

Research Report on **Birth Rates & Related Policies** in Germany, Taiwan, and China (mainland)

Presented by:

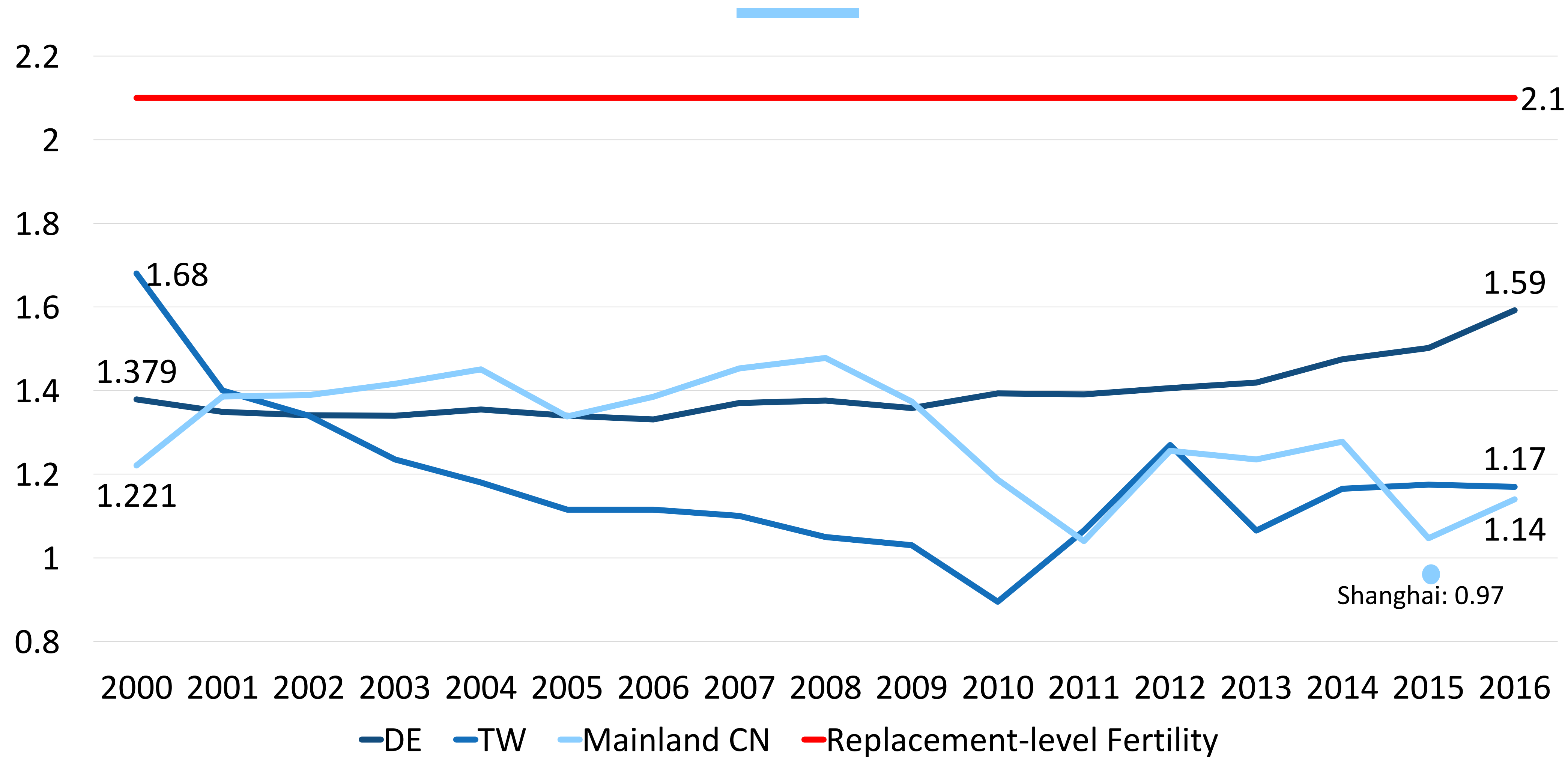
2014012589 Tungsheng Hsieh

2014012621 Hanying Wang

2018400116 Sebastian Lunz

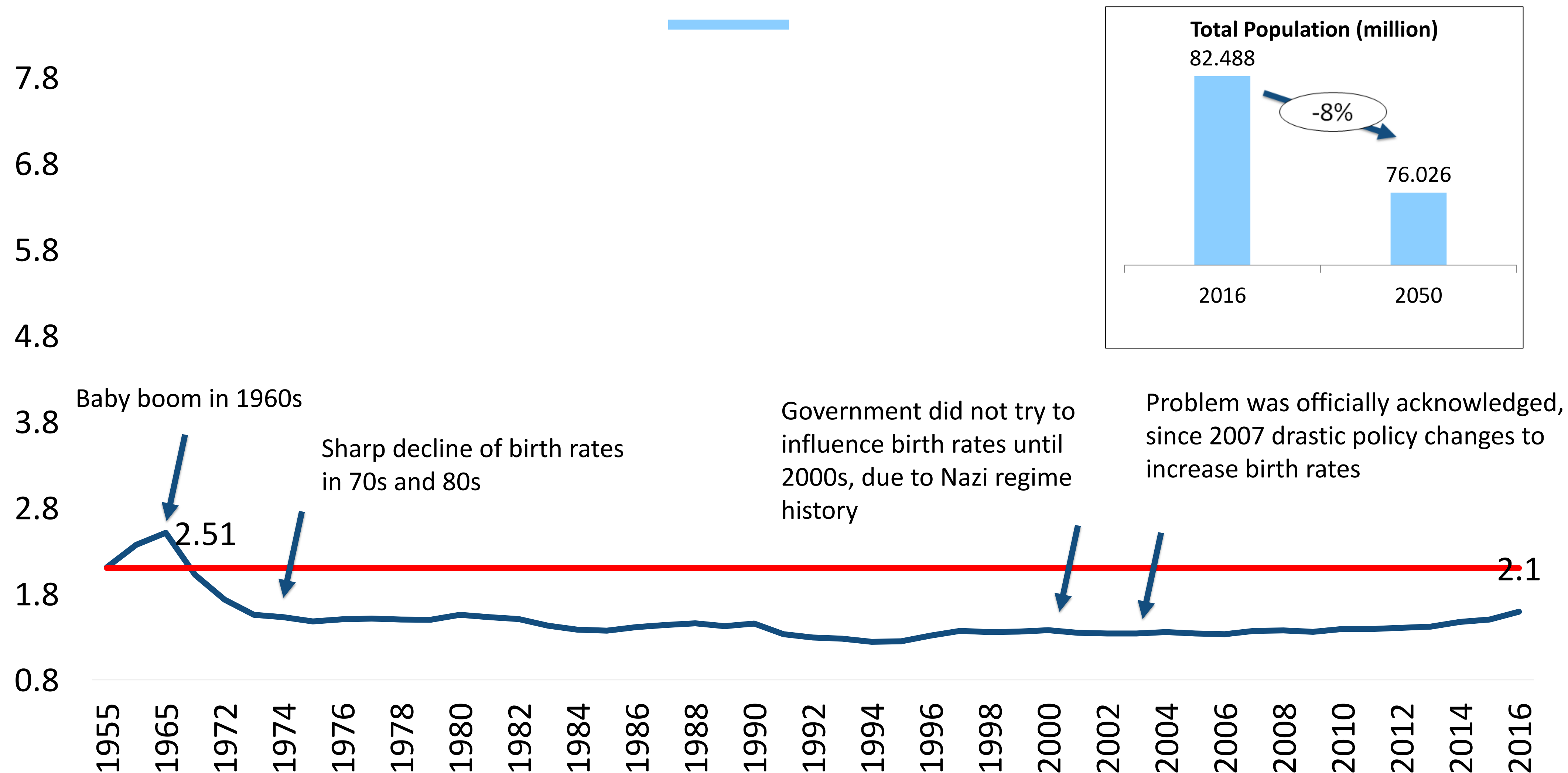
Total Fertility Rate (TFR): 2000-2016

Overview Birthrates, Population, and Approach by Politics



Total Fertility Rate - Germany

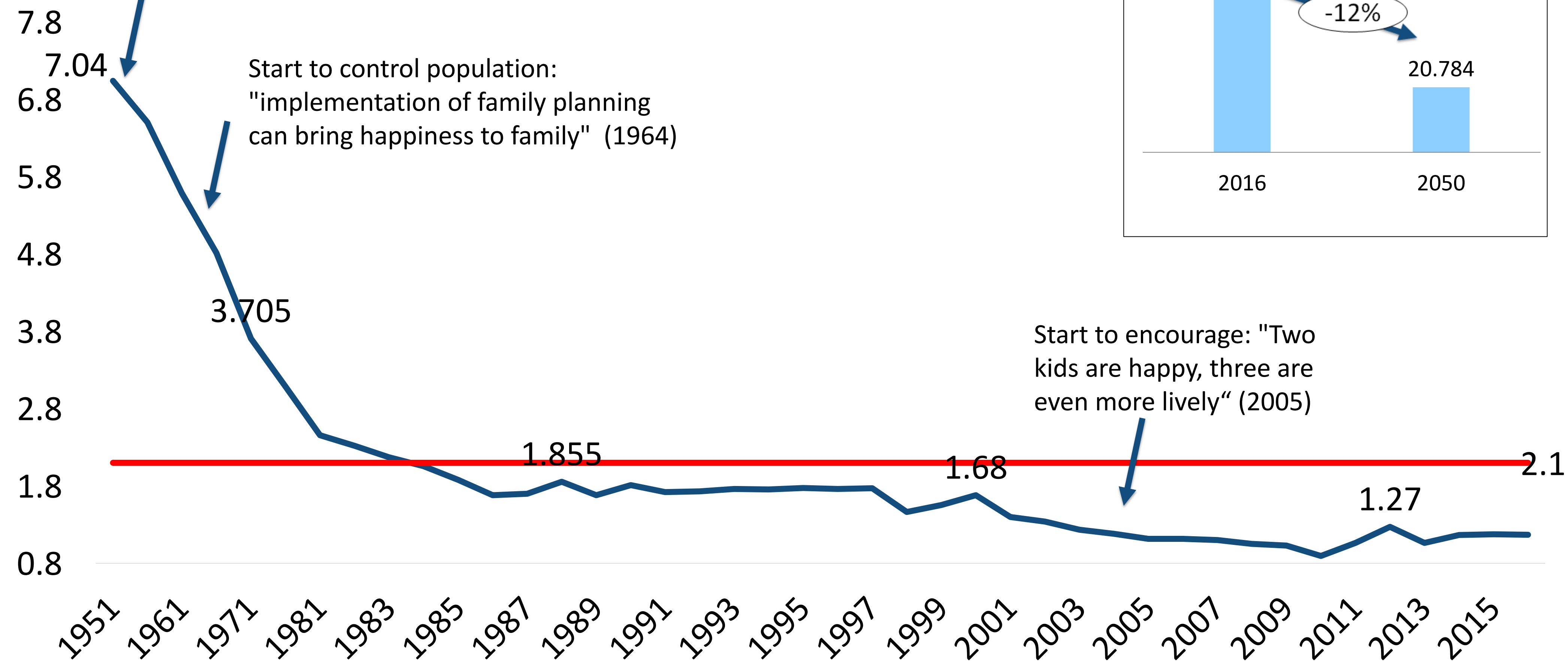
Overview Birthrates, Population, and Approach by Politics



Total Fertility Rate - Taiwan

Overview Birthrates, Population, and Approach by Politics

Baby boom after WWII



Total Population (million)

