Diverse Vision of Scientists & Engineers for the Promotion of Gender Equality in JAPAN

Japan Society of Applied Physics
Toshiba Corporation

Miyoko O. Watanabe
miyoko.watanabe@toshiba.co.jp

TOSHIBA
Leading Innovation >>>

Contents

1. Outline of Questionnaire survey for Physicists in 2001, 2003 & 2007

2. Results of questionnaire survey
    - 2-1. Working Positions
    - 2-2. Number of Children
    - 2-3. Childcare Leave

3. Problems to be solved & Our vision

Contents

1. Outline of Questionnaire survey for Physicists in 2001, 2003 & 2007

2. Results of questionnaire survey
    - 2-1. Working Positions
    - 2-2. Number of Children
    - 2-3. Childcare Leave

3. Problems to be solved & Our vision

History of Promotion of Gender Equality for Physicists

July, 2001 Establishing Committee for Promoting Equal Participating Men & Women in the ***J***apan ***S***ociety of ***A***pplied ***P***hysics (JSAP) & in the ***P***hysical ***S***ociety of ***J***APAN (JPS)

Sept.-Oct., 2001 Questionnaire survey of Gender Equality in JSAP & JPS (1st survey)

Oct., 2002 Establishing Japan Inter-Society Liaison Association Committee for Promoting ***E****qual* ***P****articipation of* ***Me****n and Women in* ***S****cience and* ***E****ngineering* (EPMEWSE)

Aug.-Nov., 2003 1st Questionnaire survey of Gender Equality in EPMEWSE (2nd survey)

Aug.-Nov., 2007 2nd Questionnaire survey of Gender Equality in EPMEWSE (3rd survey)

TOSHIBA
Leading Innovation

Japan Inter-Society Liaison Association Committee for Promoting ***E***qual ***P***articipation of ***Me***n and *W*omen in ***S***cience and ***E***ngineering (EPMEWSE)

September, 2008

Members : 37 Academic Societies

The Japan Society of Applied Physics The Society of Chemical Engineers,Japan Ecological Society of Japan
The Society of Polymer Science,Japan The Institute of Electronics, Information and Communication Engineers
Japanese Society for Biological Sciences in Space The Chemical Society of Japan The Japanese Forest Society
Atomic Energy Society of Japan Japan Society for Cell Biology The Society of Japanese Women Scientists
The Japanese Society of Plant Physiologists The Mathematical Society of Japan Bioimaging Society
The Japanese Biochemical Society The Biophysical Society of Japan Physiological Society of Japan
Protein Science Society of Japan Astronomical Society of Japan The Zoological Society of Japan
The Japanese Society of Developmental Biologist The Japan Society for Comparative Endocrinology
The Physical Society of Japan The Molecular Biology Society of Japan The Japan Neuroscience Society
Society of Geomagnetism and Earth, Planetary and Space Sciences The Crystallographic Society of Japan
The Japanese Society of Carbohydrate Research Japanese Society of Breeding Japan Geoscience Union
The Japanese Society of Animal Reproduction The Society of Eco-Engineering The Genetics Society of Japan
Japan Society of Coordination Chemistry Society of Evolutionary Studies, Japan
Architectural Institute of Japan The Society for the Study of Species Biology

Field: Mathematics Electronics & Information Physics Chemical & Material Eng.
Life science & Biology Civil Eng. Others

Observer : 29 Academic Societies

TOSHIBA
Leading Innovation

Contents

1st Survey:
Questionnaire Survey of Gender Equality in JSAP (2001)

Schedule

Sept. 1 – Oct. 10, 2001 Filling out a questionnaire

Sept. 2, 2001 Sending 1st e-mail to the members of JSAP

Sept. 2001 Distributing questionnaire papers

Oct. 2, 2001 Sending 2nd e-mail to the members of JSAP

Questionnaire Contents

Number of Questionnaire : 29

choosing : 27

description : 2

Number of Respondents

Total respondents: **3,743** (16.1% of JSAP members)

Web Respondents: 3,526 (94%) Paper Respondents: 217 (6%)

Male: 3,485 (93.1%) Female: 258 (**6.9%**)

TOSHIBA
Leading Innovation

Gender Gap of Questionnaire Survey in 2001

Questionnaire Survey in JSAP (2001)

Category \ Difference	<1%	1-10%	>10%
Basic Data	Affiliation of academic society	Age	
Working	Scholarship Research abroad	Academic degree Affiliation Job position (PRI) Business trip abroad Employment status Work assessment Working hours at office	**Job position (Univ. & Comp.)** House move with work Working hours at home
Life		Marital status Child age Experience of family care	**Number of children** **Childcare leave** Childcare support Housekeeping
Awareness		Existence of role model Future goals Satisfaction with work Role of fathers	Role of mothers

TOSHIBA
Leading Innovation

2nd Survey: 1st Questionnaire Survey in EPMEWSE (2003)

Schedule

Aug. 20 – Nov. 10, 2003 Filling out a questionnaire

Aug. 20, 2003	Sending 1st e-mail to the members of JSAP
Sept. 2003	Distributing questionnaire papers
Oct. 27, 2003	Sending 2nd e-mail to the members of JSAP

Questionnaire Contents

Number of Questionnaire : 35

choosing : 35

description : 0

Number of Respondents

Total respondents: **19,291**

Web Respondents: 18,616 (97%) Paper Respondents: 675 (3%)

Male: 16,140(84%) Female: 3,104 (**16%**)

TOSHIBA
Leading Innovation

3rd Survey: 2nd Questionnaire Survey in EPMEWSE (2007)

Schedule

Aug. 21 – Nov. 20, 2007 Filling out a questionnaire (only web questionnaire)

