

Low Fertility in Asia:

Pathways, Consequences and Policy Implications

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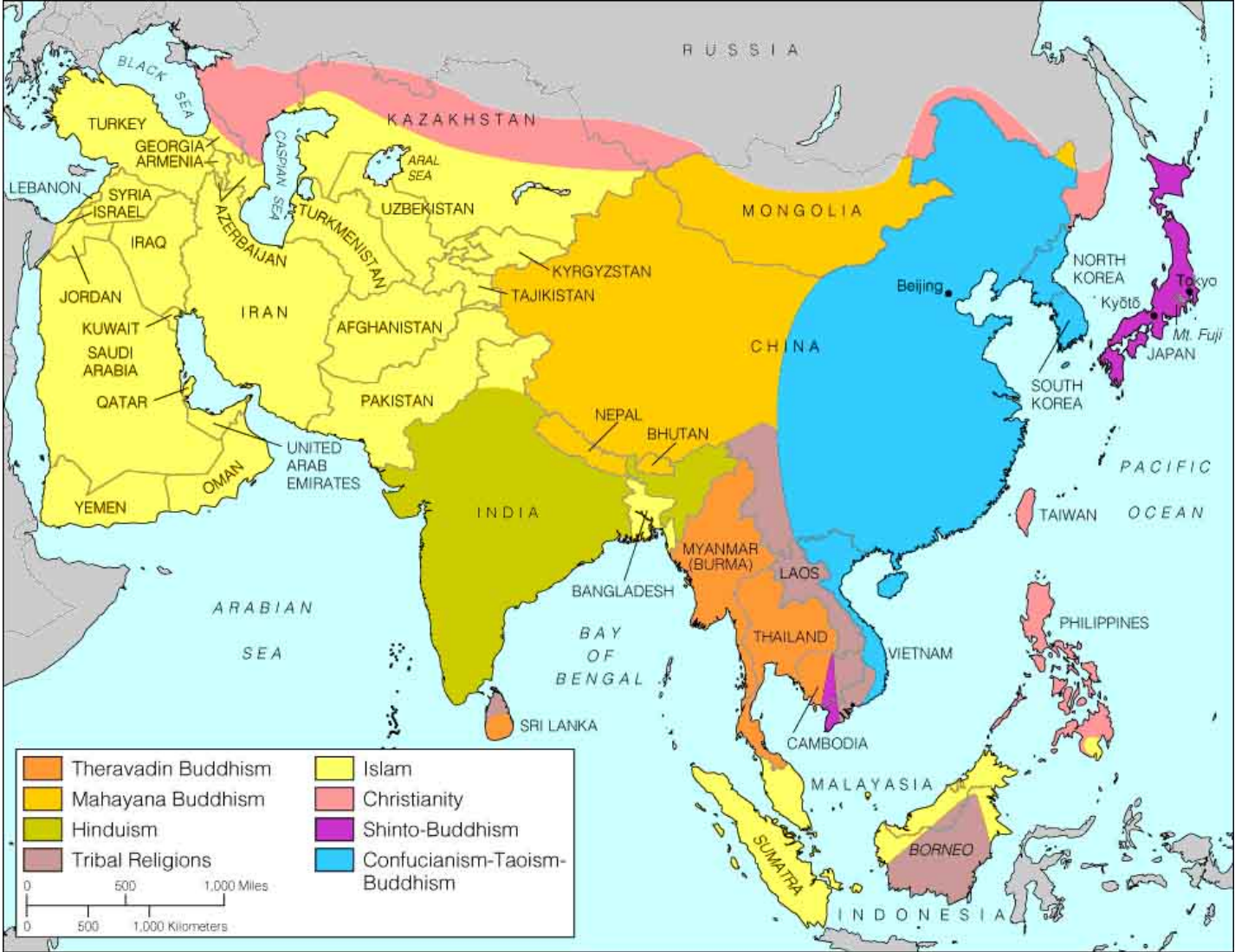
UN Expert Group Meeting on Fertility, Changing Population Trends and
Development: Challenges and Opportunities

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Asia

- **Largest and most populous continent: 60 per cent of world's population**
- **Diverse in religion, culture, ethnicity, language and history**
 - Many of the world's major religions have their origins in Asia.
 - Asia is home to several language and many language isolates.
- **Different status of development**
- **Distinct demographic patterns**

Map of Asia by dominant religion in each country



Source: <http://www.worldreligions.psu.edu/maps-hinduism.htm>

The boundaries on this map do not imply official endorsement or acceptance by the United Nations.

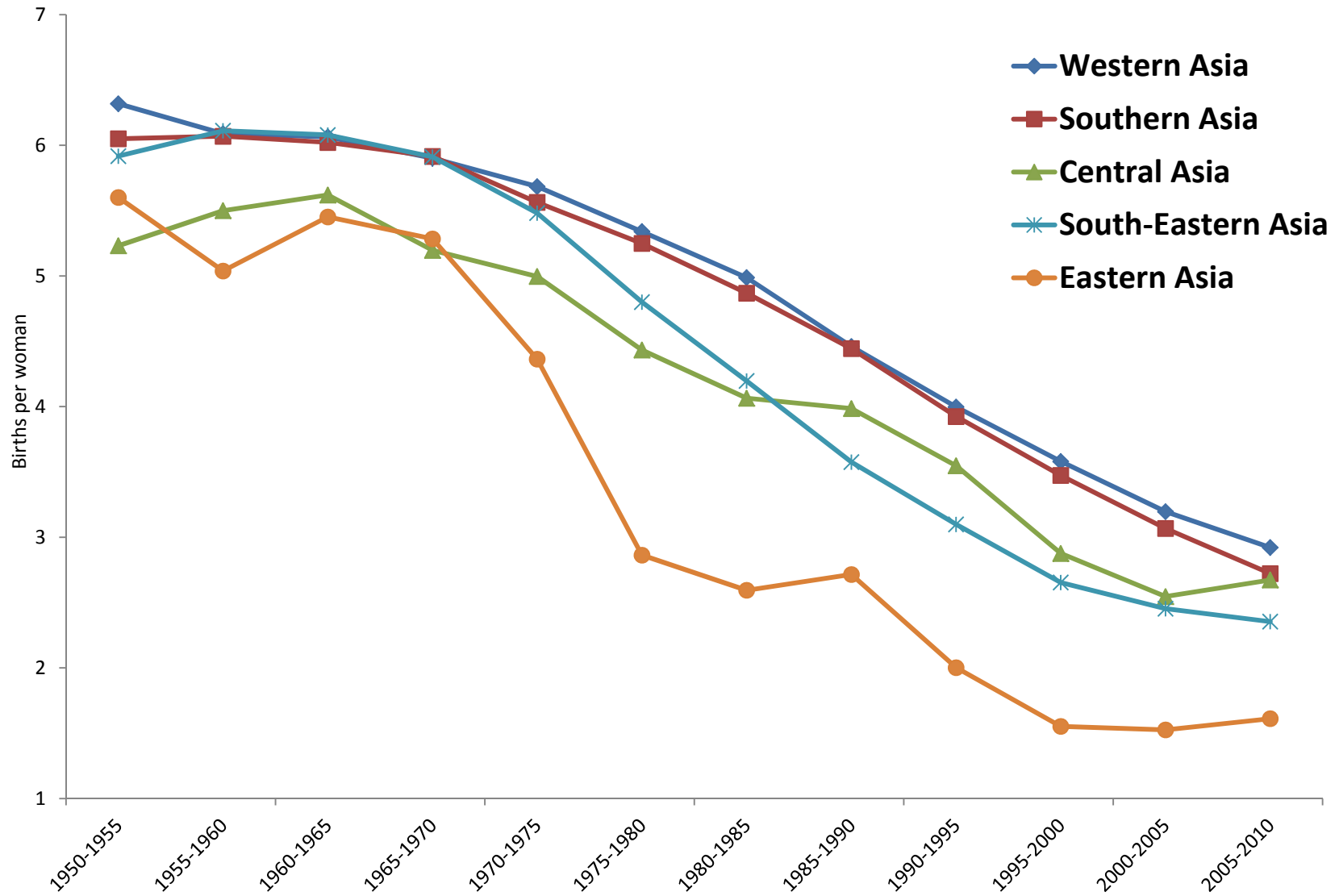
Low fertility

- **Long-term experience of low and lowest fertility trends in Europe** (Kohler, Billari and Ortega, 2002; Caldwell, 2006).
- **Several Asian countries have attained below-replacement fertility in recent decades** (Gubhaju and Moriki-Durand, 2003a; Atoh, 2001; Hirschman and others, 1994; Knodel and others, 1987; Abbasi-Shavazi et al. 2009).
- **However, pathways of low fertility have been different** (Perelli-Harris, 2005; Basten et al. 2013).

