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Abstract

The analysis of economic factors usually applied for examining gender inequality in the labour market suggests that former post communist countries in Central and Eastern Europe have reached similarly high standards of gender equality compared to Western European countries. This paper aims at comparing attitudes to women's work between transition and OECD countries highlighting the explanatory power of societal norms. The analysis of attitudes, their determinants and their change in regions and countries is based on mainly two waves (1994 and 1998) of the International Social Survey Program (ISSP). These data reveal that a strikingly higher share of people in the East than in the West agrees with traditional values on women's work. The large homogeneity in patriarchal values of Eastern European people with differing socio-economic background explains these regional differences. The East-West gap in traditional value orientations is likely to widen given that liberal values spread faster in OECD than in transition countries.

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1 Introduction

The transition process from centrally planned to market economies in Central and Eastern Europe (CEE) confronted the population of post-communist countries with a change of labour market structures. Women's chances to integrate successfully in new work relations are very much dependent on the prevalence of gender equality in CEE labour markets.

Gender equality in the labour market is often measured by comparing women's and men's economic characteristics, like gender-specific human capital, labour force participation rates and the gender pay gap. If these economic measures are applied in order to compare gender equality in the labour market between CEE and Western European countries we find generally that CEE countries keep up perfectly well with their Western neighbours.

However, pure economic factors might not catch the 'whole truth' of gender equality. Even though women's labour force participation rates were much higher in CEE than in the industrialised West during communism there is great scepticism that this implied higher gender equality in CEE than in pre-1990 OECD countries. During communism, women's full-time labour force participation was constrained in order to maximise the use of all available productive resources to sustain economic growth by 'extensive' means. In contrast, women's labour force participation in the West was a result of the impact of women's organisations and was related to the idea of women's self-realisation. Hence, economic factors compared across regions might reflect different regional policies regarding the genders and a 'good' economic outcome in terms of gender parity does not mean a preferable outcome regarding gender-equal opportunities and choices.

Instead of using economic indicators for measuring gender equality in the labour market, this paper aims at analysing and comparing patriarchal attitudes to women's work in and between transition and (pre-1990) OECD countries. It examines what people from different societies actually think about a gender equal division of work in the household and economic sphere. This different measure of gender disparities offers new perspectives for explaining gender inequality by highlighting the importance of societal norms and value systems in different countries and regions that cannot easily be captured

by pure economic factors. Women looking for work in a society characterised by a general belief in the traditional gender division of work are very probable to be worse off in terms of work opportunities and income than women living in societies where liberal gender attitudes are predominant. Hence, it is assumed that patriarchal attitudes shape women's opportunities in the labour market and can serve as a proxy for measuring gender inequality in society.

This paper is not the first to compare gender attitudes between transition countries and other regions. Panayotova & Brayfield (1997) examined gender-attitudes in the USA and Hungary using data from the 1992 round of the International Social Survey Programme. The same data source but round 1994 were used by Braun *et al.* (1999) for comparing gender role ideology between socialist and non-socialist countries. The World Value Survey was the basis of Inglehart & Norris (2003). While these studies interpret gender attitudes in a more general sense by using a summarised gender attitude index derived from responses to several questions on attitudes this paper has a more simple and transparent approach by focusing exclusively on the examination of attitudes on women's work. The additional value added of this paper is the aim to explain regional gaps in attitudes by examining determinants of regional and gender differences in attitudes to women's work using a regression framework. Consequently, it will be also examined whether it is regional differences of population characteristics or of the impact of determinants that drive the regional gap in patriarchal attitudes. Furthermore, this paper sheds light on future patterns of social change of gender-role attitudes in transition and OECD countries based on age group and cross-sectional data analyses.

Micro-data derive from mainly two rounds[1] of the International Social Survey Program (ISSP). The 1994 round (also used by Braun *et al*., 1999) includes seven CEE and 14 Western industrialised countries and the 1998 round (not used before by other authors for the examination of gender attitudes) provides data on nine CEE and 18 OECD countries.

