"Fertility Transition and The Progression to A Third Birth in Turkey"

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Some Basic Population and Health Figures in 2000

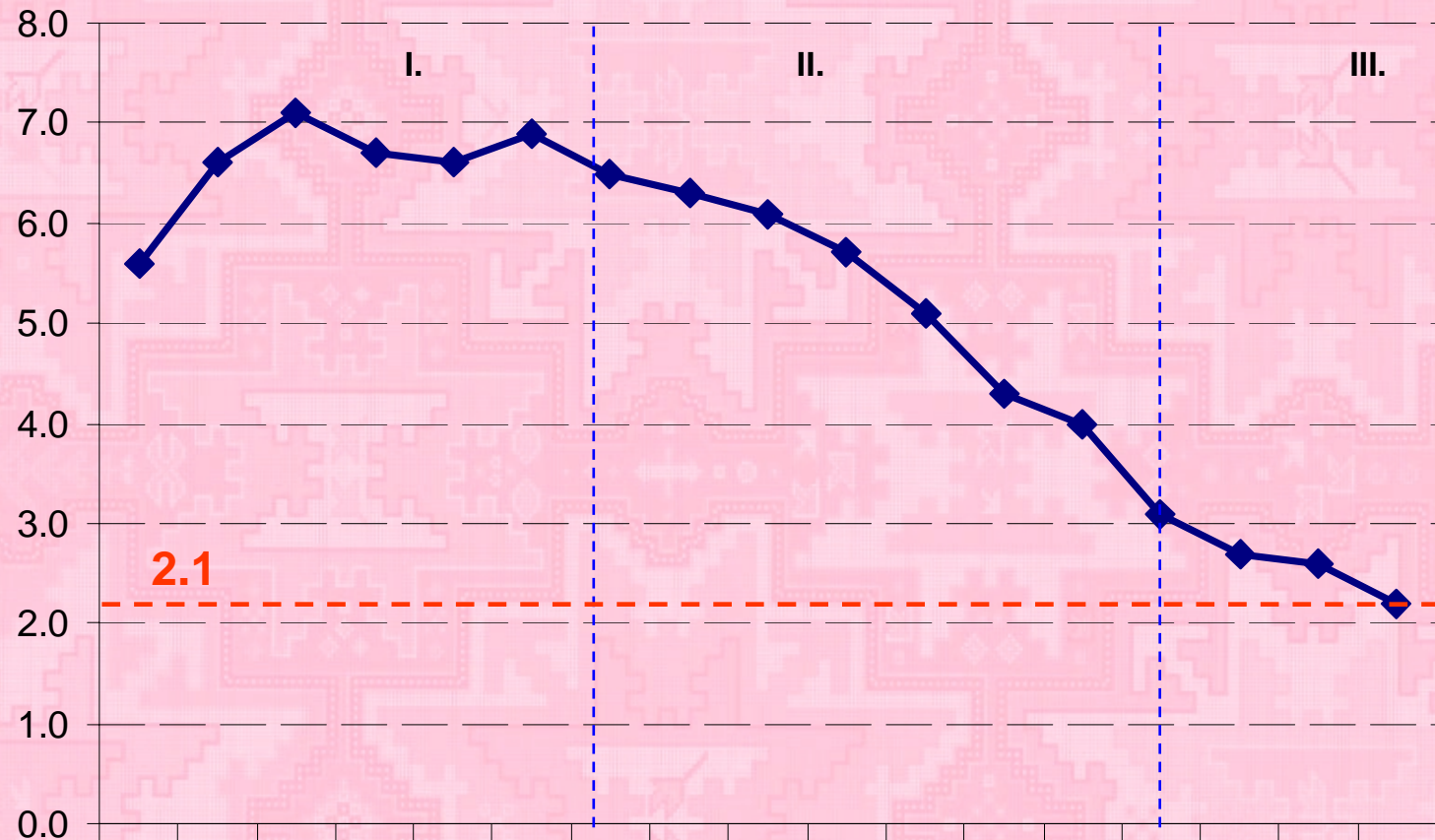|	
Total Population *(million)*	70.8
Proportion of Urban Population *(%)*	59
Population Growth Rate *(‰)*	15
Doubling Time *(year)*	45
Crude Birth Rate *(‰)*	21
Crude Death Rate *(‰)*	7
Infant Mortality Rate *(‰)*	29
Child Mortality Rate *(‰)*	9
Under 5 Mortality Rate *(‰)*	37
Life Expectancy at Birth *(year)*	
Men	66
Women	71

TURKEY - 5 REGIONS
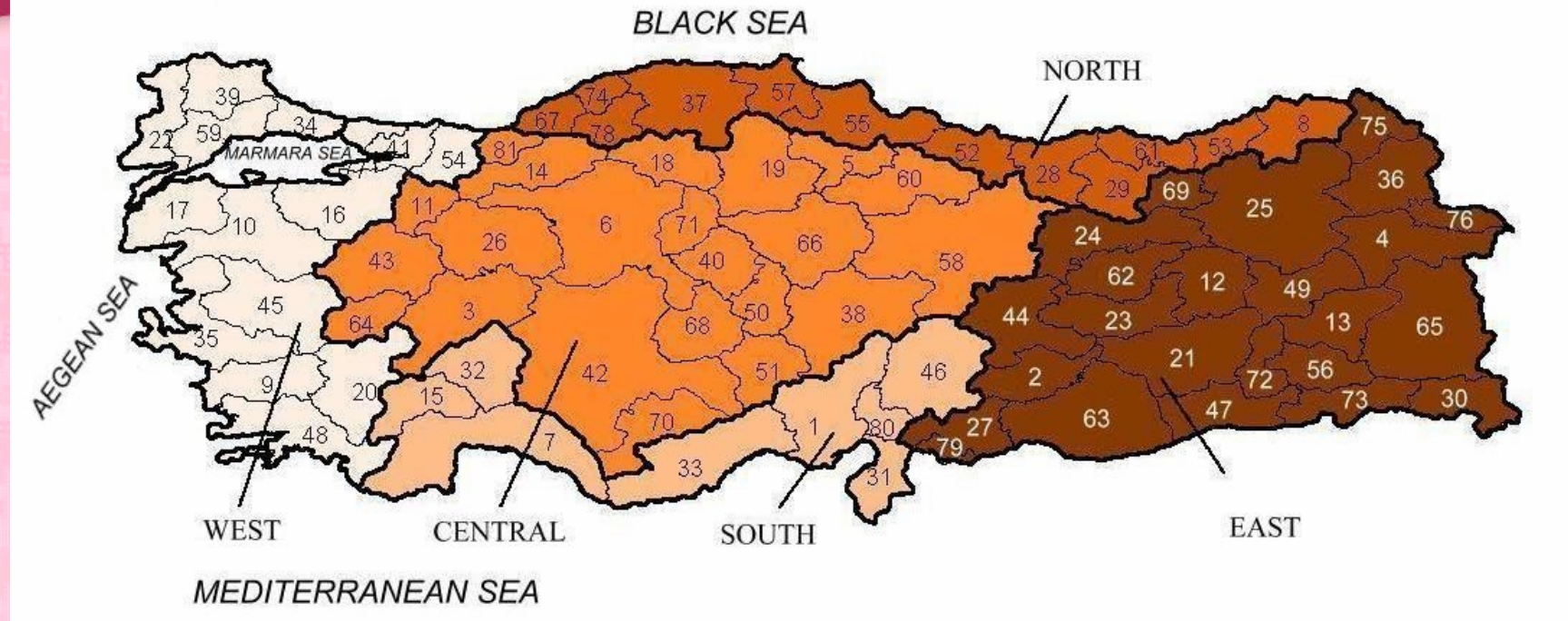
Five Geographical Regions:

1. West
2. South
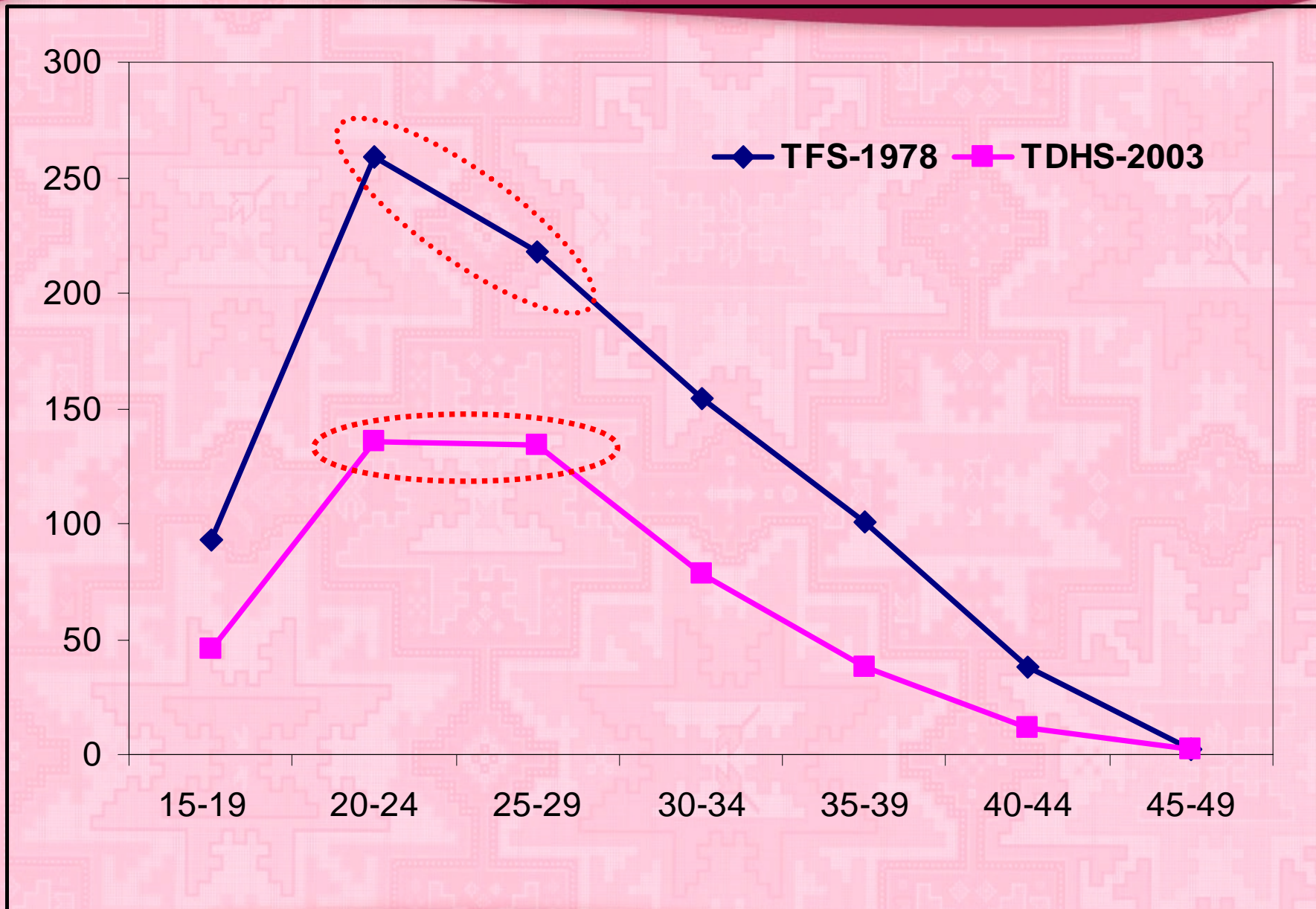3. Middle
4. North
5. East

FERTILITY TRANSITION IN TURKEY

TOTAL FERTILITY RATE (TFR) 1920 - 2003, Turkey

Source: SIS, HUIPS

	1920 - 25	1925 - 30	1930 - 35	1935 - 40	1940 - 45	1945 - 50	1950 - 55	1955 - 60	1960 - 65	1965 - 70	1970 - 75	1975 - 80	1980 - 85	1985 - 88	1988 - 93	1993 - 98	1998 - 03
Total Fertility Rate	5.6	6.6	7.1	6.7	6.6	6.9	6.5	6.3	6.1	5.7	5.1	4.3	4.0	3.1	2.7	2.6	2.2

Age Specific Fertility Rates, 1978-2003, Turkey

Total Fertility Rate by Region, (1995-1998),TDHS-1998

TFR (1995-1998)
- West: 2.03
- South: 2.55
- Central:2.56
- North: 2.68
- East: 4.19
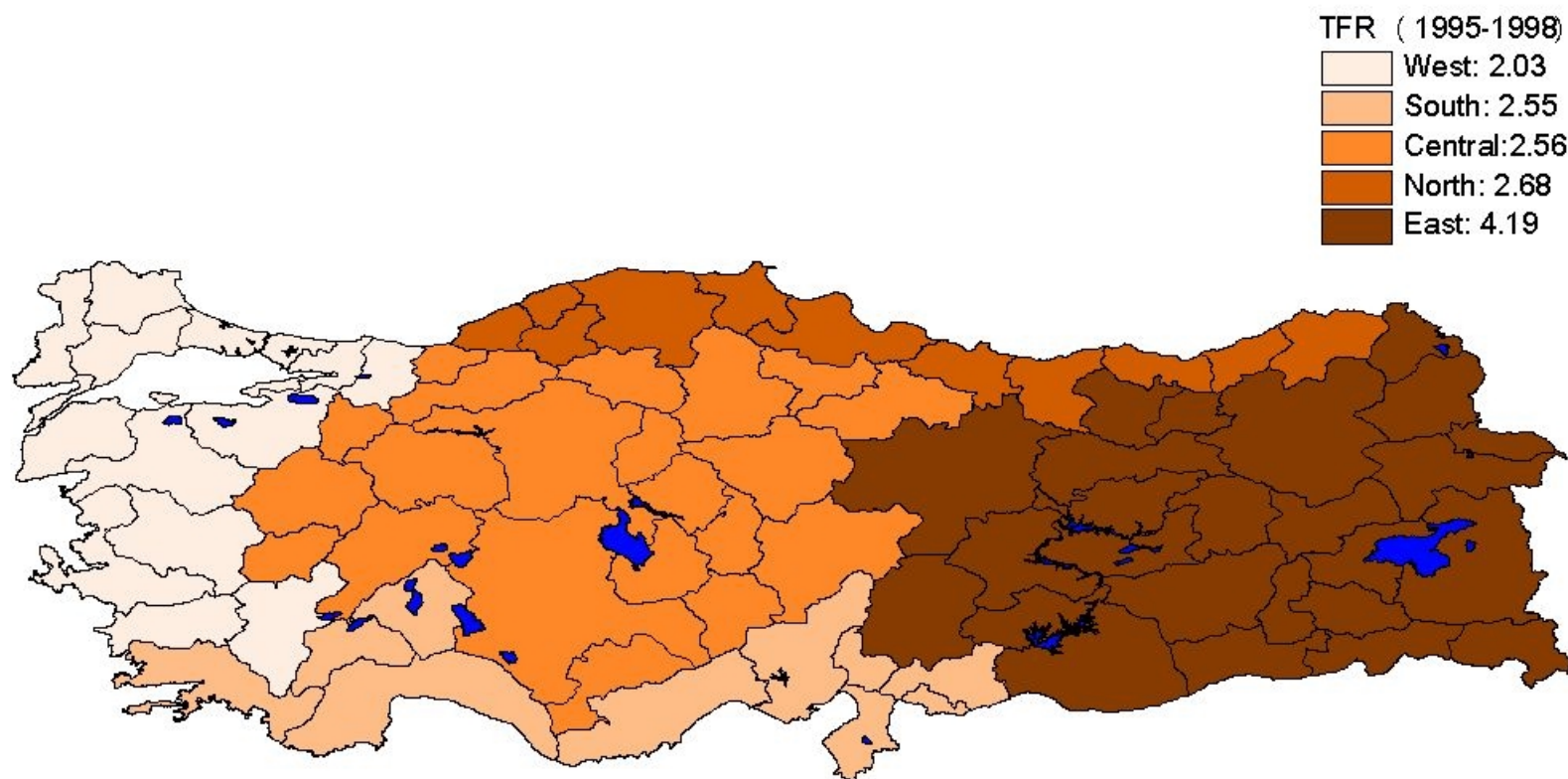
TFR (Turkey) = 2.61

