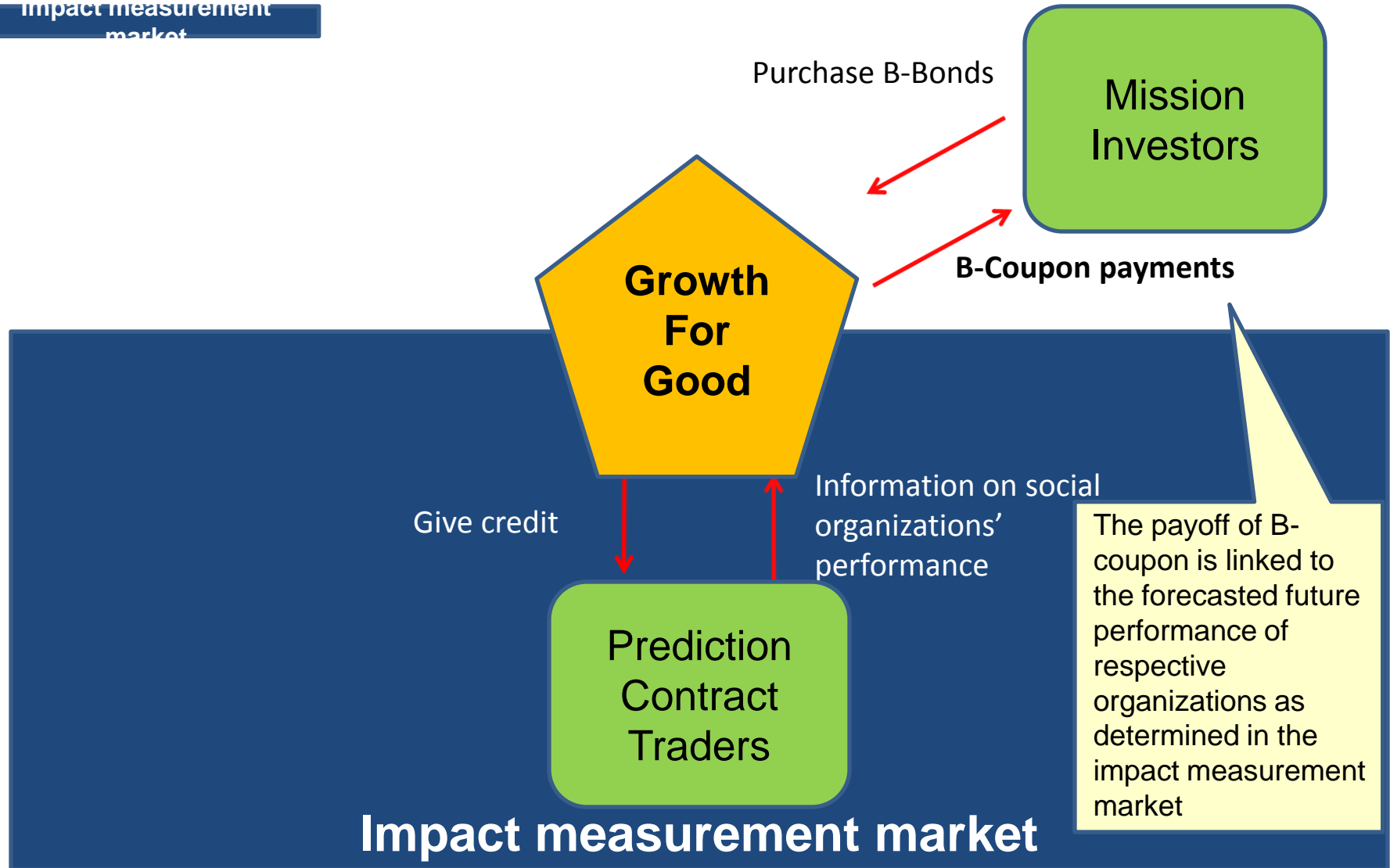
1 GFG conducts promotions, in which top mission investors are regularly given wide public recognition (through publication of ranking, awards events, media coverage etc.) in order to make mission investors associate the accumulation of B-Coupon with status value

GFG ties B-Coupon to social organizations' performance

Purchase B-Bonds

Mission Investors

Growth For Good

B-Coupon payments

Give credit

Information on social organizations' performance

Prediction Contract Traders

The payoff of B-coupon is linked to the forecasted future performance of respective organizations as determined in the impact measurement market

Impact measurement market

Why bother measuring social impact?