The paper will be structured as follows. Section 2 compares gender equality between East and West by investigating regional differences using some economic

[1] The coverage of transition countries is very small for the 1988 and 1991 rounds, so that only some descriptive results will be discussed for these years.

indicators. In addition, it portrays different political and societal trajectories related to women's role in the labour market. Section 3 describes the ISSP micro data that is used for the examination of attitudes to women's work. With the tools of descriptive and logistic regression analysis, Section 4 examines differences in gender norms between East and West and compares women's with men's attitudes. Where do regional and gender differences in attitudes to women's work derive from? Section 5 compares the impact of individual background characteristics between regions and gender. In addition, the extent to which the regional gap in patriarchal attitudes is a consequence of regional differences in population characteristics or of differences in the impact of those characteristics will be estimated using an Oaxaca decomposition. Section 6 aims at forecasting changes of gender attitudes over time for regions and countries. Section 7 concludes.

2 Economic indictors on gender equality and different trajectories in the increase of women's participation in the labour market in East and West

Are women at a greater disadvantage than men in the labour market in CEE countries today? This Section examines first some economic indictors for comparing gender equality in the labour market between East and West (Section 2.1). Even though these indicators show relative similar patterns between both regions, reasons for disparities in gender equality between East and West are discussed in a second step by describing different trajectories in the development of women's participation in the labour market for both regions (Section 2.2).

2.1 Similarities between East and West regarding economic indicators on gender equality in the labour market

Table 1 presents three economic indicators used to interpret gender equality in the labour market: gender equality in human capital measured by female and male gross enrolment ratios in tertiary education, gender employment/population ratio and the gender pay ratio. The selection of transition countries is driven by data availability. These countries are compared with five OECD countries: Sweden due to its high regulation on gender equality, the Mediterranean country Italy characterised by a traditionally less emphasis on gender equality and three other countries with some regulation (Germany, the USA and

the UK). In addition, Table 1 gives also the averages of the economic indicators for a group of CEE and OECD countries.

Column 1 of Table 1 shows the female/male gross enrolment ratio (GER) in tertiary education. The GER is the number of students enrolled in tertiary education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education. In all countries women are in an advantageous position. In Albania and Latvia 60 percent more women than men are enrolled in tertiary education; women's advantage is lowest in the Czech Republic and Slovenia with an about 10 percent higher share in tertiary education. However, a similar trend of the 'feminisation of tertiary education' can be observed for OECD countries.

Within OECD countries Sweden shows the highest advantage for women in access to tertiary education (about 50 percent more women than men). Italy, the UK and the US reflect the OECD average: in Western industrialised countries about 24 percent more women than men are enrolled in tertiary education. The average gender enrolment ratio for transition countries is 1.37 showing a substantially higher educational advantage of women over men in post-communist compared to OECD countries.

Column 2 displays a measure of women's economic independence by presenting the employment/population ratio of people in the working age (15 to 64 year-olds) by gender and again the female to male ratio. We find now a reverse picture to education, showing that women's higher human capital is not efficiently used in the labour market since women make up a smaller share of the employed than men. In transition countries female employment is relatively high compared to men's. There is practically no difference between the share of women and men in the labour market in Lithuania. Only in the Czech Republic and Hungary a considerably higher share of women (about 20 percent) than men is not employed.

On average, in transition countries about 14 percent less females than males are employed (ratio 0.86). This compares to 21 percent lower employment of women compared to men in OECD countries. Hence, the gender gap regarding employment is considerably lower in former post-communist countries than in Western industrialised countries. Nevertheless, a higher share of women is employed in OECD countries (60 percent) than in transition countries (54 percent).

