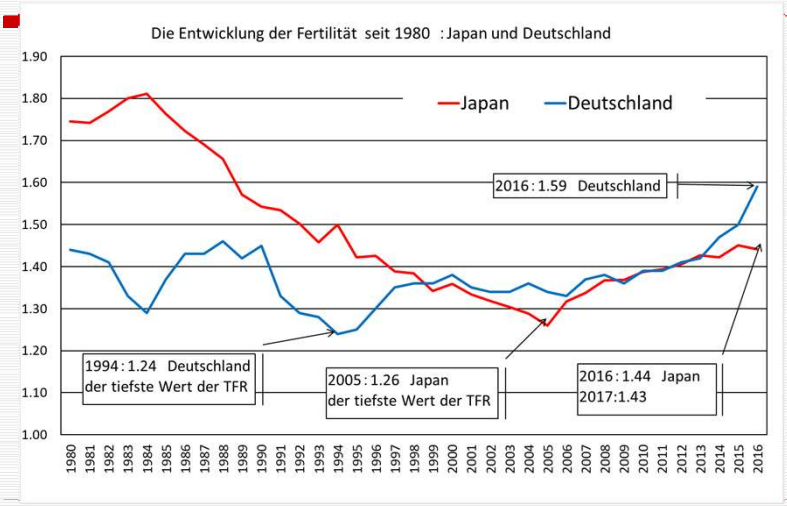
Die Entwicklung der Fertilität seit 2005 in Japan, zu einer Wiederherstellung der Ausgleichsrate ?

Toshihiko HARA
Sapporo City University, Professor (emeritus, Ph.D.in Sociology)

22. 10.2018, 14.00-16.30 Uhr
Besuch im BiB, Wiesbaden in Deutschland

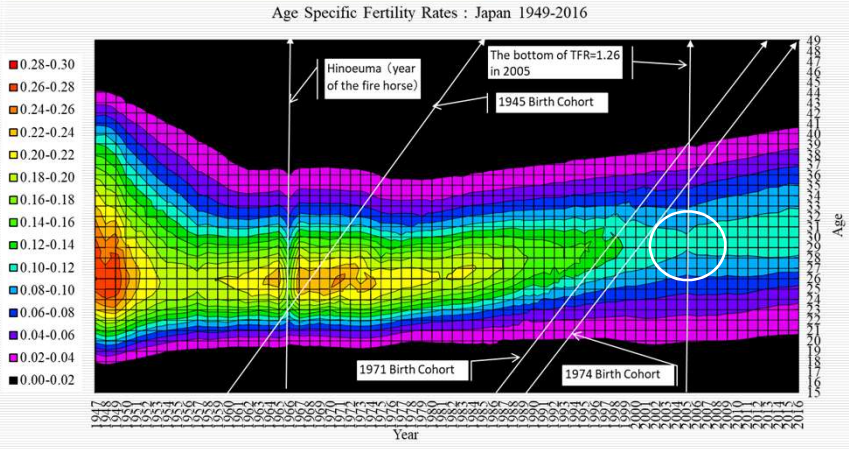
1. Die Entwicklung der Fertilität in Japan

Trend der TFR:1980-2016
Japan und Deutschland



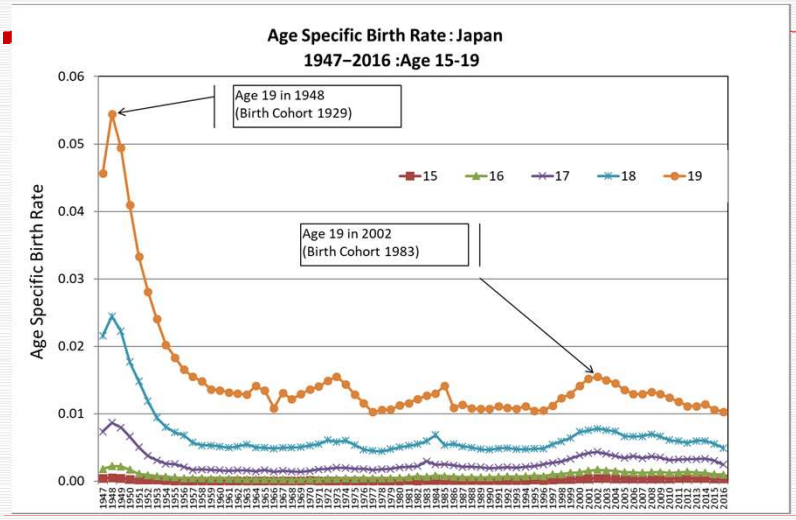
☛ zu einer Wiederherstellung der Ausgleichsrate ?