Total Fertility Rate by Region, (2000-2003),TDHS-2003

TFR (2000-2003)

|	
Central:	1.86
West:	1.88
North:	1.94
South:	2.30
East:	3.65
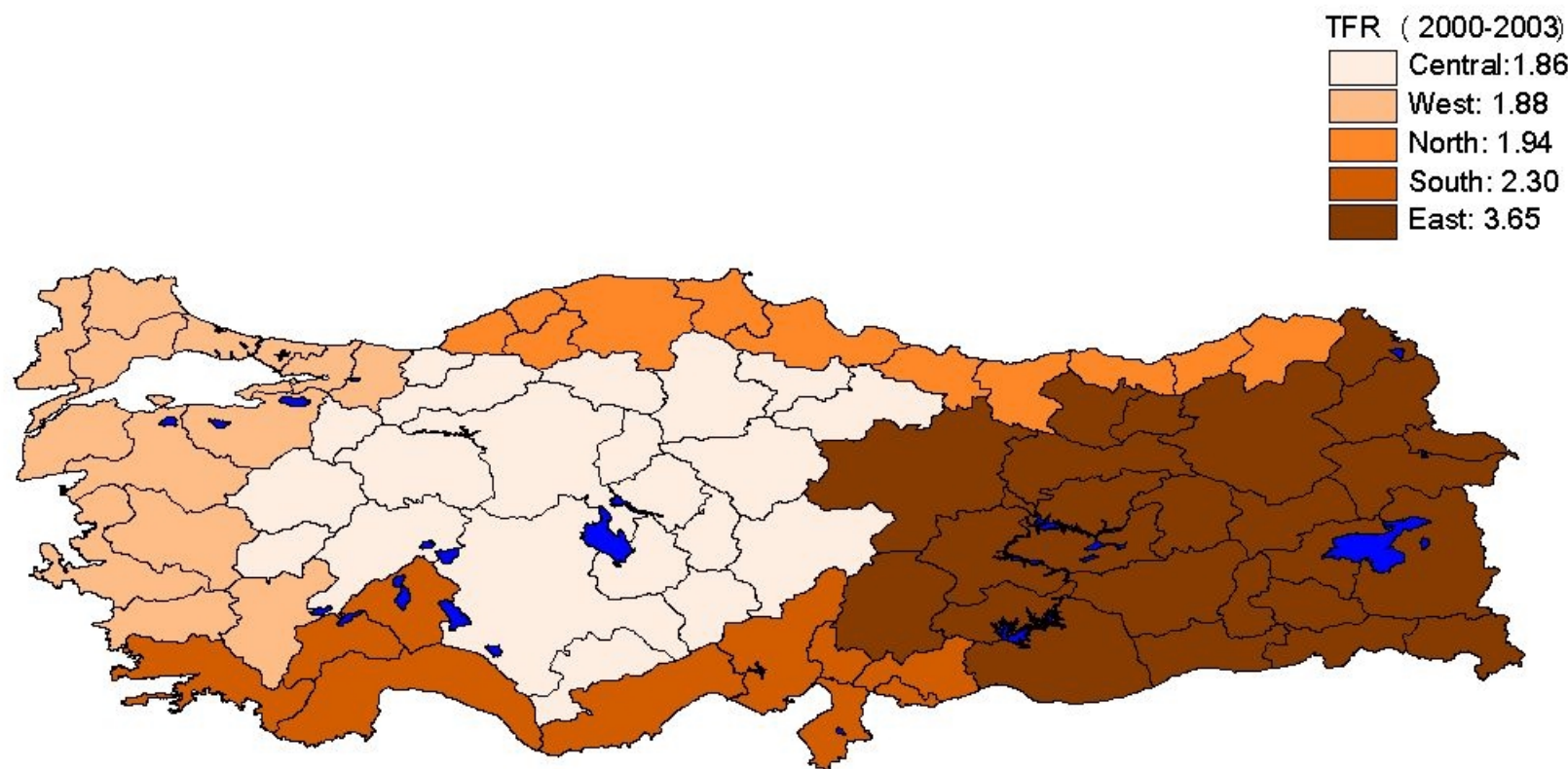
TFR (Turkey) = 2.23

- The most significant cleavage in fertility level in Turkey, at both an aggregate and household level, is regional location

- The eastern part has demographic rates more characteristics of the developing countries of the Middle East and Asia, whilst the western region is more European in demographic structure

- A very large part of this regional difference can be explained as the result of different;

1. Urban-rural distribution of population
2. Different educational attainment
3. Different marital status distributions
4. Different level of economic development

Development Index for Provinces, State Planning Organisation

Development Index (SPO-1996)

1. Level
2. Level
3. Level
4. Level
5. Level
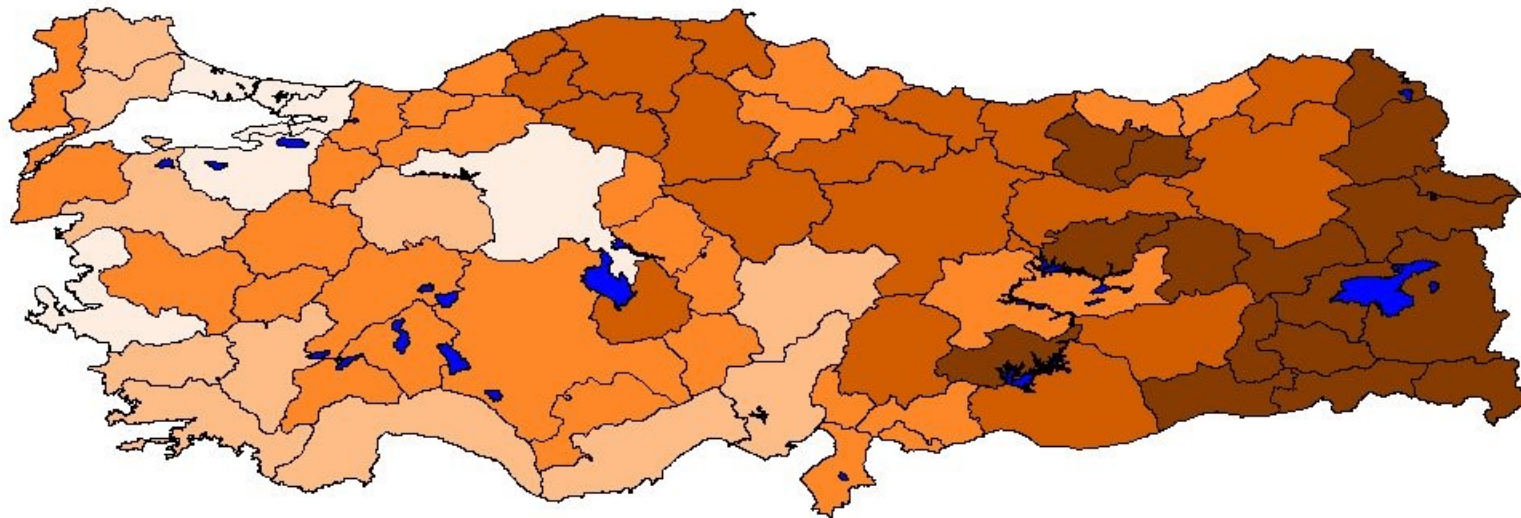
PERCENTAGE DISTRIBUTION OF ILLITERATE WOMEN (15-49), TDHS-1998