Impact measurement market

"How can we do the most good for the greatest number with the resources we have?

*After seeing the problem and finding an approach, (you have) to **measure the impact** of your work and share your successes and failures.*

You can't get people excited unless you can help them see and feel the impact. And how you do that – is a complex question."

Bill Gates, Bill and Melinda Gates Foundation

*"(The social online markets like Kiva and GlobalGiving) could indeed make a significant contribution to just, sustainable development, but they will do so only if they address **the fatal flaw at the heart of our profession – the generally inadequate informational basis for understanding the difference we make**"*

David Bonbright, Keystone

Existing approaches to social impact valuation are costly and lack comparability

Impact measurement market

TEACHFORAMERICA   jumpstart
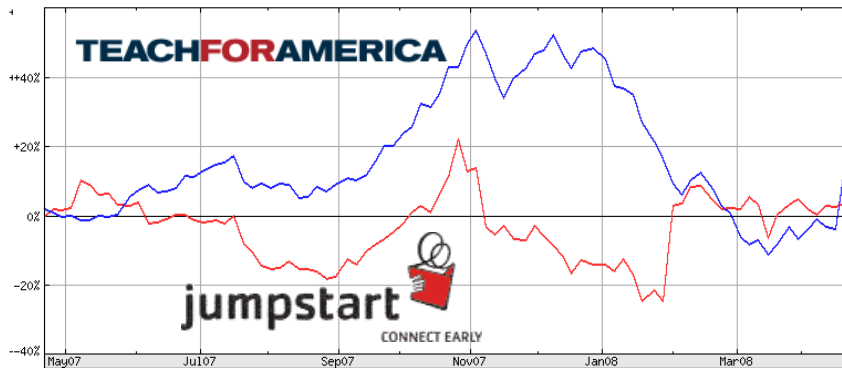CONNECT EARLY

Problems with the existing methodologies

- Not comparable
  - Lack of common unit/standard
  - Context specific
  - Subjective judgment
- Costly
  - Information collection
  - Information processing & analysis
  - Evaluation

Market-based approach seems to have several unique advantages

Impact measurement market

Stock markets essentially work as information aggregation mechanisms to value performance of for-profit businesses

→ **Can't we do the same with social impact valuation?**

Potential advantages

- Capable of aggregating diverse qualitative information
- Capable of incorporating subjective judgment and multiple viewpoints
- Responsive to new information
- Can incentivize traders to collect and evaluate information
- Scalable

Application of prediction market

Pros

- Responsive to new information
- Capable of forward-looking valuation
- Can incentivize information collection
- Architectural flexibility
  - Upward compatibility to diverse new metrics/techniques
  - Capability to process mixture of subjective/objective judgments and quantitative/qualitative data
  - Potential for public participation and enhanced accountability

Cons

- Accuracy and relevance is only as good as the metrics used for prediction and verification
- Costs to organize
  - Need of liquidity
  - IT resources, etc.

Recap: GFG's Two key components

Mission capital market

- GFG facilitates social organizations to raise equity-like capital, by issuing **"beneficial bond (B-Bond)"** instead of chasing after donation. This is deeply subordinated, long-term rolling debt security without interest or discount. Unlike grant, which is main funding vehicle for social organizations, the equity-like capital comes with no restriction of use and thus can be used as a growth capital

- Social investors can finance these loans through GFG and will be awarded the **"social benefit coupon (B-Coupon)"**, which has no real monetary value. B-Coupon payout level that individual mission investors receive for each B-Bond they own is linked to the respective organizations' performance, which is indicated by impact measurement market price.

Impact measurement market

- GFG utilizes a prediction market called "impact measurement market" as valuation mechanism.

- GFG will collaborate with a selected group of valuation experts and annually announce the evaluation rating of social organizations in the US by program areas (e.g. youth tutoring, employment training).

- Interested individuals, including practitioners, end clients and community members, can participate in the impact measurement market and trade **"prediction contract"** according to their predictions, based on public and private information available, about which organization will get high rating.