Age Specific Fertility Rates : Japan 1949-2016



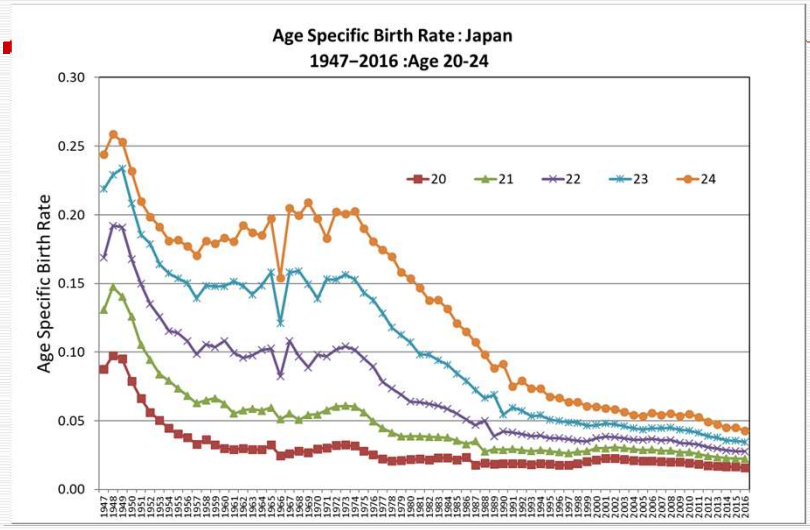
☛ **Verengung der höchsten ASFR Periode in 2005**

ASFR15-19 : Japan 1949-2016



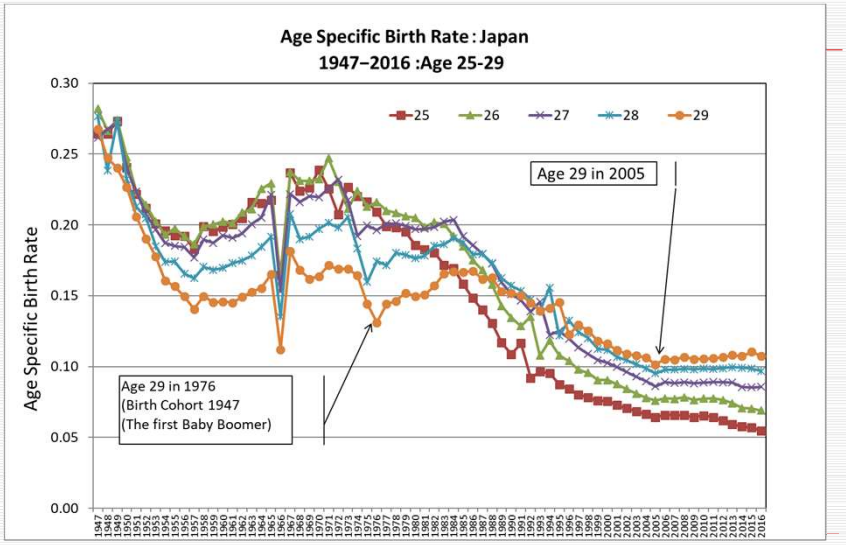
☛ **Weitere Abnahme der ASFR 15-19 seit 2003**

ASFR20-24 : Japan 1949-2016



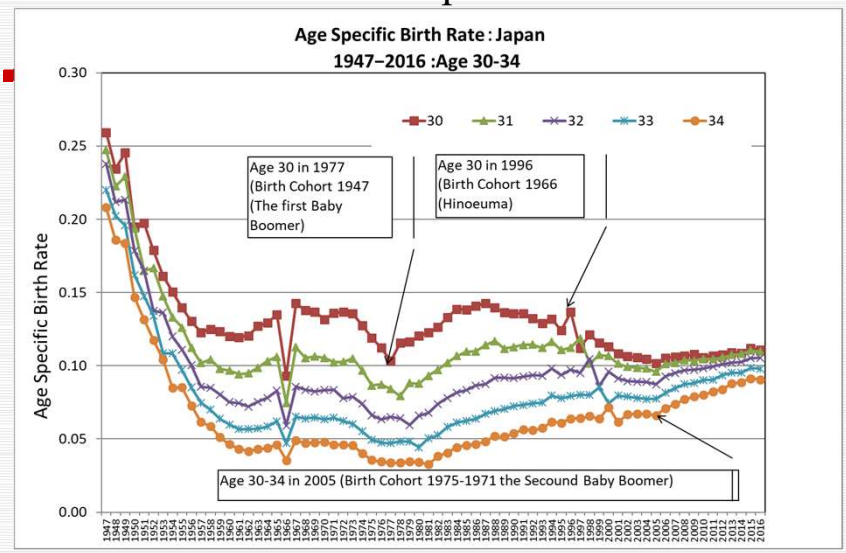
☛ **Weitere Abnahme der ASFR 15-19 seit 1975**

ASFR25-29 : Japan 1949-2016



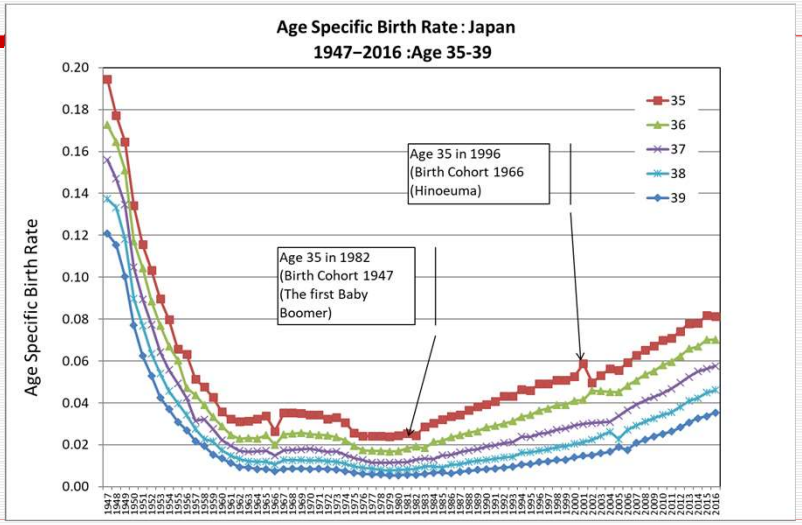
☛ **Stabilizierung der ASFR 25-29 seit 2005**