Aims

- Review trends in low fertility in Asian countries from 1975-1980 to 2005-2010
- Discuss the pathways by which low fertility in Asia has been achieved
- Discuss consequences of low fertility and policy implications in Asia
- Review low-fertility policies in Asia

Total fertility rate by subregions of Asia, 1950-2010



Source: United Nations (2013). World Population Prospects: the 2012 Revision. CD Rom Edition.

Total fertility rate in the world and Asia by subregions 1975 to 2010

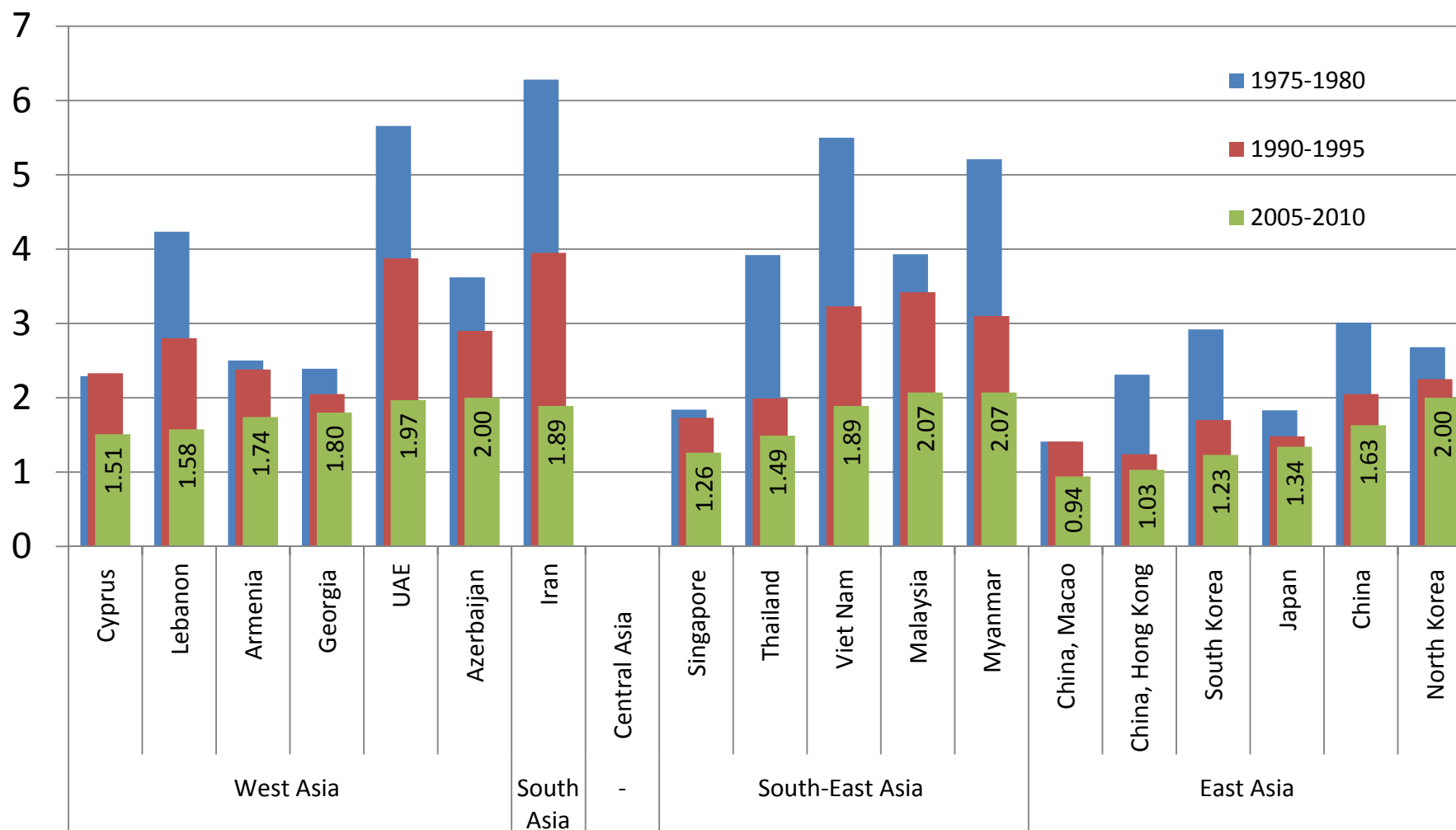
Region	Total fertility rate			Percentage decline	
	1975-80	1990-95	2005-10	1975-80 to 1990-95	1990-95 to 2005-10
WORLD	3.9	3.0	2.5	21.2	16.7
ASIA	4.1	3.0	2.3	27.6	23.9
West Asia	5.3	4.0	2.9	25.1	26.9
South Asia	5.3	3.9	2.7	25.2	30.6
Central Asia	4.4	3.6	2.7	20.0	24.6
South-East Asia	4.8	3.1	2.4	35.5	24.0
East Asia	2.9	2.0	1.6	30.1	19.5

Source: United Nations (2013). *World Population Prospects: the 2012 Revision*. CD Rom Edition.

Low-fertility countries in Asia

- 18 countries (out of 50) in Asia represented low-fertility countries (TFR of 2.1 or lower during 2005-2010).
- ~ 1.9 billion people in 2010 lived in those 18 “low-fertility” countries of Asia (UN 2013a)
- This represents 27.7 % of the world population and 45.9 % of the population of Asia.
- Only 3 countries in Asia (Japan, Singapore and Macao) had low fertility during 1975-1980, increasing to 8 countries during 1990-1995 and 18 during 2005-2010.

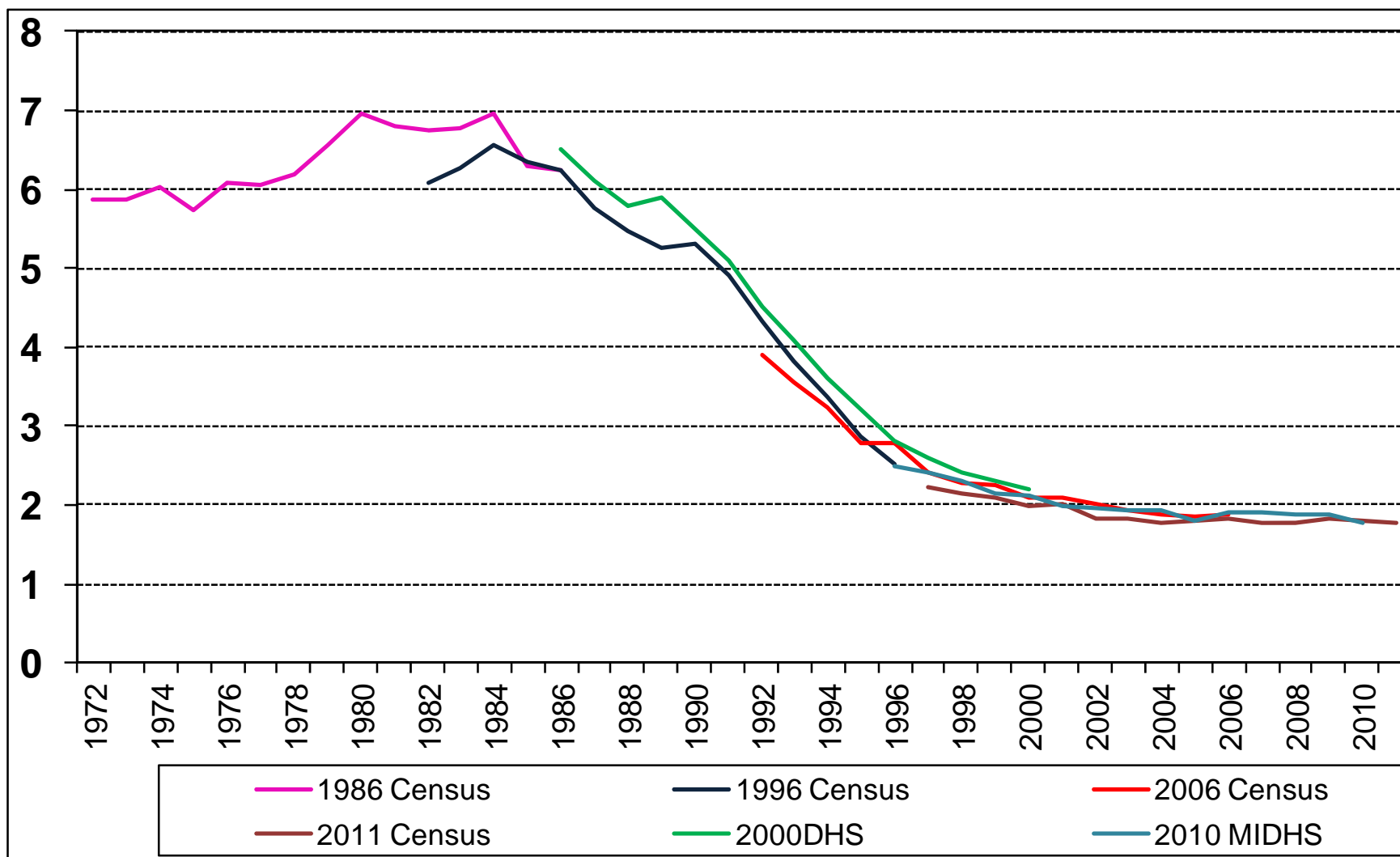
Trend of TFR in low-fertility countries in Asia by subregion 1975 to 2010



Source: United Nations (2013). *World Population Prospects: the 2012 Revision*. CD Rom Edition.