- Prediction contract traders purchase prediction contracts with **"Social Value Credit "**, which has no real monetary value, and will be rewarded according to accuracy of their prediction

Theory of change

Growth For Good

Social organizations can raise sufficient capital to invest on capacity improvement

End clients receive better service

Public trust grows as the voices of key stakeholders are reflected in important decisions

Mission investors have confidence that their money is spent where it can make the most impact

More resources are attracted to social investment

Appendix

- B-Bond investment

- Impact measurement market

- Basic framework for the B-Coupon calculation

- Impact measurement market experiment

B-Bond investment: An example

B-Bond Structure
Par Value: $1,000
Original Term: 5 years
Interest Rate: 0.00%
Coupon: Variable (Linked to organization's performance)
Special Provision: Annual maturity extension option

Example: Investor purchases $10,000 in B-Bonds in Jan 2008. Original principal maturity date is Jan 2013.

Timing	Satisfaction with company's performance	Extend maturity?	Principal due date	Total B-Coupon payment* in the year	Principal Due
2008 EOY	Negative	No	Jan 2013	B55.68	$0.00
2009 EOY	Positive	Yes	Jan 2014	B60.25	$0.00
2010 EOY	Positive	Yes	Jan 2015	B65.34	$0.00
2011 EOY	Negative	No	Jan 2015	B64.00	$0.00
2012 EOY	Negative	No	Jan 2015	B63.57	$0.00
2013 EOY	Negative	No	Jan 2015	B57.32	$0.00
2014 EOY	Positive	Yes	Jan 2016	B58.69	$0.00
2015 EOY	Negative	No	Jan 2016	B60.24	$0.00
Jan 2016	--	--	Jan 2016	--	$10,000.00

* Linked to the forecasted future performance of respective organizations, which is measured by monthly average price of the organization's prediction contract in the impact measurement market

Callability and liquidity of B-Bond

Mission capital market

	Callability	Liquidity
Phase 1 (CDLF, Non-security)	• B-Bonds give the issuing social organizations the right to repay the bond anytime before the maturity date • No transaction fee is charged for early repayment • Repaid amount will be transferred to bad loan allowance and not be returned to mission investors until the maturity date	• B-Bond holders may request the early redemption at par minus transaction fee before the maturity date • Early redemption can take place only when there is a counterpart who would buy secondhand B-Bonds on spot • Mission investors who exercise early redemption option are charged 10% of par value as transaction fee • Mission investors who purchase secondhand B-Bonds on spot are charged no extra fee
Phase 2 (SEC-registered broker, SEC-regulated security)	• Social organizations can buy back the B-Bonds from mission investors on secondary market at any time	• Mission investors trade secondhand B-Bonds on secondary market at any time • The maturity of a B-Bond will be reset to the original 5-year term when traded on secondary market

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- Impact measurement market experiment

GFG organizes luminary panel that rates social organizations' performance

We are a panel of luminaries on education.

We have decades of experience as teachers, superintendents, consultants, academics, running districts, working on the State and National levels and know how to measure the effectiveness of after-school programs.

We have been asked by GFG to "rate" different after-school organizations and determine how well they perform in terms of social impact.

We will consider a sample of organizations providing after-school service and rate them on a 1-5 star basis, 5 being the highest possible rating.

Organizations volunteer for this.

Our ratings are as follows for Companies X, Y, and Z:

Company X = ★ ★ ★
Company Y = ★ ★
Company Z = ★ ★ ★ ★ ★

3 1 2
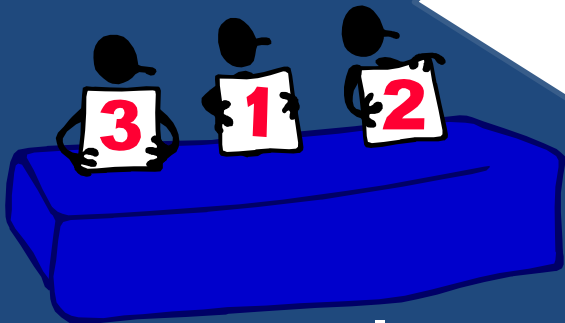
Impact measurement market

GFG sets up a "prediction market"

1. GFG issues **"prediction contracts "**
2. Holders of prediction contracts receive payoff every year when rating panel's evaluation is announced
3. Amount of payoff to a prediction contract is according to the star rating of respective organizations
4. Payoff is in **Social Valuation Credit (unit=C)**, which has no monetary value but can be used to purchase more prediction contracts

Growth For Good

Payoff Table

Star Rating:	Payoff:
★ ★ ★ ★ ★	C100
★ ★ ★ ★	C80
★ ★ ★	C60
★ ★	C40
★	C20

Payoff:

Company X = ★ ★ ★ C60

Company Y = ★ ★ C40

Company Z = ★ ★ ★ ★ ★ C100

Prediction contract traders try to predict rating

I am interested in issues of education and have some information about organizations providing after-school service.