ASFR30-34 : Japan 1949-2016



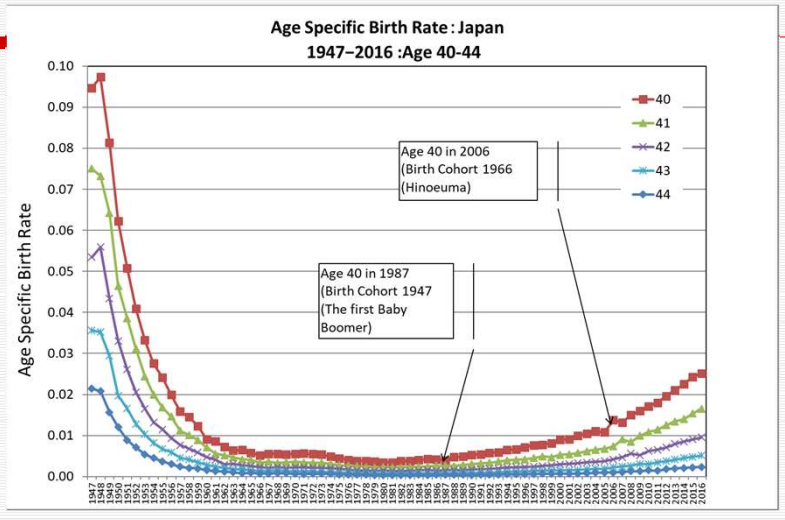
☛ **Zunahme der ASFR 30-34 von der Birth Cohort 1947**

ASFR35-39 : Japan 1949-2016



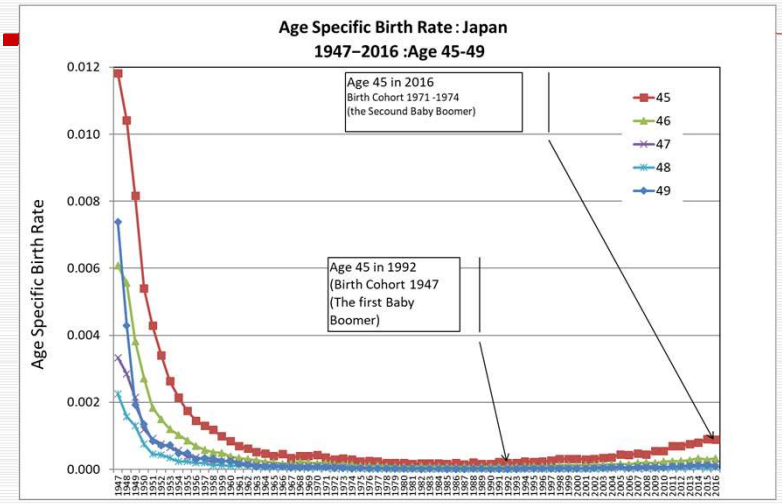
☛ **Zunahme der ASFR 35-39 von der Birth Cohort 1947**

ASFR40-44 : Japan 1949-2016



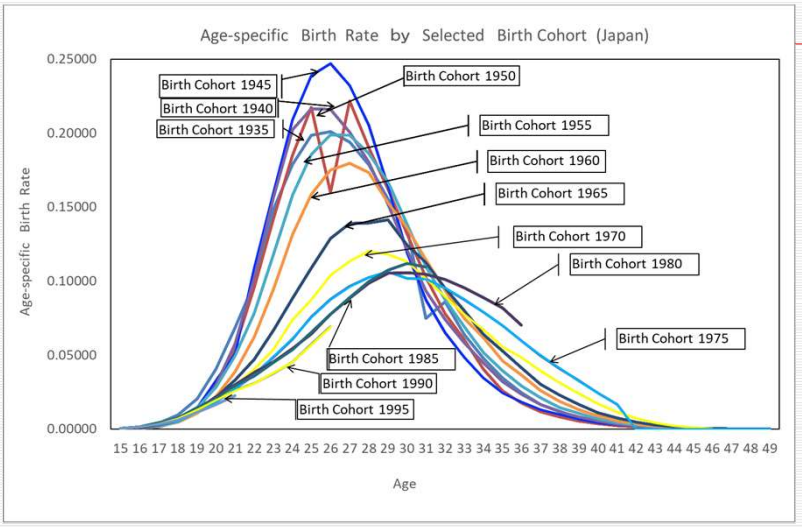
☛ **Zunahme der ASFR 40-44 von der Birth Cohort 1947**