Aug. 21, 2007 Sending 1st e-mail to the members of JSAP

Oct. 26, 2007 Sending 2nd e-mail to the members of JSAP

Questionnaire Contents

Number of Questionnaire : 76

choosing : 75

description : 1

Number of Respondents

Total respondents: **14,110**

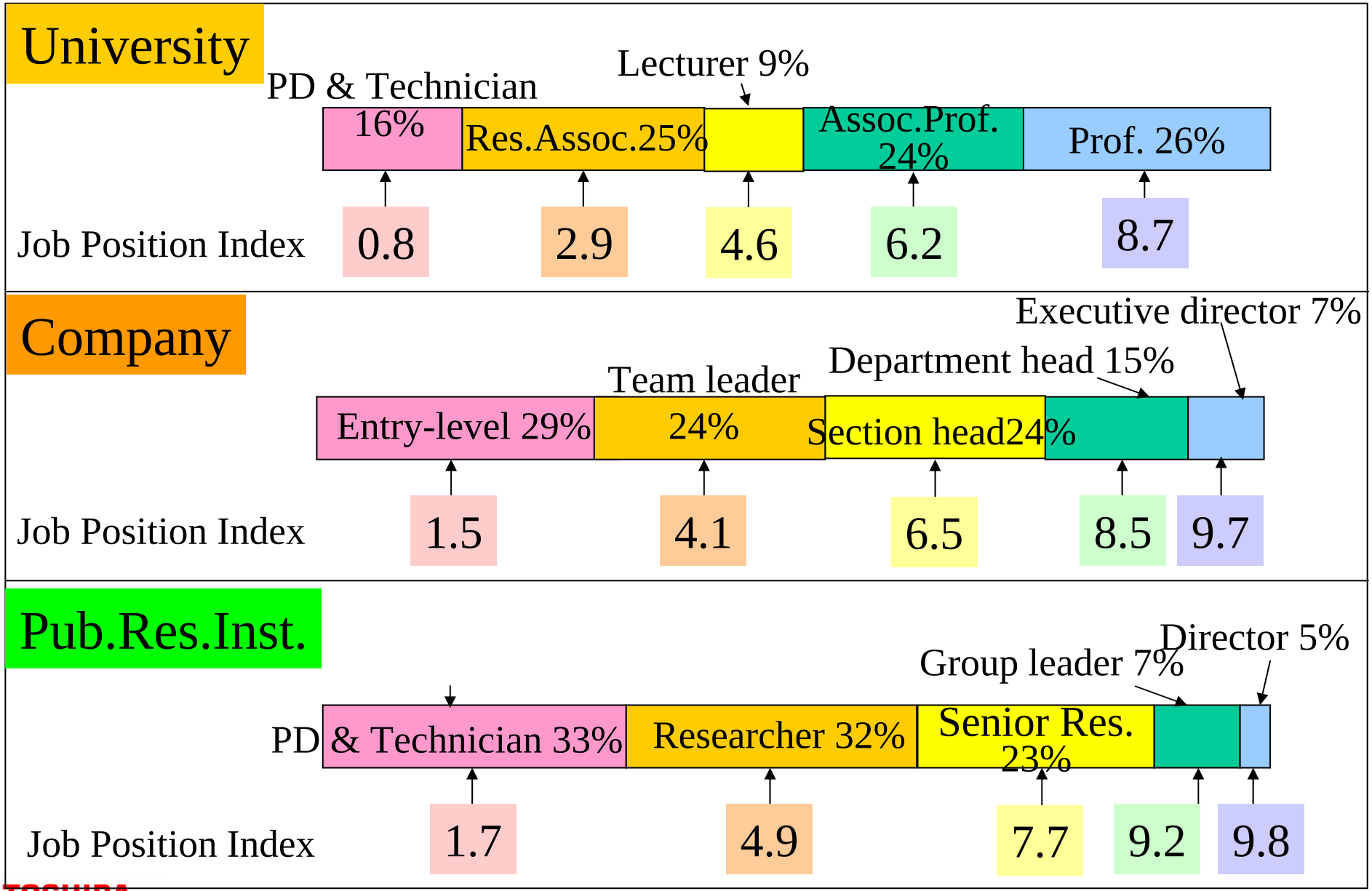
Web Respondents: 14,110 (100%)

Male: 10,349 (73%) Female: 3,761 (**27%**)

TOSHIBA
Leading Innovation

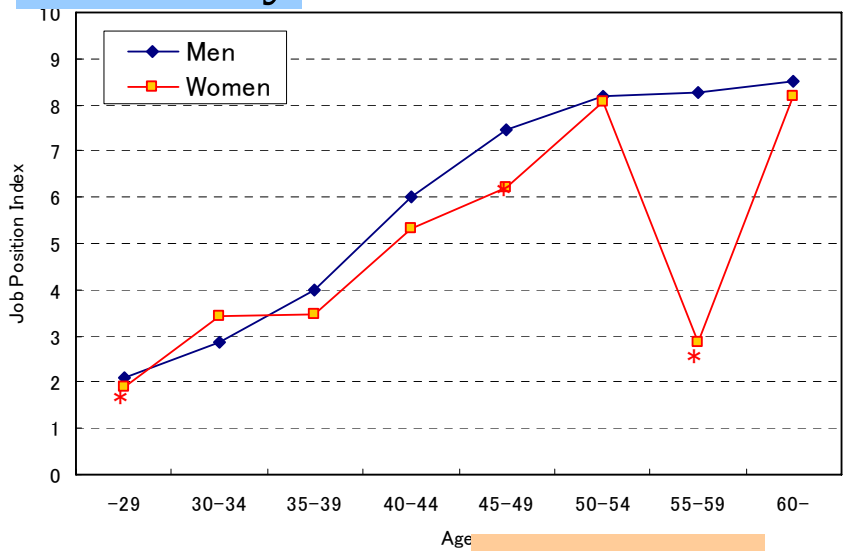
Contents

Definition of Job Position Index EPMEWSE (2007)