Table 1: Economic indicators on gender equality in the labour market

	Gross enrolment ratio[2] in tertiary education ISCED 5 and 6, 2000/2001 in percent			Employment/ population ratio[3] 2001 in percent			Gender pay ratio[4] different sources		
							A	B	C
	Male	Female	**Ratio female male**	Male	Female	**Ratio female male**	1996, 1997, 1998	1998	1998
Albania	11	19	**1.73**						
Bulgaria	35	47	**1.34**	54	48	**0.89**	69		
Czech	29	31	**1.07**	73	57	**0.78**	81		
Estonia	45	70	**1.56**	66	57	**0.87**	73		
Hungary	35	45	**1.29**	63	50	**0.78**	78		
Latvia	48	79	**1.65**	62	56	**0.91**	80		
Lithuania	42	63	**1.50**	60	57	**0.96**	71		
Macedonia	21	28	**1.33**						
Moldova	24	31	**1.29**						
Poland	46	66	**1.43**	59	48	**0.82**	79		
Romania	25	30	**1.20**	69	58	**0.85**	76		
Russia	56	72	**1.29**				70		
Slovakia	29	32	**1.10**	62	52	**0.84**	78		
Slovenia	52	70	**1.35**	69	59	**0.86**	85		
Italy	*43*	*57*	**1.33**	*69*	*41*	**0.60**		*91*	*93*
Germany				*73*	*59*	**0.80**		81	83
Sweden	*56*	*85*	**1.52**	*77*	*73*	**0.95**		82	88
UK	*53*	*67*	**1.26**	*78*	*65*	**0.83**		76	79
USA	*63*	*83*	**1.32**	*79*	*67*	**0.85**			76
Mean CEE	35.6	48.8	**1.37**	63.7	54.2	**0.86**	76.4		
Std. dev. CEE	(13.1)	(20.5)	**(0.19)**	(5.6)	(4.3)	**(0.06)**	(5.1)		
Mean OECD	52.0	64.7	**1.24**	75.8	59.8	**0.79**		85.3	85.1
Std. dev. OECD	(5.9)	(12.0)	**(0.17)**	(5.0)	(9.8)	**(0.11)**		(5.7)	(5.9)

Source: UNESCO (2003) for gross enrolment ratio, OECD (2002) and EUROSTAT (2003) for data on employment rates. Gender pay gap data are not directly comparable. The sources and measures are as follows: A) UNICEF (1999): monthly gender pay ratios (*not adjusted for hours worked*). In general data refer to the year 1996, but for Hungary, Bulgaria, Romania, and Lithuania to 1997 and for Latvia to 1998. B) Eurostat, ECHP, wave 5 (2003): Ratio of women's average gross hourly earnings with respect to men's average gross hourly earnings based on earning data for all individuals employed 15 hours or more at the time of the survey in 1998 (*adjusted for hours worked*). C) OECD (2002): gender pay gap by median of wage structure, hourly earnings 1998 *(adjusted for hours worked*). OECD country average refers to the following countries for employment ratio and gender pay ratio, source C: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, New Zealand, Portugal, Spain, Sweden, Switzerland, UK and USA. The OECD country group covers the same countries for source B of the gender pay ratio with the exception of Australia, Austria, Canada, Netherlands, Switzerland and the USA. For

[2] The gross enrolment ratio is the number of pupils enrolled in a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education. This contrasts to the net enrolment ratio, that is the number of pupils in the theoretical age group for a given grade/level of education enrolled in that level expressed as percentage of the total population in that age group.

[3] The employment ratio expresses the number of employed people between 15 and 64 years old as a share of the working-age population in the same age group here for women and men separately. Data refer to 2001 for all countries. Even though sources for OECD and the transition countries are different, sources are comparable: for the four countries given in both sources the Slovak and Czech Republic show exactly the same female employment ratio, and for both sources Hungary and Poland respectively have very similar values with a smaller ratio of 0.02 for the first and a higher ratio of 0.06 for the second in the given EUROSTAT source.

[4] The gender pay ratio gives the average earning for women devided by the average earning for men.

enrolment ratio the countries not covered compared to the OECD group used for the employment ratio are Finland and Germany. Standard deviation is given in parenthesis for the CEE and OECD unweighted country mean.

Variation in women's employment is much greater in OECD countries (the standard deviation of women's employment/population ratio is 9.8 in OECD compared to 4.3 in transition countries). In Italy, the Mediterranean country with lowest female labour force participation, 40 percent more working age men than women are employed.[5] On the other end, Scandinavian countries like Sweden are characterised by only marginal differences in men's and women's working age employment status. Gender equality here is similar to that in Lithuania and higher than in many other transition countries.