ASFR45-49 : Japan 1949-2016



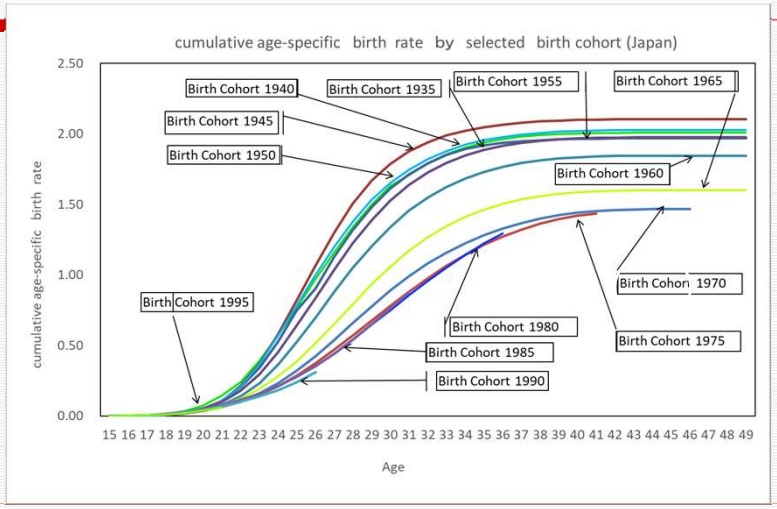
☛ **Zunahme der ASFR 40-44 von der Birth Cohort 1947**

ASFR by Birth Cohort 1935-1995 : Japan



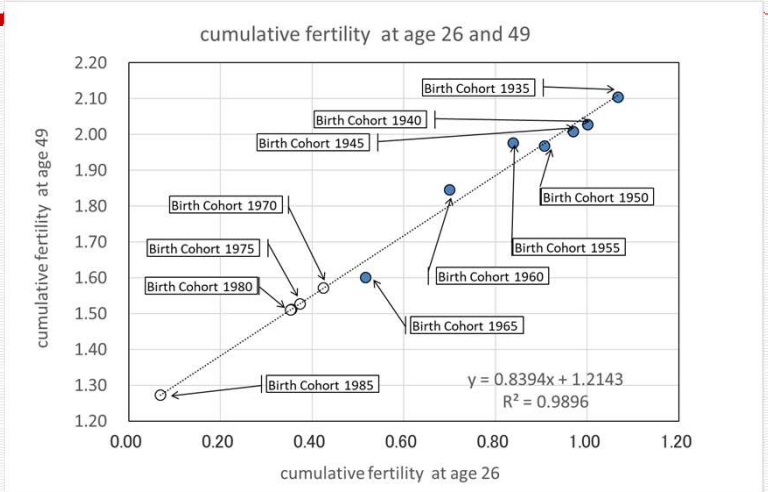
☛ **Nivellierung und Verzögerung der ASFR**

Cumulative ASFR
by Birth Cohort 1935-1995 : Japan



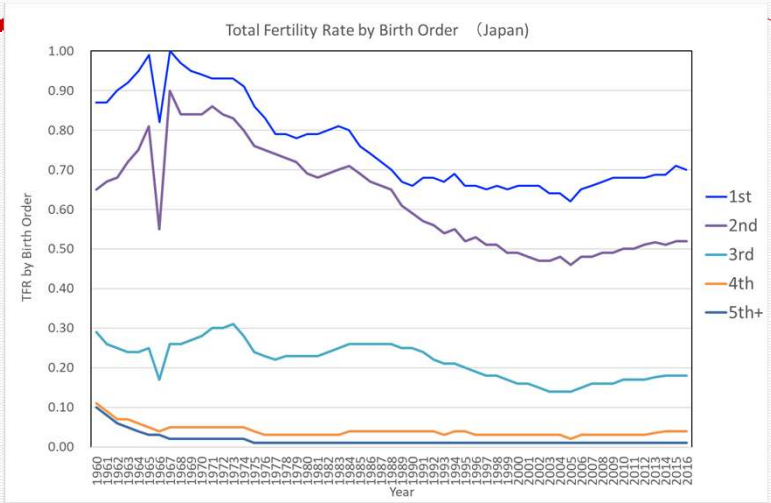
☛ **Nivellierung und Verzögerung der ASFR**