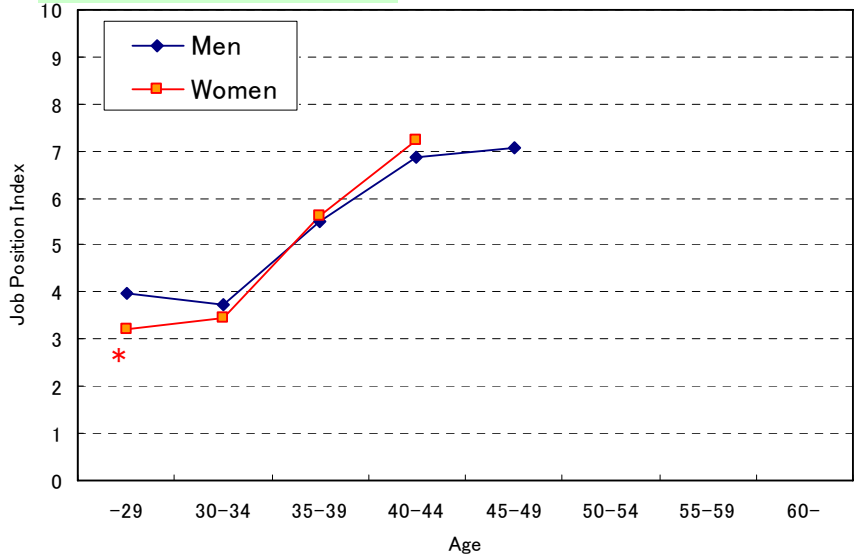


Age dependent Job Position Index – Appl. Phys. 2007 --

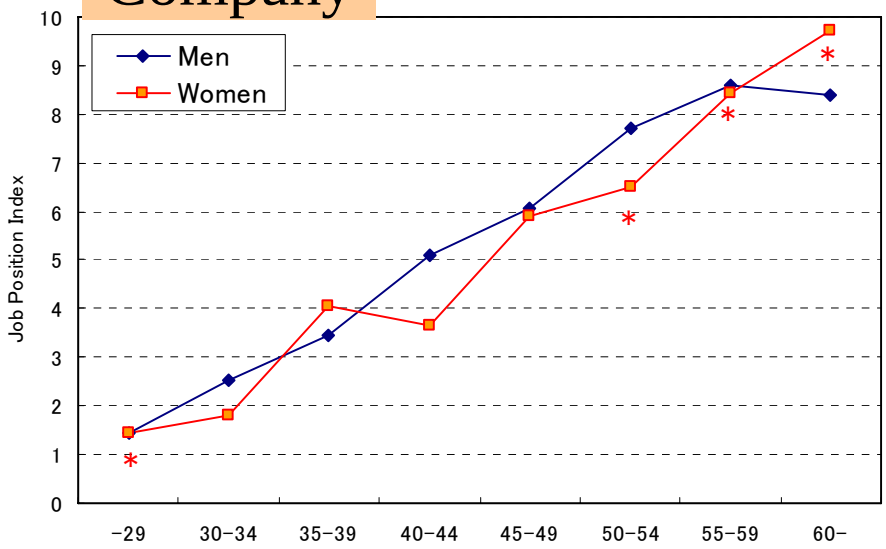
University



Pub.Res.Inst.



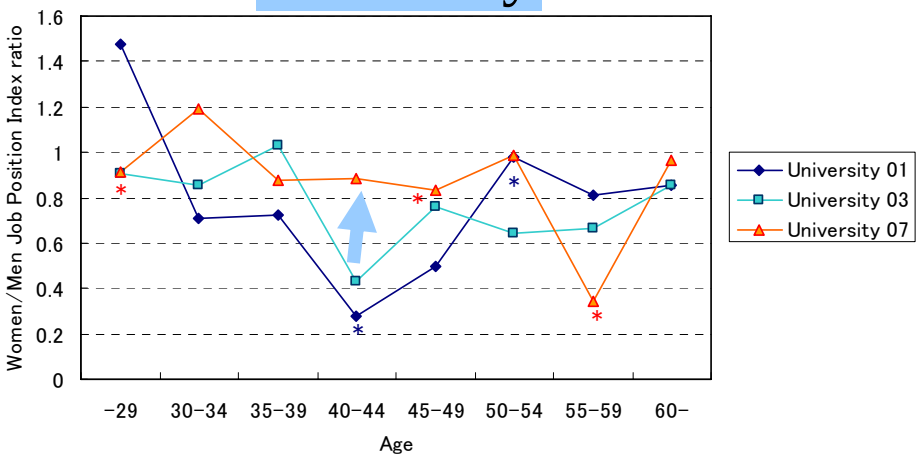
Company



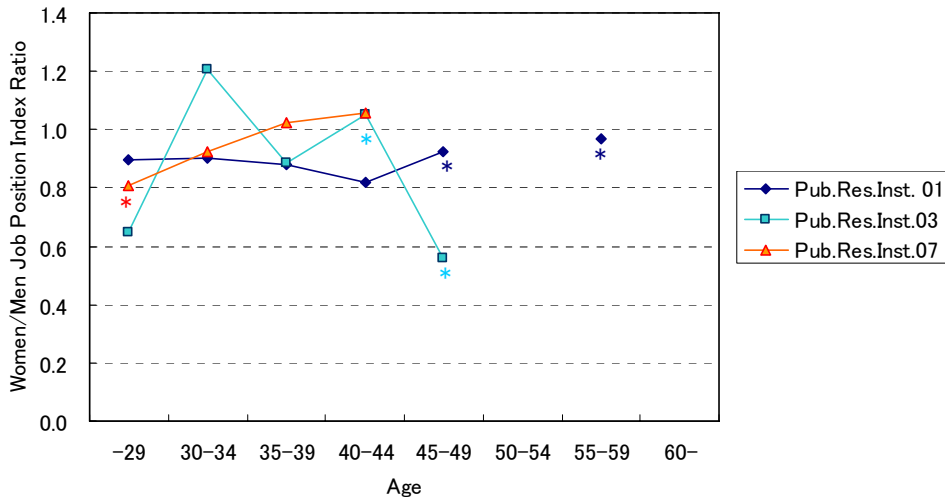
Age dependent Job Position Index Women/Men Ratio

– Appl. Phys. 2007 --

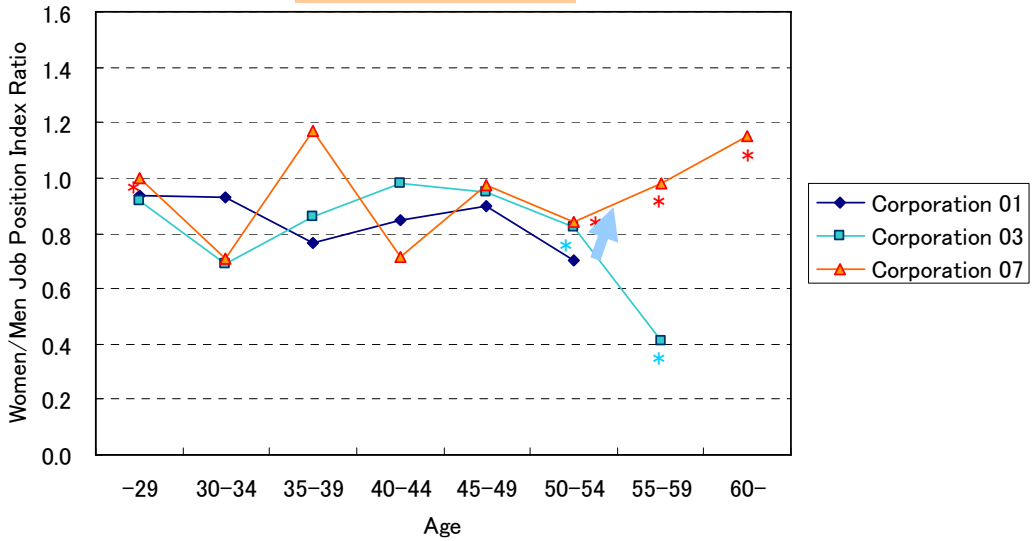
University



Pub.Res.Inst.