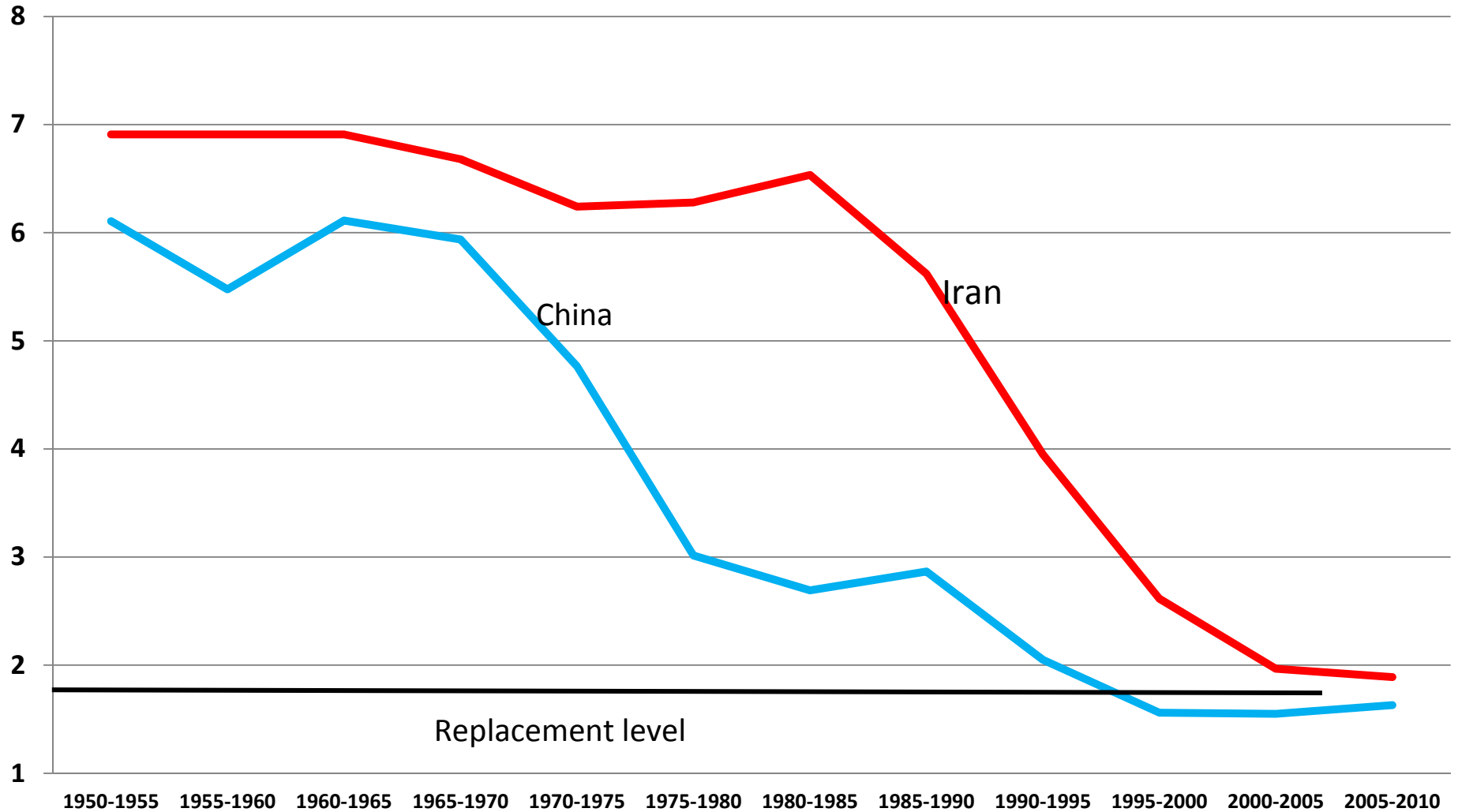
Own-children estimates of TFR, Iran, 1972-2010

using 1986-2011 censuses, 2000 DHS and 2010 MIDHS



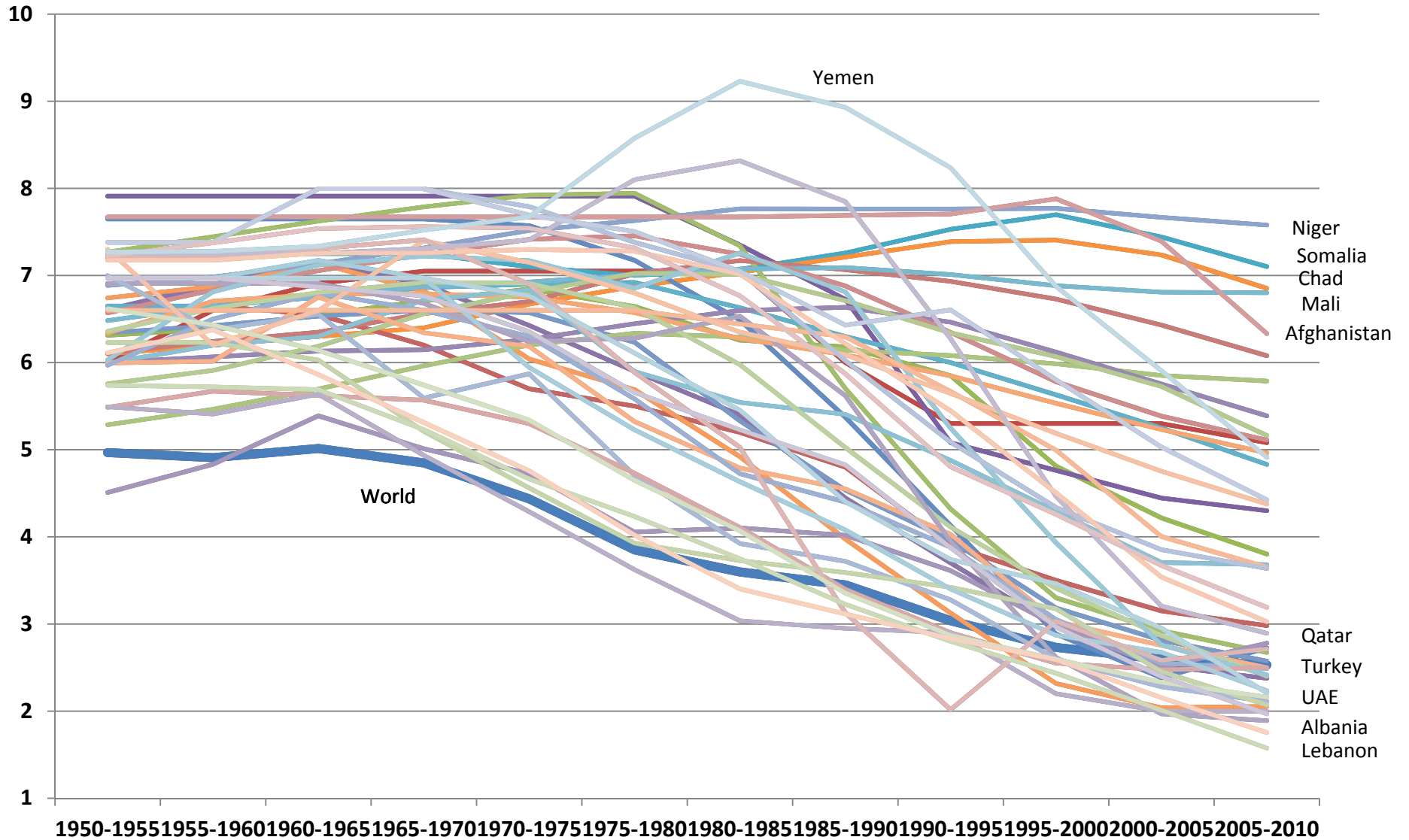
Source: Abbasi-Shavazi, Hosseini-Chavoshi, Banihashemi and Khosravi (2013).

Speed of fertility decline in China and Iran, 1950-2010



Source: Source: United Nations (2013). World Population Prospects: the 2012 Revision.