Cumulative ASFR
by Birth Cohort 1935-1995 : Japan



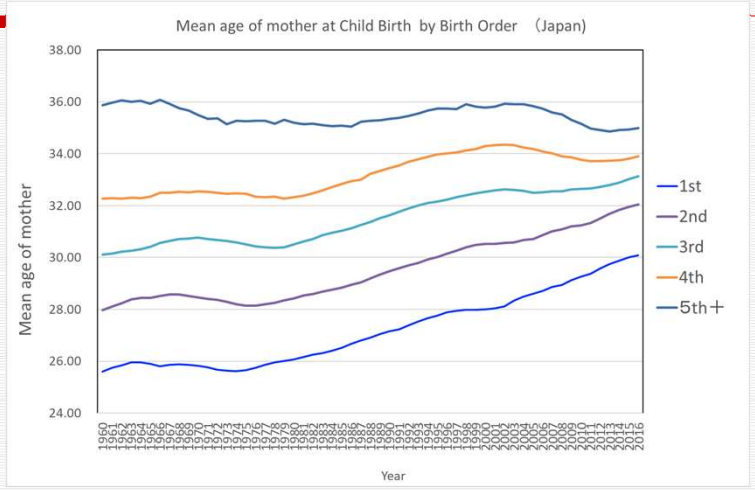
☛ **Birth Cohort 1985 ⇒CTFR＝1.27 ？**

TFR by Birth Order 1960-2016 : Japan



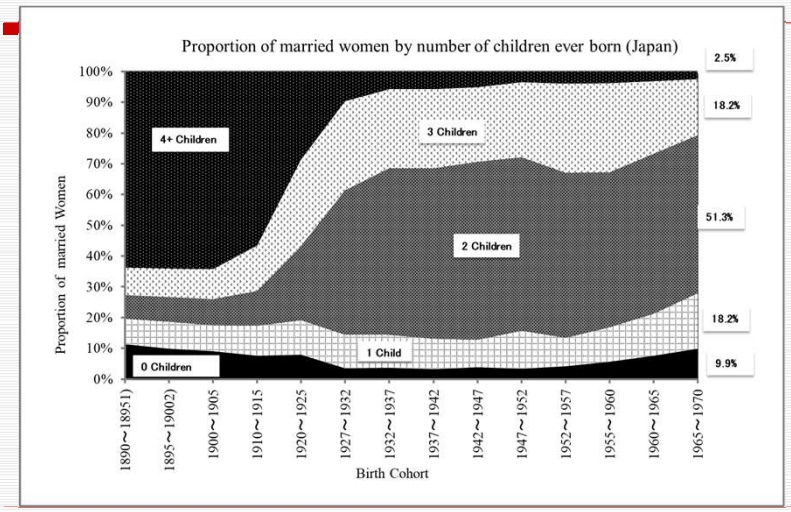
☛**Zunahme seit 2005 der TFR in allen Birth Order**

Mean Age of Mother by Birth Order 1960-2016 : Japan



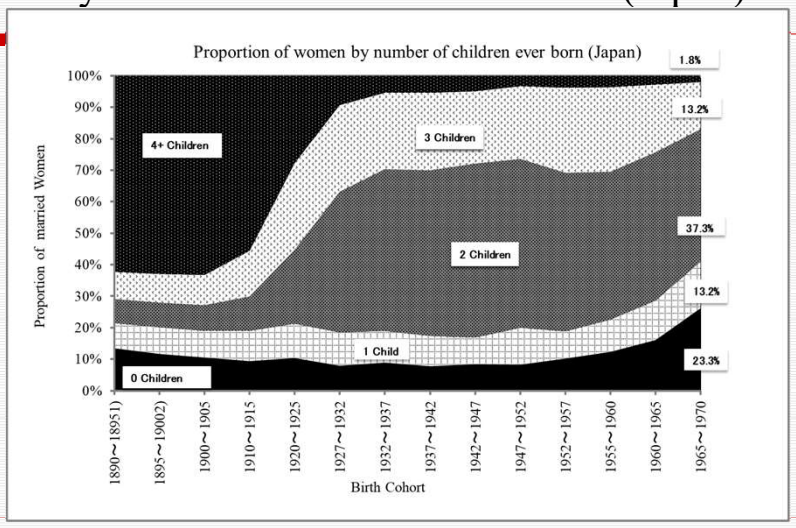
☛**Zunahme der TFR in allen Birth Oder**

Proportion of married women by number of children ever born (Japan)



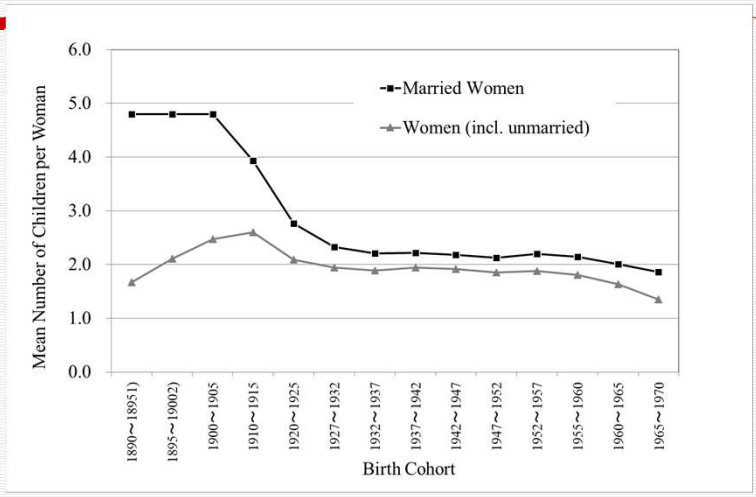
☛**Zunahme der 0 und 1 Child in Birth cohort 1965-1970**

Proportion of women by number of children ever born (Japan)



☛**Zunahme der 0 und 1 Child in Birth cohort 1965-1970**

Mean Number of Children per Women(Japan)



☛**Er wird weniger als 1.40 in Birth Cohort 1965-1970**

Zusammenfassung

- Verengung der höchsten ASFR Periode in 2005 ist erkennbar. Das war Wendepunkt des Ausgleiches zwischen ASBR unter 29 und ASFR über 30.
- Zunahme der ASBR über 30 hat begonnen, mit der der ASFR 30-34 von der Birth Cohort 1947
- Zunahme der ASBR über 30 hat gewisse Begrenzung wegen der Nivellierung und Verzögerung der ASFR.
- Der Anteil der Kindelosen und Ein-Kind Familien nimmt zu.
- Mit dem gegenwärtigen Trend ist eine Wiederherstellung der Ausgleichsrate nicht zu erwarten.