Can not Read (%)
- 10 – 13
- 14 – 17
- 18 – 25
- 28 – 34
- 46 – 70
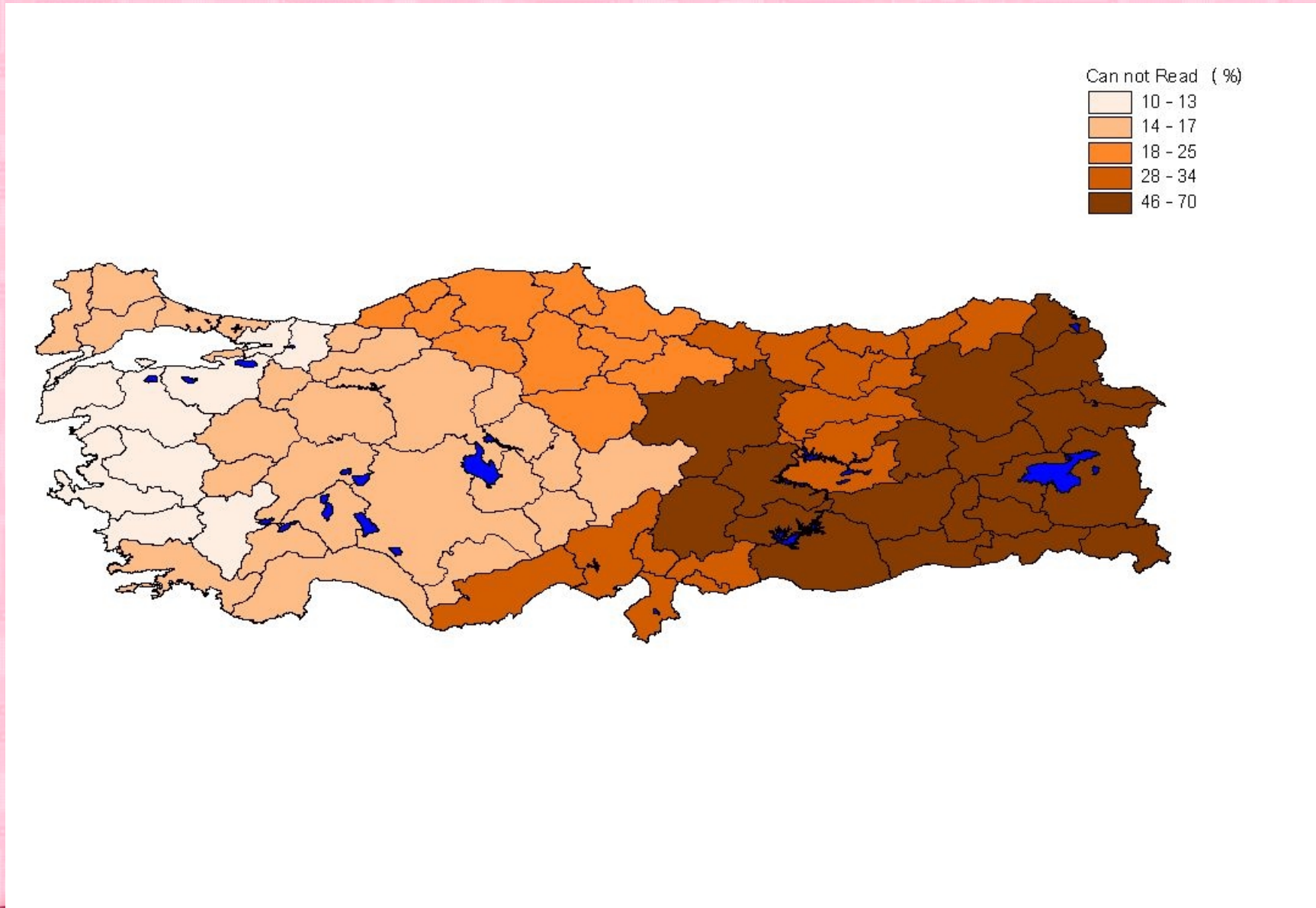
However,

Such differences of may also stem from ethnic and other subcultural differences.

The different sections of the population have been in interaction with the social and cultural changes with diverse ways and paces.

A contrast between 'modern' and 'traditional' cultural features is maintained along the regional diversification.

When social change eliminates group differences in socioeconomic characteristics or when such conditions are controlled statistically, discrepancies in fertility behavior may remain

Percentage of Women (15-49) whose Mother Tongue is Turkish, TDHS-98
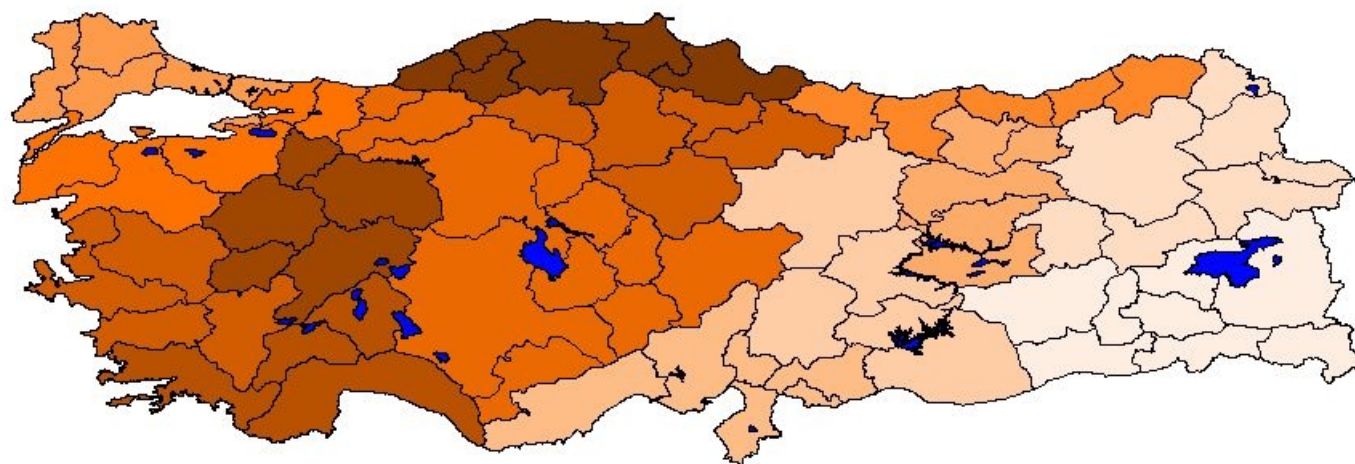
In Turkey: % 82.5

M.T. is Turkish (%)

	East 1: 9.3
	East 2: 35.1
	East 3: 50.5
	South 2: 76.9
	East 4: 84.7
	West 1: 89.1
	North 1: 91.8
	West 2: 94
	Central 3: 94.8
	West 3: 95.7
	South 1: 96.7
	Central 2: 97.3
	North 2: 99.7

Percentage of Women (15-49) whose Mother Tongue is Kurdish, TDHS-98

In Turkey: % 14.3

M.T. is Kurdish (%)