23.547

-12%

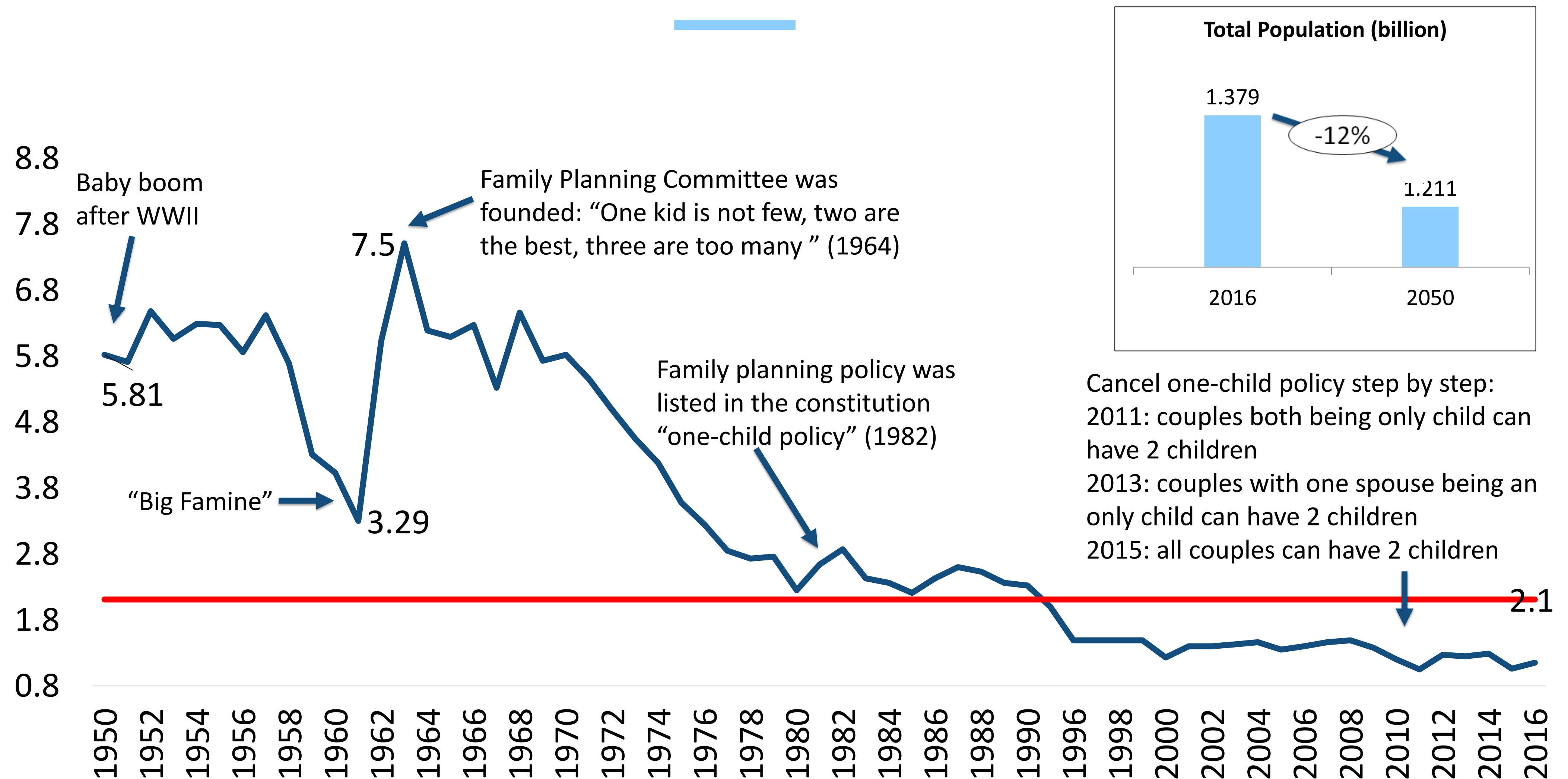
20.784

2016

2050

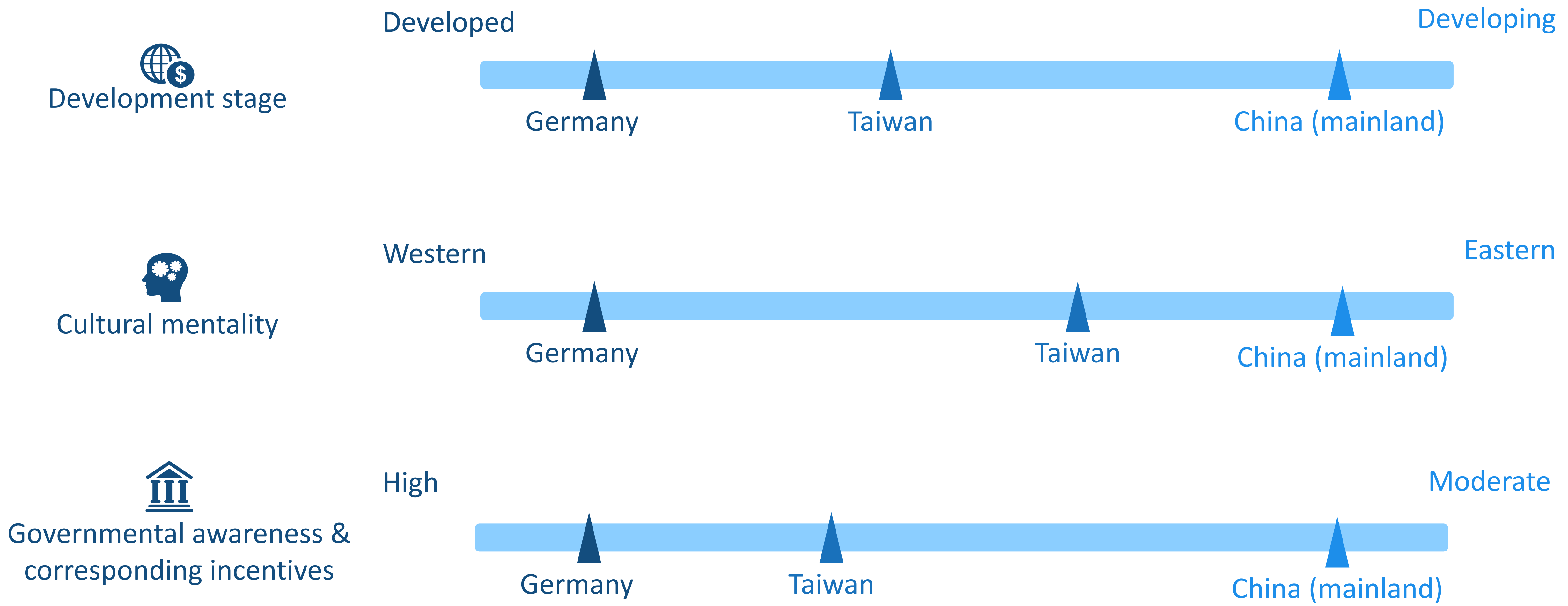
Total Fertility Rate - China

Overview Birthrates, Population, and Approach by Politics



Goal of the Presentation

Comparison

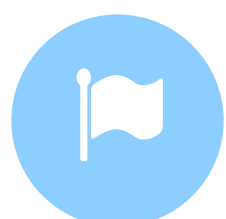


Analysis Framework

Framework



Decomposition of statistical index and the birth rate gap



Priority check of incentive policies



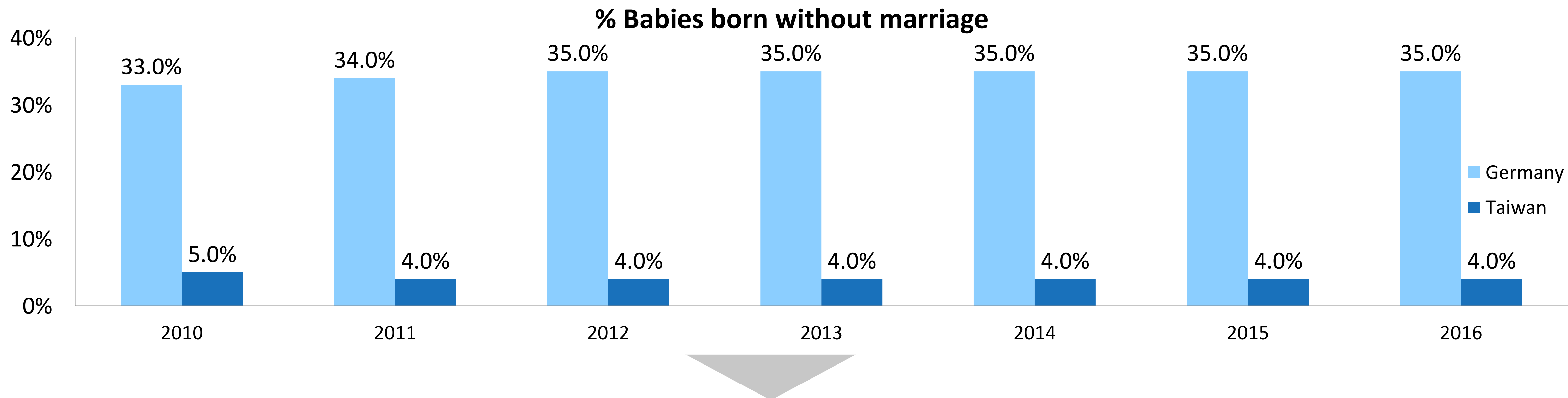
Incentives policies evaluation



Decomposition of statistical index and the birth rate gap

Decomposition of Total Fertility Rate

Analysis Method

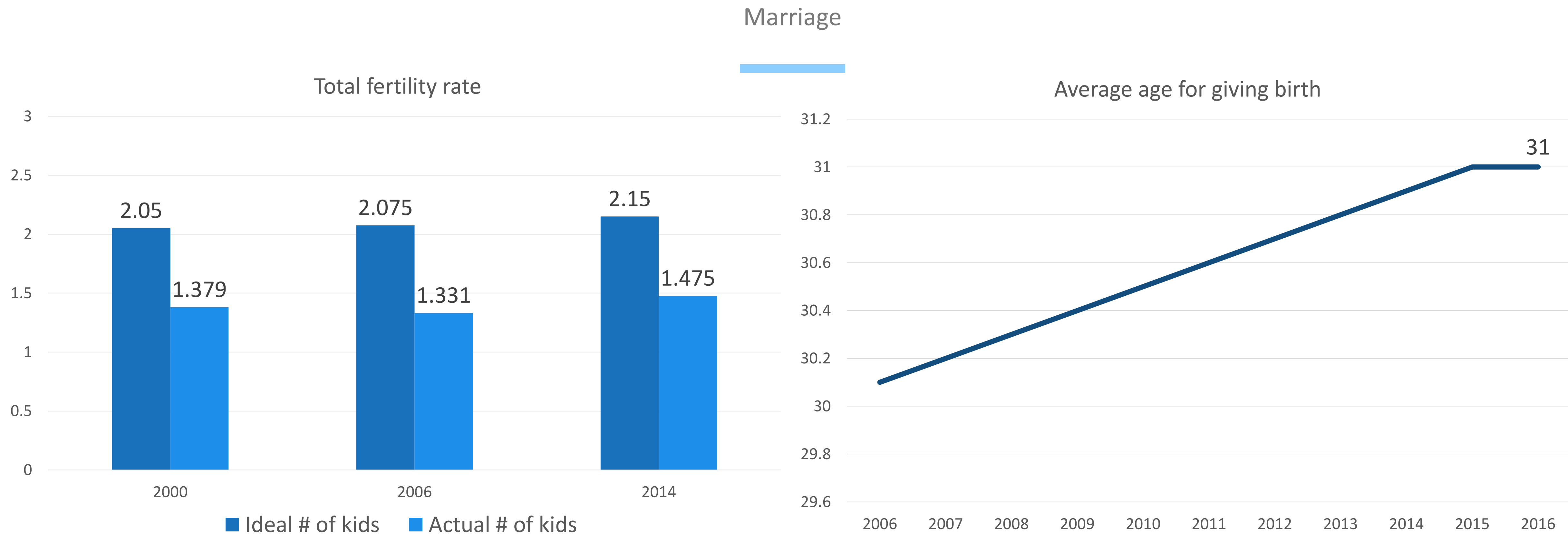


✓ For societies with conservative mentality, being married is still the legal/ social prerequisite for having children.

Total Fertility Rate

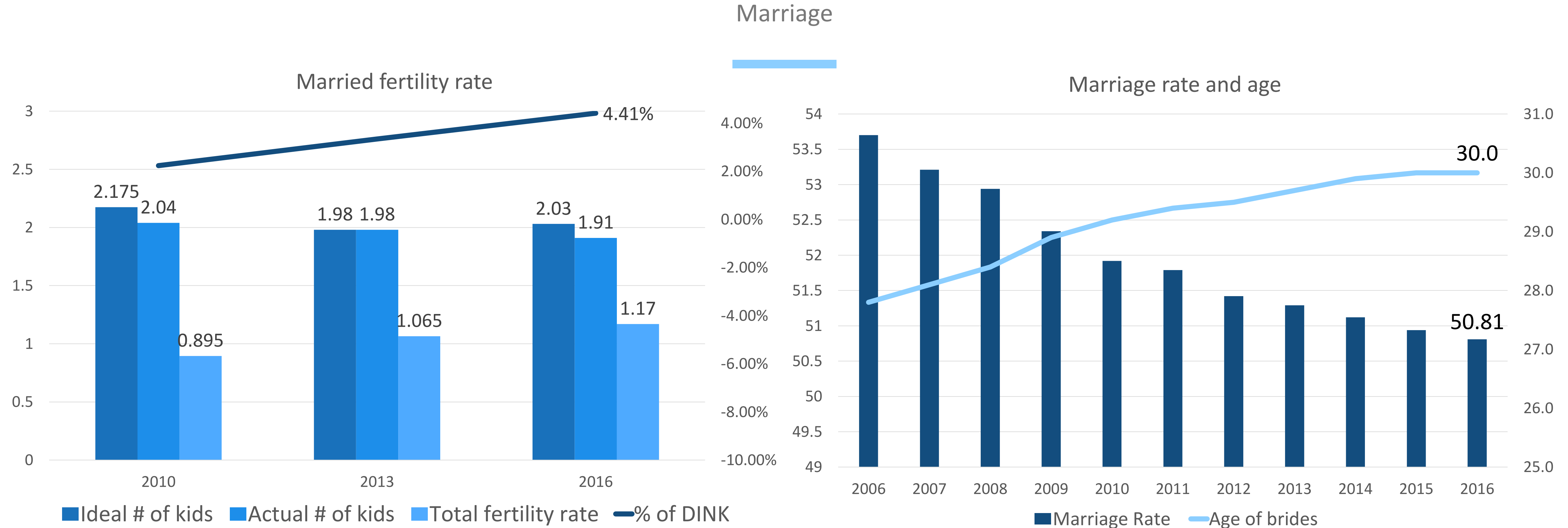
$$= \frac{\# \text{ of Births}}{\# \text{ of Woman}} = \frac{\# \text{ of Births}}{\# \text{ of married Woman}} \times \frac{\# \text{ of married Woman}}{\# \text{ of Woman}} = \text{Married Fertility Rate} \times \text{Marriage Rate}$$