2. Trends in Total Marital Fertility Rates

: An Explanation by Socioeconomic Developments, Gender Regime, and Reproductive Technology
by Shohei YODA and Miho IWASAWA

Journal of Population Problems 74－3（2018.9）pp. 205-223
Special Issue I: Marriage and Fertility in Contemporary Japan: The Fifteenth National Fertility Suvey (IPSS), 2015- Part I

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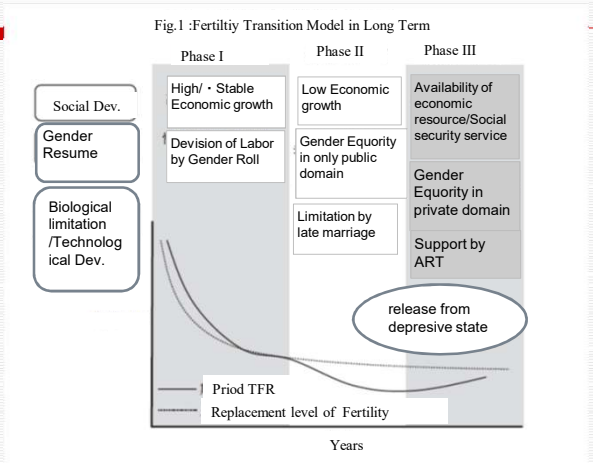
Fig.1:Fertiltiy Transition Model in Long Term



☛The fertility trend of Japan would be at Phase III.

Data

The National Fertility Survey of Japan (Shussho doko kihon chosa) (NIPSSR) , Pool data from #7（1977）#15（2015）. They are limited in ;

1. First marriage (both) couples
2. Age of wife under 35
3. Cases with consistency between Childbearing und number of children
4. Cases with perfect record on all event years.

Basic Method

- Calculation of TMFR (Total marital fertility rate）from MDSFR (marriage-duration-specific fertility rate）in concern with all marriage-duration by different operational variables.

$$TMFR=\sum_d MDSFR_d=\sum_d\left(\frac{\sum_a B(d,a)}{\sum_a P_m(d,a)}\right)=\sum_d\sum_a\left(\frac{B(d,a)}{P_m(d,a)}\cdot\frac{P_m(d,a)}{\sum_a P_m(d,a)}\right)$$

- B:n of births, Pm: n of married women, a:age of first marriage, d: marriage-duration

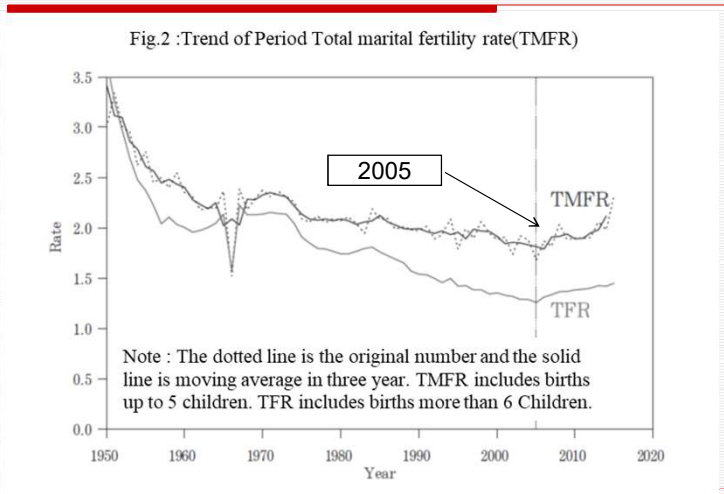
Table 1:
Operational Variables of Fertility Change

Table 1 :Operational Variables of Fertiltiy Change

Factors of Fertility Change	Socio-economic development/Low economic growth	Gender Resume	Biological limitation at late childbearing /ART
variable	Resident in DID/Non DID	Educational Attainment of Wife	Age of women at Firt Marraiage
	Educational Attainment of Husbund	Gender Rolle Attitude of Wife	Experience of Infertility Treatment
		Living arrangement with parent*	

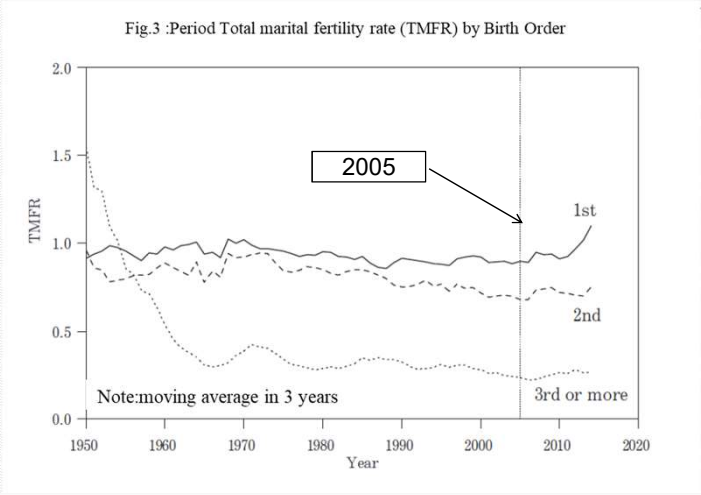
*Immidiatly after marriage

Fig.2 :
Trend of Period Total marital fertility rate(TMFR)



