What Will We Witness When We Seriously Try to Boost Fertility?

Normative Constraints against Universal Child Benefits

TANAKA Sigeto (Tohoku University)

1. Question

Many contemporary societies suffer from low fertility for two reasons: (1) the desired number of children has declined and stabilized at a relatively low level between 2.0 and 3.0 [1: 201–207], near replacement level fertility, and the realized fertility is below replacement level because (2) most people cannot achieve their desired number of children [2: 12–19]. If we consider these as serious problems and try to raise fertility to replacement level, what resources should we mobilize? Furthermore, what obstacles to such policies could we anticipate? This study addresses these issues by focusing on the economic aspects of the work-life balance (WLB) and universal child benefit (UCB) policies in Japan.

2. Model and analysis on WLB/UCB effects

This study used a model of people's expectations about their future equivalent incomes, measured as the household income divided by the square root of the number of household members. Suppose an unmarried person earns income s without any family responsibilities. He or she expects life in a household consisting of x children and m adults with an expected equivalent income $y(x) = s\,(wm+bx)\,/\sqrt{(m+x)}$, where w denotes the effect of WLB and other adults' contribution and b denotes child benefit per child. Both w and b are measured by s. We assume that $m = 2$ to focus on households comprising a couple with children.

Analyses of the function $y(x)$ found limited effects of WLB. Even under the fully achieved WLB ($w = 1$), the equivalent income $y(x)$ exceeded s only where $x = 1$, if $b = 0$. If UCB (b) is low, $y(x)$ decreases as x increases, regardless of the size of w. In addition, w cannot be so large under the current conditions in Japan that a majority of young unmarried women will not want to pursue fulltime careers [3: 62, 162]. Therefore, WLB policies are not promising mechanisms to raise fertility.

In contrast, UCB improved the equivalent income of parents. High UCB ($b > 0.54$) let $y(x)$ exceed s and increase monotonously, with a small effect of WLB ($w = 0.6$). The effect was strong enough for policymakers to pursue UCB as a fertility booster.

3. Discussion on normative constraints and a probable future society

High UCBs are controversial in contemporary Japan because they violate some fundamental normative beliefs, such as reproductive egalitarianism [4] and that parents have primary responsibility for maintaining their children [5]. In contrast, the WLB policies are conservative and can coexist with those beliefs. High levels of UCB can be developed if we find ways to overcome the normative constraints and constitute a new family system in which most parents would come from a specific subpopulation of the overall society, bear large numbers of children, and take no (or secondary) economic responsibility for their children.
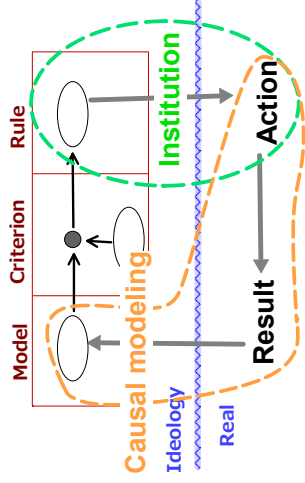
References
[1] 池周一郎, 2009,『夫婦出生力の低下と拡散仮説: 有配偶完結出生力低下の反応拡散モデル』古今書院.
[2] Suzuki Toru, 2013, *Low fertility and population aging in Japan and Eastern Asia*, Springer.
[3] 国立社会保障・人口問題研究所, 2012,『第 14 回出生動向基本調査 第 II 報告書』.
[4] Ochiai Emiko, 1997, *The Japanese family system in transition*, LTCB International Library Foundation.
[5] 渡辺洋三, 1975,「現代家族法理論」福島正夫編『家族 政策と法 1』東京大学出版会, 187–215.

Key words: ideology, family policy, Japan

Title slide

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— Normative constraints
against universal child benefits —

田中 重人   TANAKA Sigeto
(Tohoku University)

IIDCM

Ideology-
Institution
Dynamics with
Causal
Modeling

Is sociology useless?