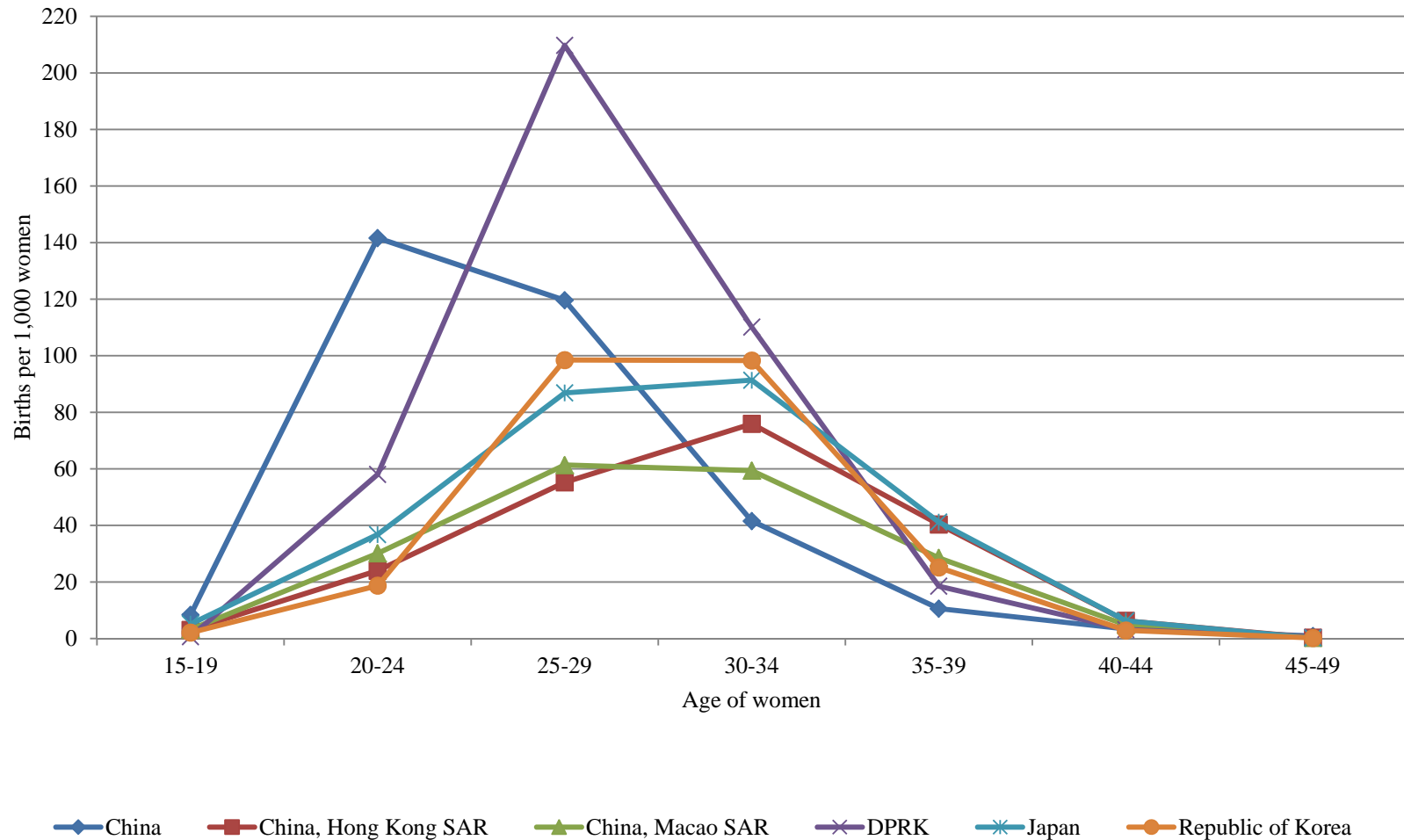
Below-Replacement fertility in some Muslim-majority countries, 1950-2010



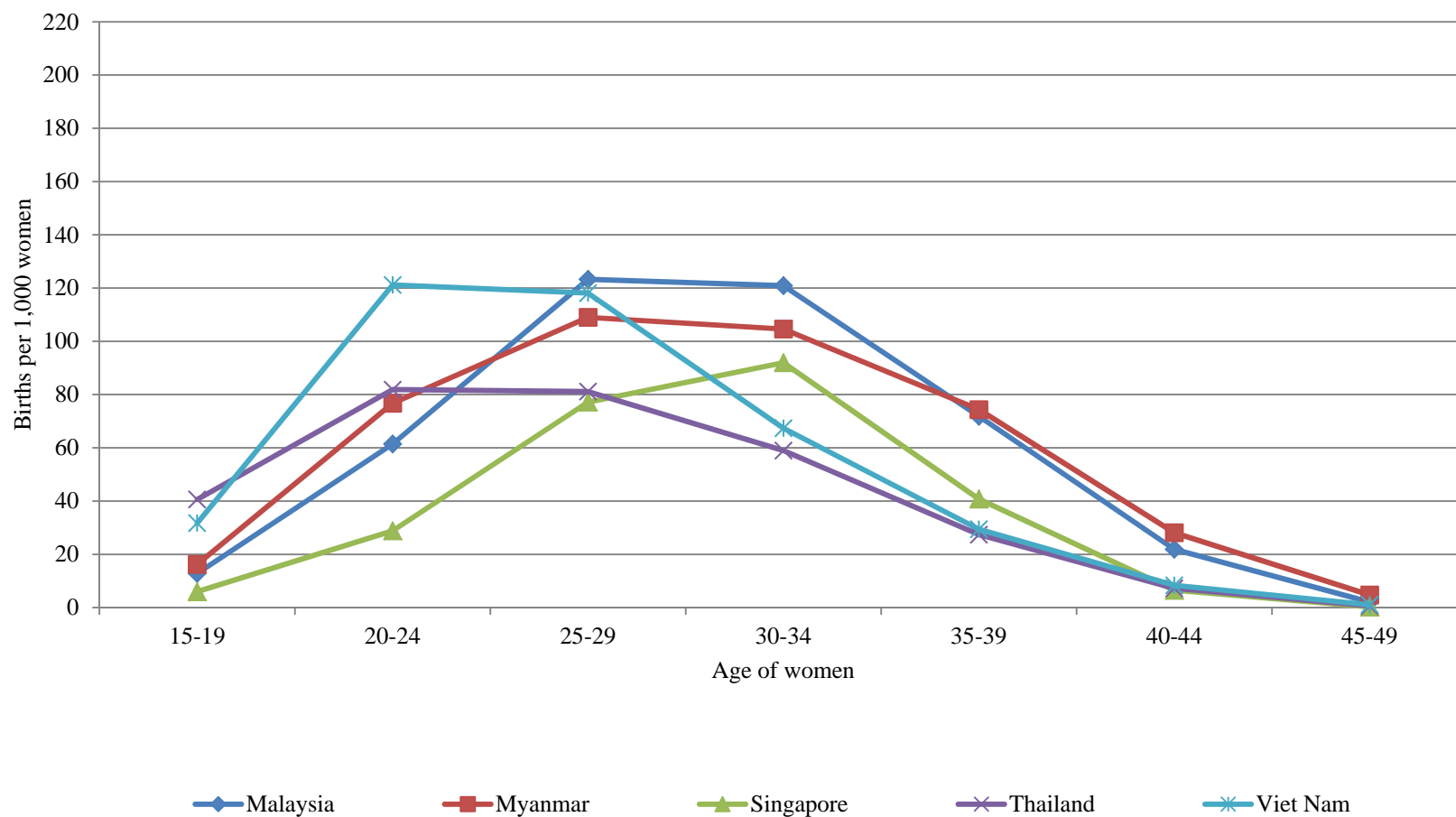
Source: Source: United Nations (2013). World Population Prospects: the 2012 Revision.

Age pattern of fertility in low-fertility countries in Asia

Age-specific fertility rate of low-fertility countries or areas in **Eastern Asia**, 2005-2010