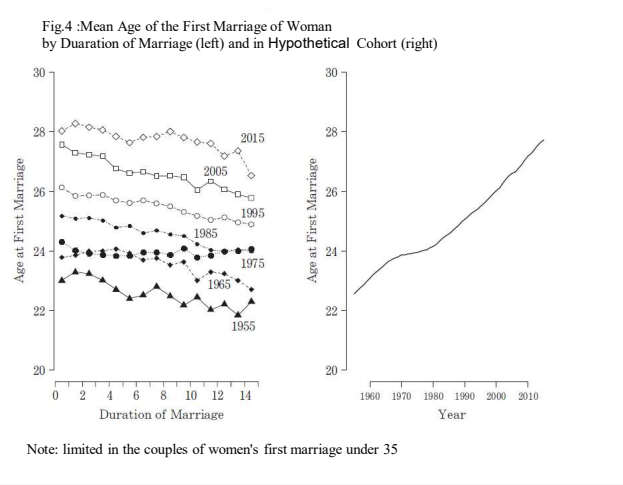
☛**TMFR and TFR show the same trend.**

Fig.3 :Period Total marital fertility rate (TMFR) by Birth Order



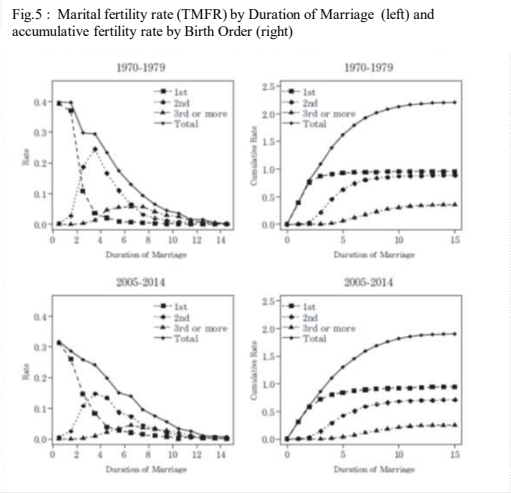
☛**TMFR of 1st shows the record high after World War II .**

Fig.4 :Mean Age of the First Marriage of Woman by Duaration of Marriage (left) and in Hypothetical Cohort (right)



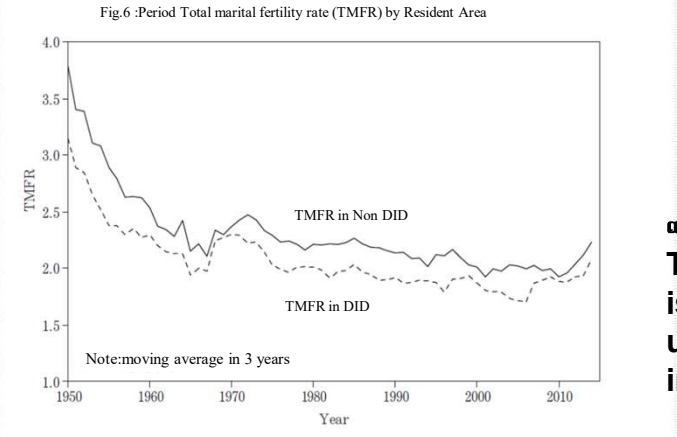
☛**Mean age of first marriage rises up constantly.**

Fig.5 : Marital fertility rate (TMFR) by Duration of Marriage (left) and accumulative fertility rate by Birth Order (right)



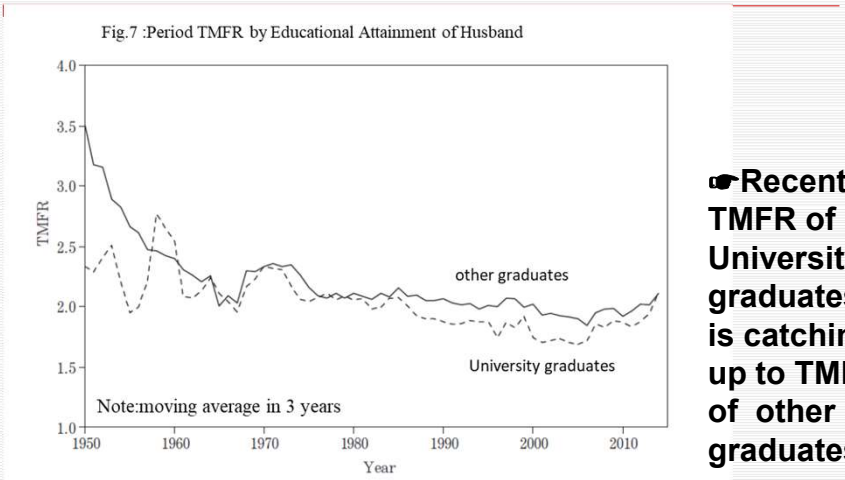
☜ **The peak and the accumulative value of TMFR in each birth order became lower than ever.**

Fig.6 :
Period Total marital fertility rate (TMFR) by Resident Area



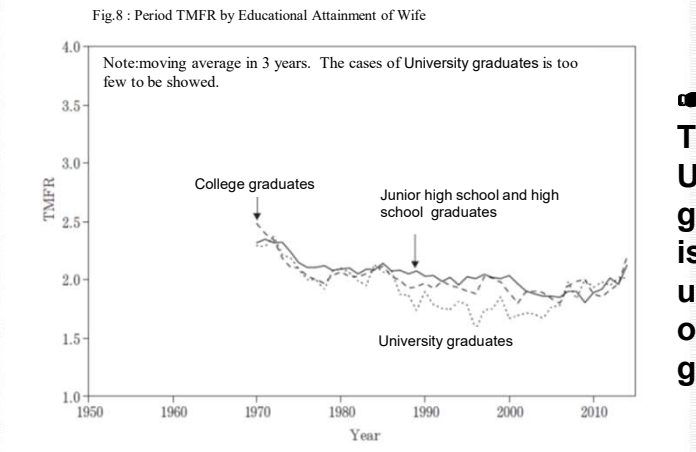
☛**Recently, TMFR in DID is catching up to TMFR in Non DID.**