- North: 0
- West 2: 2.1
- Central 1: 2.3
- Central 2: 2.7
- West 3: 2.9
- South 1: 3.0
- Central 3: 4.3
- West 1: 9.0
- East 4: 15.3
- South 2: 15.4
- East 3: 41.3
- East 2: 55.1
- East 1: 86.0
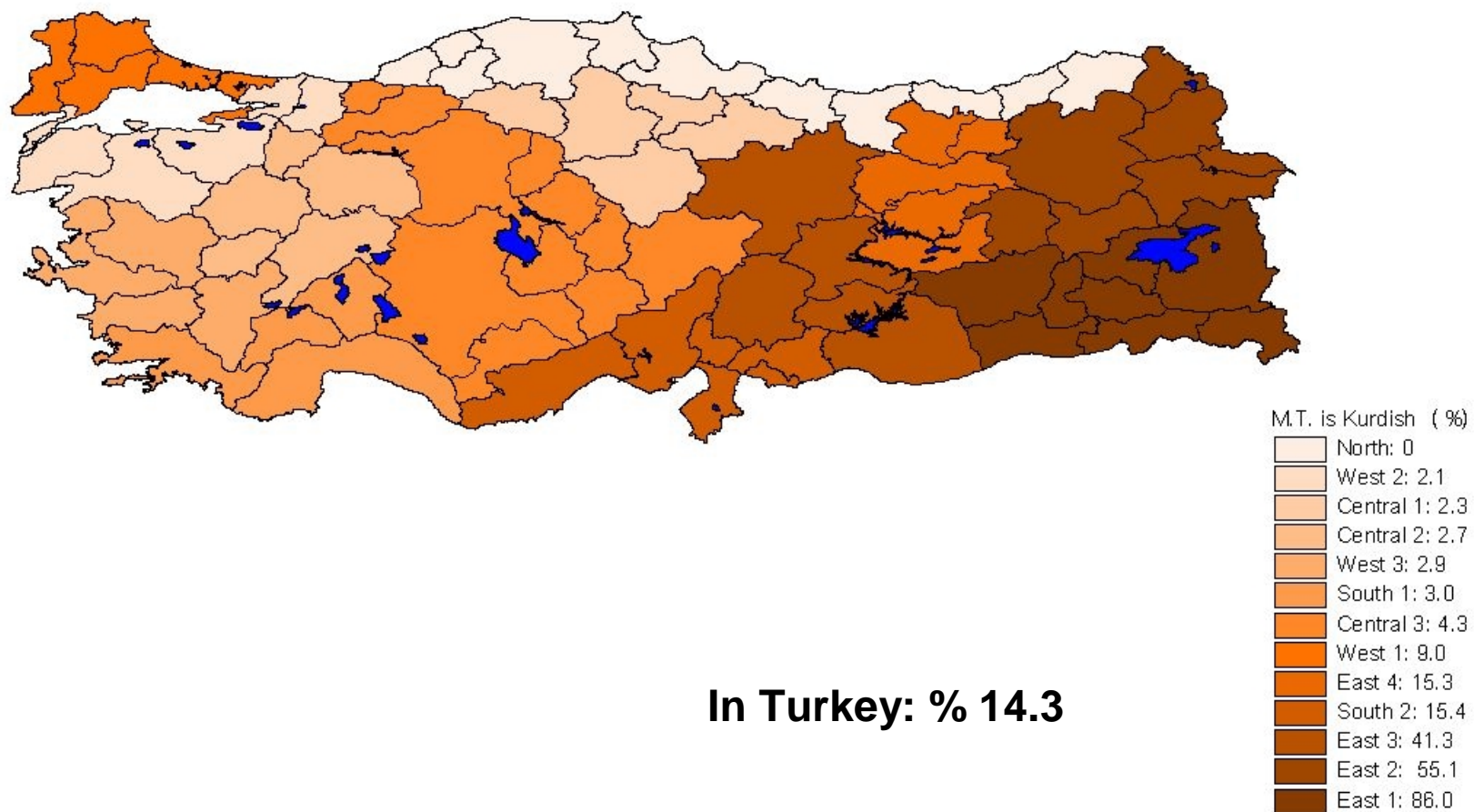
ASFR (1995-1998) By Mother Tongue: Turkey, TDHS-1998
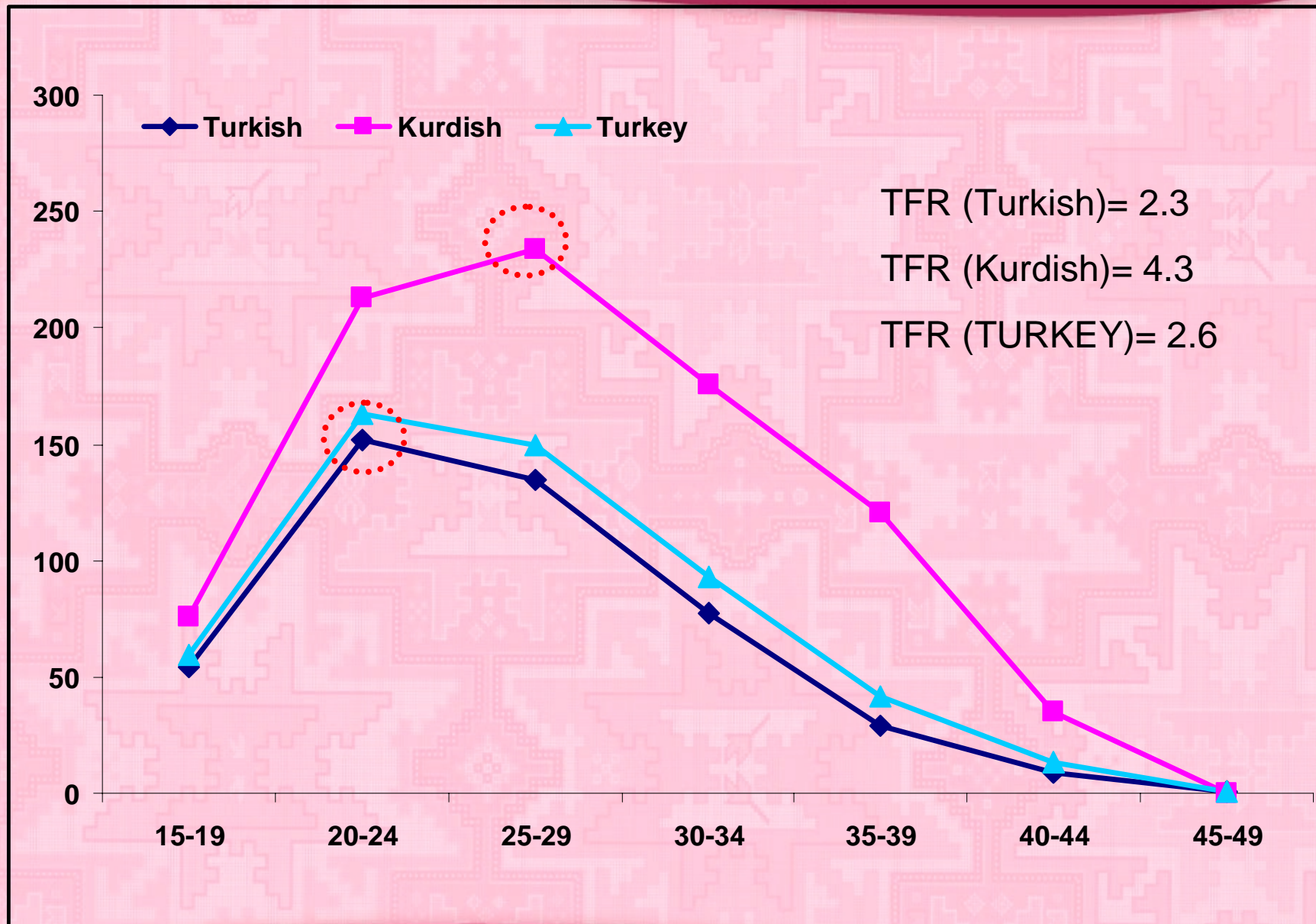
ASFR (1995-1998) By Mother Tongue: EAST, TDHS-1998

TFR (Turkish)= 2.9

TFR (Kurdish)= 4.8

TFR (EAST)= 4.2

TFR (TURKEY)= 2.6

Legend:
- Turkish
- Kurdish
- TFR in Turkey

X-axis: 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49

Y-axis: 0, 50, 100, 150, 200, 250, 300
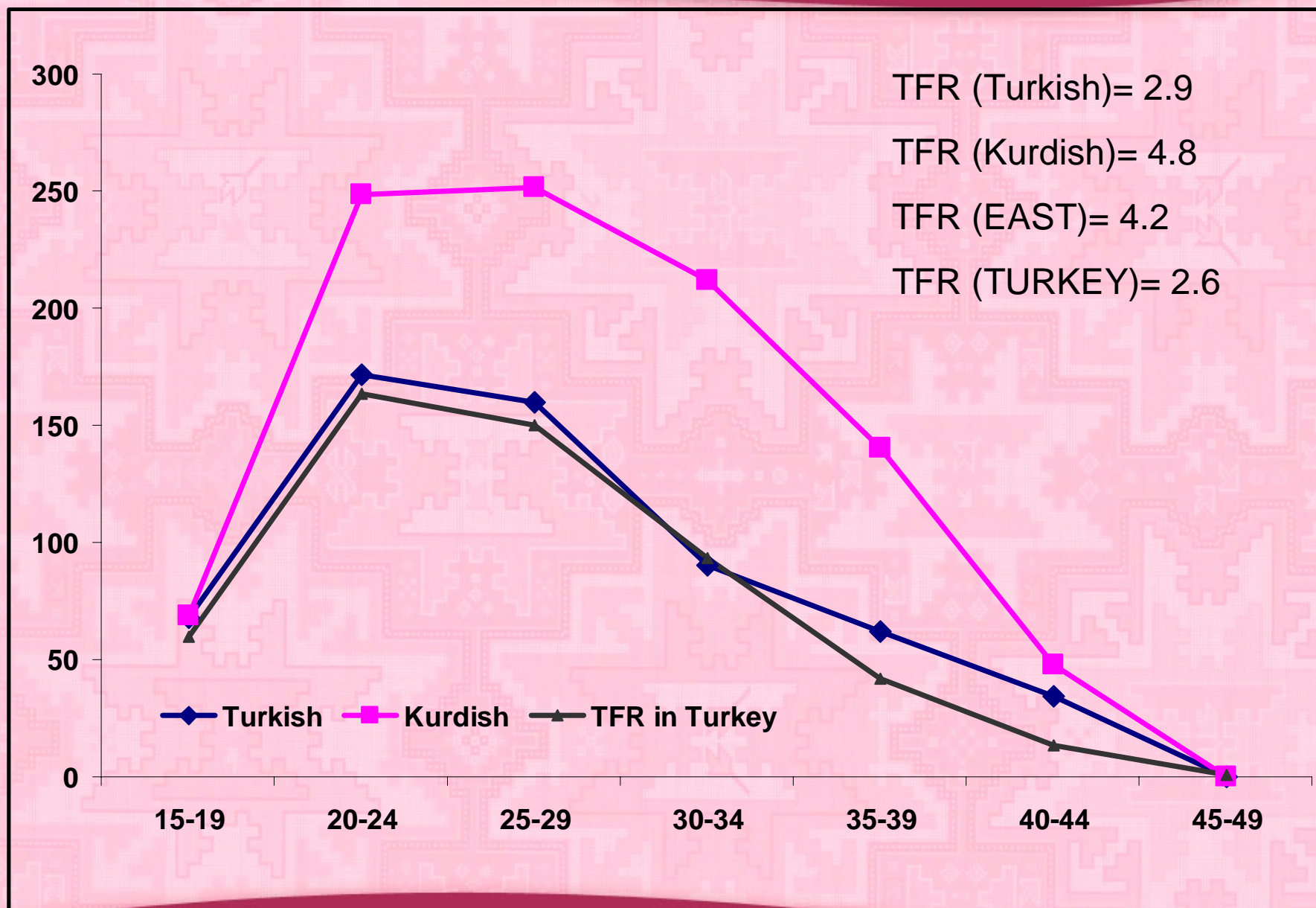
The purpose of this study

- Find out iimportant determinants of third- birth intensities of women by applying event-history analysis to retrospective survey data.