The gender pay ratio, the fraction of the average male pay earned by women, is given in column 3. Differences in pay between women and men is of great importance as it has a direct effect on living standards, the level of pensions, unemployment benefits and other benefits paid to employees. Unfortunately, there is no one satisfactory source for measuring the gender pay ratio in a harmonised way across Europe so that figures are not directly comparable between regions. Source A (UNICEF, 1999) refers to monthly gender pay ratios in terms of average total monthly earnings and is available only for transition countries covering the years 1996 to 1998. Sources B (Eurostat, 2003) and C (OECD, 2002) refer to gender wage ratios calculated on the basis of hourly earnings and refer to the year 1998. The monthly ratios (source A) given for transition countries tend to show higher gender inequality than ratios based on an hourly measure (B and C) as men, on average, work longer hours than women. However, it is important to note, that female part-time employment in transition countries is still rare so that the gender pay gap calculation based on monthly earnings (source A) is probably relatively similar to gender pay gap calculations based on hourly earnings for post-communist countries.[6]

Based on the monthly ratio women in transition countries earn about 20 to 30 percent less than their male counterparts with the exception of Slovenia, where the gender ratio is about 85 percent high. Surprisingly, gender pay ratios seem to reveal a quite low gender inequality for OECD countries with the exception of the UK and the US. This

[5] Only the OECD countries Turkey and Mexico show considerable lower female participation rates with 63 percent more men employed in the first and 53 percent in the last (not shown and not included in the OECD average).
[6] This would be different for OECD countries where a great share of women work part-time which would effect greatly the estimation of the gender pay ratio if only total monthly earnings (and not hours worked) were taken into account for the calculation of the ratio.

stands in contrast to other data that suggest higher gender pay inequality in some Western industrialised countries compared to the East (Blau and Kahn, 2001). However, taking into account that the monthly pay calculation for transition countries might slightly overestimate gender inequality, data do not show that women in transition fare necessarily worse than women in Germany or Sweden. Even by applying the hourly wage calculation, gender equality in the UK is not higher compared to that in many transition countries, where differences in working hours between men and women are not taken into account for the gender gap calculation.[7]

Taken together, women's relative advantage compared to men in access to tertiary education and work seems to be slightly greater in post-communist countries while the gender pay ratio suggests a somewhat higher disadvantage of women in transition than in Western industrialised countries. Hence, given these economic indicators gender equality is rather similar between transitional and OECD labour markets.

However, can economic factors indeed show the 'whole' picture of gender equal work division? Regional differences in developments of gender equality show another perspective of women's integration into work.

2.2 Dissimilarities in developments of women's work in East and West

In Western industrialized countries the increasing labour market participation of women was a gradual process stimulated by economic factors but also by societal contest. New opportunities for women to earn money outside the home opened during the last decades initially driven by an increasing service sector. The availability of part-time employment facilitated women's ability to work. At the same time, the amount of time necessary for household activities diminished, since consumption of household appliances increased and the appearance of inexpensive substitutes for services traditionally provided by women augmented. This increased the costs of conformity to the traditional division of labour between male breadwinner and female homemaker in the West.[8]

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[7] In contrast to the hypothesis of women's higher vulnerability during the transition process, literature suggests, that the gender pay gap diminished in transition countries (Newell and Reilly, 2001; Brainerd, 1997) which might be also related to an increase in return to women's education (Munich *et al*., 1999).

[8] Indeed, over the last decades breadwinner-husband marriages in which the wife did not work outside home slid into an increasing economic disadvantage relative to other marital arrangements where both contribute to the family income. (Dechter and Smock, 1994)

Closely related to the economic stimulation of women's work in the labour market was the social contest on gender norms. Starting in the 1970s, women participating in women's organisations fought for women's rights and created an agenda where women's issues were discussed resulting in reinforced equal opportunities for women in all spheres of life in the 1980s and 1990s. The increasing female labour force participation was therefore paired with a discussion on gender equality regarding responsibilities in the household.