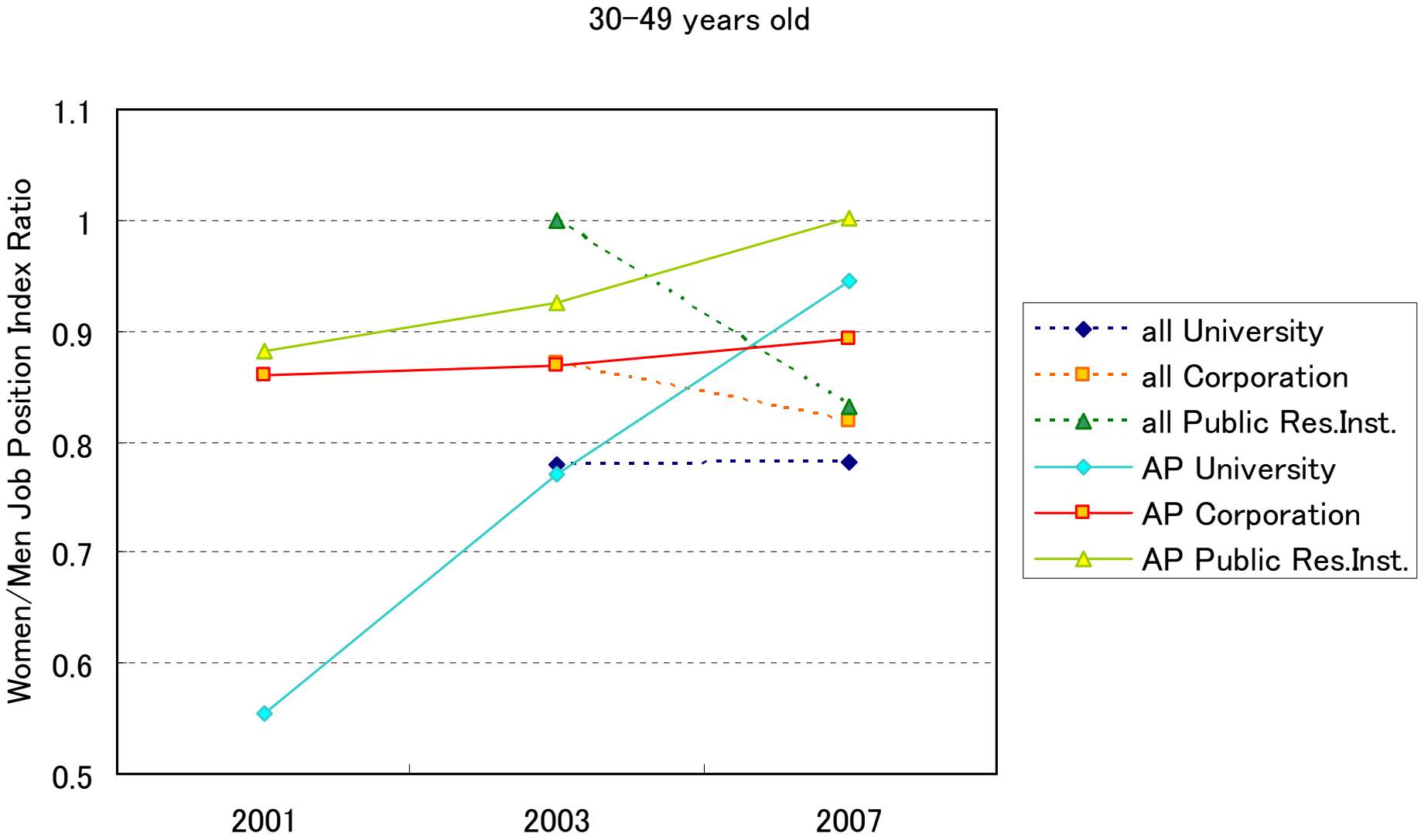
Company



TOSHIBA
Leading Innovation

Change of Average Job Position Index Women/Men Ratio

– Appl. Phys. & all societies 2007 --

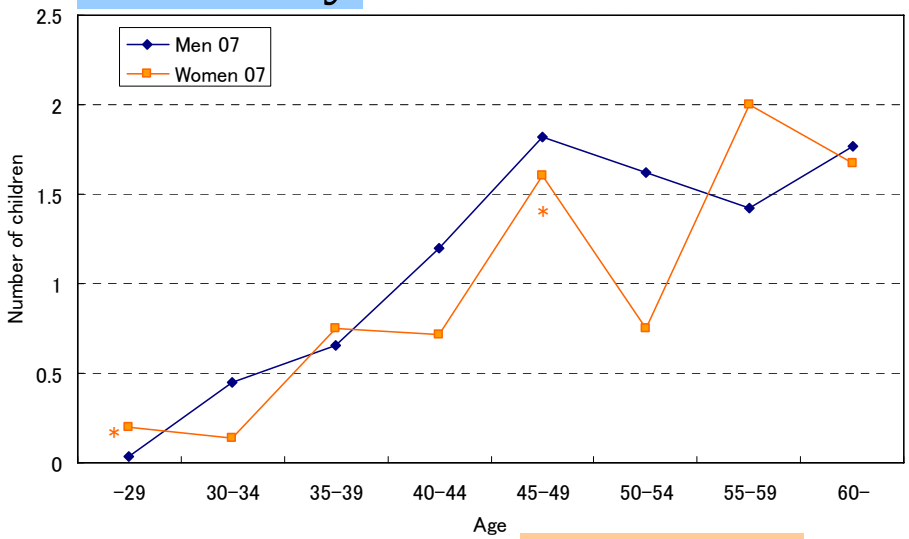


TOSHIBA
Leading Innovation

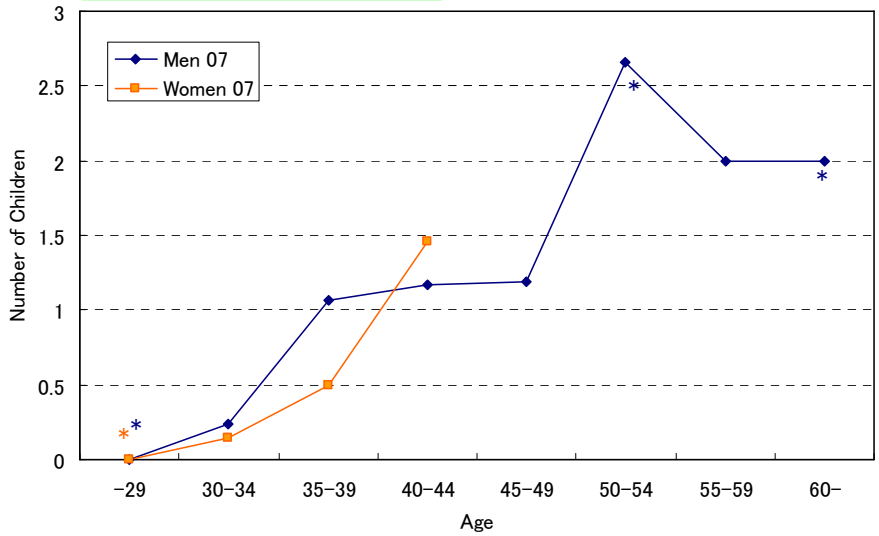
Contents

Age dependent Number of Children – Appl. Phys. 2007 --

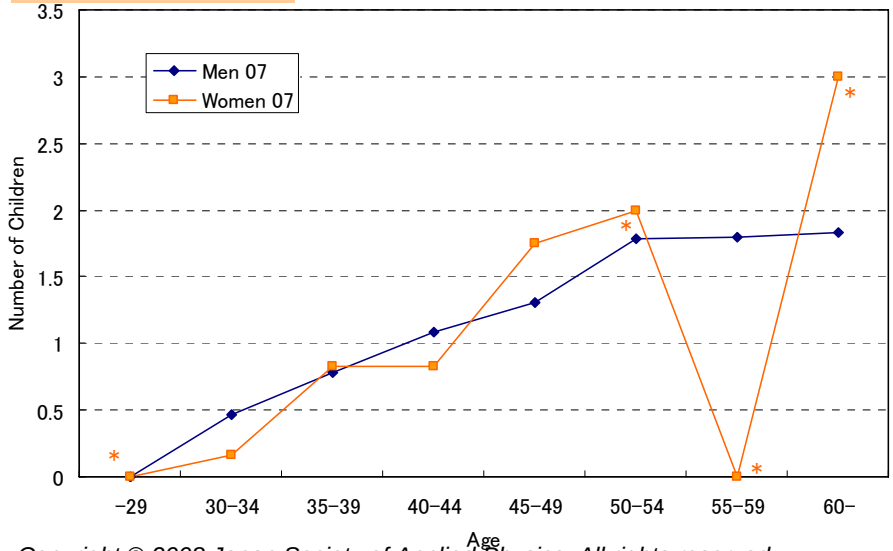
University



Pub.Res.Inst.