- Some of the basic socioeconomic characteristics of women and

- Cultural characteristics of their first marriages related to the cultural context of fertility behavior are investigated with hazard regression models.

- $h(t) = a_k\, b_l\, c_m d_n\, e_o f_p g_r h_s i_t$

- where $h(t)$ is the third birth intensity that depends on various levels of factors.

- a is the basic time factor, duration since the birth of second child,
- b is the mother tongue,
- c is the second time-varying covariate; period (calendar time),
- d is age of mother at her second birth,
- e is literacy level of woman,
- f is working status of woman before marriage,
- g is whether bride's money paid before marriage,
- h is showing how marriage was arranged,
- i is whether marital life of woman started in neo-local or patri-local settlement.

- The data used in this study originated from the '1998 Turkish Demographic and Health Survey (TDHS-98)'.

- Overall, there are 4273 study objects included in the study and they constituted with women who were in their first union and who had at least two births at the survey date.

- The observation starts with the 'birth date of the second child' and it ends with either the birth date of third child or the survey date. The cases accepted as right censored if no event observed from the birth date of second child until the survey, September 1998

- For empirical analysis, the software package EvHa (version 0.32; cf. MPIDR) is used to fit intensity models.

- The results, produced as maximum-likelihood estimates of the effect parameters of the models, are presented in the form of relative risks.

- The model fitting is conducted with stepwise approach:
- Firstly, individual demographic characteristics,.
- Secondly, covariates implying socioeconomic development,
- Lastly, the groups of covariates that represent cultural traits of the marriages are involved.

- **HERE SEE THE WORD FILE !!!**

The relative risks of the having third birth by the interaction of mother tongue and period

	-1982	1983-1987	1988-1992	1993-1998
Turkish	1.00	0.73	0.53	0.43
Kurdish	1.00	1.08	0.94	0.63
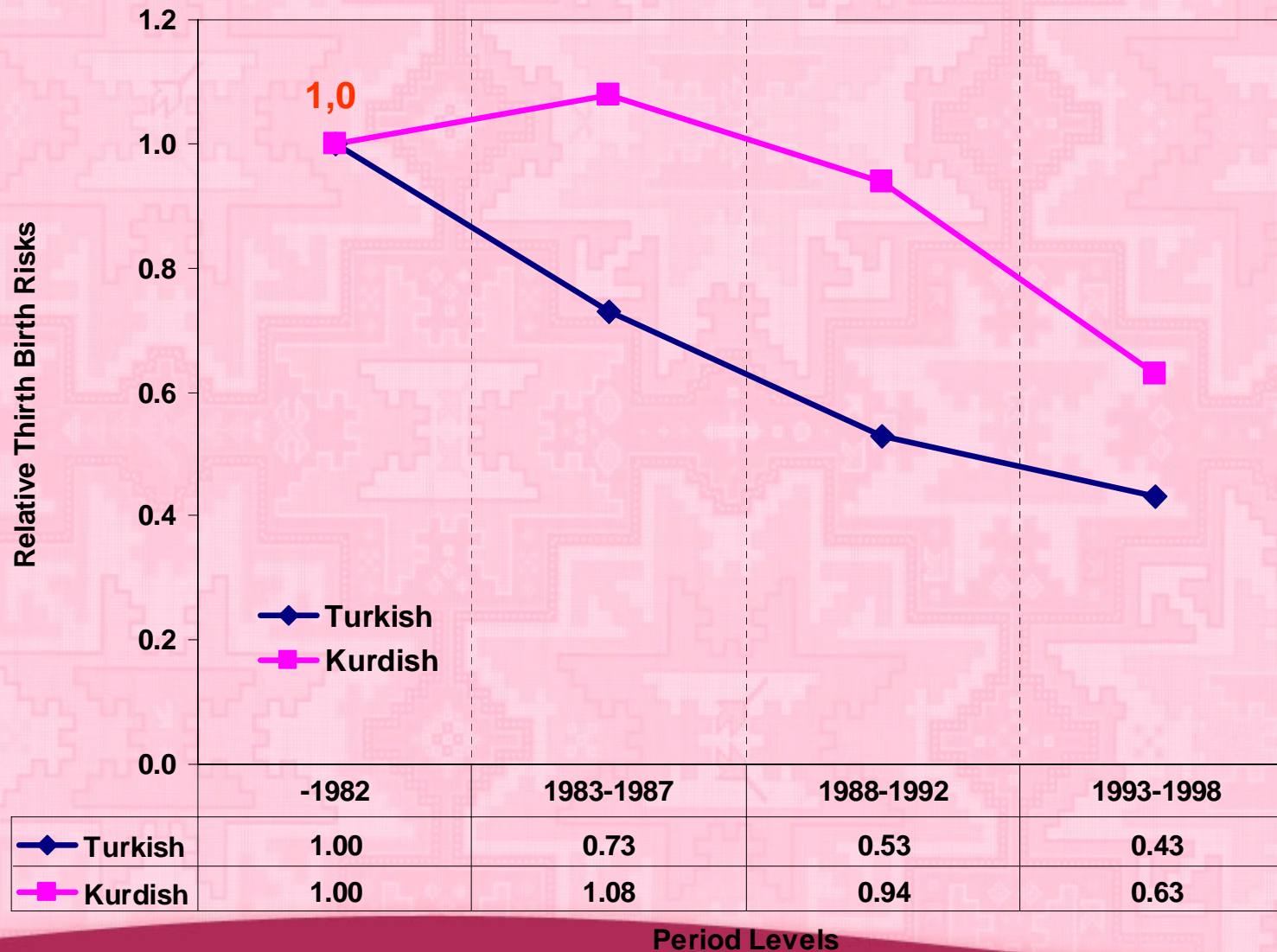
Period Levels

The relative risks of the having third birth by the interaction of mother tongue and age of mother at second birth