When I signed up to GFG's impact measurement market, I got a certain amount of Social Valuation Credit that has no monetary value.

Based on my information, I believe Company X will get the highest rate of 5 stars in rating panel's evaluation this year.

Last year the company was rated 3 stars and its prediction contract is currently traded at C65 per contract.

I should buy Company X's prediction contract because I believe it will give me the payoff of C100 per contract in the end of year!

I am holding Company X's prediction contracts.

Based on my information, I believe Company X's rate this year will be 2 stars.

Because I believe the payoff in the end of year will be lower than the current market price, **I want to sell Company X's prediction contracts!**

Prediction Contract Traders

Price formulation & information quality

Impact measurement market

| Prediction contract traders have varying opinions on the true valuation of a company and will engage in a transaction if for any "ask" price there is a "bid" price to match it | At the end of each trading day, the market settles at an "equilibrium price" between supply and demand for each company's prediction contract value | As new information becomes available, the impact measurement market price changes to reflect this information | Traders who buy low and sell high are rewarded for improving the quality of market's impact measurement, while those who buy high and sell low are penalized for degrading it |
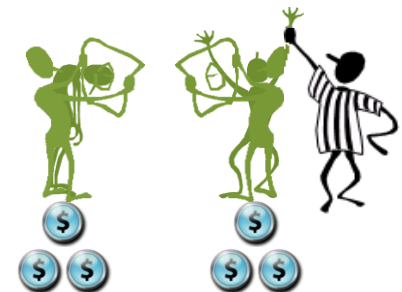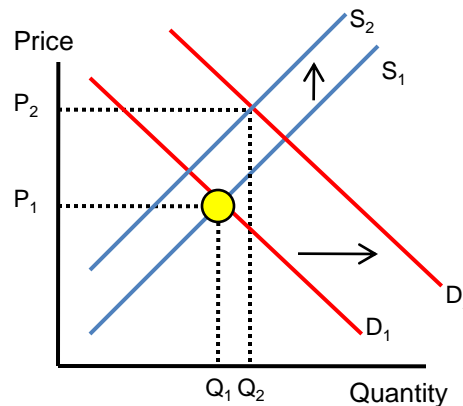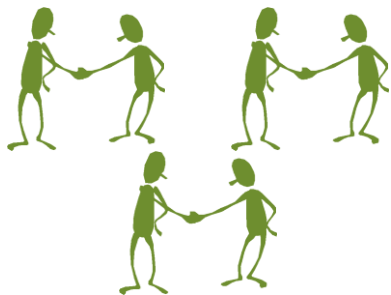
Incentivizing accumulation of SVC

Impact measurement market

Social Organizations

1 GFG conducts promotions, in which top prediction contract traders are regularly given wide public recognition (through publication of ranking, awards events, media coverage etc.) in order to make prediction contract traders associate the accumulation of SVC with status value

Growth For Good

"Forbes" Ranking of Top 100 Best Prediction Contract Traders

1) Tara Johnson (C50,320)
2) Laura Gibson (C49,640)
3) …
4) …
5) …
•
•
100) Eric Godfrey (C1,800)

Payoff

Trade prediction contracts

2 Prediction contract traders will try to find more information about social organizations to improve their trading performance by buying undervalued prediction contracts and selling overvalued ones

Prediction Contract Traders

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Alternative approach to Social Benefit Valuation

The proposed approach will:

- Acknowledge that both objective and perceptual measures are needed to fully capture the social benefit

- Use the Structural Equation Modeling (SEM) technique to integrate various stake holders' consideration and observed data

- Allow a large number of social organizations to be evaluated

  - Both objective and perceptual measures are collected for small sample organizations to understand the causal relationships between variables

  - The induced model of causal relationships can be used to estimate the social benefit of larger number organizations for which only objective measures are collected