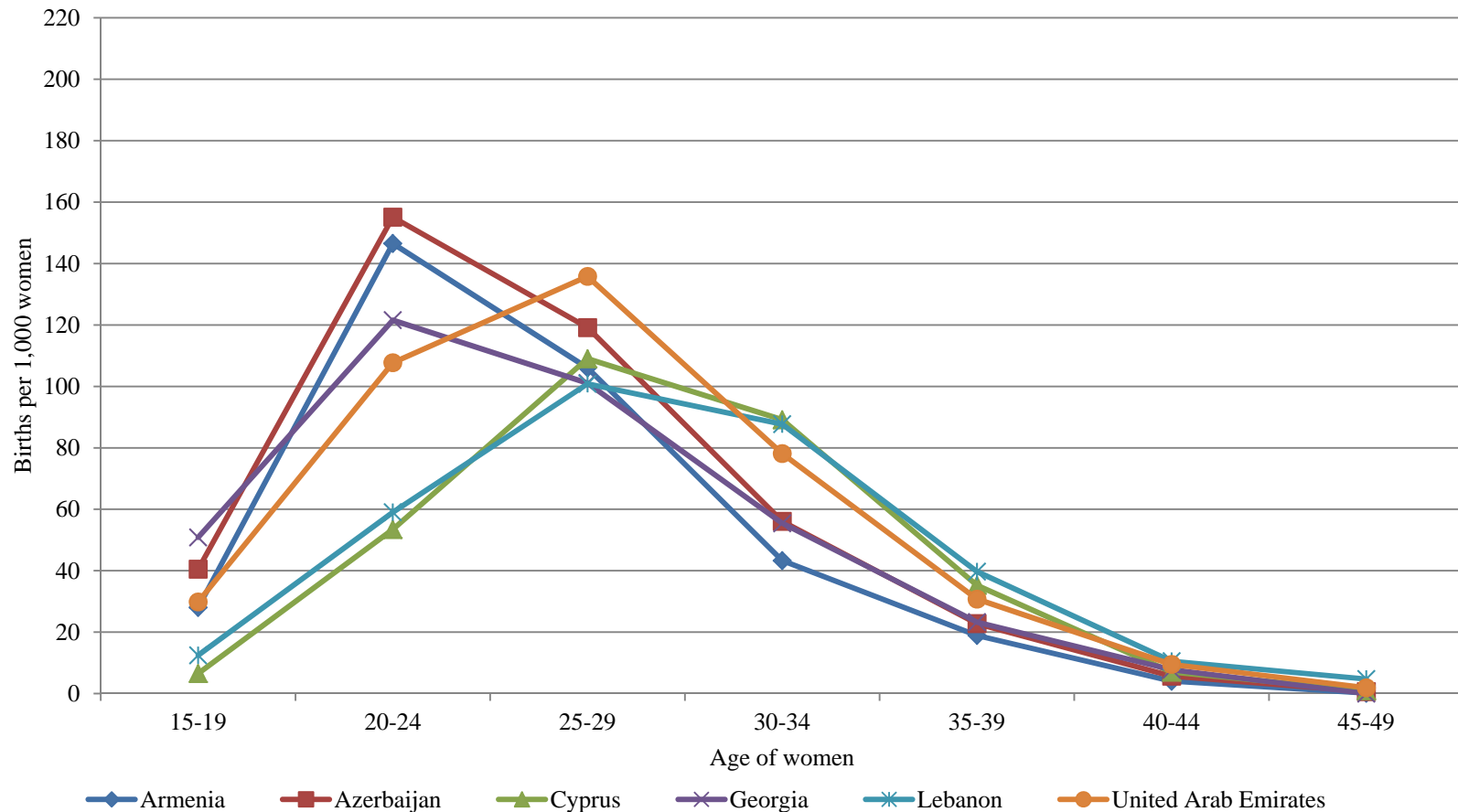


Age-specific fertility rate of low-fertility countries in South-Eastern Asia, 2005-2010



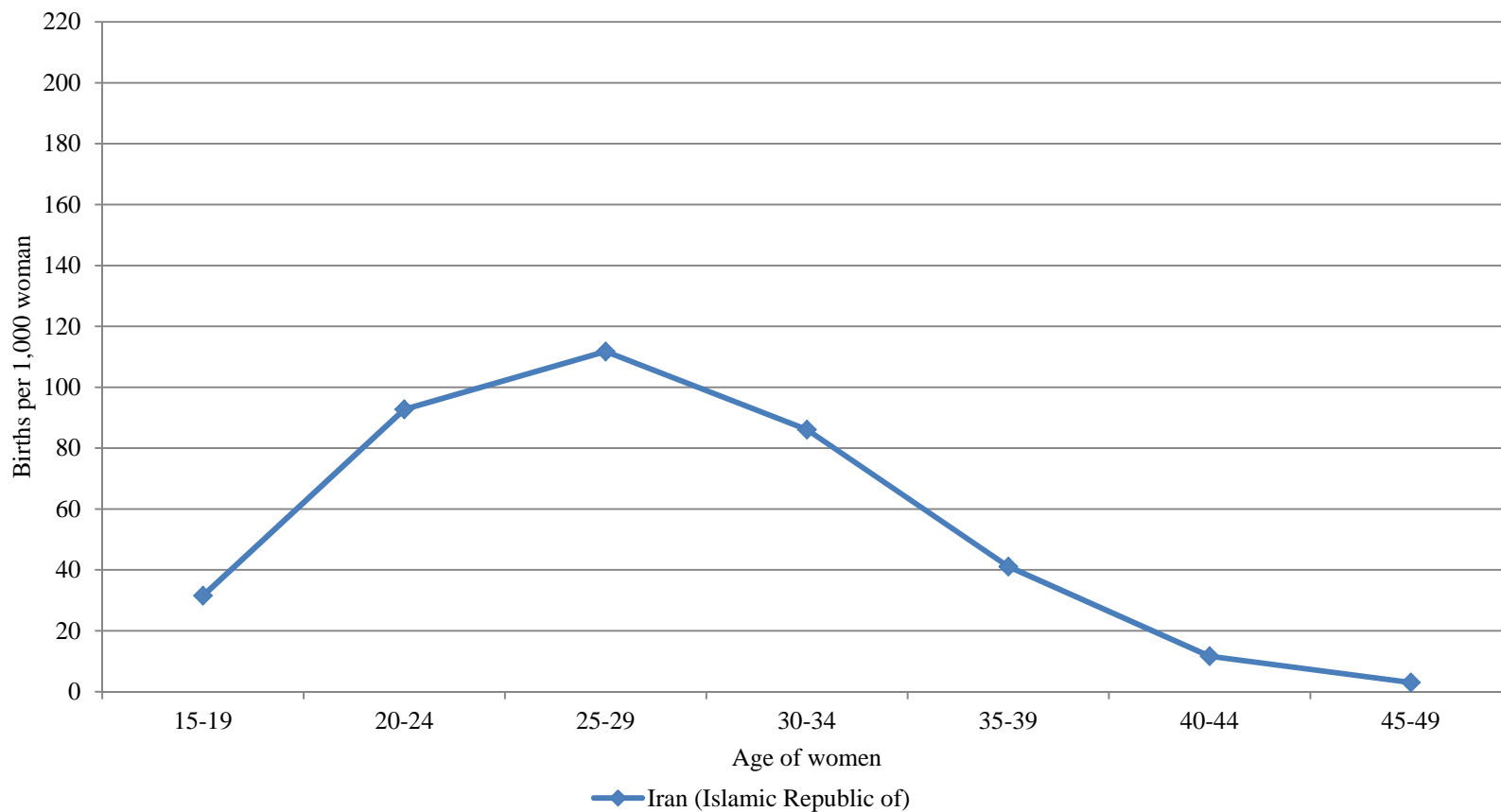
United Nations (2013). *World Population Prospects: the 2012 Revision, CD Rom Edition*

Age-specific fertility rate of low-fertility countries in Western Asia, 2005-2010



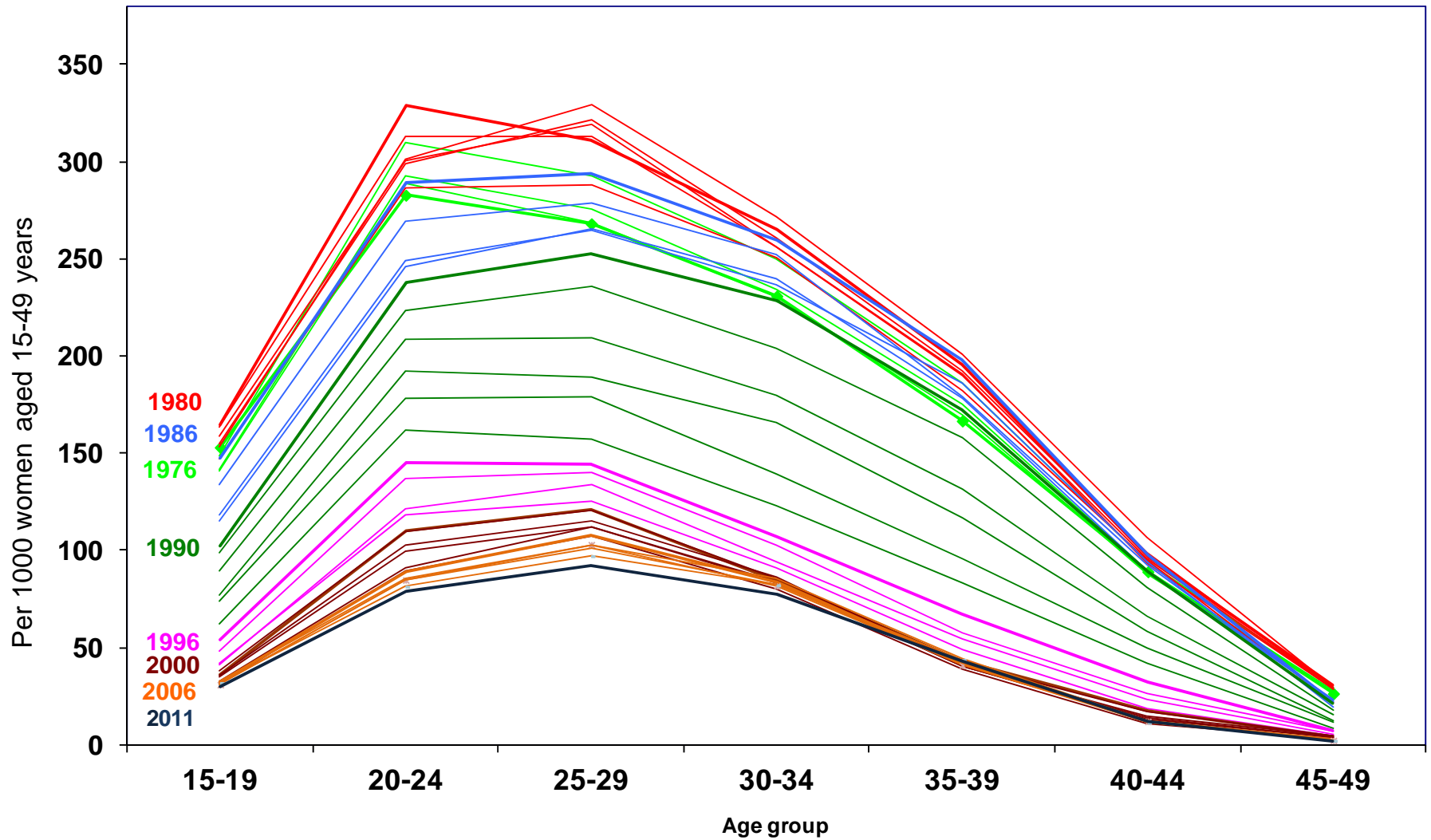
United Nations (2013). *World Population Prospects: the 2012 Revision, CD Rom Edition*