Hence, both, economic factors and societal contest led to erosion in traditional gender roles specifying husbands as breadwinners and wives as homemakers in Western industrialised countries. (Blossfeld & Drobnic, 2001; Badgett *et al*., 2000; Frankel, 1997)

In contrast to Western industrialised countries, communist countries used direct state intervention for the implementation of a socialist form of gender equality. This normative imposition of gender ideology impeded the development of a pluralistic and free debate of gender issues that shaped gender norms in the West.

The communist ideology of gender equality did not by far reach the ambitious aim of equality in all spheres of life demanded by Western women's organisations. The socialist term of equality for women was mainly identified with women being wage earners but did not question women's primary responsibilities for childcare and household tasks. (Dijkstra, 1997) While in the West feminism restructured value orientations with e.g. one effect of a voluntarily and gradually increase of women's entry into the labour force, women in the East were often constrained to work full-time due to two reasons. First, women's participation in the labour market was meant to maximise the use of all available productive resources to sustain economic growth by 'extensive' means. Second, women had to participate in the labour market as a means of economic survival and not self-realisation.

2.3 Greater adherence to traditional attitudes to women's work in the East?

These different trajectories in increase of women's labour force participation in the West and East are likely to have impacted on people's adherence to traditional attitudes to women's work in both regions.

Since the communist gender ideology focused only on access to paid work but not on the division of caring and household tasks, women's full-time employment led to an

overburdening of women as workers and mothers. This so-called ‘double burden’ (UNICEF, 1999) might have promoted the acceptance of traditional orientations towards CEE women’s work and family responsibilities (Lobodzinska, 1995) in transition countries today. In addition, different patterns of women’s employment might matter: women in transition countries are generally full-time employed, while women in pre-1990 OECD countries have a wider opportunity of part-time work. Also women’s lack of choice in ex-communist countries might have restrained public support for women’s employment. (Panayotova & Brayfield, 1997)

Additionally, once boundaries lifted in the aftermath of communism, it makes a difference whether gender equality is a fundamental part of a society that developed over decades as it is characteristic for the West or whether gender equality was dictated from above as found in communist countries. Due to the imposition of gender equality in the work sphere people in the East experienced a discrepancy between their traditionally moulded expectations of women’s role as housewives and the necessity of women’s fulltime work in the society. The loss of a communist, societal grip caused a revitalisation of traditional values that were concealed during communism.

Such a revival of traditional values was also due to the re-emergence of other powers within the post-communist societies like the revival of religious community life that was in favour of traditional beliefs on gender roles. In contrast, values in Western European Countries are moulded by increasing shares of populations not associated with any religion at all (Crouch, 1999) whereby also a relatively high share of Protestantism might be related to more relaxed attitudes to women’s work.

Hence, while in the West women’s participation in the economy, women’s high access to tertiary education and decreasing gender gaps are argued to be most important for explaining the degree of liberal gender values today, it must be doubted whether this argument can be applied also to post-communist countries. Eastern women’s high labour force participation and access to tertiary education might still more reflect inheritance of the communist system than that it is a consequence of a profound societal agreement on women’s societal roles. Hence, the much longer and profounder tradition of women’s labour force participation in the East compared to the West might not be the reason for a greater acceptance of dual earner households. In contrast, the constraint of and

experiences with women's full-time work might have lead to a backlash nourishing traditional gender values in post-communist countries today.[9]

These societal norms on gender equality in the labour force are of high importance. First, attitudes are likely to impact upon labour market policies and peoples (e.g. employers') behaviour. Therefore, they can shape women's equal opportunities in the labour market. Second, the relative high gender equality in the labour market visible through economic indicators today might still be inherited from the communist grip. Profound societal preferences for gender inequality are very likely to impact upon women's role in societies and could therefore lead to increasing gender gaps in the CEE labour market.