Survey data analysis

Findings (about causality)

→ **So What?**

(Diagram)

Model   Criterion   Rule
Ideology
Real
Result   Action

Causal modeling / Institution

Model   Criterion   Rule
Institution
Causal modeling
Ideology
Real
Result   Action

Question

How to raise fertility
up to RpL?

From policymaker's view
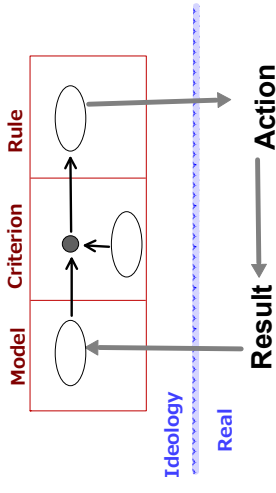
Glossary

CFR	RpL
WLB	UCB
PPR	RE

Japan Sociological Society meeting

Sep 20 Waseda

http://tsigeto.info/15x

Distribution of child number

CFR= 1.39   RpL = 2.08

Women born 1975
(Projection by IPSS, 2010. Medium level)

Desired child number

RpL = 2.08   **Mean: 2.32**

National Fertility Survey 2010
Combined
(1) married wives and
(2) unmarried women under 35,
weighted 7:3

Incentive to have children more than desired

Answer 1: Because people do not want

Women want to continue career: **30%**

Women continuing career: **20%**

Children (aged 1-2) in day-care: **30%**

Data: National Fertility Survey 2010,
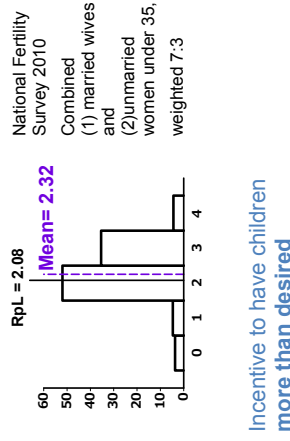
A WLB-resistant society

Child-care leave

Growth in day-care capacity

But low fertility
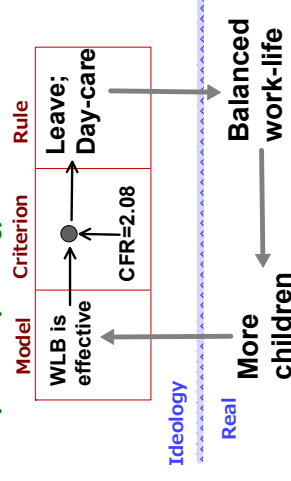
Why is WLB so ineffective?

Answer 2: Fundamental limit in WLB effect

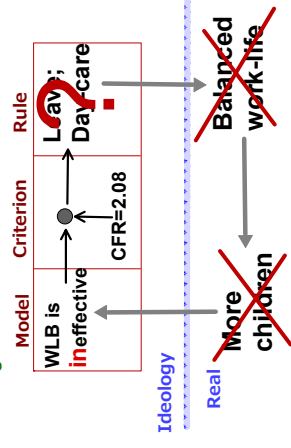Model of equivalent income

$$\frac{y(x)}{s} = \frac{wm + bx}{\sqrt{m + x}}$$

x: number of children y: equivalent income
s: income when single and no child
b/s: benefit per child
w: WLB effect
m: number of adult member in household

(1-parent / 2-parent charts)

2-parent ($m=2$)   1-parent ($m=1$)

No incentive except 1st child for 2-parent with WLB

Ideological feedback

Model   Criterion   Rule
WLB is **in**effective
CFR=2.08
Leave; Day-care
~~Balanced work-life~~
~~More children~~
Ideology
Real

WLB justified by ideology

Model   Criterion   Rule
WLB is effective
CFR=2.08
Leave; Day-care
Balanced work-life
More children
Ideology
Real

Distribution of child number

CFR= 1.39   RpL = 2.08

Women born 1975 (Projection by IPSS, 2010. Medium level)

How much does it cost?