Age-specific fertility rate of low-fertility countries in Southern Asia (Iran), 2005-2010



United Nations (2013). *World Population Prospects: the 2012 Revision, CD Rom Edition*

Own-children estimates of ASFRs in Iran, 1976-2011



Source: Abbasi-Shavazi, Hosseini-Chavoshi, Banihashemi, and Khosravi (2013).

Theories of low fertility

- **Postponement of marriage and childbearing** is one of the main factors pushing fertility in many advanced countries to the lowest end (Bongaarts, 2002; Jones, 2007).
- **Uncertainty:** unemployment, low-status and temporary jobs, lead to postponement of marriage and childbearing (Mills and Blossfeld, 2005; McDonald, 2006; Kohler, Billari and Ortega, 2002).
- **Women, work and fertility:** Countries with very low fertility tend to hold to the 'breadwinner' model of the family and their family policies are both limited and consistent with the mother being at home (McDonald, 2000, 2006; 2013).
- **Post-modern materialistic views** towards life and childbearing along with the second demographic transition (Lesthaeghe and Willems, 1999),
- Demographic, social, economic and cultural **context** (McNicoll, 1994; Rindfuss *et al.* 2003)

Reasons for low fertility in East Asia

- Confucianism and patriarchal family system
- Postponement of marriage and delayed childbearing (Frejka et al. 2010; Tsuya 2008, 2012)
- Low cohabitation (~ 3% in Singapore and Japan, and ~ 1% in Rep. of Korea) and low ex-nuptial births (Jones 2012;)
- Increased aspirations, high expenses for a 'success child'
- Advancement of education, increased labour force participation
- Increased opportunity costs of women's childbearing and child rearing
- Conflict between women's improved status and poor gender equity within family (McDonald 2000)
 - Women shoulder most domestic work with little support
 - Long hours for paid work with little flexibility (i.e., Rep. of Korea, Japan, Singapore) (Tsuya, Bumpass and Choe, 2000:216)
- Job insecurity, temporary employment (Tsuya 2012; Jones 2012: 320; Basten et al. 2013)

Marriage in low-fertility countries in Asia

Region	Country	SMAM		% Women remaining single by age					
		Men	Women	20-24	25-29	30-34	35-39	40-44	45-49
East Asia	China	26.5	24.7	67.5	21.6	5.4	1.8	0.8	0.4
	North Korea	29.0	25.5	80.8	24.6	3.9	1.7	1.0	0.5
	China, Macao	29.5	27.7			27.4	16.8	11.4	8.9
	Rep. of Korea	32.0	28.8	93.7	59.1	19.0	7.6	3.6	2.4
	Japan	31.2	29.7	89.6	60.3	34.5	23.1	17.4	12.6
	China, Hong Kong	32.8	30.3	92.4	67.7	35.0	22.6	16.5	11.9
South Asia	Iran	26.8	23.5	47.1	26.2	15.5	9.1	5.5	3.4
South-East Asia	Viet Nam	26.2	22.7	50.8	18.2	8.0	6.1	5.7	5.6
	Thailand	27.4	24.1	56.0	29.0	16.2	11.7	9.3	8.0
	Malaysia	28.0	25.7	67.1	37.8	17.9	10.8	6.7	5.4
	Myanmar	27.6	26.1	67.9	43.2	29.0	21.4	17.3	14.8
	Singapore	30.4	27.9	91.8	54.0	25.1	17.1	14.1	12.8
West Asia	Georgia	28.0	23.7	52.2	28.4	17.2	11.4	8.9	7.8
	Armenia	27.8	24.4	55.4	29.0	16.3	8.8	5.8	4.4
	Azerbaijan	28.2	24.4	55.4	28.6	16.7	11.2	8.2	6.9
	UAE	26.8	25.3	63.1	31.2	14.7	7.6	4.2	2.8
	Cyprus	30.8	27.9	84.9	50.2	23.5	13.0	9.5	6.6
	Lebanon	32.3	28.3	80.7	52.1	33.5	23.7	21.7	15.6

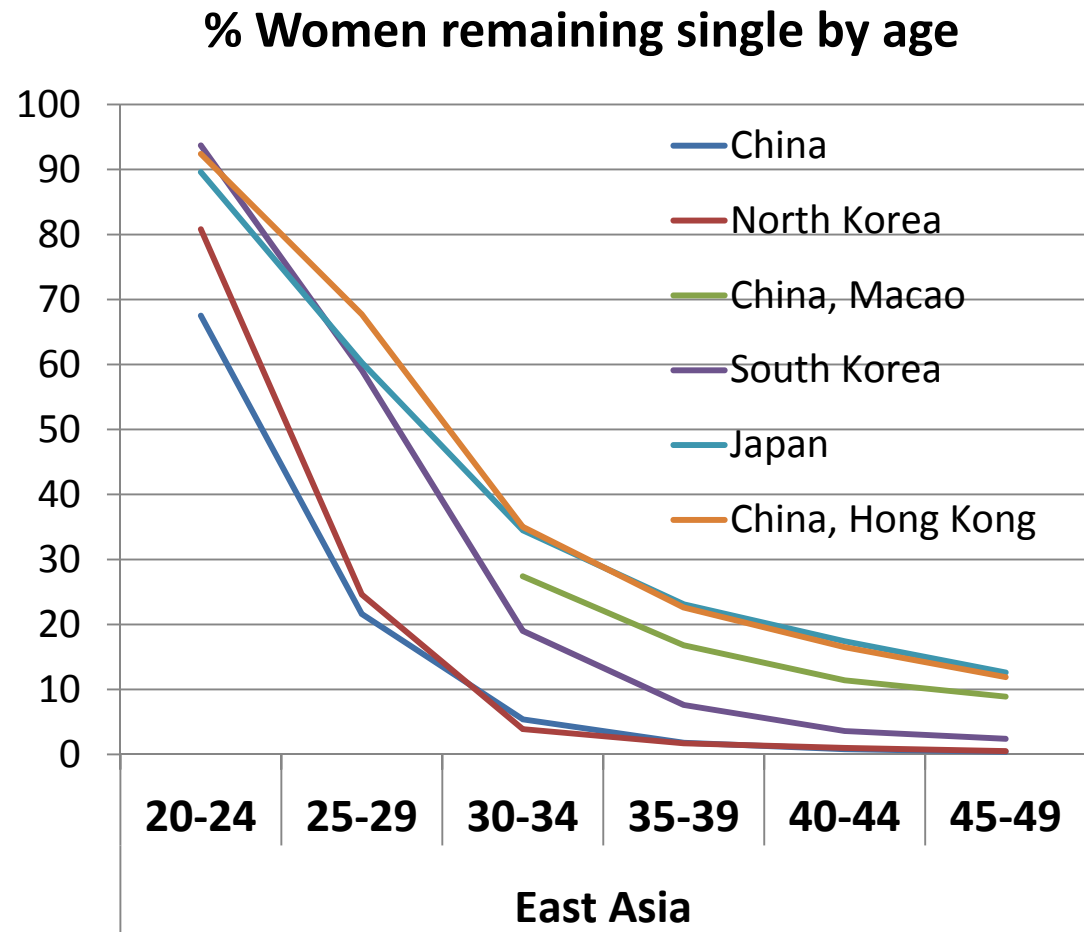
Source: United Nations (2013). United Nations, Population Division (2013). World Marriage Data 2012.