Fig.7 :Period TMFR by Educational Attainment of Husband



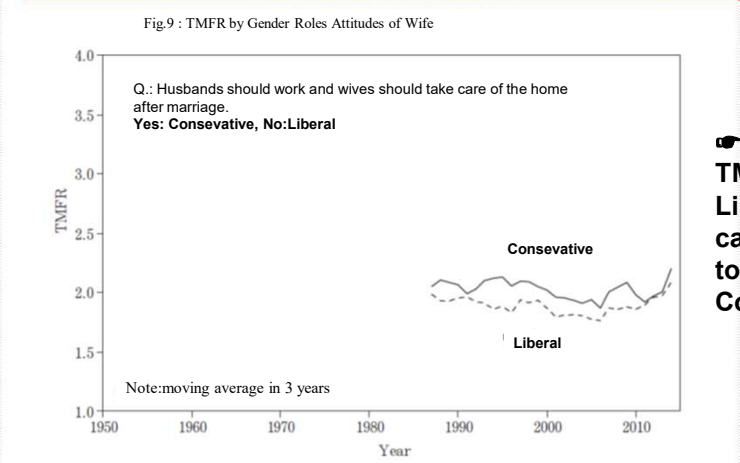
☛**Recently, TMFR of University graduates is catching up to TMFR of other graduates.**

Fig.8 : Period TMFR by Educational Attainment of Wife



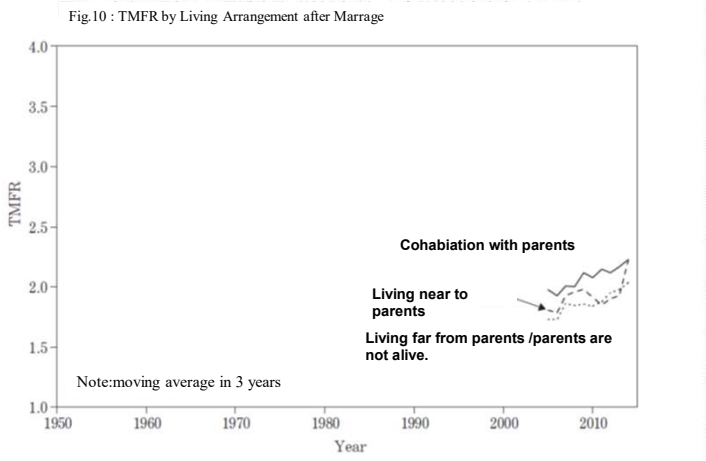
☛**Recently, TMFR of University graduates is catching up to TMFR of other graduates.**

Fig.9 : TMFR by Gender Roles Attitudes of Wife



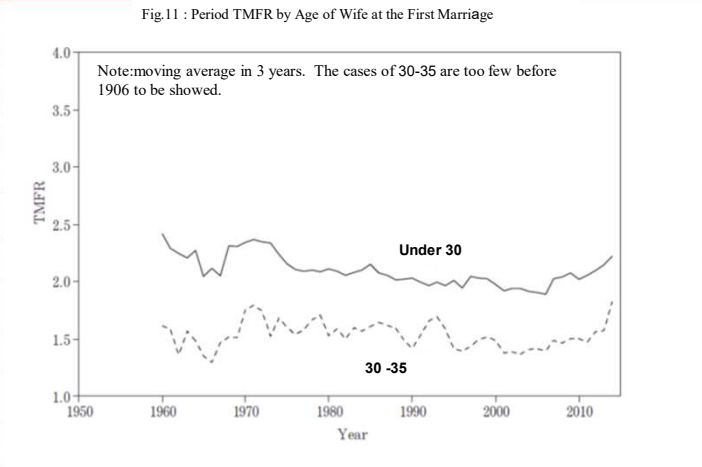
☛**Recently, TMFR of Liberal is catching up to TMFR of Conservative.**

Fig.10 : TMFR by Living Arrangement after Marrage



☛**Recently, TMFR of other living arrangement is catching up to TMFR of living with parents.**

Fig.11 : Period TMFR by Age of Wife at the First Marriage



☛**TMFR of marriage 30-35 is catching up to Under 30.**

summary

- TMFR shows trend change to rise up since 2005 as same as TFR.
- TMFR of DID residentes, Woman with liberal attitude in gender rolle are catching up to TMFR of another Group.
- TMFR of woman with experience of infertility treatment is rising up.
- They have consistency with the Fertiltiy Transition Model.

Toshihiko HARA
Sapporo City University, professor emeritus　(Ph.D.in Sociology)
Kita34 Higashi19 Chyome 3-7, Higashi-Ku, Sapporo, 007-0834 JAPAN
E-Mail: t.hara@scu.ac.jp TEL/FAX:+81-11-785-7022
E-mail：t.hara@scu.ac.jp, http://toshi-hara.jp