Fertility Rate and Age of Giving Birth – Germany



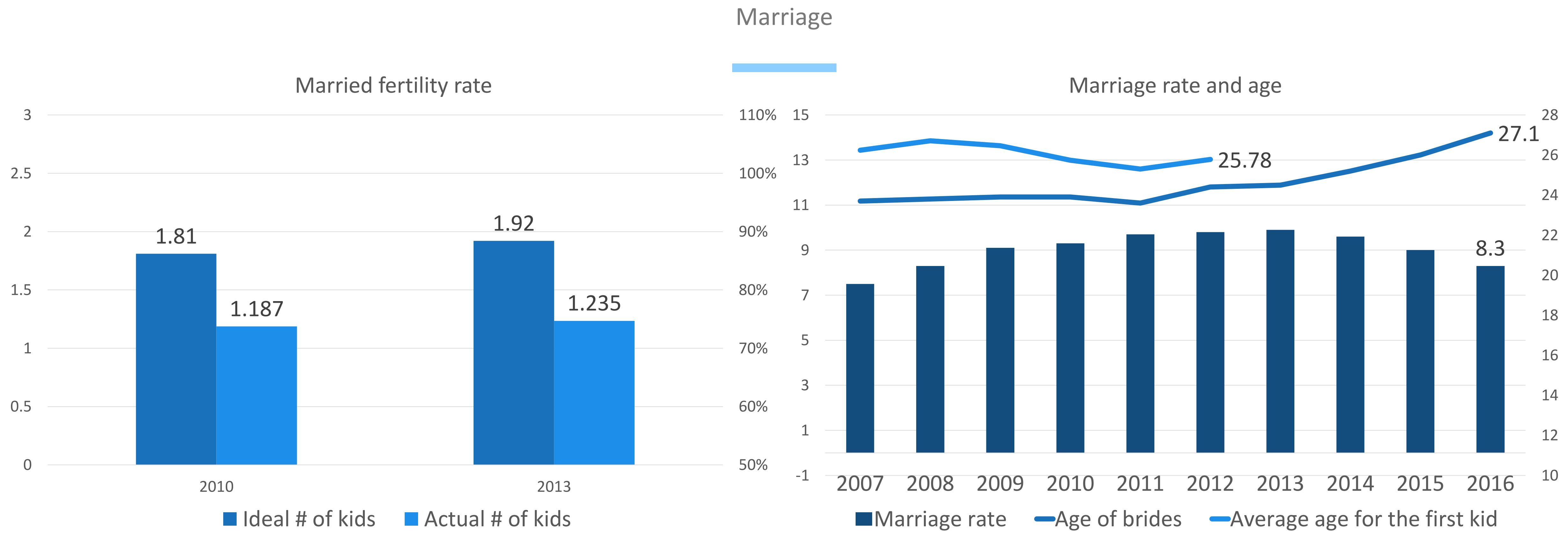
- ✓ Appreciable gap between the as is and the should be
- ✓ Women’s age of giving birth increasing

Marriage Rate and Married Fertility Rate – Taiwan



- ✓ The MFR is decreasing but still above the TFR
- ✓ The drop in the TFR can be mainly attributed to the “left-over woman” phenomenon (increasing marriage age/decreasing marriage rate)
- ✓ Being married is almost equivalent to having kids (% of Double-Incomes-No-Kids is increasing but still the minority)
- ✓ Appreciable gap between the as is and the should be

Married Fertility Rate and Marriage Rate – China



- ✓ Appreciable gap between the as is and the should be
- ✓ Humped marriage rate with left-over woman phenomenon also
- ✓ Being married is also almost equivalent to having kids (% of Double-Incomes-No-Kids is increasing but still the minority)

Sources: National Bureau of Statistics of the People’s Republic of China; 张银锋 & 侯佳伟, (2016)



Priority check of incentive policies

Priority of Issues – Germany

Policies

Actual problems
for having children

Distinction between 2
issues:

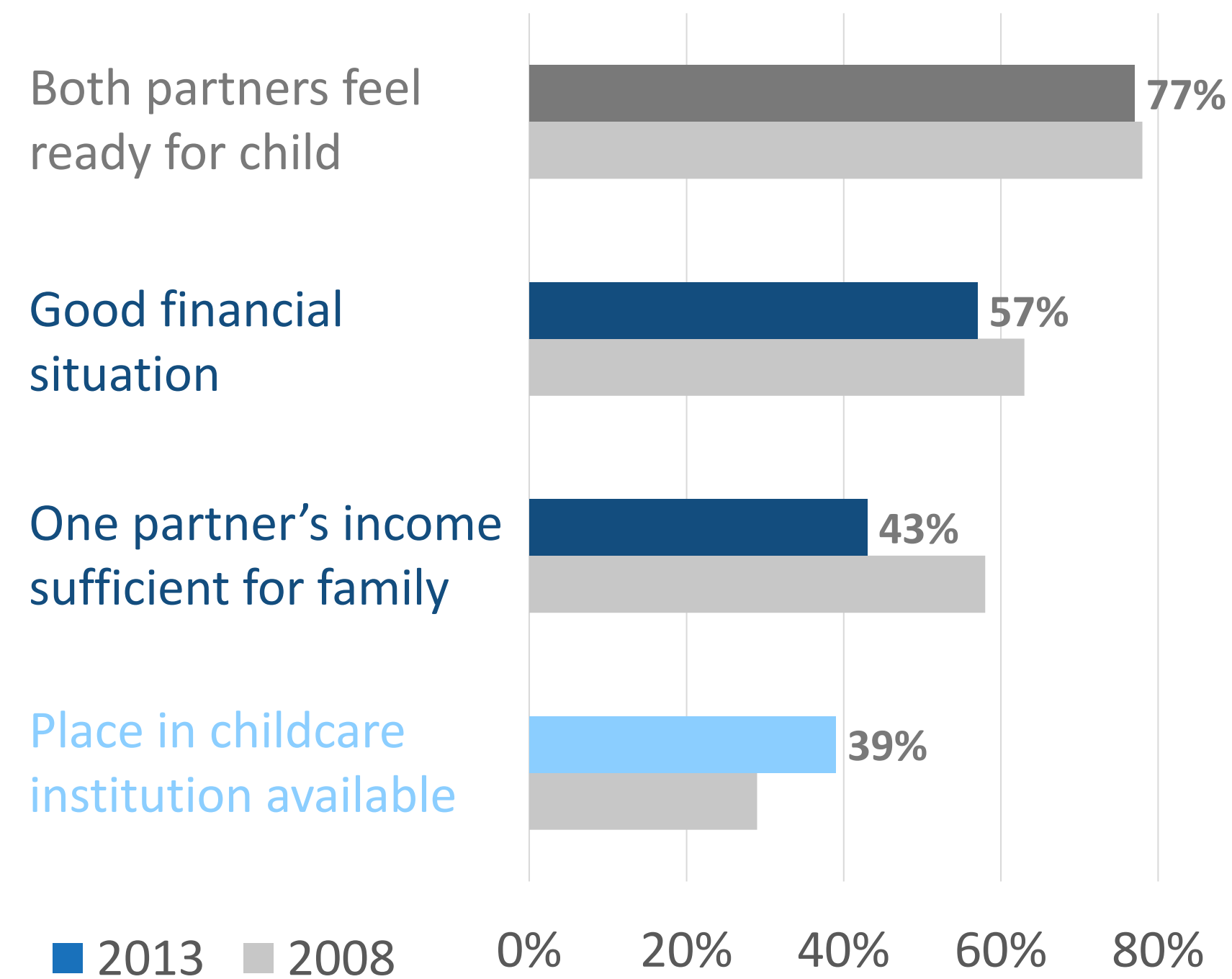


Improvement of **financial
situation** of parents

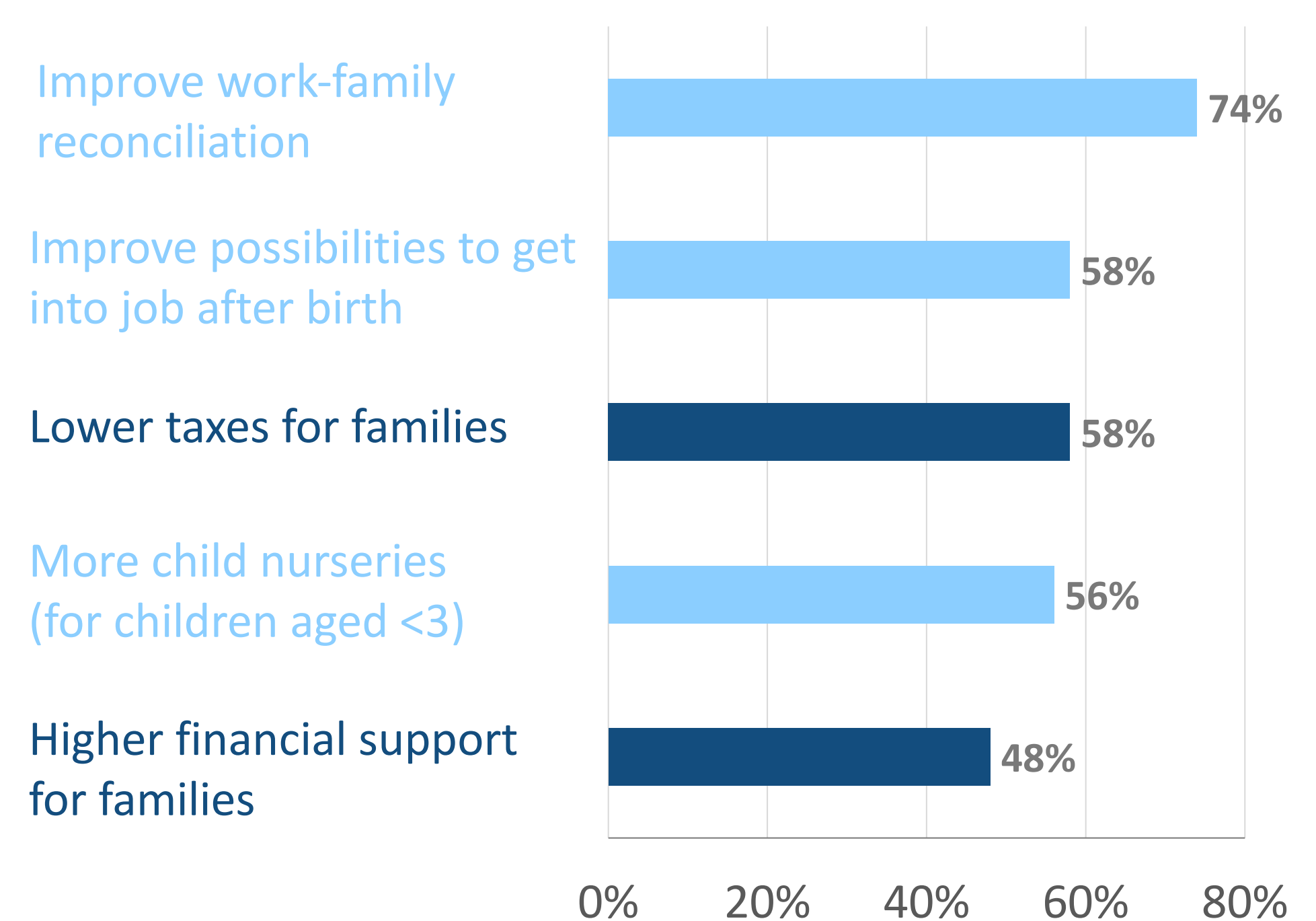


Improvement of **work-
family reconciliation**

Prerequisites for having a child (2013)



Topics to be addressed by politics (2013)



- ✓ Prerequisites: Financial situation still more important than work-family reconciliation, but decreasing importance
- ✓ Actual problems: Topics related to work-family reconciliation seem to be more pressing (potential) parents

Priority of Issues – Taiwan

Policies

Distinction between 2 issues:

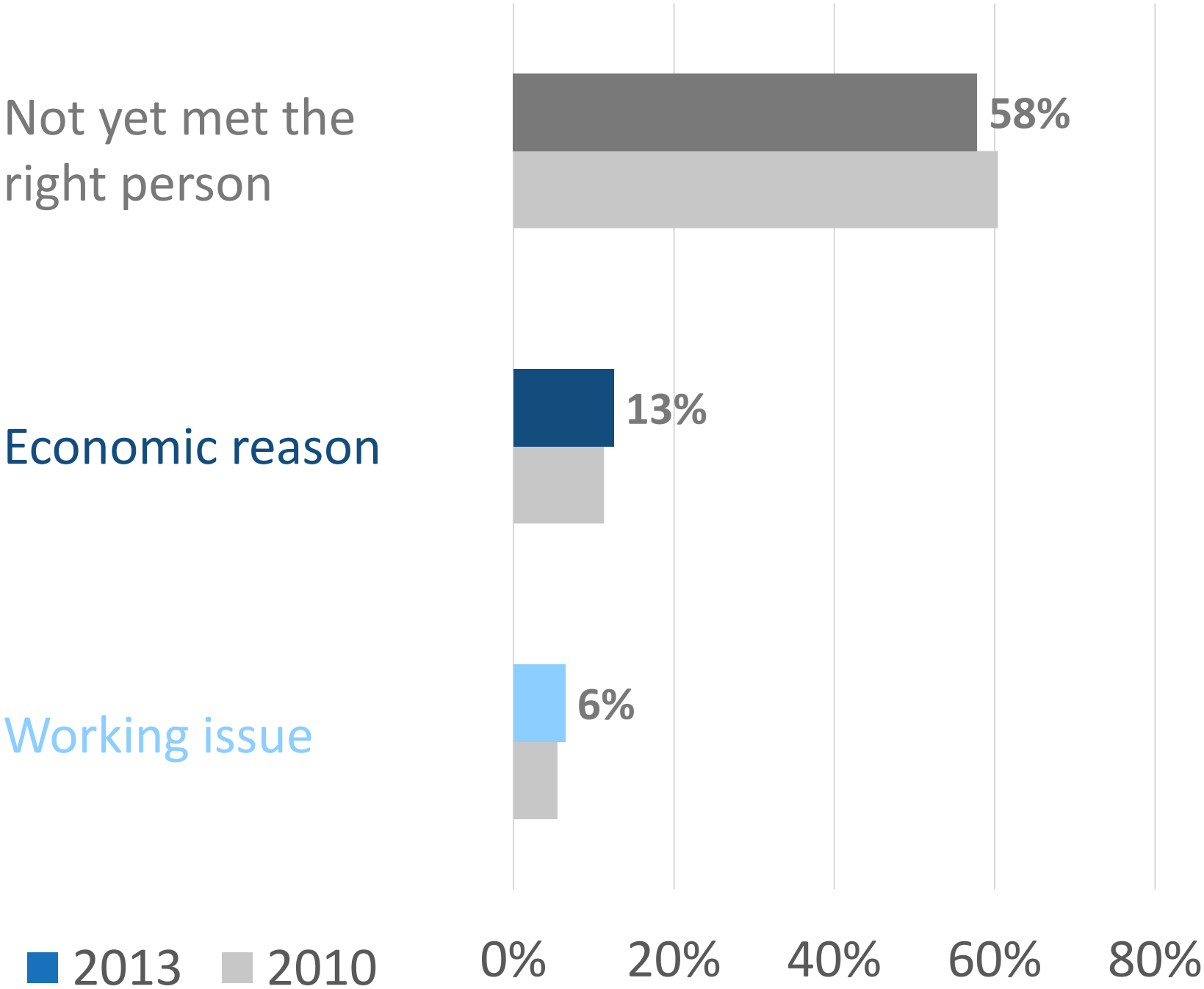


Improvement of **financial situation** of parents

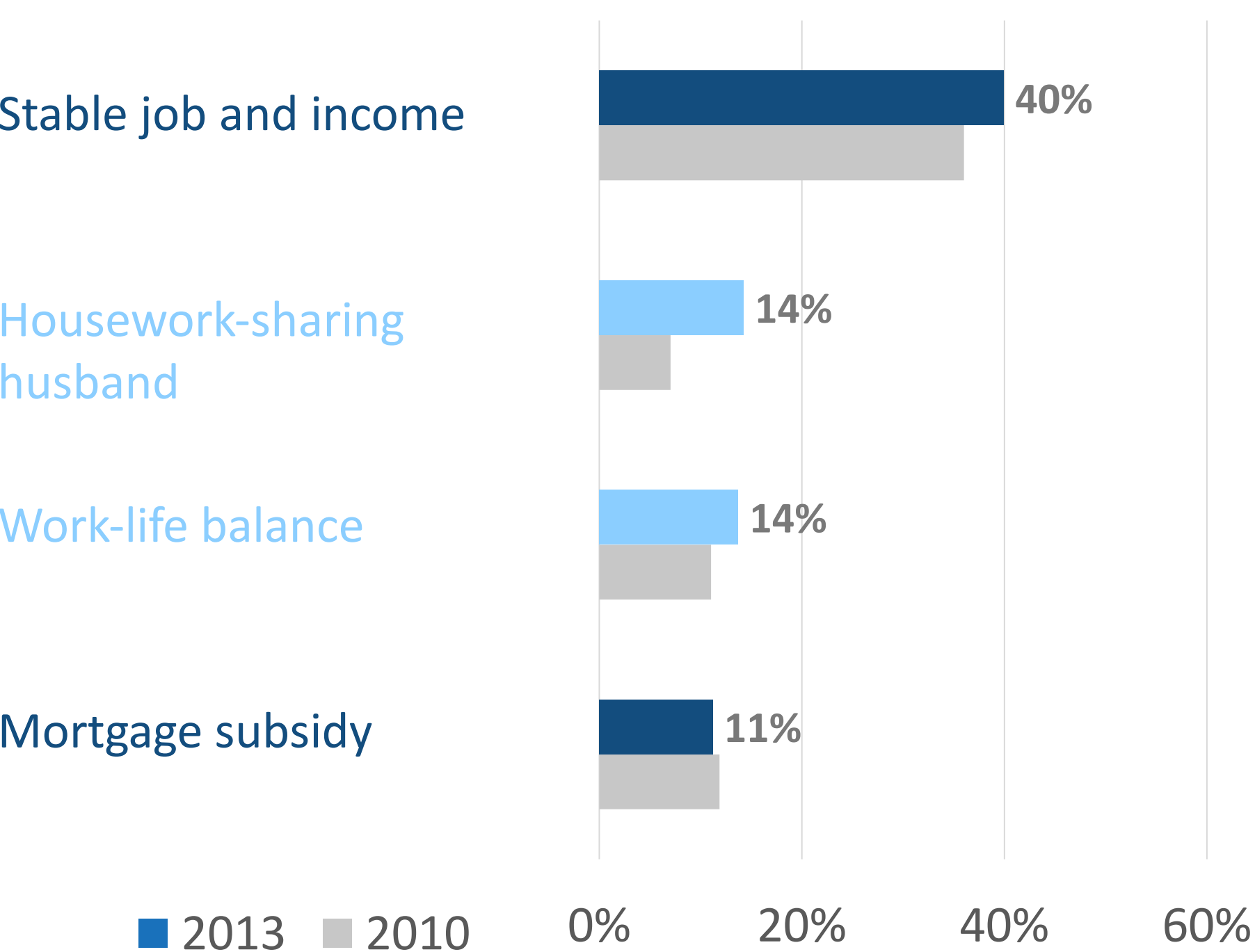


Improvement of **work-family reconciliation**

Top 3 reasons for being unmarried



Top incentives for being married



- ✓ Financial situation is still the most important issue with increasing importance
- ✓ Quasi-parents are asking for better work-life reconciliation for having kids

Priority of Issues – China

Policies

Distinction between 2 issues:

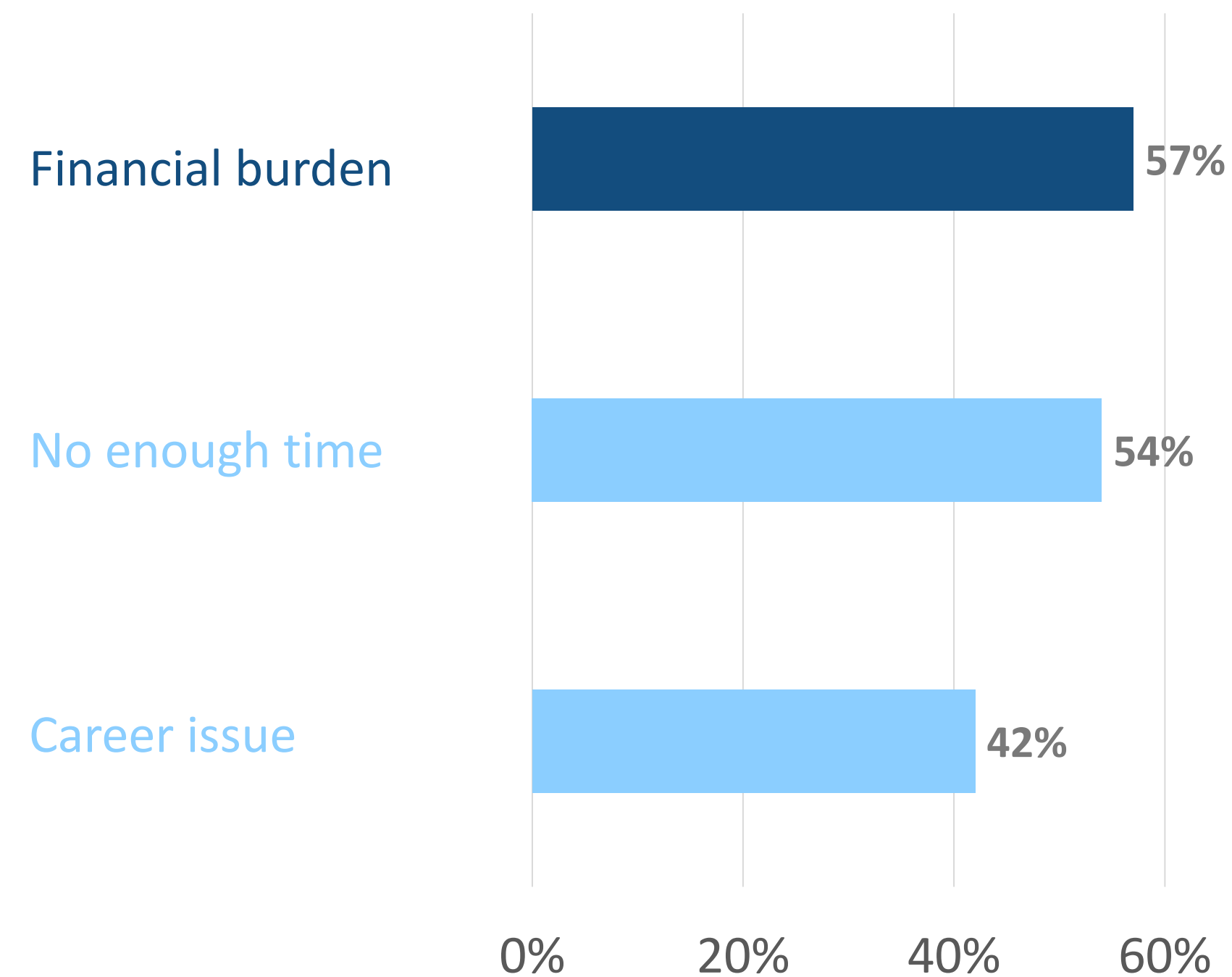


Improvement of **financial situation** of parents

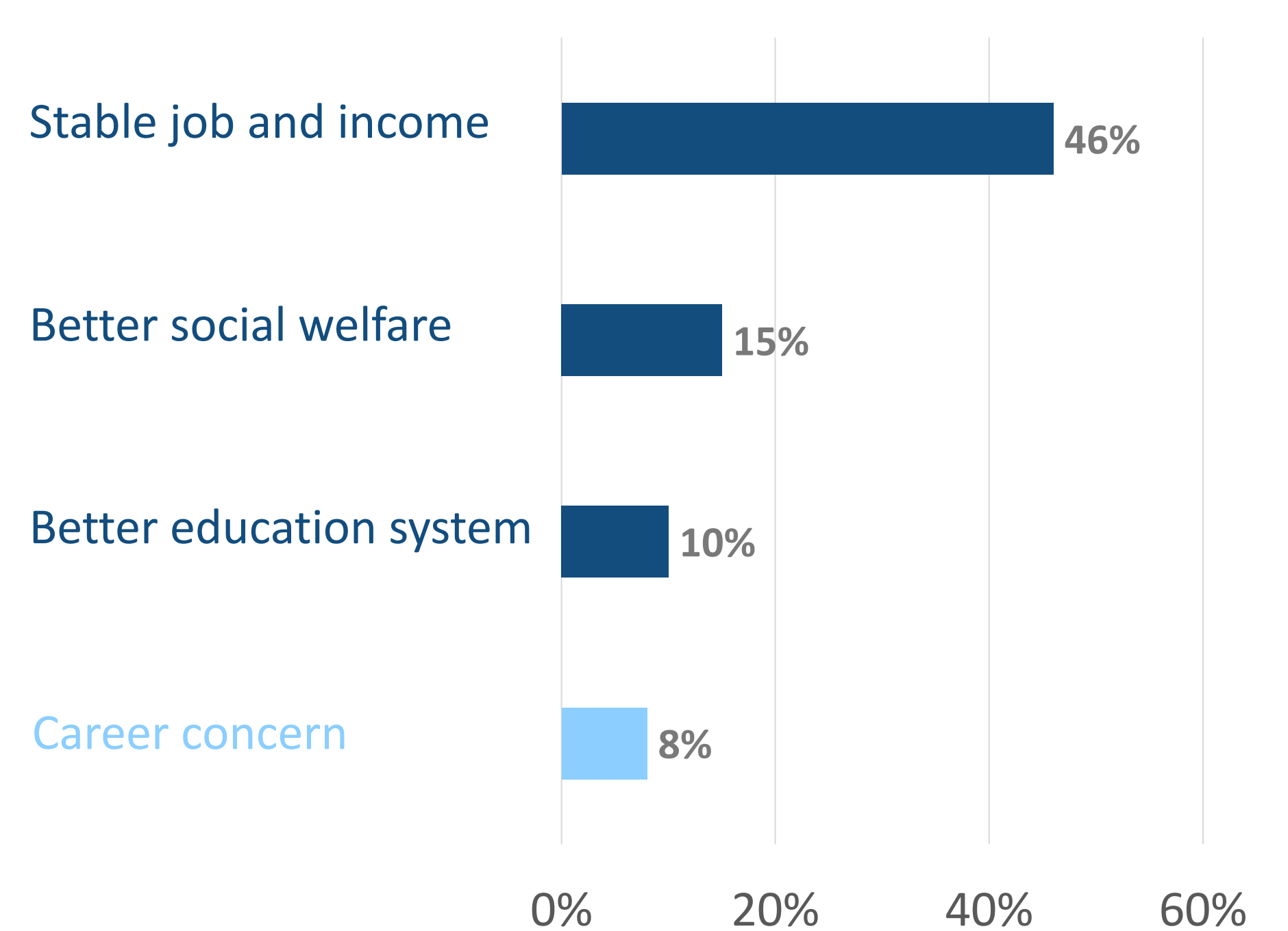


Improvement of **work-family reconciliation**

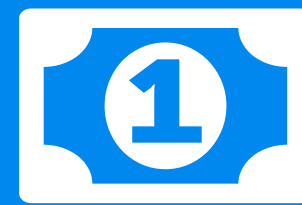
Top 3 reasons for not having a kid (2016)