Conceptual Model of Social Benefit Valuation
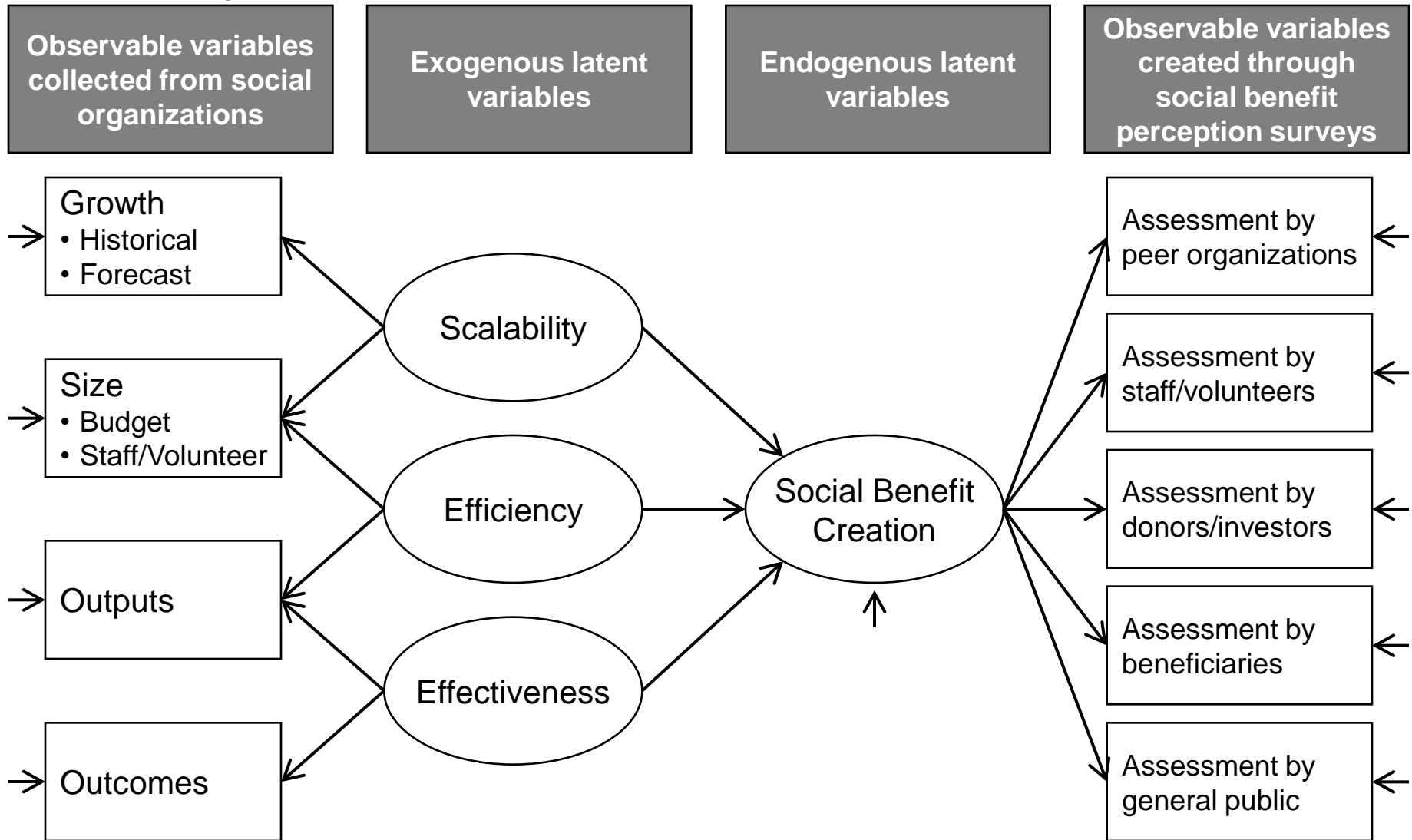
Note: "Outputs" = The amount of work a social organization does (e.g. # of students participating in the program)
"Outcomes" = The results of the social organization's work (e.g. # of graduating students placed in livable-wage jobs)
"Efficiency" = Outputs / Total costs
"Effectiveness" = Outcomes / Outputs

Basic assumptions drawn from MIMNOE

Multidimensional Integrated Model of Nonprofit Organizational Effectiveness (MIMNOE)*

- **Principle 1:** There are multiple dimensions of effectiveness, with the primary dimensions being management and program effectiveness
- **Principle 2:** Management effectiveness and program effectiveness are further composed of two subdimensions, (a) capacity (processes and structures) and (b) outcomes
- **Principle 3:** Both objective and perceptual measures are needed to fully capture the dimensions of effectiveness
- **Principle 4:** A model of organizational effectiveness should allow for organizational and programmatic variations within a systemic structure
- **Principle 5:** The analytical method used to assess nonprofit organizational effectiveness should capture multiple levels of analysis and model interrelationships between the dimensions of organizational effectiveness