Trend of never-married women aged 35-39 in selected Asian countries

Country	% Women remaining single by age 35-39				
	1970	1980	1990	2000	2005-2010
China	-	0.3	0.3	0.5	1.8
Rep. of Korea	0.4	1.0	2.4	4.3	7.6
Thailand	5.2	7.3	9.6	11.6	11.7
Singapore	5.1	8.5	14.8	15.1	17.1
Myanmar	7.0	8.9	13.8	18.6	21.5
China, Hong Kong	3.0	4.5	10.2	17.5	22.6
Japan	5.8	5.5	7.5	13.8	23.1

Marriage in low-fertility countries in East Asia

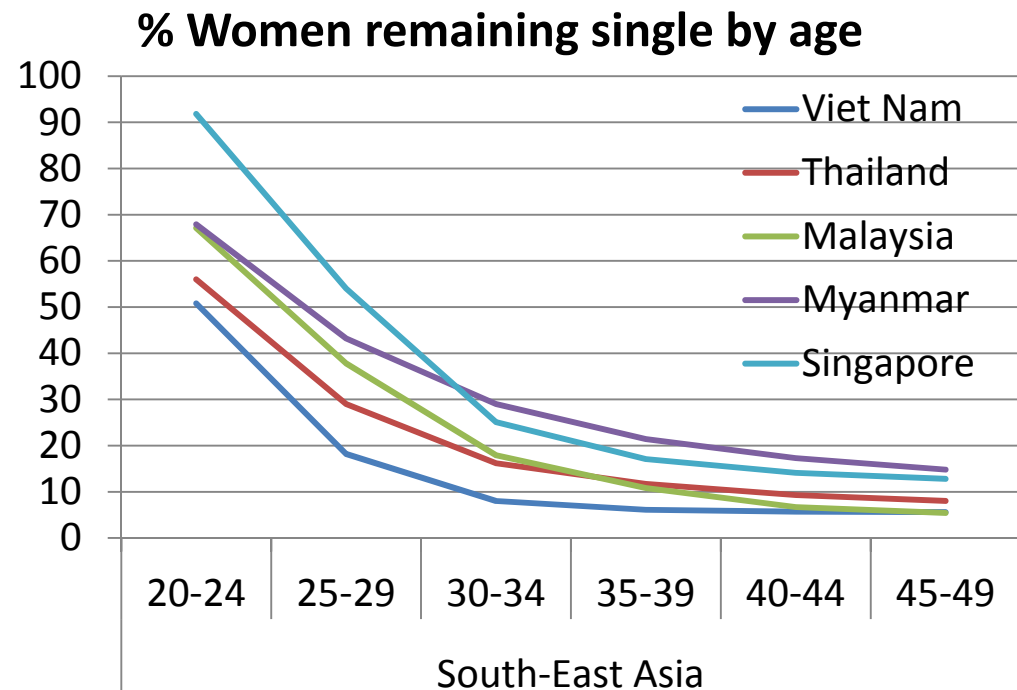
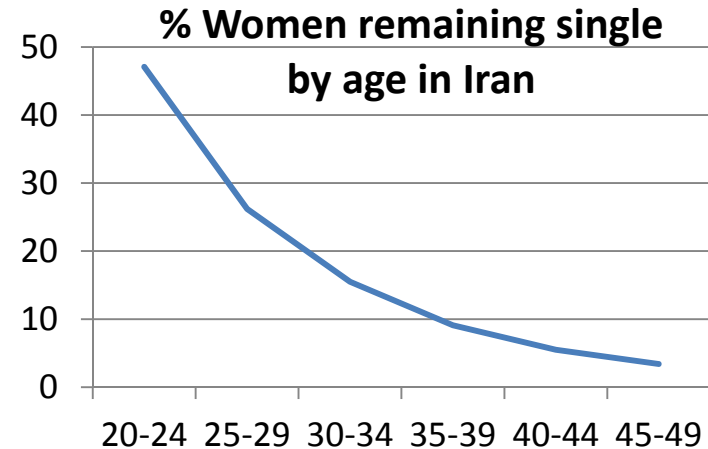
<i>East Asia</i>		
Country	SMAM	
	Men	Women
China	26.5	24.7
Dem. People's Rep. of Korea	29.0	25.5
China, Macao	29.5	27.7
Rep. of Korea	32.0	28.8
Japan	31.2	29.7
China, Hong Kong	32.8	30.3



Source: United Nations (2013). United Nations, Population Division (2013). World Marriage Data 2012.

Marriage in low-fertility countries in South and South-East Asia

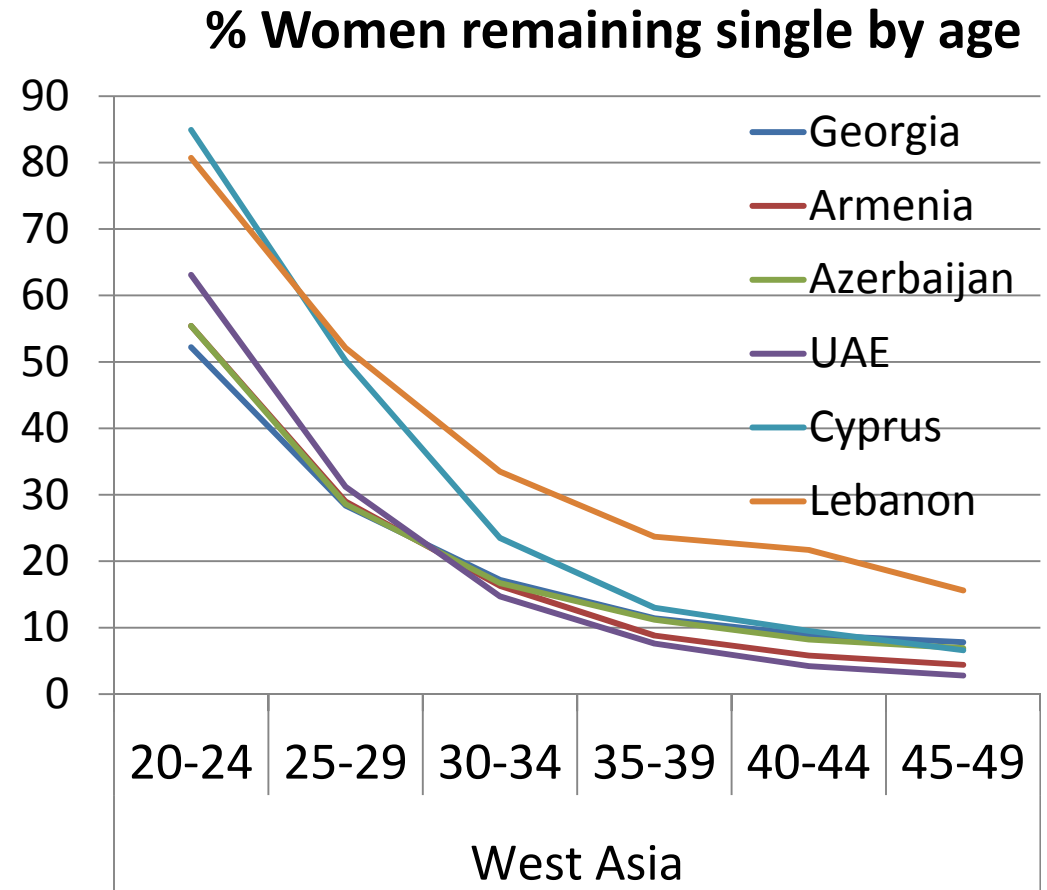
<i>South Asia</i>		
Country	SMAM	
	Men	Women
Iran	26.8	23.5
<i>South-East Asia</i>		
Viet Nam	26.2	22.7
Thailand	27.4	24.1
Malaysia	28.0	25.7
Myanmar	27.6	26.1
Singapore	30.4	27.9



Source: United Nations (2013). UN, Population Division (2013).
World Marriage Data 2012.

Marriage in low-fertility countries in West Asia

<i>West Asia</i>		
Country	SMAM	
	Men	Women
Georgia	28.0	23.7
Armenia	27.8	24.4
Azerbaijan	28.2	24.4
UAE	26.8	25.3
Cyprus	30.8	27.9
Lebanon	32.3	28.3



Source: United Nations (2013). United Nations, Population Division (2013). World Marriage Data 2012.