Top incentives for having the 2nd kid (2016)



- ✓ Financial issue is the most important concern when considering whether have a kid and whether to have a 2nd kid
- ✓ Asking for the balance between family and career development



Financial support

Overview of Government Subsidies for Children

Financial Support


	Fixed subsidies	Conditional subsidies	
		Price-level based	Income based
DE	Children money "Kindergeld" ¥1,455 monthly per child	Rent subsidy - "Wohngeld" - ¥2,835–5,648 monthly per HH	Extra children money "Kinderzuschlag" ¥ 1,275 monthly per child
TW	Birth rewards "生育獎勵" ¥7,780 one time per child	Regional birth rewrad "生育獎勵" ¥4,255 one time per child	Low income childcare allowance "低收入戶育兒津貼" ¥532 monthly per child
	Childcare allowance "育兒津貼" ¥532 monthly per child		
CN			Low income subsidy "低收入家庭補助" ¥970 monthly. per HH member


Sources: Federal Statistical Office (Germany); Federal Agency for Employment (Germany); Federal Ministry for Family Affairs (Germany); Federal Ministry for Environment Protection and Construction (Germany); Wohngeld.org; MamiBuy編輯部, (2018); Shanghai Civil Affairs Bureau


Cost of Raising a Child for Average & Low Income Families


Financial Support

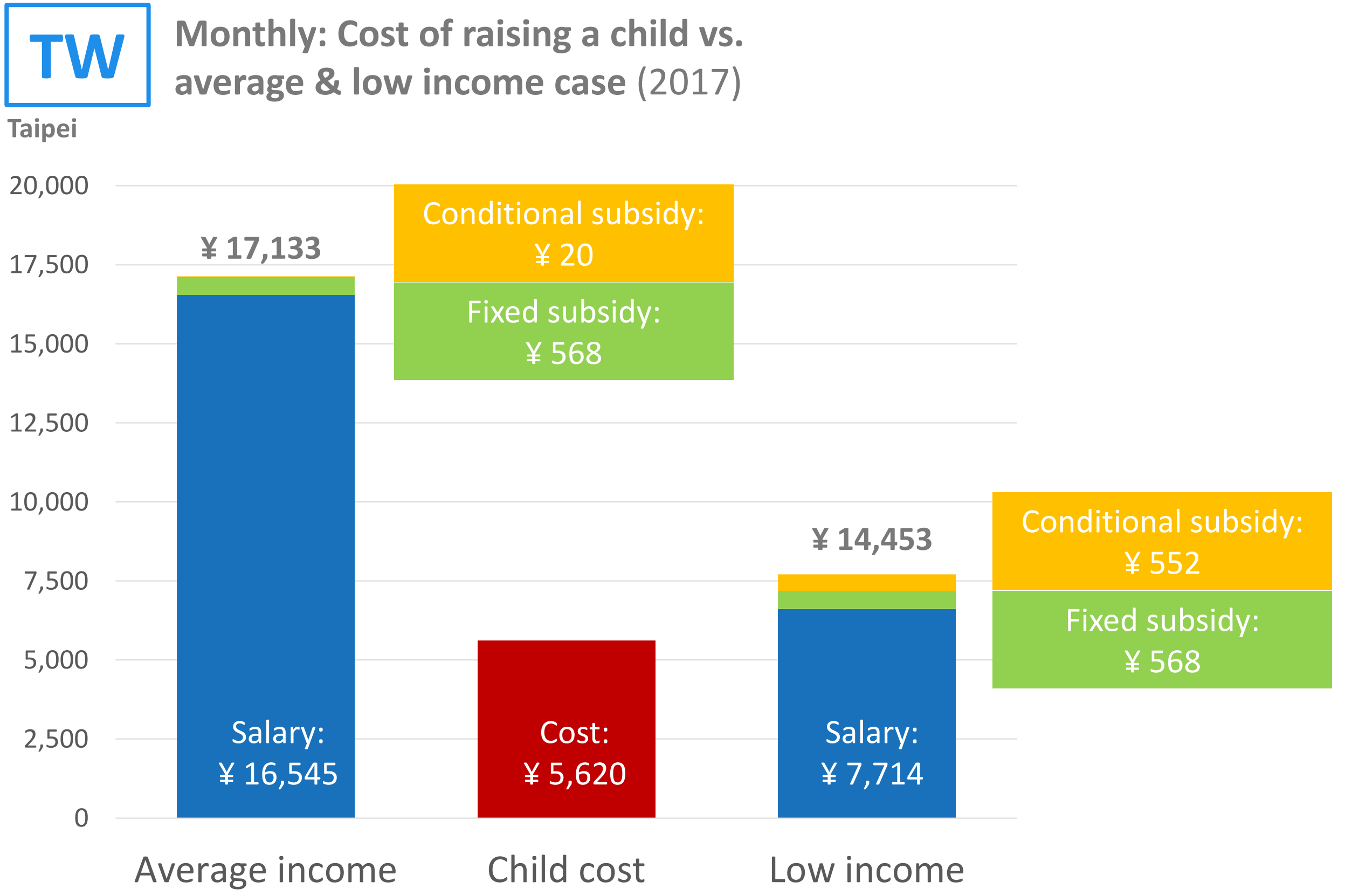
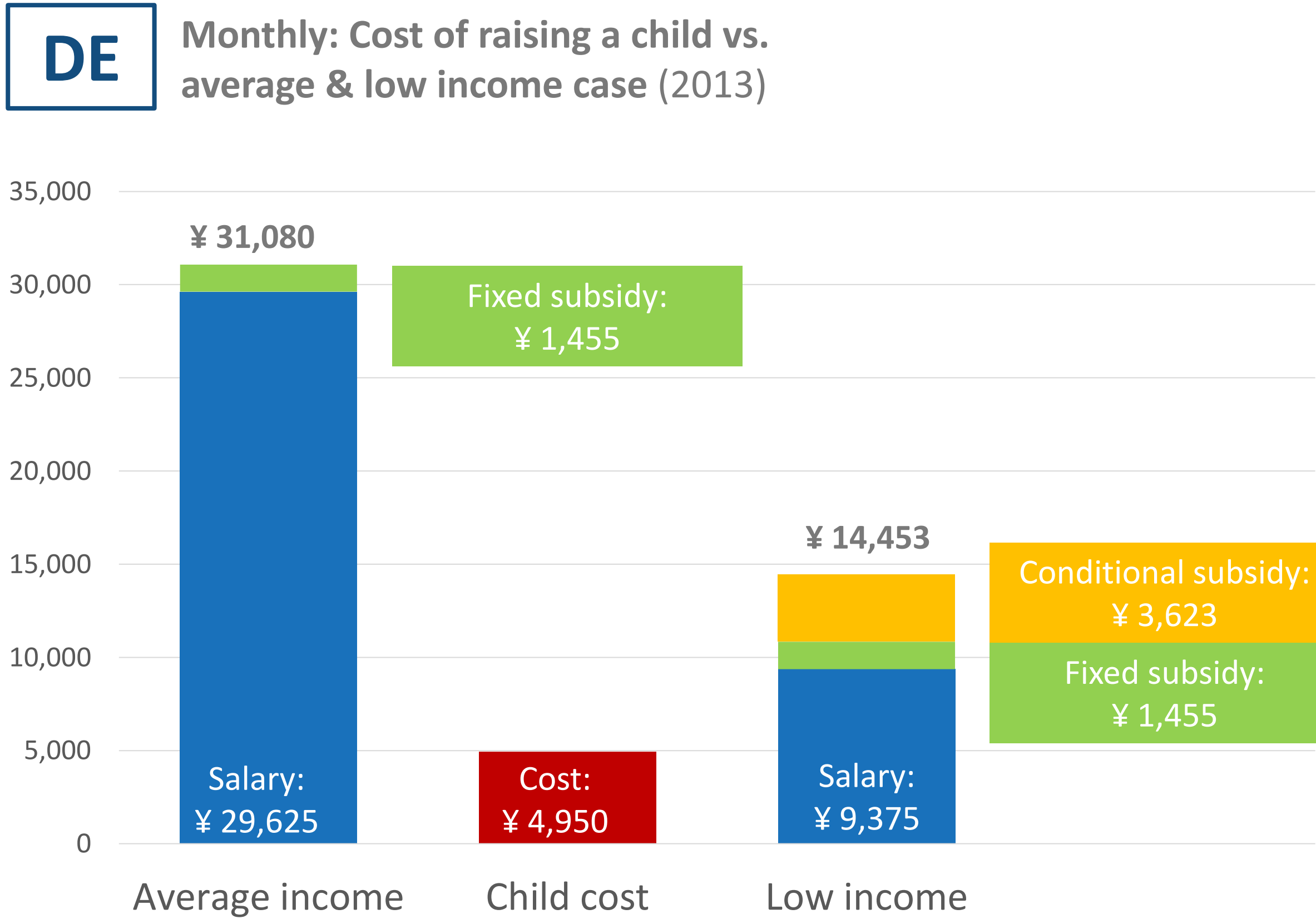
Assumptions:

 One child family

 Both parents working

 Average monthly costs until graduation

 1¥ = 4.7 NT\$ = 0.13€





Sources: Federal Statistical Office (Germany); Federal Agency for Employment (Germany); Federal Ministry for Family Affairs (Germany); Federal Ministry for Environment Protection and Construction (Germany); Wohngeld.org; MamiBuy編輯部, (2018); Shanghai Civil Affairs Bureau; 凤凰网