Conceptual Model of Social Benefit Valuation

- **Assumption 1:** Social organization's potential of social benefit creation is composed of three aspects, (a) efficiency, (b) effectiveness, and (c) scalability
- **Assumption 2:** Both objective and perceptual measures are needed to fully capture the social benefit
- **Assumption 3:** A conceptual model of social benefit valuation should allow for organizational and programmatic variations within a systemic structure
- **Assumption 4:** The analytical method used to assess social benefit created by social organizations should capture multiple levels of analysis and model interrelationships between the aspects of social benefits creation

* Jessica E. Sowa, et al. (2004), "No Longer Unmeasurable? A Multidimensional Integrated Model of Nonprofit Organizational Effectiveness"

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GFG team ran an empirical experiment of Impact Measurement Market in May 2008

Company C's Price
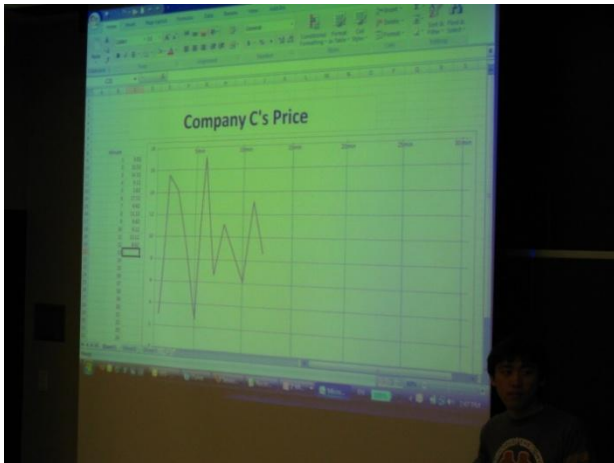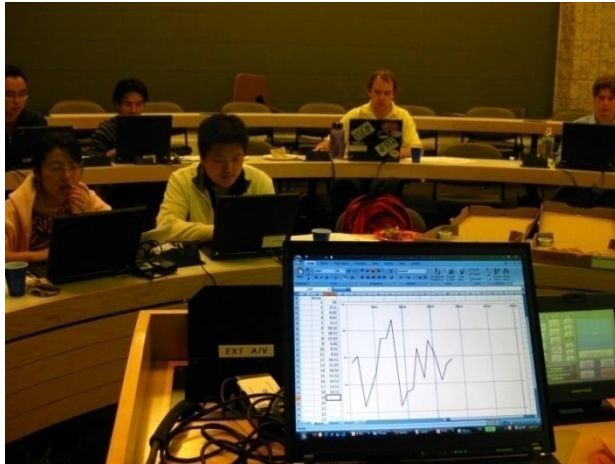
Experiment setup

- 23 Kellogg students participated as traders
    - Session I: 9 participants
    - Session II: 14 participants
- Share of 1 company is traded at each round (3 rounds per session)
    - 3 rounds per session
    - REDF's portfolio companies (employment-creating organizations targeting "difficult to employ" people from San Francisco Bay Area) were selected for the experiment
- Tested different settings to observe their impact on market's performance
    - Symmetric vs Asymmetric information distribution
    - Calculation aid tool made available vs not available
- Data source: SROI Reports, REDF

Traders were asked to focus on estimating social enterprises' "socio-economic" value REDF portfolio companies

Social enterprise

Drivers

Value creation

Economic value
Monetizable value <u>not captured</u> in the market

Social value
Value <u>not captured</u> in the market

Socio-economic value
Monetizable value that <u>is captured</u> in the market

Having greater potential for growth

Hiring more target employees

Hiring people with greater degree of dependency on public assistance programs

Generating greater improvements in wages

Reducing cost per person required to support the target employees

(+)

"Socio-economic value" defined

Socio-economic value = **Present value** of (**Projected social cost savings** + **Projected incremental tax revenues** - **Projected social operating expenses**)