Hence, after the introduction of the ISSP data in Section 3 the following Sections aim at answering three main questions:

a) *Are there differences in preferences over gender inequality between East and West?* Section 4 compares regional and gender differences in attitudes. The results show a large regional discrepancy in patriarchal values even if population characteristics are controlled for.

b) *Where do these regional differences derive from?* Section 5 examines different impacts of population characteristics between genders and regions. I estimate the share of regional differences in agreement with the traditional gender stereotypes that derives from i) regionally different impacts of individuals' background and ii) varying regional population characteristics.

c) Given that there is a great gap between OECD and transition countries in patriarchal attitudes it is interesting to know *how attitudes to gender inequality will change over time in both regions*. Section 6 examines age group effects and compares agreement with the gender stereotype between 1994 and 1998.

[9] A comparison of China and Taiwan regarding traditional values of women and men for the male-breadwinner-model showed similarly, that people in China think much more that women should be the homemaker even though women's labour participation in China has a much more profound and longer tradition in China than in Taiwan. (Tu & Chang, 2000)

3 Data

The data used to measure attitudes to gender inequality are taken from four waves of the International Social Survey Program (ISSP)[10]. The 1988 and 1991 ISSP rounds cover only one (Hungary) and four transition countries (Hungary, Poland, Eastern Germany and Slovenia) respectively. The 1994 round of the ISSP includes seven transition (Eastern Germany, Hungary, Czech Republic, Slovenia, Poland, Bulgaria and Russia) and 14 OECD countries. The 1998 data comprise additionally two further Eastern European countries (Latvia and Slovakia) and a total of 18 Western industrialised countries. Even though the sample of transition countries is quite heterogeneous, data on Central Asia and the Caucasus are missing. Both regions differ in cultural, economic and geographical terms from the countries covered by ISSP. Hence, the results cannot be generalised for these regions that are very likely to show a higher degree of patriarchal attitudes to women's work. In general, the results below refer to most recent data of the ISSP 1998 round. Only in Section 6 where changes in attitudes are examined are data from the other ISSP rounds also analysed.

In ISSP 1998 approximately 1000 respondents per country were asked questions related to preferences about gender roles. Table A 1 in the Appendix shows the sample size, response rate, fieldwork method and sample type for each country. In all transition and half of other OECD countries data were obtain by face-to-face interviews. Response rates are over 80 percent in Latvia and Bulgaria, slightly above 50 percent for Russia and Hungary and small for Slovenia (35 percent) and Czech Republic (40 percent). Results on the last two countries need to be interpreted with caution. Also some OECD countries show very low response rates, especially France with only 10 and Canada with 30 percent of response. I exclude both countries from the analysis since results are very likely to be biased. In general, the weighted results of respondents' characteristics in ISSP 1998 approximate[11] population characteristics of the country derived from countries' census data.

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[10] Further information on ISSP data beyond that given here can be found under http://www.issp.org/.

[11] I compared countries' census data with the weighted results on population characteristics for the ISSP 1998 round. For some countries there is a slight bias in response. Women, people not in the labour force, youngest and oldest age cohorts and better educated people seem to be more likely to respond in general. However, differences in the coverage of population groups between country's census and ISSP data remain generally below 5 percent of the respective group (see data documentation of ISSP 1998 on http://www.gesis.org/en/data_service/issp/data/1998_Religion_II.htm).

The focus of this analysis is on one ISSP question that is given in the form of a statement to which respondents are asked to register their attitude on a scale of 1 to 5.

Table 2: Question on attitudes to women's work

Statement asked of respondents	Response categories
Do you agree or disagree… 'A husband's job is to earn money; a wife's job is to look after the home and family'?	1. Strongly agree 2. Agree 3. Neither agree nor disagree 4. Disagree 5. Strongly disagree

This measure for attitudes to gender inequality limits the focus to gender stereotypes concerning labour division within the family and leaves open gender-specific attitudes regarding politics, the workforce and education.

