Economics for Inclusion!:
An introduction to
Research on Economy And Disability
(READ)

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June 2011
What is economics about?

• Economics is a discipline that analyzes society, market in particular, and well-being of people therein.

• Not much talking about human rights, which are usually given in economics. But can analyze and compare different societies with different levels of human rights.
Traditional economics vs modern economics

• Traditional economics (Market theory)
Traditional economics vs modern economics

- Modern economics (Game theory)
John von Neumann
John F. Nash
What game theory can show is that society is designed for the “normal”

- “normal” is a concept relative to the society. — self-reference
- E.g., height of steps is determined to accommodate “normal” people.
- Indeed, if many people were like athletes in gymnasium, then we wouldn’t have stairs but only a pole to go to “upstairs”.
- In such a society, people like me would be called people with disability (PwD)
Logic behind the necessity of Social Inclusion 1

- We need a critical mass in public arena to move the society.
Logic behind the necessity of social inclusion 2

Poor economic conditions and segregation policy of PwD may induce prejudices, which in turn prevents the society from including some people.

Inductive game theory (Kaneko and Matsui, 1999) showed:

“If people who do not know the real structure of society, then segregation leads to prejudices.”
Logic behind the necessity of social inclusion 2

They are doing OK…

Society
Logic behind the necessity of social inclusion 2

One day, a different type of person comes.

Without preparation and experiences, don’t know what to do. may justify their not including: “Well, must be useless (or harmful).” Unfortunately, this happens even if is useful (or harmless). => Prejudices emerge.
Registration system for “PwD” in Japan

Limit the number of recipients of benefits. Registration system as device to divide people between “normal” and “PwD”. “PwD” are separated as a group. Prejudices are induced against some.
Registered number of people with intellectual disability

Prejudices are real and related to economic conditions such as income

Registered number of PwID (per 10K)

Per capita Prefectural Income (1,000 yen)
Hypotheses

(1) Actual # of PwID and economic conditions
   Economic conditions $\uparrow \Rightarrow$ IQ $\uparrow$
   $\Rightarrow$ Actual # PwID $\downarrow$ $\Rightarrow$ Registered # PwID $\downarrow$

(2) Registered # of PwID and economic conditions
   Economic conditions $\uparrow$
   $\Rightarrow$ Cost from prejudices > Benefits from registration
   $\Rightarrow$ Registered # PwID $\downarrow$
Registered number of people with intellectual disability  
(per ten thousand)

<table>
<thead>
<tr>
<th></th>
<th>Severe</th>
<th>Mild</th>
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<tbody>
<tr>
<td></td>
<td>coefficient</td>
<td>t-value</td>
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<tr>
<td>Per capita prefectural income (in thousand yen)</td>
<td>-0.0033</td>
<td>-0.80</td>
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<tr>
<td>Fraction 65 and over (%)</td>
<td>1.05</td>
<td>2.43*</td>
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<td>Avg no. people per household</td>
<td>0.80</td>
<td>0.18</td>
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<tr>
<td>Net social increase rate (%)</td>
<td>-6.57</td>
<td>-1.06</td>
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<td>Rate of continuation on to colleges (%)</td>
<td>-0.11</td>
<td>-0.63</td>
</tr>
<tr>
<td>Constant</td>
<td>13.09</td>
<td>0.78</td>
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</tbody>
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** 1% significance  
* 5% significance

R²=0.54  
R²=0.57
Survey by READ

• We need statistical analysis to relate economic variables and disability variables.
• No comprehensive data
• We conducted a survey
  17 associations
  1331/2275 (=59%)
Conclusion

• Modern economics (game theory) are concerned with people and their interaction.
• Society is designed for the “normal”.
• System designed for “non-normal” induces prejudices, which is real and can be related to economic factors such as income.
• Economics can and should contribute to the understanding of such a situation and the empowerment of PwD by theoretical and statistical analysis.
Team: *Research on Economy And Disability* (READ)
Thank you!
Japan
a country of uniformity

• Minority
  Ainu: 24,000 (0.02% of the total pop)

• Immigrants
  Migrant stock (UN, 2006)
  1.6% or 28\textsuperscript{th} of 30 OECD countries
  (cf. UK: 9.1% or 14\textsuperscript{th})
System designed for “non-normal”

There are always people who are not “normal”

People with disability
Children in Nursing Institutions
Welfare Program, Medical Care

Institution
Care
Education

Society
Independent Living
Working

Barrier

READ
Working Rate by Age

資料: 厚生労働省「身体及び知的障害者就業実態調査」(平成13年)
総務省「労働力調査年報」(平成13年)

Non-disabled
Physically Disabled
Intellectually Disabled
Types of Work

People with Physical Disability

- Fulltime employment: 41%
- Self employed/Family business: 24%
- Executive officers: 11%
- Parttime employment: 9%
- Others/Unknown: 10%
- Working at facilities: 5%

People with Intellectual Disability

- Working at facilities: 54%
- Fulltime employment: 24%
- Parttime employment: 9%
- Self employed/Family business: 4%
- Others/Unknown: 9%
Monthly Income

in thousand yen

Employment
- Total: 280
- Physical: 250
- Intellectual: 120
- Mental: 151

Welfare
- Factory:
  - Total: 190
  - Physical: 120
  - Intellectual: 96
  - Mental: 81

Institution
- Total: 22
- Physical: 12
- Intellectual: 13

资料: 常用労働者全体」: 厚生労働省「毎月勤労統計調査」(平成15年11月)
「雇用」: 厚生労働省「障害者雇用実態調査」(平成15年)
「福祉工場・授産施設」: 全国社会就労センター協議会「社会就労センター実態調査」(平成12年)
Monthly Salary of Pw Intellectual Disability

Minimum wage x fulltime
(800yen x 40hrs x 4weeks=128K)
Social Security (OECD, 2007)
What can and should economics do to reduce stigma and empower PwD?

E.g., Some people say Basic Income helps to reduce stigma since it’s universal. But, so far only ideas without theory nor simulation, and therefore cannot tell whether it’s feasible and effective or not. Economics can offer a theory and do statistical analysis as well as simulations.