Relative Thirth Birth Risks

1,0

Turkish

Kurdish

	>20	21-25	26-30	31+
Turkish	1,00	0,72	0,44	0,34
Kurdish	1,00	0,91	0,91	0,52

Age of Mother at Second Birth
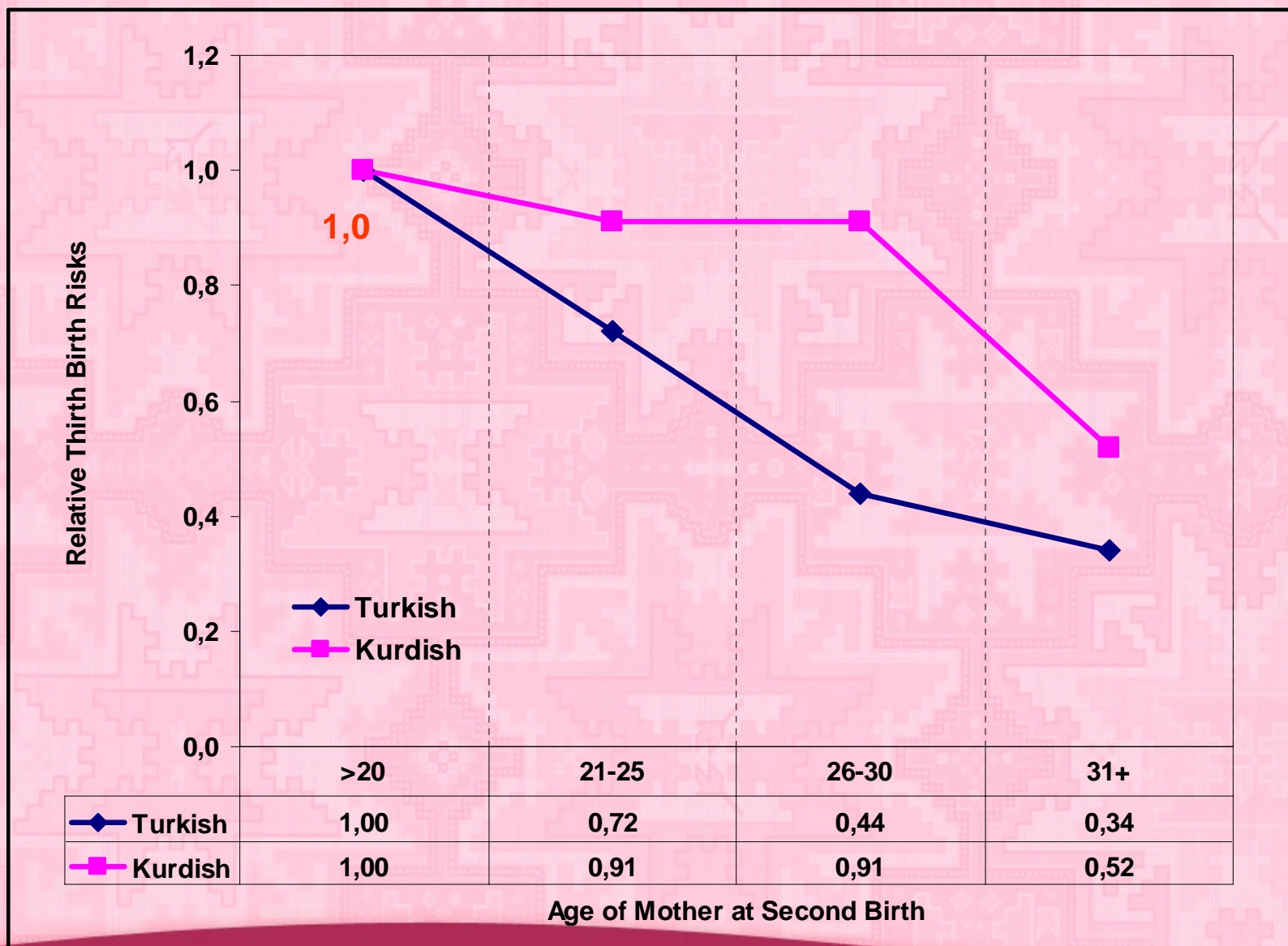
The relative risks of the having third birth by the interaction of the mother tongue, literacy and period

Turkish * Reads easily

Turkish * Reads with difficulty

Turkish * Cannot read

1,0

Period Levels

	-1982	1983-1987	1988-1992	1993-1998
Turkish * Reads easily	1,00	0,77	0,52	0,43
Turkish * Reads with difficulty	1,00	0,59	0,49	0,38
Turkish * Cannot read	1,00	0,74	0,63	0,52

TURKISH

Kurdish * Reads easily

Kurdish * Reads with difficulty

Kurdish * Cannot read

1,0

Period Levels

	-1982	1983-1987	1988-1992	1993-1998
Kurdish * Reads easily	1,00	1,25	0,60	0,39
Kurdish * Reads with difficulty	1,00	0,90	0,63	0,64
Kurdish * Cannot read	1,00	1,05	1,02	0,64

KURDISH

The relative risks of the having third birth by the interaction of mother tongue*brides money and period
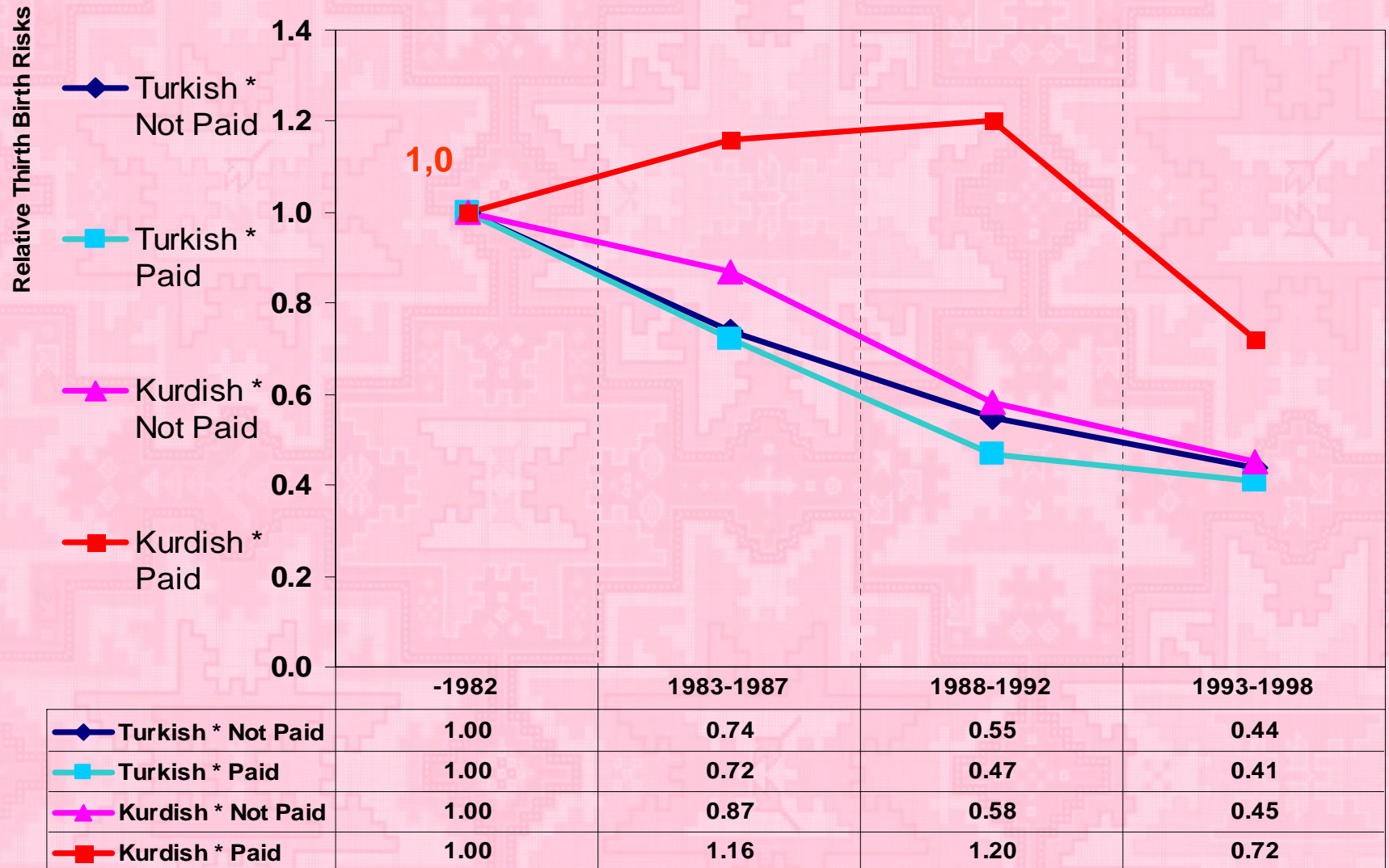
	-1982	1983-1987	1988-1992	1993-1998
Turkish * Not Paid	1.00	0.74	0.55	0.44
Turkish * Paid	1.00	0.72	0.47	0.41
Kurdish * Not Paid	1.00	0.87	0.58	0.45
Kurdish * Paid	1.00	1.16	1.20	0.72

Period Levels

The relative risks of the having third birth by the interaction of mother tongue*family type and period

	-1982,00	1983-1987	1988-1992	1993-1998
Turkish * Nuclear	1,00	0,59	0,61	0,40
Turkish * Extended	1,00	0,78	0,49	0,45
Kurdish * Nuclear	1,00	0,95	0,76	0,64
Kurdish * Extended	1,00	1,12	0,99	0,63