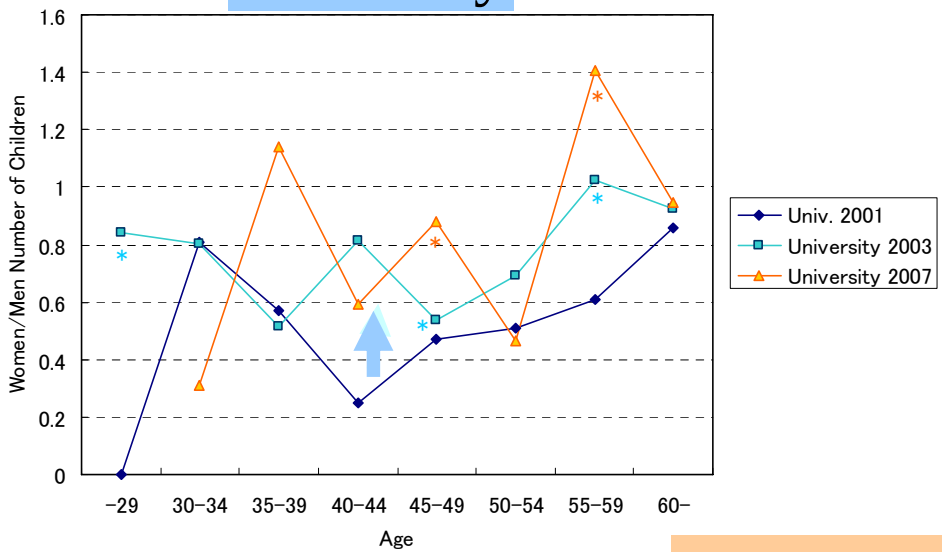
Company



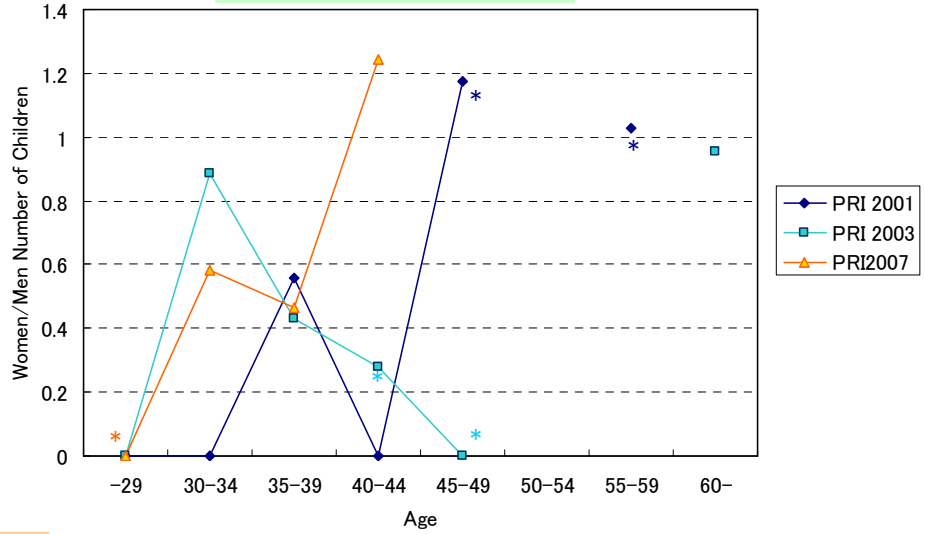
TOSHIBA
Leading Innovation

Age dependent number of children Women/Men Ratio
– Appl. Phys. 2007 --

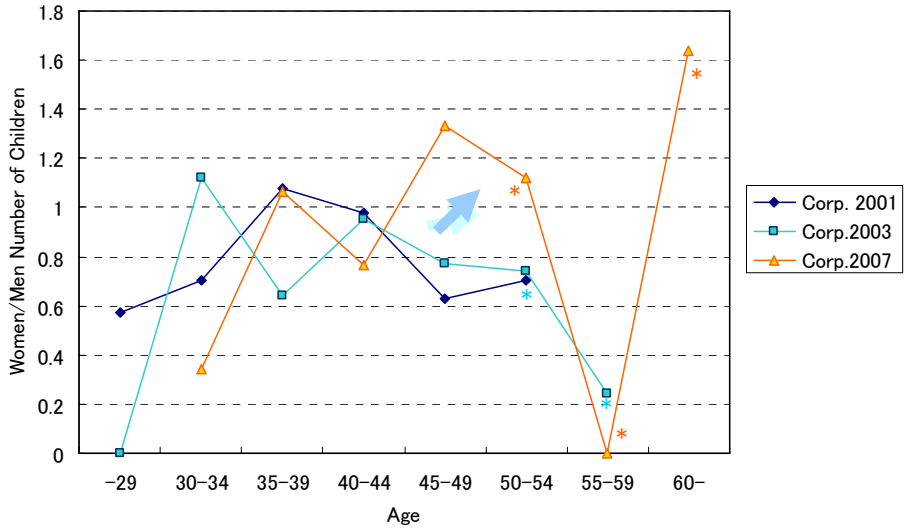
University



Pub.Res.Inst.