Cost of Raising a Child for Average & Low Income Families


Financial Support

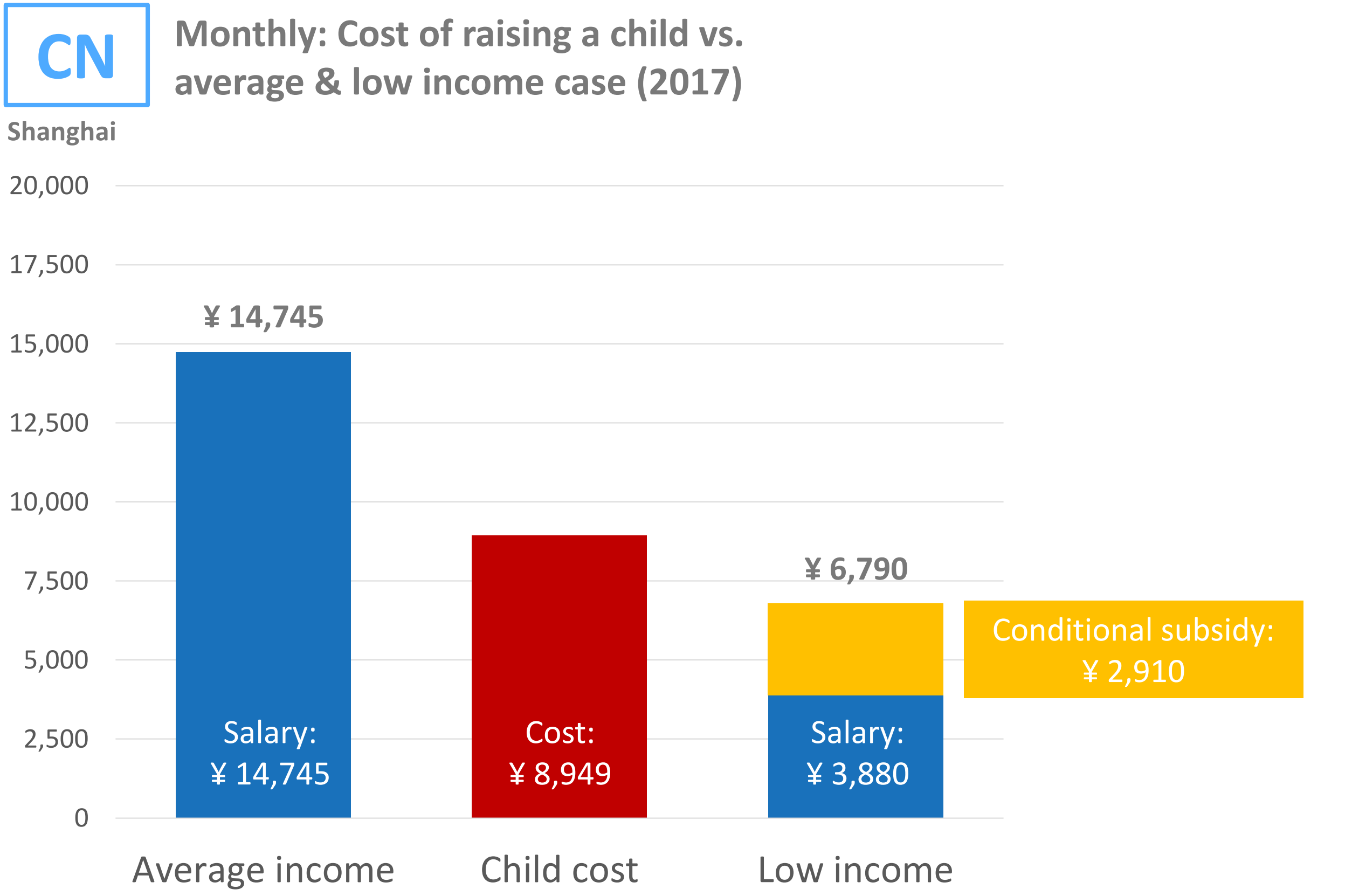
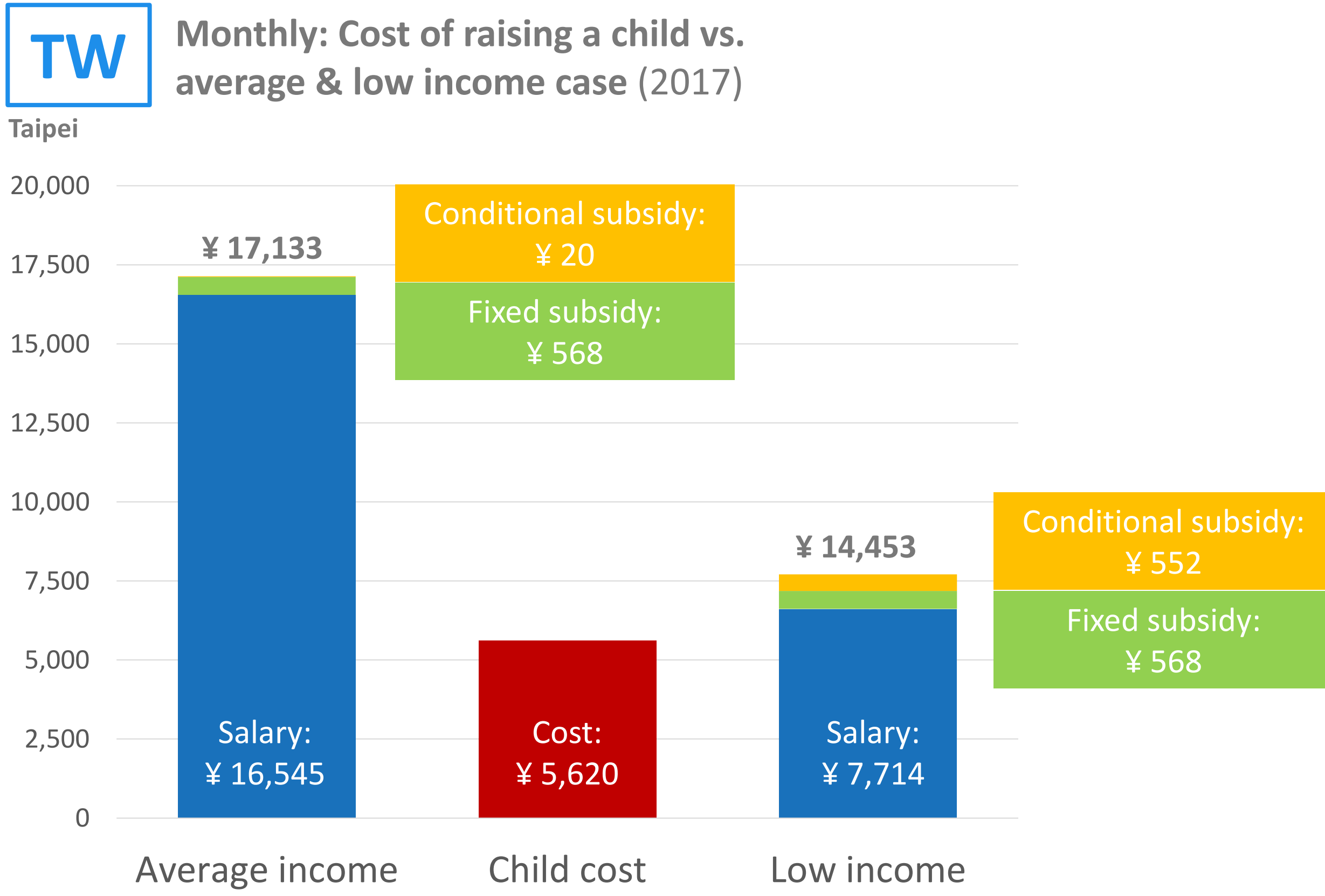
Assumptions:

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 Average monthly costs until graduation

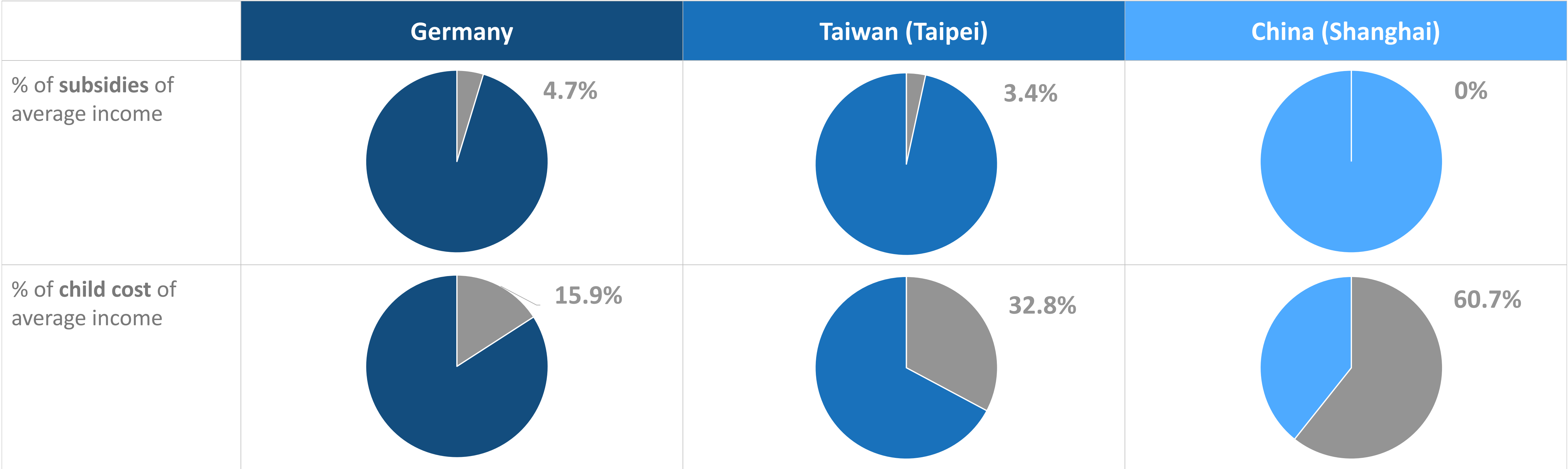
 1¥ = 4.7 NT\$ = 0.13€



Sources: MamiBuy編輯部, (2018); Shanghai Civil Affairs Bureau

Comparison of Costs and Subsidies – Average Income Case

Financial Support



- ✓ German and Taiwanese subsidies in same range; in China hardly existent – no specific subsidies for raising a child
- ✓ Cost proportion in China & Taiwan much higher than in Germany

Potential reasons for higher costs in China & Taiwan

- Education costs
- Marriage costs
- Different tax systems
- No free child healthcare like in Germany

Sources: Federal Statistical Office (Germany); Federal Agency for Employment (Germany); Federal Ministry for Family Affairs (Germany); Federal Ministry for Environment Protection and Construction (Germany); Wohngeld.org; MamiBuy編輯部, (2018); Shanghai Civil Affairs Bureau; 凤凰网



Childcare

Parental Leave Policies – Germany

Childcare

German parental leave policy before 2007:

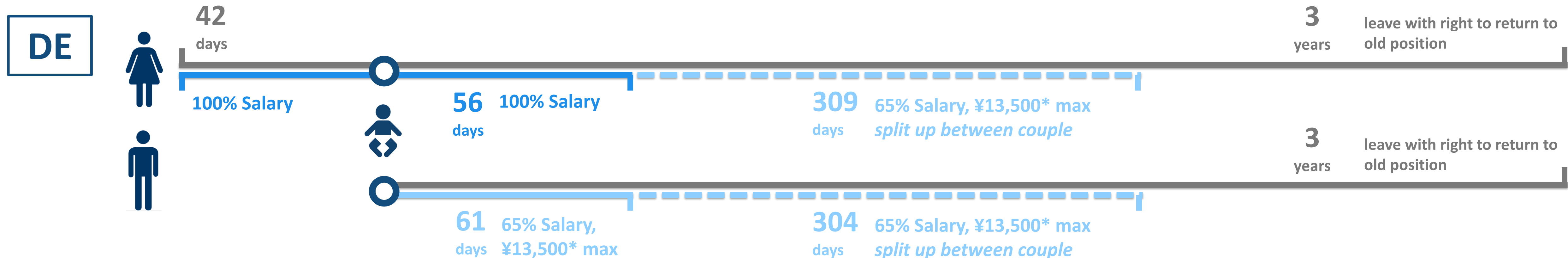
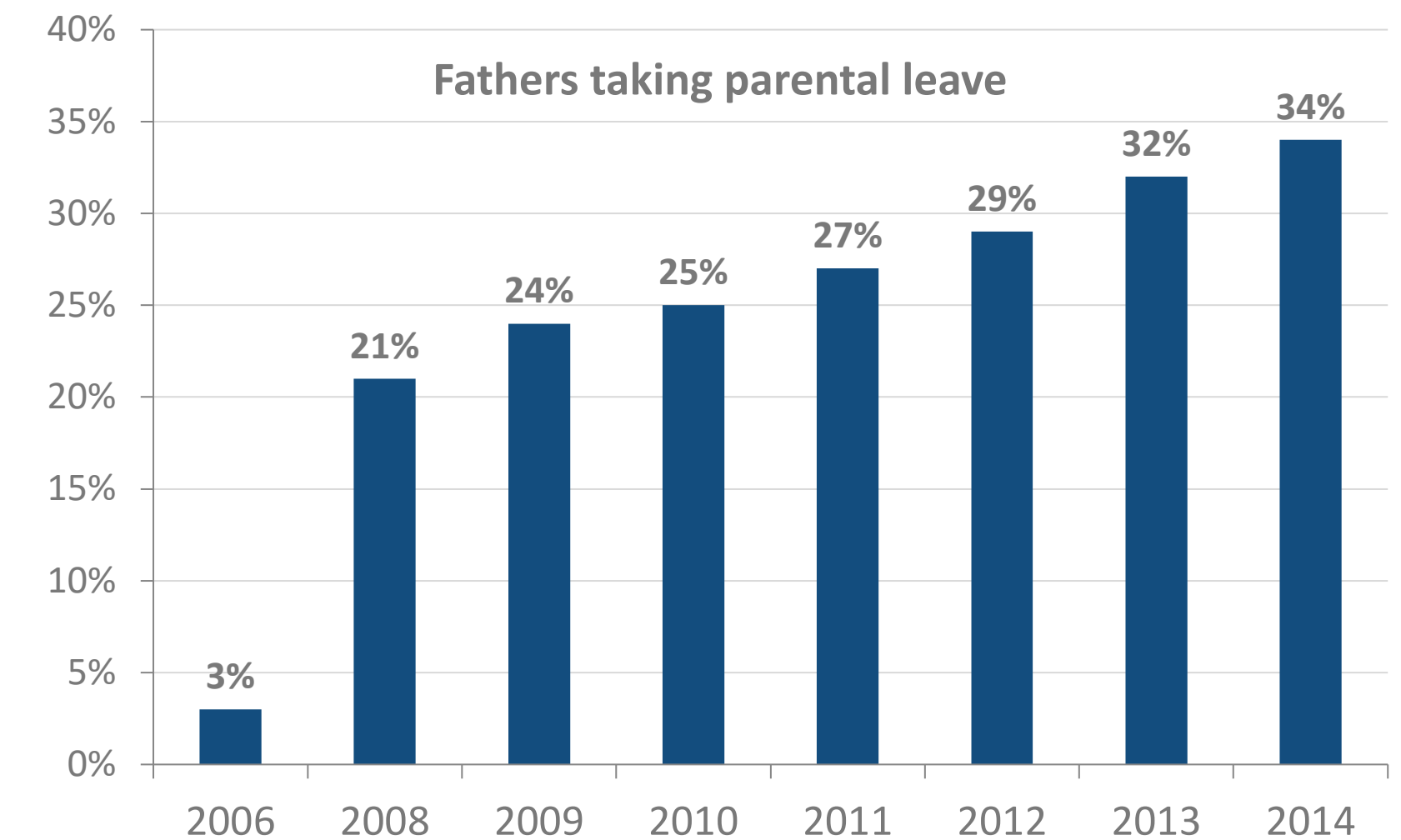
- Very low salary replacement (¥2,250)
- Paid for up to 2 years to one parent

Problems:

- Mothers discouraged to get back into job
- Fathers discouraged to take parental leave

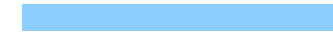
New policy since 2007:

- Salary replacement at acceptable level
- Limited to one year
- Dedicated parental leave (>2 months) for fathers



Daycare Institutions – Germany

Childcare



Expectation of (future) German parents:

- Better work-family reconciliation, hence...
- More child daycare institutions

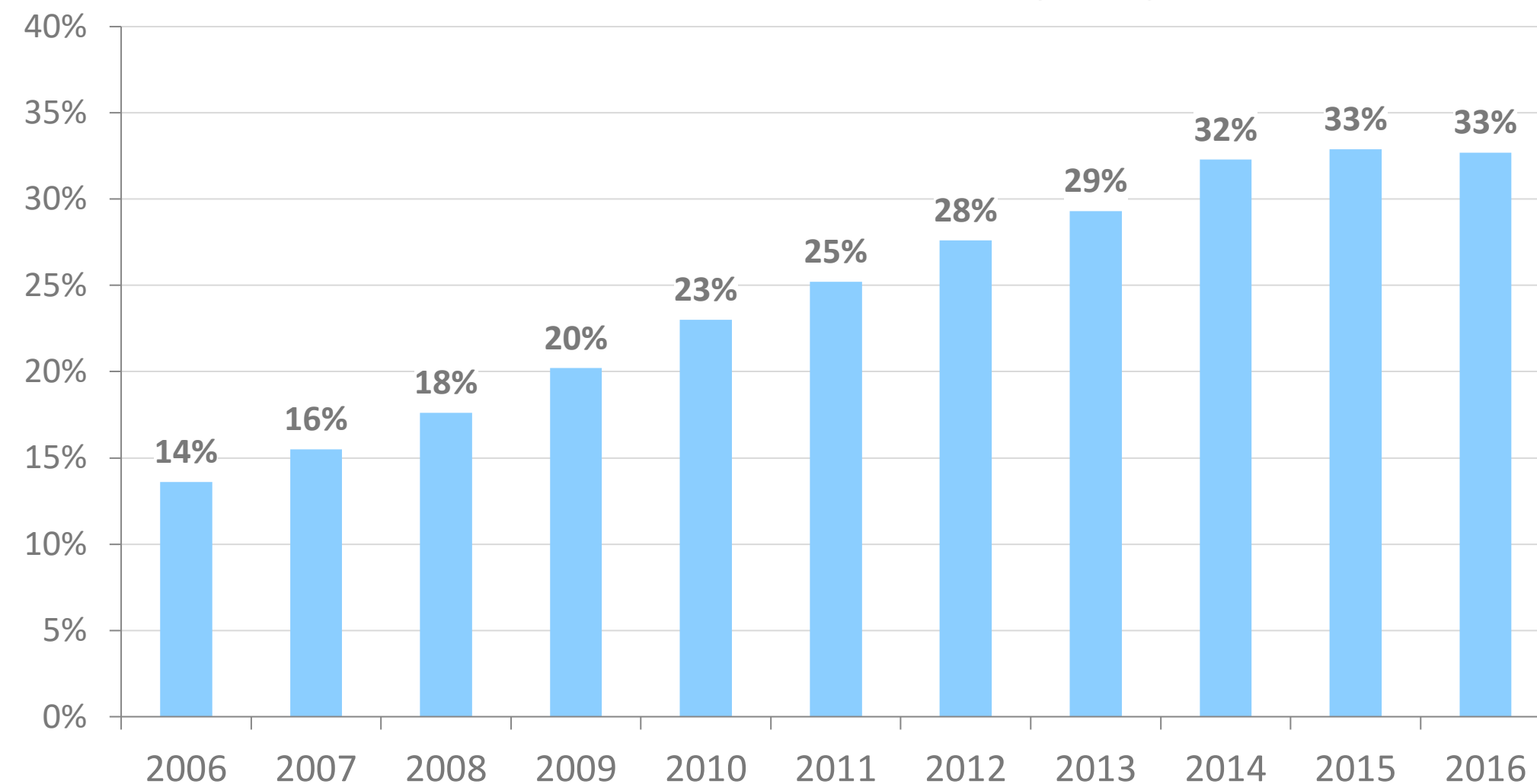
Status quo before 2008:

- Kindergarten enrolment for children aged >3 very common
- Few possibilities to enrol children aged <3 in a child nursery

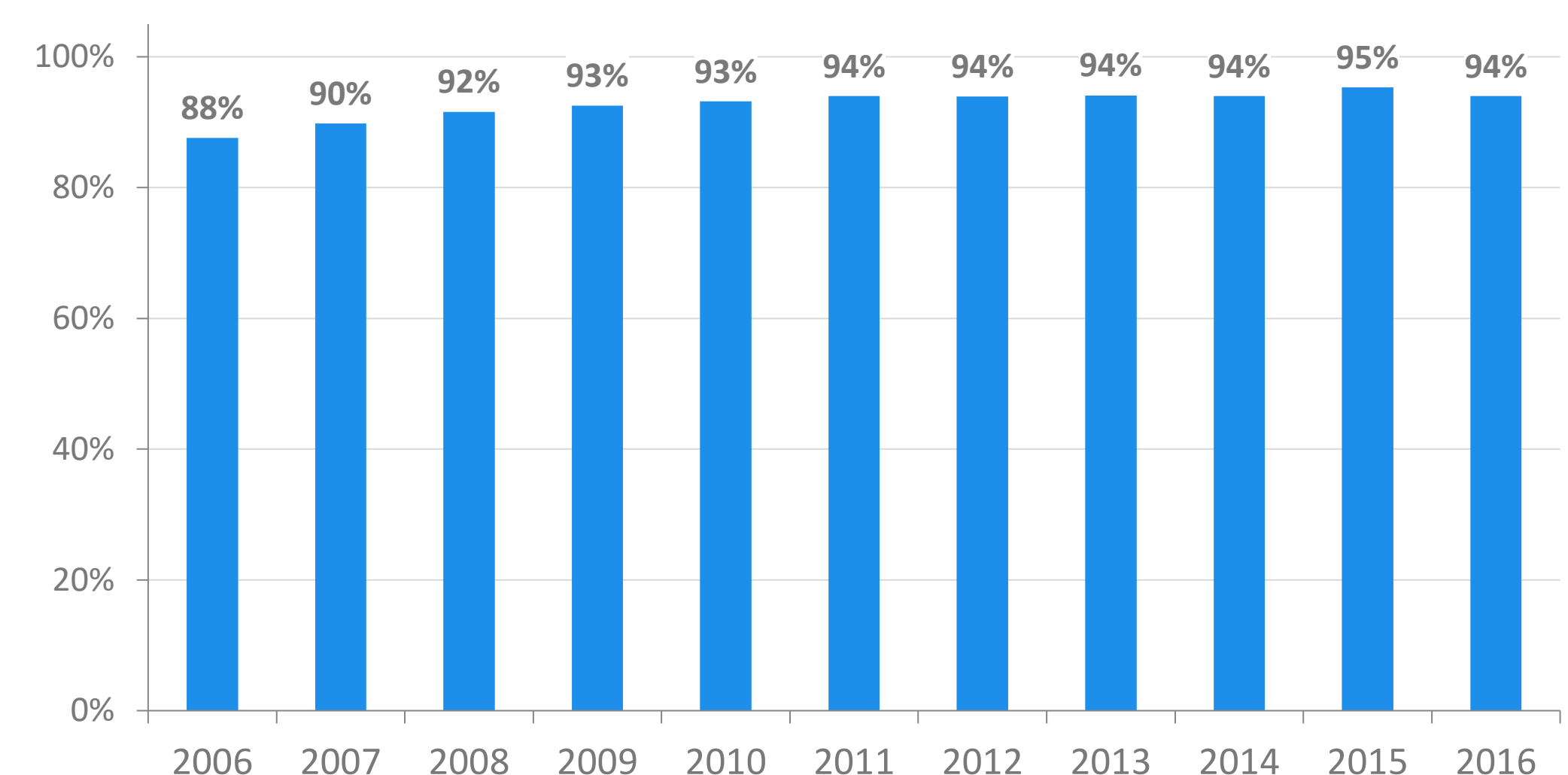
Policy since 2008:

- Investment program to increase number of child nursery institutions
- Since 2013, parents have legal claim for enrolment in child nursery

% children enrolled in nursery (<3 years)



% children enrolled in kindergarten (≥3 years)

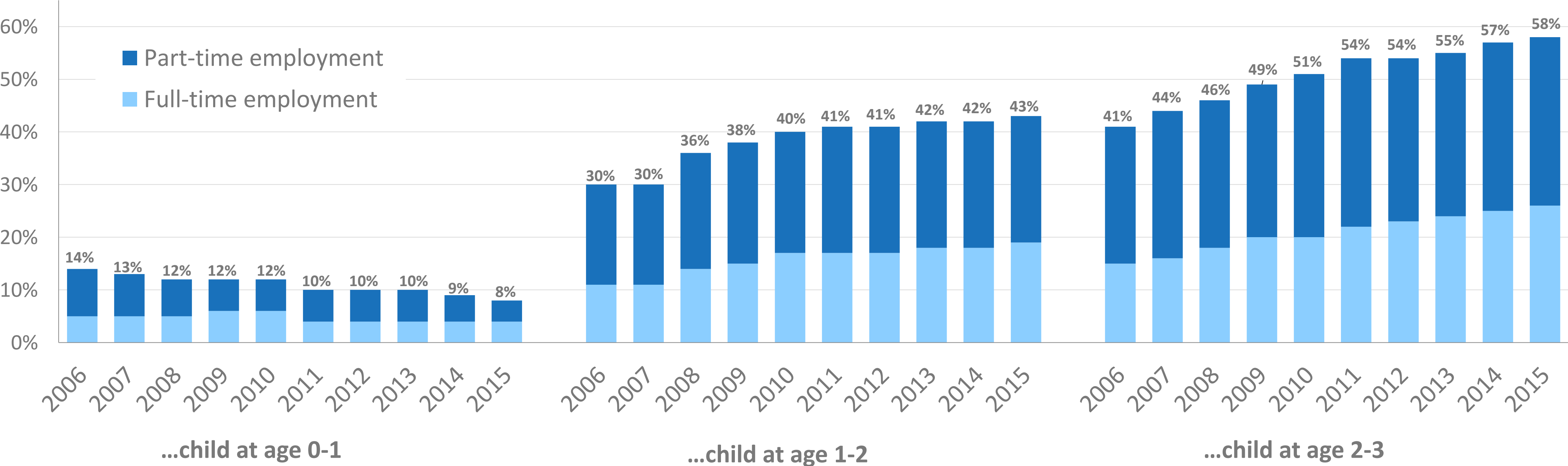


Daycare Institutions – Germany

Childcare



Labor participation rate of mothers with...



Effect of parental leave policy

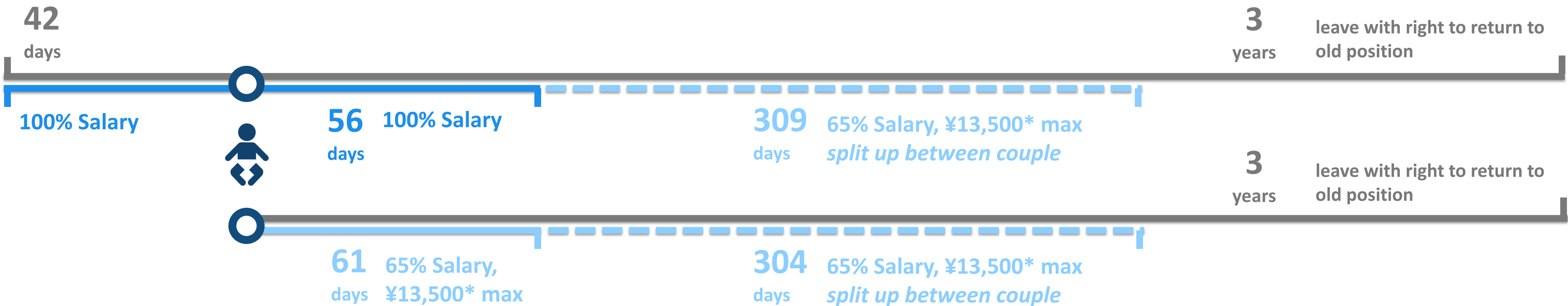
Effect of day care infrastructure expansion

Sources: Federal Statistical Office (Germany); Federal Ministry for Family Affairs (Germany)