Labour force participation rate by sex, world and regions (%)

	1992	2000	2002	2004	2006	2008	2010	2012*
<u>Male</u>								
World	80.2	78.6	78.1	78	77.8	77.5	77.1	77.1
Developed economies & European Union	71.8	70.2	69.4	68.9	69	69	68	67.5
South-East Asia & the Pacific	82.6	82.8	82.8	83.2	82.4	81.9	81.9	81.8
South Asia	84.8	83.3	83.3	83.3	83.1	82.1	81.4	81.3
Middle East		74.0	73.8	73.8	73.5	72.7	73.6	74.3
East Asia	84.2	82.1	81.4	80.9	80.4	80	79.6	79.4
<u>Female</u>								
World	52.4	52	52.1	52.2	52.2	51.7	51.2	51.1
Developed economies & European Union	50.3	51.8	51.7	52	52.5	53.0	53.0	52.8
South-East Asia & the Pacific	58.4	58.5	58.4	58.4	58.3	58.7	58.6	58.8
South Asia	36.1	35.0	35.8	36.8	36.3	33.9	31.7	31.8
Middle East		16.3	17.2	18.3	18.7	17.7	18.1	18.7
East Asia	71.4	69.7	69.1	68.3	67.8	67.2	66.9	66.4

* 2012 are preliminary projections.

Source: ILO, Economically Active Population Estimates and Projections, (EAPEP) database, 6th edition (July 2012 update).

Family change in Asian countries

Convergence	Non-convergence
Intergenerational change (education, work, etc.)	Divorce
Fertility	Premarital sex/non-marital childbearing
Age at marriage	Living arrangements
Aspirations and ideals	Consanguinity (prevalent in Muslim countries)?

Pace of demographic transition, social change and reactions in Europe and Asia

Region	Demographic transition	Social change	Reaction
Europe	Slow	Slow	Gradual adaptation
Asia	Fast	Fast	Anxiety and generational conflict

Consequences of low fertility in Asia

- Rapid ageing in the low-fertility regions, but level and speed of ageing varies by the onset of low fertility
 - Japan has the highest percentage of 60+
 - Singapore, and Republic of Korea are also on the high end
 - Thailand and Iran are still on the low end of ageing but will increase rapidly
- Decline of labour force
- Population momentum
 - Negative : Japan
 - Positive: Iran, Thailand
- Demographic dividend
 - Various stages
 - Diverse experiences in seizing the opportunity

Current and projected ageing (% 60+) in the world and selected low-fertility countries in Asia

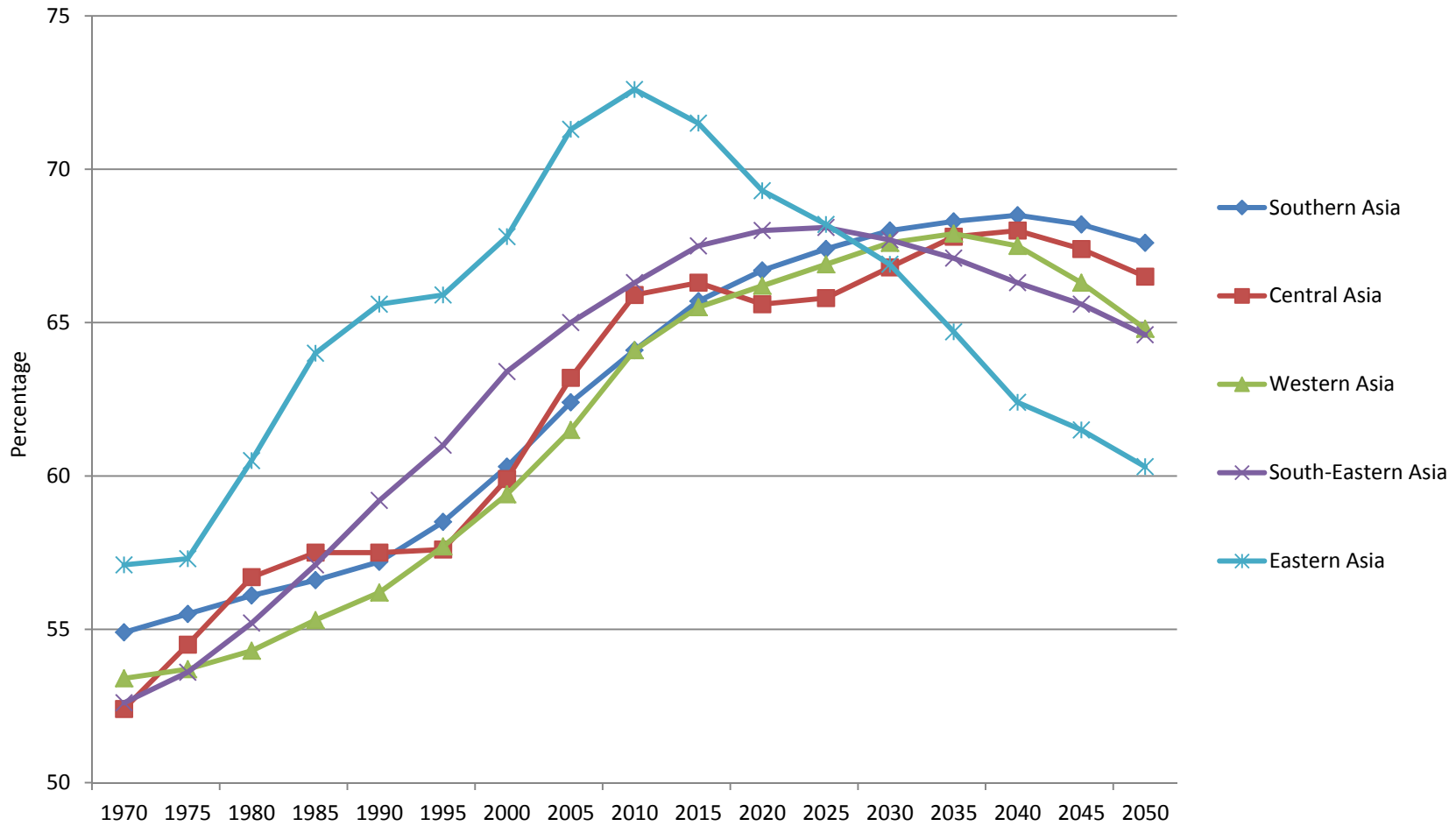
Region/ country	2010	2025	2050
World	11.1	14.8	21.2
Asia	10.1	14.8	24.0
Japan	30.7	35.8	42.7
Rep. of Korea	15.6	27.0	41.1
Singapore	14.1	24.2	35.5
Thailand	12.9	23.1	37.5
China	12.4	20.0	32.8
Iran	7.4	12.2	29.4

Source: United Nations (2013)

Implications of population ageing in Asia

- **Burdens for economic and social support and health care**
- **Shortage of caregivers for the elderly**
- **The rapidity of low fertility and inadequate preparation for the problems associated with population ageing**
 - **Current: i.e., Japan, Rep. of Korea and Singapore**
 - **Future: China, Thailand, Iran**
- **Note: Ageing measures? Perception about ageing?**

Demographic dividend by subregions of Asia: percentage of population aged 15-64, 1970-2050



Source: United Nations (2013). World Population Prospects: the 2012 Revision. CD Rom Edition.

Low-fertility policies in Asia

Country	Year	Policy
Singapore	1984	President's order: highly educated women have more babies
	1987	Extended pronatalist law

	2013	Population Policy White Paper (National Population and Talent Division, 2013)
Japan	1990	Childcare Leave Law
	1994	The Angel Plan (1995-1999)
	1997	Child Welfare Law
	1999	New Angel Plan (2000-2004)
	2003	The New Generation Law
	2004	New-New Angel Plan
2006	New Policy to Cope with Low Fertility (Suzuki 2009, 2012)	
Rep. of Korea	2006	The First Basic Plan on Low Fertility and Aging Society 2006-2010
	2011	The Second Basic Plan on Low Fertility and Ageing Society 2011-2015 (Lee and Kim 2013)
Taiwan	2008	White Book of Population Policy
Thailand	2009	First National Reproductive Health Development Policy
	2013	New Draft Policy (UNFPA-Thailand 2012)
Iran	2013	New Draft Law being prepared

Pronatalist policies to raise fertility in Asia have been unsuccessful → Why?

- Confusion culture and patriarchal society (Retherford and Ogawa, 2006, p. 36;)
- Lack of cooperation from employers
- Work hours are very long; few opportunities to work part-time in good jobs (Suzuki, T. 2012)
- Limited availability and affordability of formal childcare
- Under-funding and insufficient support (McDonald 2002, UNFPA-Thailand 2011: 126)
- Late reactions of Government to low fertility (low fertility trap hypothesis (Lutz et al. 2006))

Pronatalist policies (continued)

- Lack of understanding of population dynamics and implementation of quick-fix plans
- Implementation of out-of-context policies (successful policies in Europe do not necessarily work in East Asia)
- Top-down approach and lack of involvement of civil society and people

Pronatalist policies in the region are generally judged to have failed. However, Jones & Im-em (2012: 10) argue that these policies may have prevented fertility from going even lower.