Threshold:
b = 0.83 (for 1-parent)

Sufficient level:
1.6 million yen/year (per child)

=About **0.4 × GDP per capita**

UCB on IIDCM framework

Model   Criterion   Rule

UCB
PPR
CFR=2.08
RE
UCB as incentive
Differential incentive

Ideology

Distribution of income of young men

30%   30%   40%

National Fertility Survey 2010, unmarried men under 35

(in 10,000 yen)

CFR= 2.92
RpL = 2.08

Class Differentials

RpL = 2.08   CFR= 2.92

Rich←   →Poor
(smaller b)   (greater b)

Effective?

500,000 yen per child (3rd, 4th....) × 20 years

Incentive if $b>0.15$ →

Income < 3 mil yen

Expected effect of UCB

○— m=2, b=0.54
●— m=1, b=0.85

Normative constraint 2:
Reproduction egalitarianism (RE)

Sankei's proposal

¥ 10 mil. for 3rd and subsequent children

Sankei Shinbun 2015-06-21
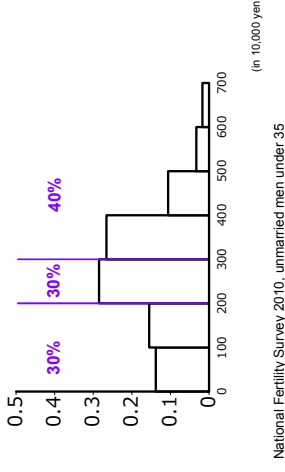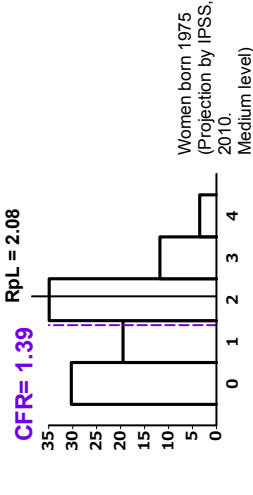
Effect expected for Sankei's proposal

RpL = 2.08   CFR= 2.04
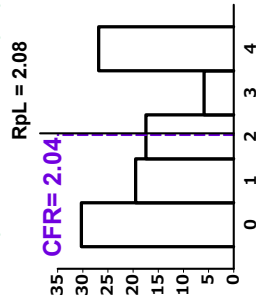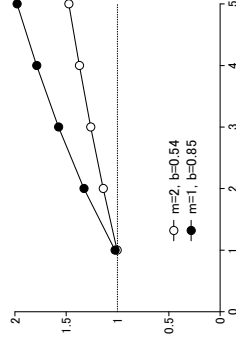
Normative constraint 1:
Who is responsible to maintain child?

PPR: Parents' primary responsibility to maintain children
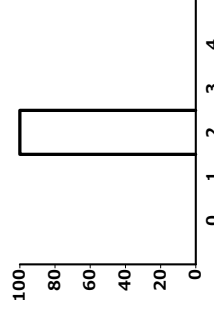
Incompatible with UCB

Probable scenario 1

High UCB and drastic changes of family
- Govt maintains children
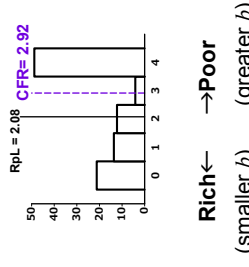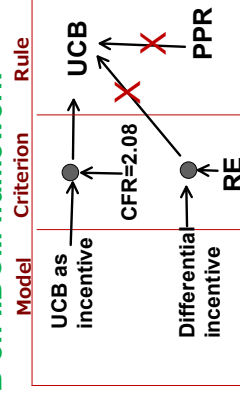- Social div of reproduction

Probable scenario 2

- Ineffective WLB
- Low fertility
- Unchanged family