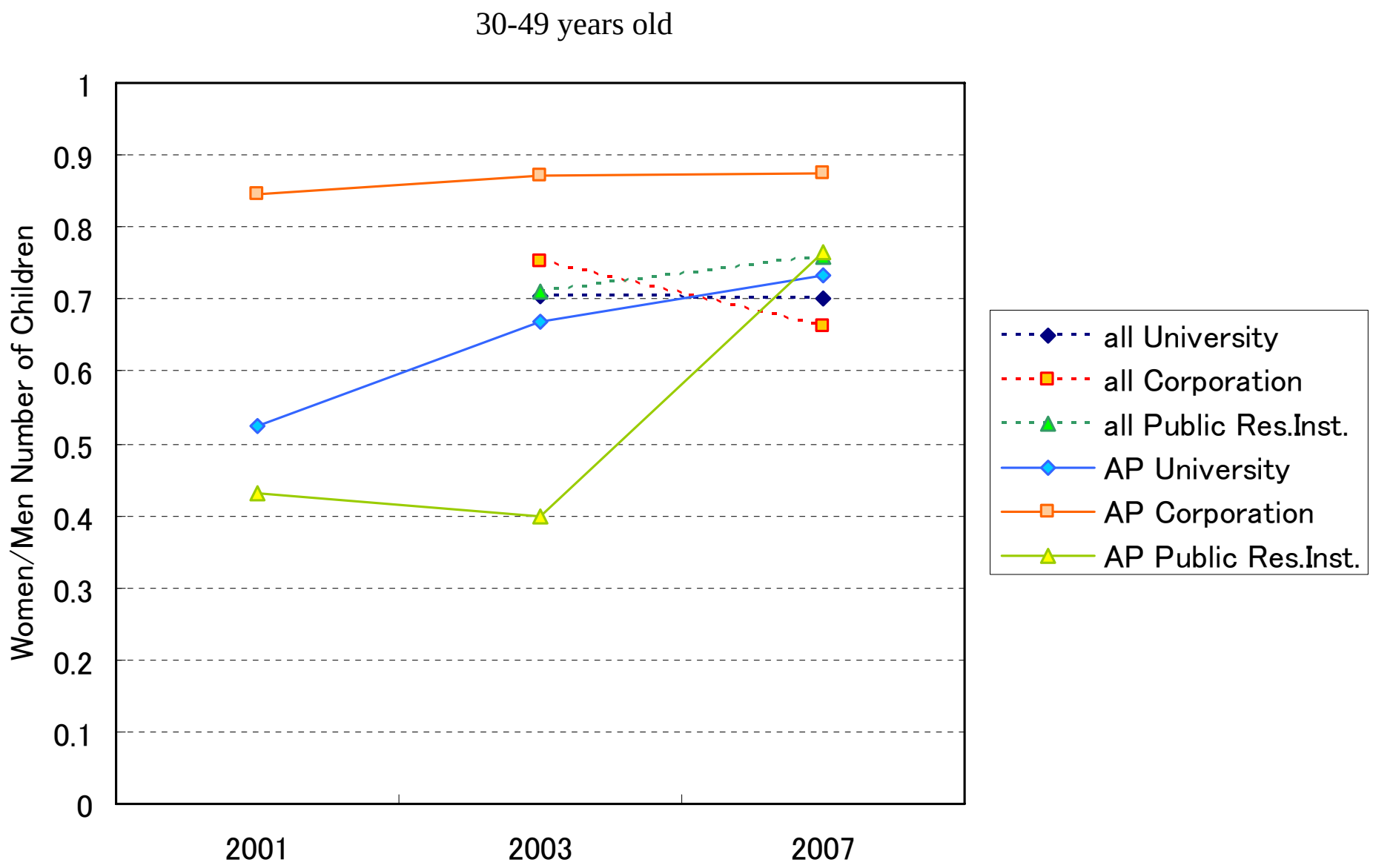
Corporation



TOSHIBA
Leading Innovation

Change of Average Number of Children Women/Men Ratio

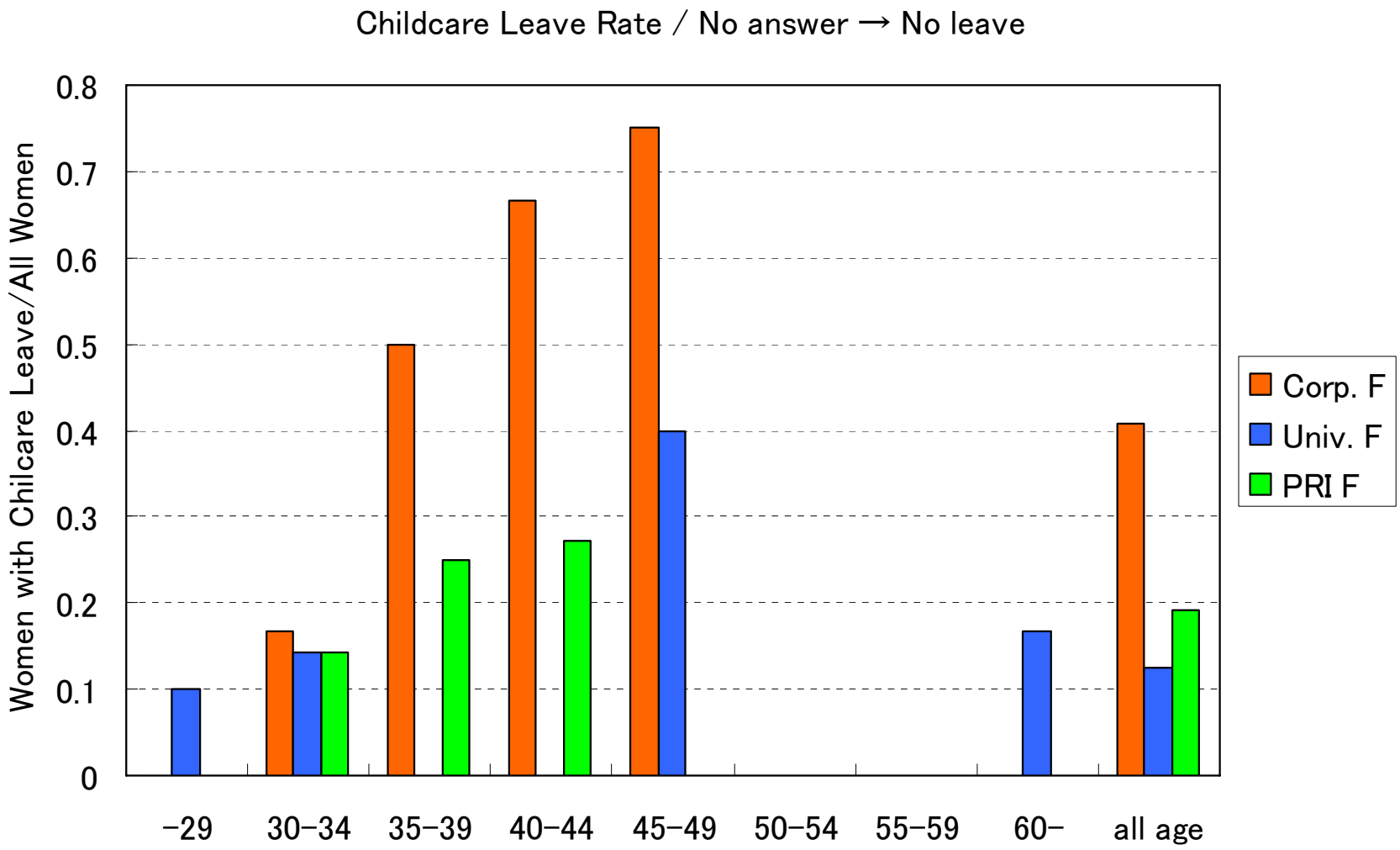
– Appl. Phys. & all societies 2007 --



Contents

Age dependent Childcare Leave Rate of Women

– Appl. Phys. 2007 --

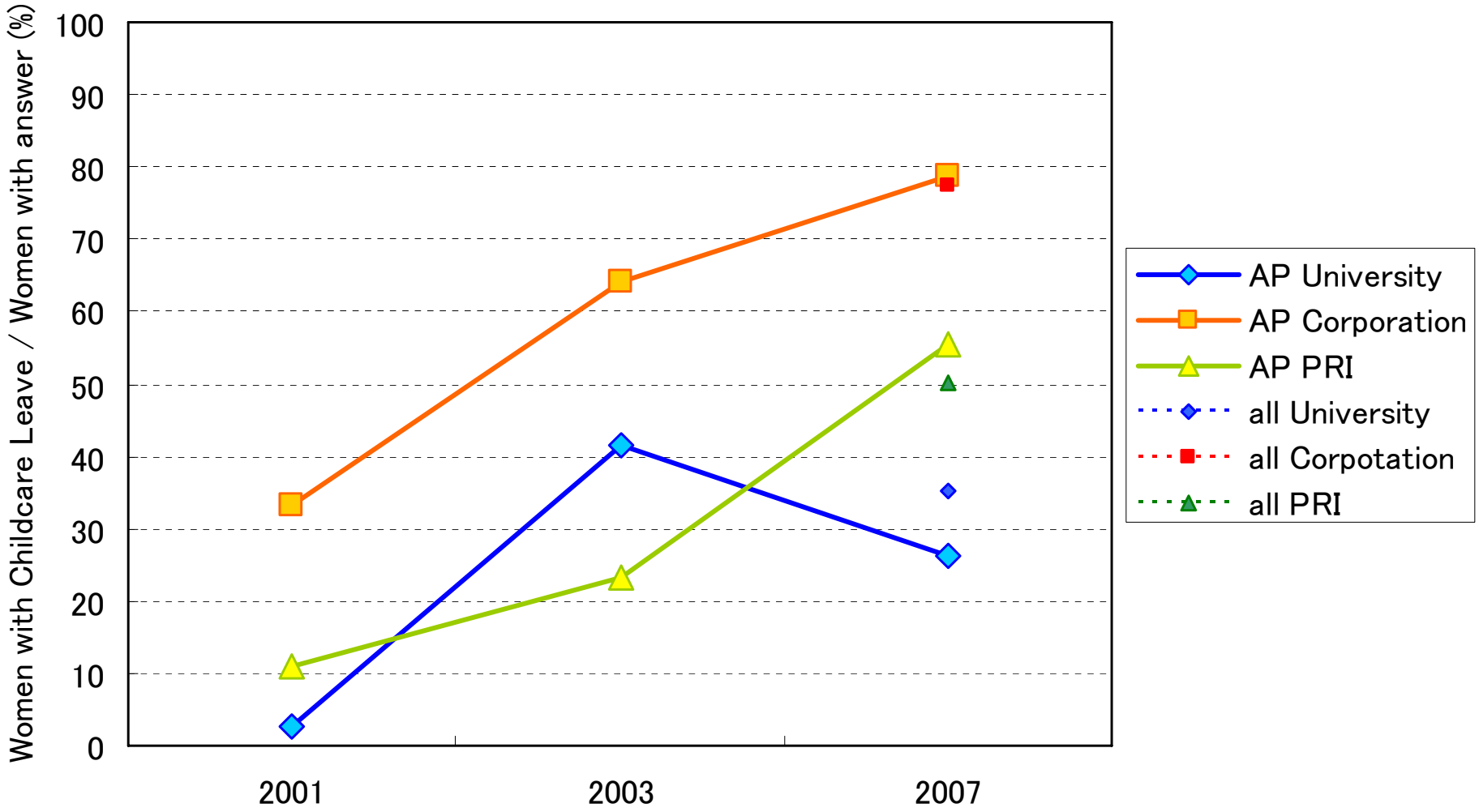


TOSHIBA
Leading Innovation

Change of Childcare Leave Rate

– Appl. Phys. & all societies 2007 --