Period Levels
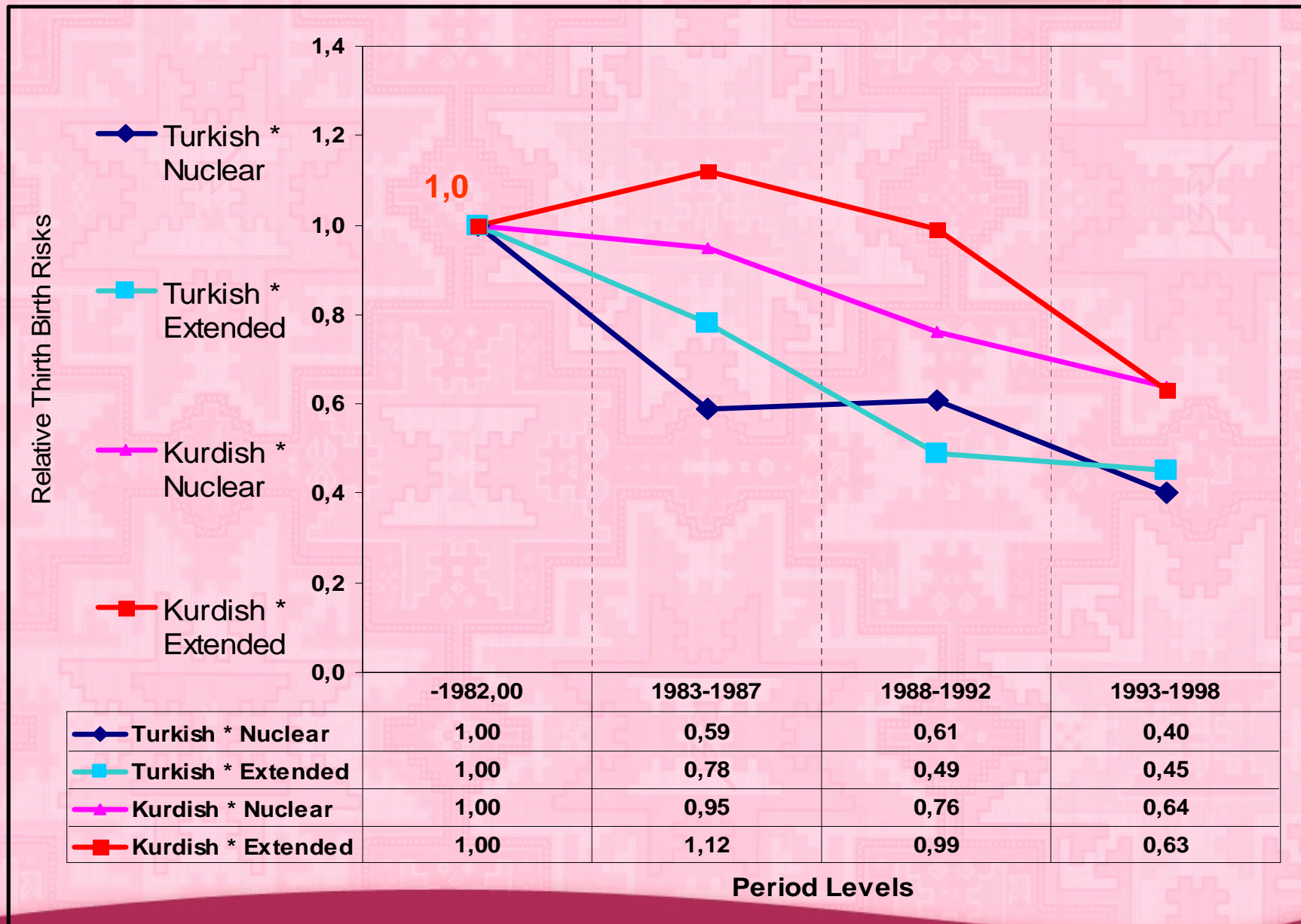
The relative risks of the having third birth by the interaction of mother tongue*marriage arrangement and period

Relative Thirth Birth Risks

- Turkish * Themselves
- Turkish * Family
- Kurdish * Themselves
- Kurdish * Family

	-1982,00	1983-1987	1988-1992	1993-1998
Turkish * Themselves	1,00	0,57	0,44	0,39
Turkish * Family	1,00	0,76	0,55	0,45
Kurdish * Themselves	1,00	1,11	0,70	0,59
Kurdish * Family	1,00	1,06	1,00	0,62

Period Levels
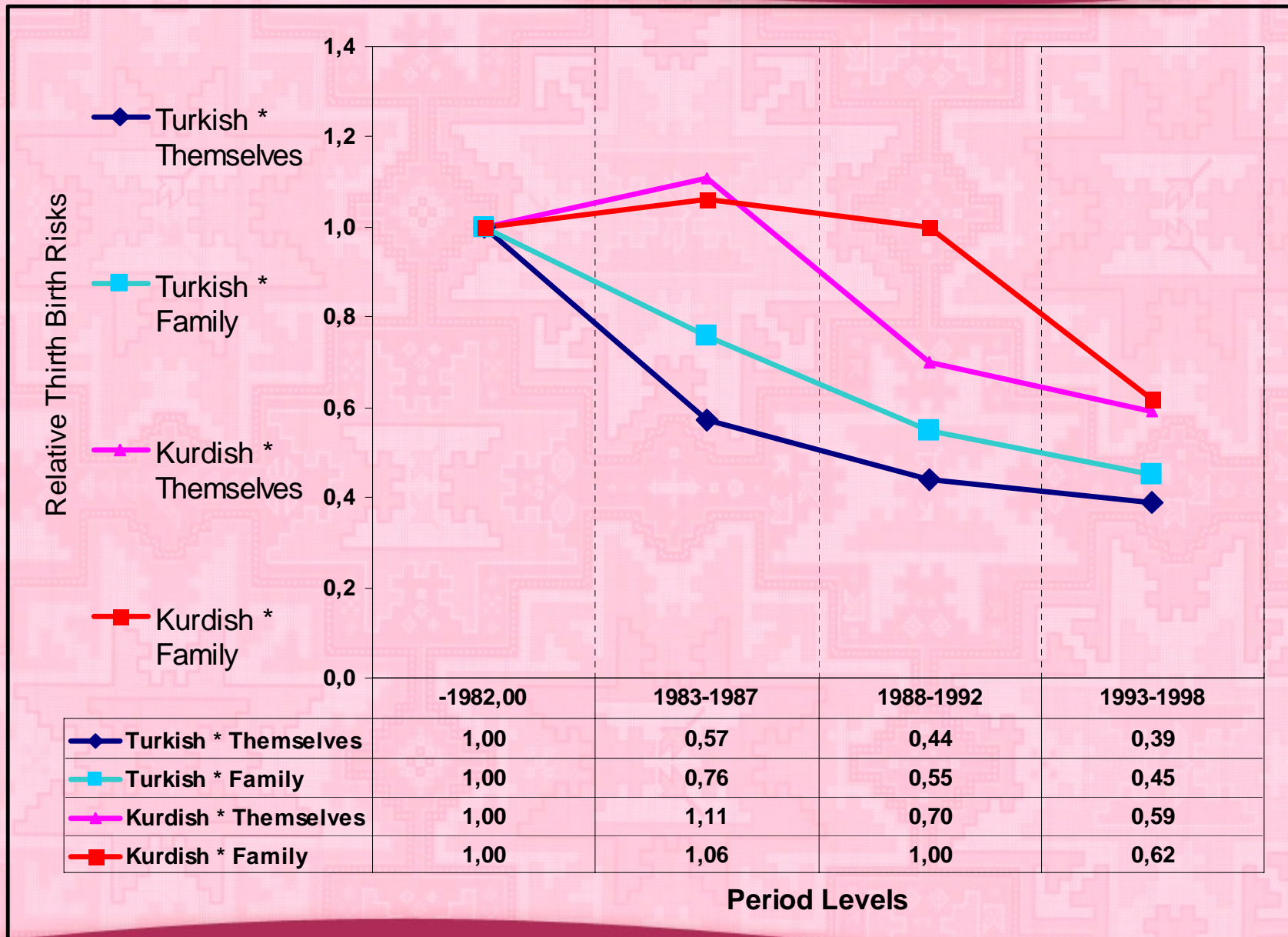
- Overall, the study showed that relative effect of; firstly, background and socioeconomic characteristics of the women and secondly the attributes of their first marriages are highly influential on the third birth risks.

- The findings presented that the third-birth intensities considerably differ by mother-tongue of the women.

When socio economic variables are considered;

- The Turkish women who read easily and who worked before first marriage with social security has the lowest transition rate from second to third birth.

- On the contrary, Kurdish women who could not read and who either did not work had the highest third birth risk.

Whatever the level of socio-economic level is fertility decrease among Turkish women has been constant for two decades,

- The traditional norms and values are still supporting high fertility of the illiterate Kurdish women who constitute laggards of low fertility behavior in Turkey.

- Several other cultural factors are of importance and it is fruitful to consider a wider spectrum of such variables in fertility studies than what is usually the case.

- Kurdish women who married with traditional attributes constitute the most resistant group to fertility transition in Turkey.