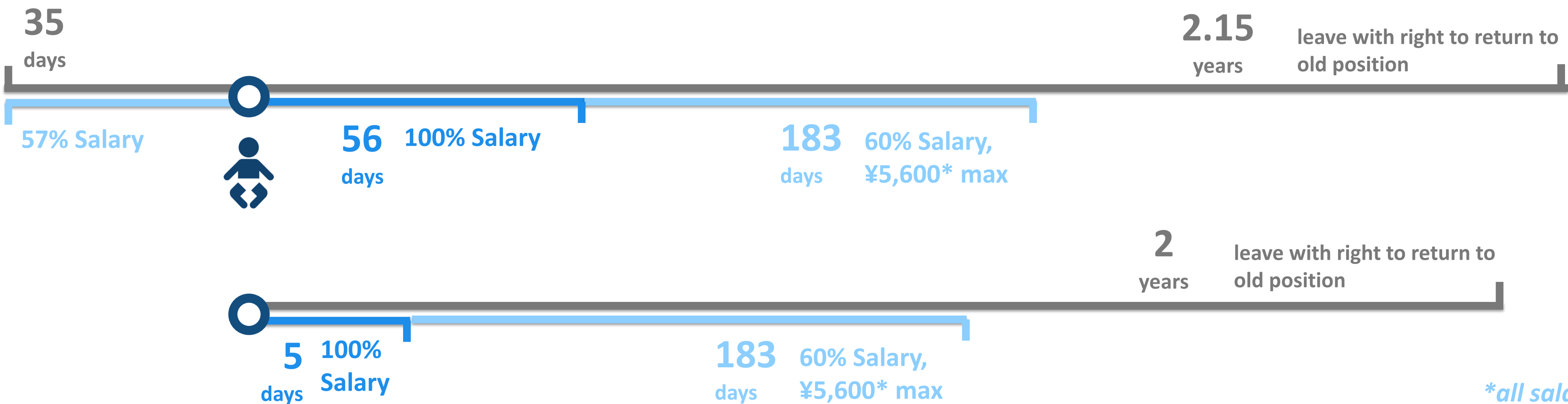
Parental Leave Policies – Comparison

Childcare

DE



TW

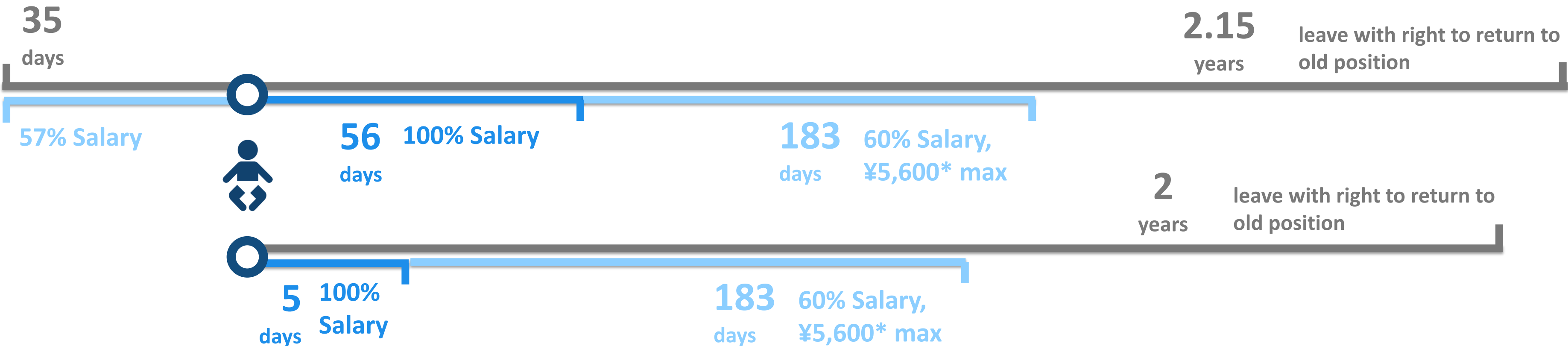


**all salaries on monthly basis*

Parental Leave Policies – Comparison

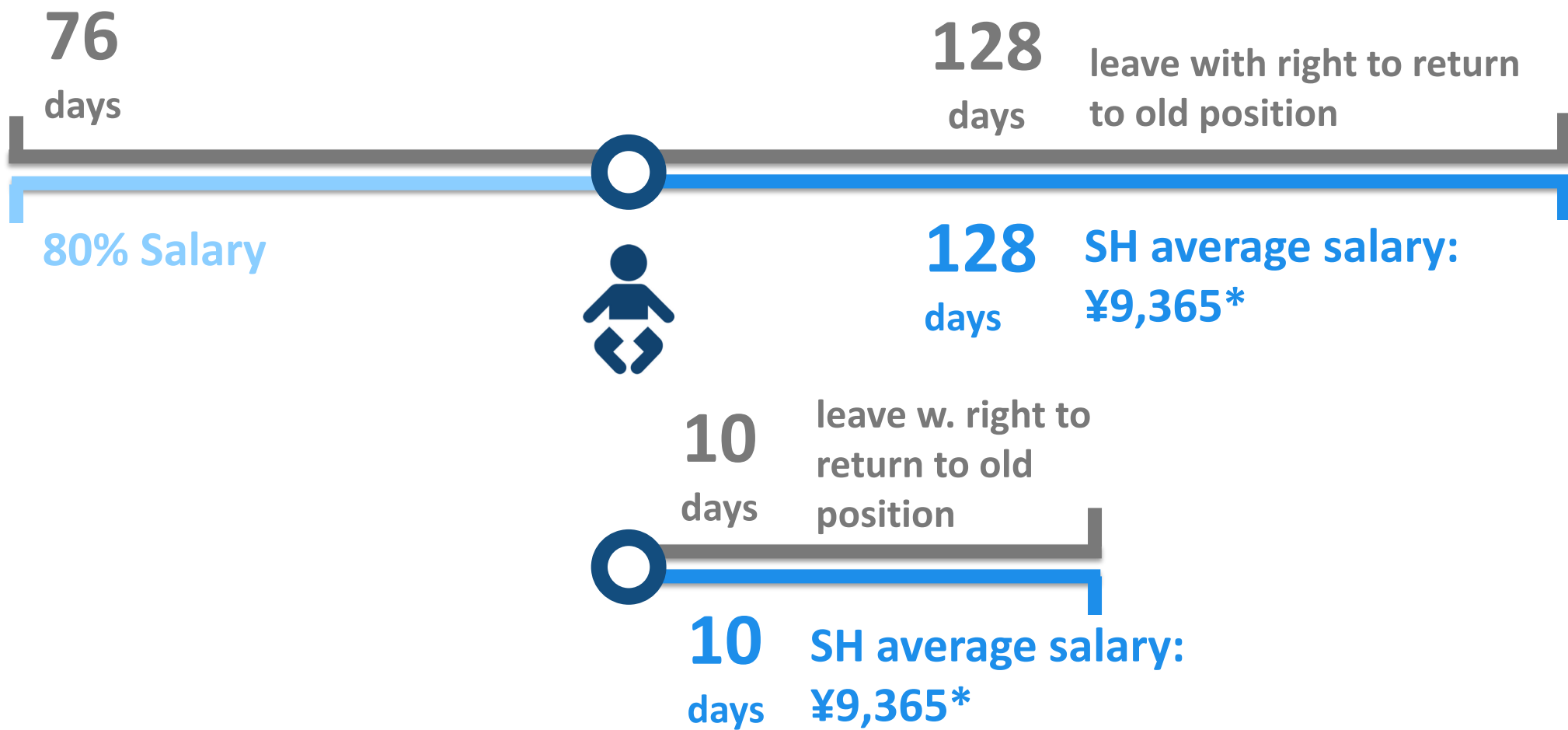
Childcare

TW



CN

Shanghai



**all salaries on monthly basis*

Parental Leave Policies – Comparison

Childcare



Germany	Taiwan	China (Shanghai)
Similar general structure, but...		Depending on province, but...
<ul style="list-style-type: none">• Highest flexibility• Highest salary replacement• Longest duration of after-birth leave	<ul style="list-style-type: none">• Strongest encouragement of fathers’ parental leave	<ul style="list-style-type: none">• Longest mother protection period before birth• After-birth leave much less comprehensive than Germany & Taiwan
2014: <ul style="list-style-type: none">• >98% mothers taking parental leave• 34% of fathers taking parental leave	2016: <ul style="list-style-type: none">• 67% mothers taking parental leave• 14% fathers taking parental leave	n/a

Daycare Institutions – Comparison

Childcare

	Germany	Taiwan	China																											
Enrollment in childcare institution	<div><div>-2016-</div><table><tr><th>Age Group</th><th>Actual enrolment rate</th><th>Demanded enrolment rate</th></tr><tr><td>Younger than 3</td><td>32.7%</td><td>46.0%</td></tr><tr><td>3 and older</td><td>94.0%</td><td>96.5%</td></tr></table></div>	Age Group	Actual enrolment rate	Demanded enrolment rate	Younger than 3	32.7%	46.0%	3 and older	94.0%	96.5%	<div><div>-2016-</div><table><tr><th>Age Group</th><th>Actual enrolment rate</th><th>Demanded enrolment rate</th></tr><tr><td>Younger than 3</td><td>1.0%</td><td>0.3%</td></tr><tr><td>3 and older</td><td>64.0%</td><td>59.3%</td></tr></table></div>	Age Group	Actual enrolment rate	Demanded enrolment rate	Younger than 3	1.0%	0.3%	3 and older	64.0%	59.3%	<div><div>-2015-</div><table><tr><th>Age Group</th><th>Actual enrolment rate</th><th>Demanded enrolment rate</th></tr><tr><td>Younger than 3</td><td>4.1%</td><td>n/a</td></tr><tr><td>3 and older</td><td>77.4%</td><td>n/a</td></tr></table></div>	Age Group	Actual enrolment rate	Demanded enrolment rate	Younger than 3	4.1%	n/a	3 and older	77.4%	n/a
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Average cost for childcare institution (≥3 years old)	<div><div>One child:</div><div>¥800 / month</div><div>2.7% of...</div><div>Two children:</div><div>¥915 / month</div><div>2.6% of HH income</div></div>	<div><div>One child:</div><div>¥2,260 / month</div><div>13.2% of Taipei HH income</div><div>-</div></div>	<div><div>One child:</div><div>¥2,460 / month</div><div>16.7% of Shanghai HH income</div><div>-</div></div>																											
Grandparents as child care for...	<div><div>47% of all children</div></div>	<div><div>37% of children younger than 3 years</div><div>13% of children 3 years and older</div></div>	<div><div>73% of all children</div><div>One child policy:</div><div>Four grandparents per child</div></div>																											

Sources: Federal Ministry for Family Research (Germany); Allensbach Institute for Public Opinion Research; Netzsieger.de; Directorate-General of Budget, Accounting and Statistics, Executive Yuan, R.O.C. (Taiwan); National Bureau of Statistics of the People’s Republic of China; 黄国桂, 杜鹃, & 陈功, (2016); 鲸媒体

Summary & Recommendations to Governments

Conclusion



	Germany	Taiwan & China (mainland)
Society structure	<ul style="list-style-type: none">Birthrates in all three countries below sustainable level, and Germany leads with a recent reboundLow birth rates can be attributed to postponed motherhood, which is equivalent to postponed marriage in Chinese societies	
Policies & recommendations	<ul style="list-style-type: none">Financial factors not an issue for German parents due to moderate costs and significant subsidiesParental leave policy very goodDespite recent improvements still further expansion in daycare infrastructure recommended	<ul style="list-style-type: none">Financial factors largest problem in TW & CNRecommendation to governments to especially work to cut costs; in China more subsidies also feasibleTaiwanese parental leave policy good; in China an improvement in highly developed provinces could be consideredDay care not very important yet, but recommendation to governments to monitor situation to be able to act foresightful

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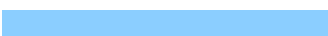
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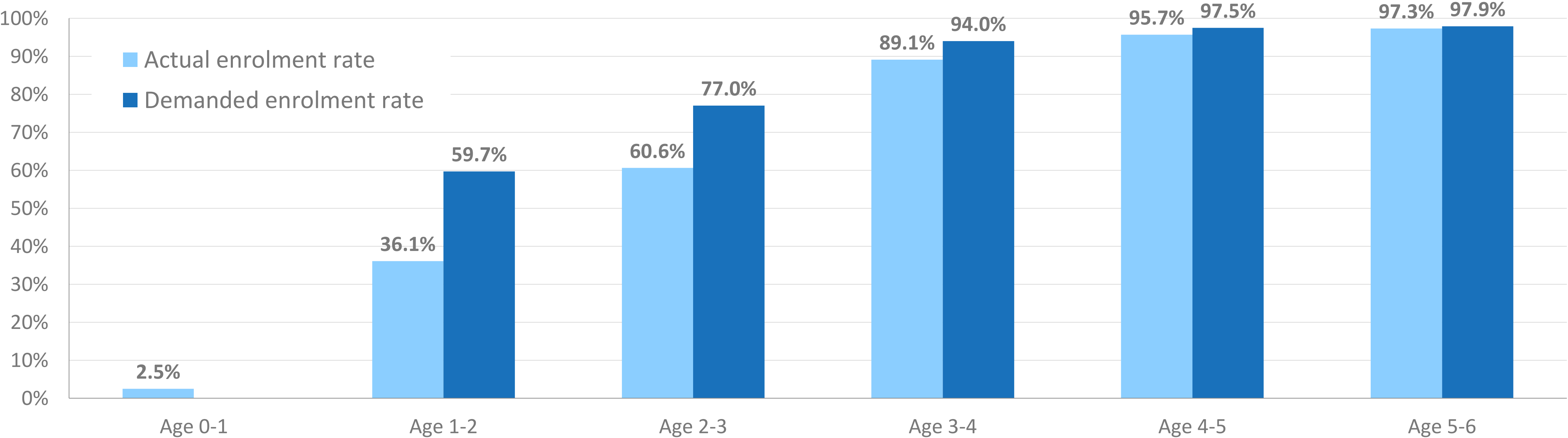
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Back-up: Daycare Institutions – Germany

Childcare



% children enrolled in daycare institutions vs demand - 2016



- No demand for children younger than one year

- Vast majority of parents of children younger than 3 demands daycare
- Existing infrastructure still not sufficient

- Kindergarten infrastructure overall sufficient

Sources: Federal Statistical Office (Germany); Federal Ministry for Family Affairs (Germany)