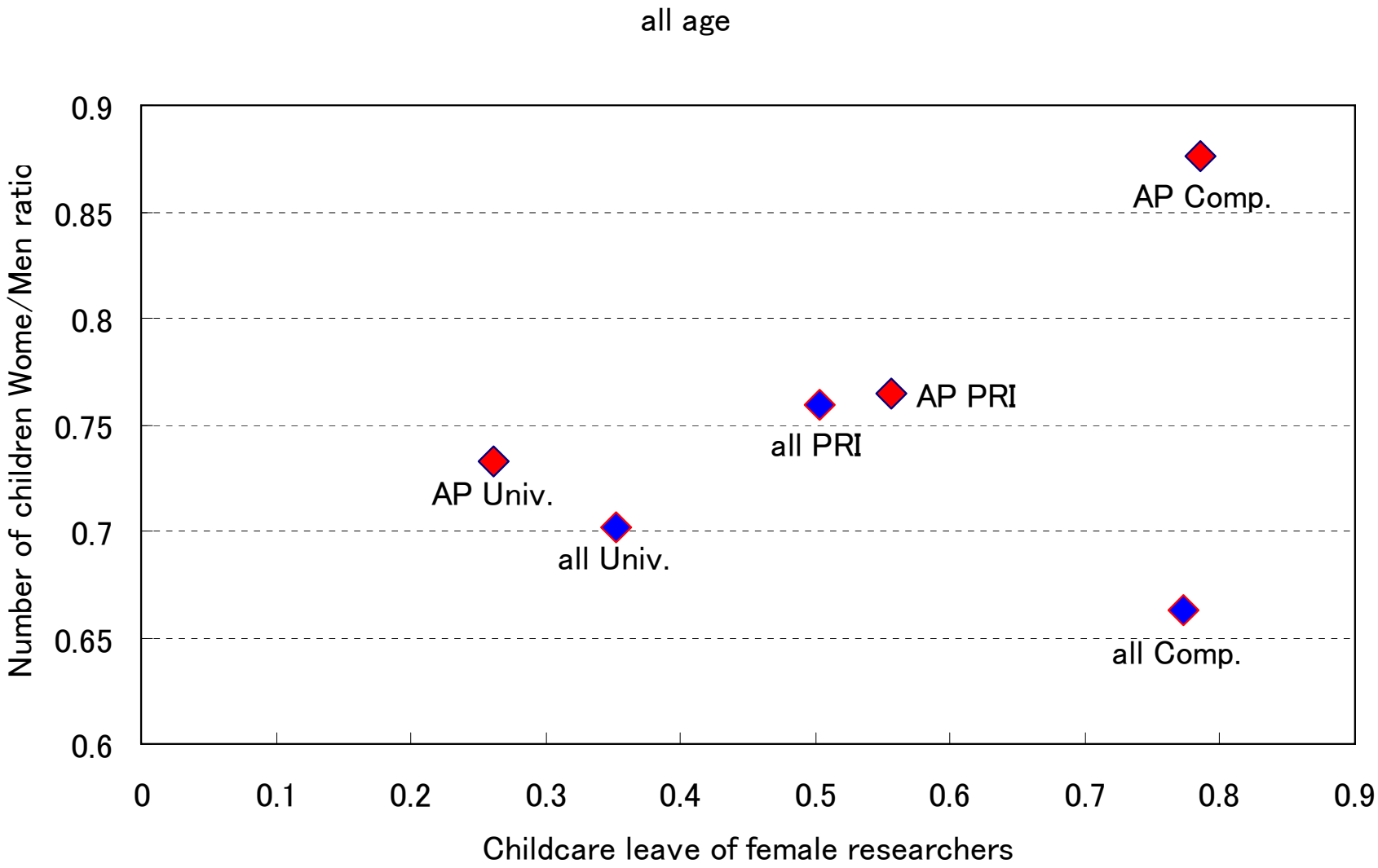
All age



TOSHIBA
Leading Innovation

Correlation of number of children & childcare leave

– Appl. Phys. & all societies 2007 --



TOSHIBA
Leading Innovation

Contents

Problems to be solved & Our vision

Problems

1. Job position improvement

   It has been improved in AP fields, but has still gender gap.

2. Childcare leave popularization

   It should be more popular in universities, expecting the female researchers have children as they want.

3. Repeat of extensive questionnaire surveys

   The surveys should be repeated to capture the current status of gender equality in the science and engineering fields, showing problems to be solved to realize a truly gender-equal society.

Our Vision:

Anybody who wishes to work in a higher position with the faculty and wishes to have a full life can realize her (his) will.

END