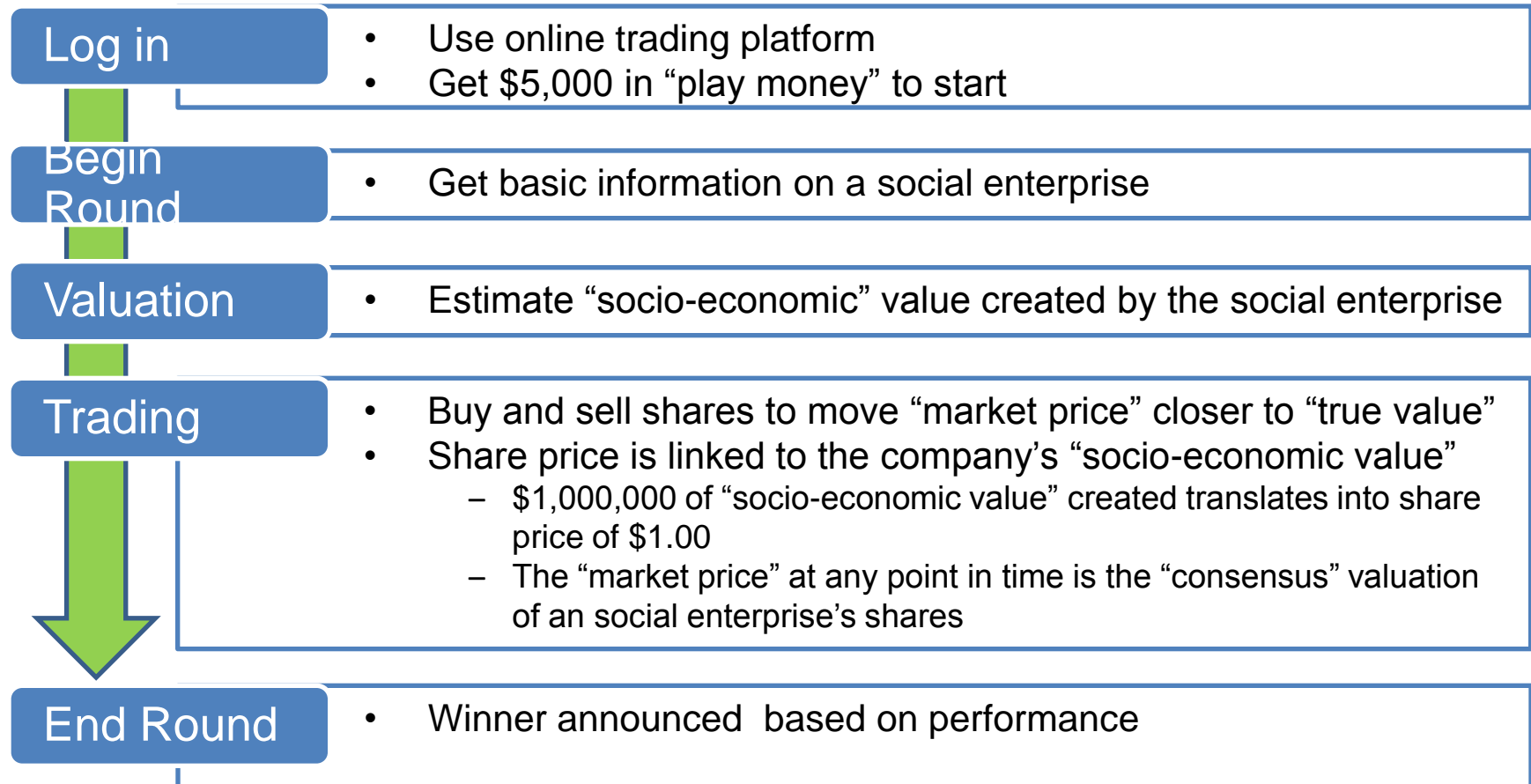| **Social cost savings**	**Incremental tax revenue**	**Social operating expenses**
• Target employees who have previously used some form of public assistance or local social services can reduce their dependence on such services after they get a job • This change represents a cost savings to federal or local governments	• Net increase in tax revenue generated by increase in target employees' income • Once employees have a job and source of income, they generate new income taxes for community coffers	• Additional expenses that a social enterprise incurs by operating with a social mission • These additional expenses include factors such as additional supervision, training and support needed or material wasted as a result of employing at-risk people

- *The data and concepts were utilized by REDF in its estimation of Social Return on Investment (SROI) for a series of portfolio companies in which it held investments as of 1999.*
- *Some of the definitions and terminology have been simplified or paraphrased in order to be most relevant to this experiment.*
- *The approach and perspectives on calculating SROI adopted in this experiment is not the official approach that REDF took, but instead represents a simplified version for academic purposes.*

Traders were given limited information and use heuristics to estimate socio-economic value

Log in
- Use online trading platform
- Get $5,000 in "play money" to start

Begin Round
- Get basic information on a social enterprise

Valuation
- Estimate "socio-economic" value created by the social enterprise

Trading
- Buy and sell shares to move "market price" closer to "true value"
- Share price is linked to the company's "socio-economic value"
    - $1,000,000 of "socio-economic value" created translates into share price of $1.00
    - The "market price" at any point in time is the "consensus" valuation of an social enterprise's shares

End Round
- Winner announced based on performance

Traders collectively reached a reasonably sound evaluation of socio-economic value

Session 1 - Einstein's Cafe

True Value: **$7.03**
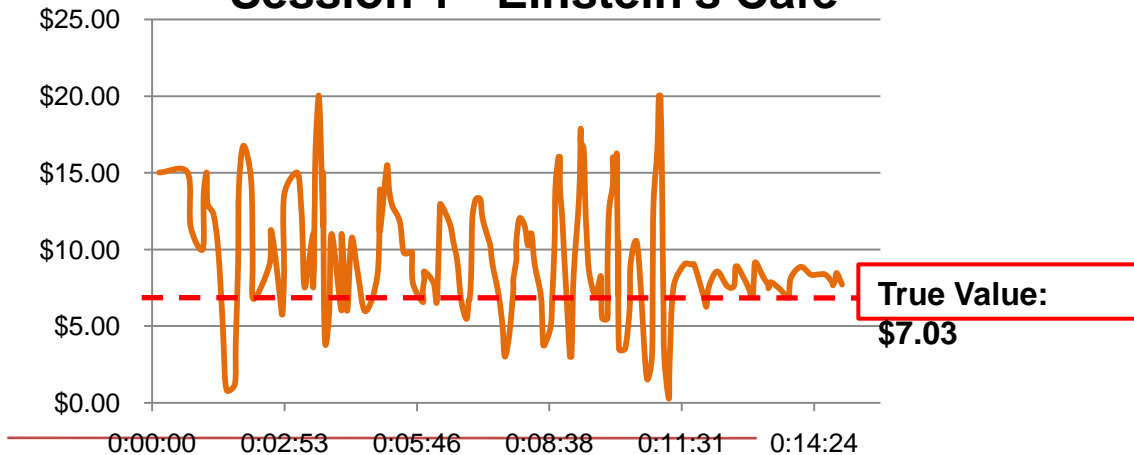
Session 2 - Rubicon
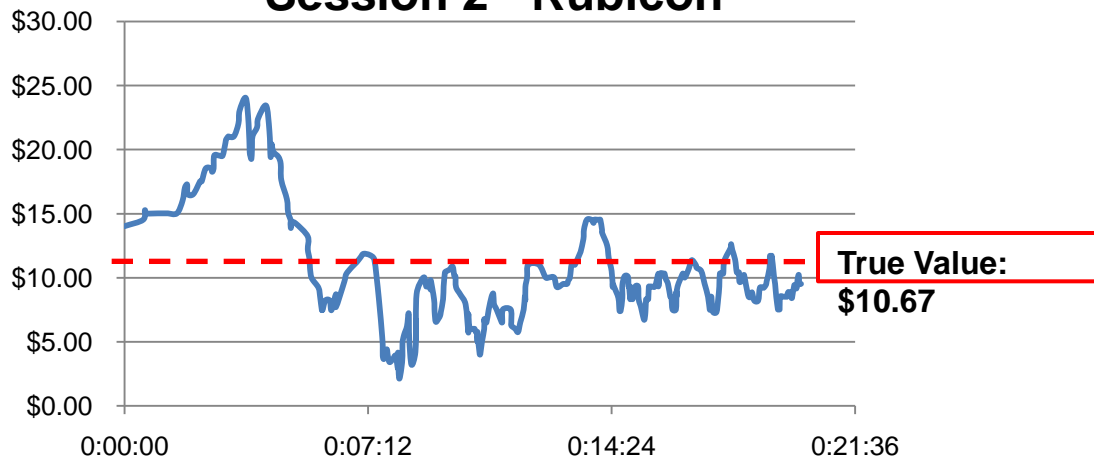
True Value: **$10.67**

Findings

- Market final price differed from the true value by +/- 35% on average
- The margin of error in 3 out of 6 cases was <+/- 11%
- Accuracy was not affected by symmetric or asymmetric information distribution