The question used for this analysis is formulated quite neutrally in contrast to for example a question like: 'Women and men should share housekeeping equally'. This statement would very much picture men's and women's distributional interests instead of general attitudes to women's roles in the household. In contrast, the question in Table 2 is not directly related to distributional conflicts between women and men. Men gain from women's work due to an increased pooled household income. Also women can improve their status by becoming breadwinners given the problem of the distribution of homework is solved. Hence, I assume that there is a relative low interference of respondents' very own distributional interests impacting upon results.

It is important to note that respondents being asked about their ideas of women's work are likely to associate predominantly female full-time occupation in the East where part-time work is still very rare. In contrast, respondents in pre-1990 OECD countries might think of 'some form of' female occupation given the high variability of part-time work in the West.

A general problem of comparing country results regards respondents' exact interpretation of the question that might be determined by differences between languages and translations. The effect of translation differences remains a black box, e.g. we do not know how far different response categories mean exactly the same in each country. The word 'strongly' of the answer categories 'strongly agree' and 'strongly disagree' seems

open to variations in interpretation from country to country while the 'agree' and 'disagree' difference is likely to be the same in every country. Hence, for reducing response differences due to these translation problems I generally analyse agreement with the patriarchal gender attitude and collapse therefore the answer categories 'strongly agree' and 'agree' into one category 'agreement'.

4 Are there differences in preferences to gender inequality between East and West?

This Section provides a first glance at cross-country differences in preferences to gender inequality by examining the distribution of answers to the question listed in Table 2 and by discussing gender differences in attitudes (Section 4.1). In a second step the 'pure' regional and country differences in gender attitudes is measured by controlling for individuals' characteristics (Section 4.2).

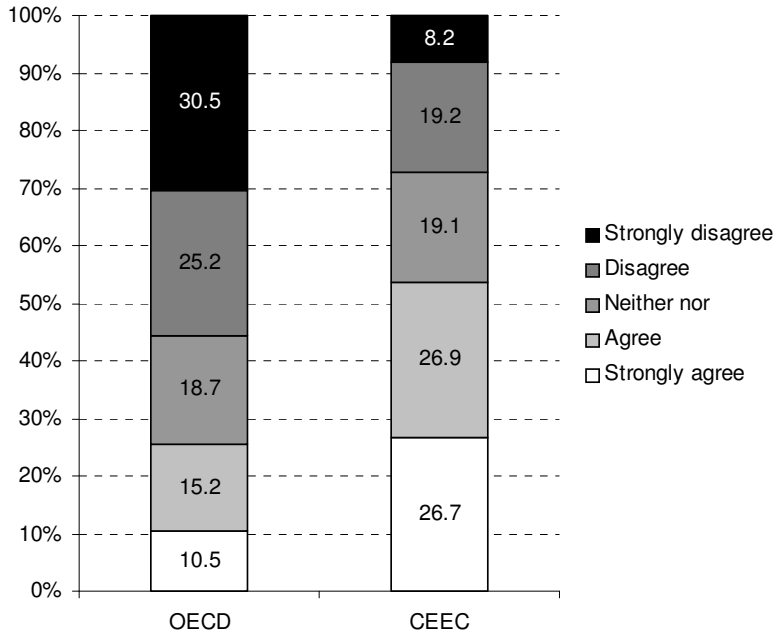
4.1 General preferences for gender inequality

Figure 1 displays the share of respondents for each answer category of the question on attitudes to women's work by region. In OECD countries about every tenth respondent strongly agrees with the patriarchal gender attitude but almost every third respondent strongly disagrees. About 26 percent of respondents generally agree (strongly agree and agree) but opposition is much greater with a share of 56 percent who disagree with the gender attitude (strongly disagree and disagree). For transition countries the picture is reverse. As many as 27 percent of respondents strongly agree that a wife's job is to look after home and family and only 8 percent strongly disagree. 54 percent of respondents with patriarchal attitudes to women's work (strongly agree and agree) are opposed by only by 27 percent of respondents disagreeing in CEE countries. Only the share of people in the middle position (neither agree nor disagree) is similar between regions. Hence, descriptive regional results show a large difference between Western and Eastern European countries with a high preference for patriarchal gender roles in post-communist countries. This confirms results of ISSP 1994 data (Braun *et al.,* 1999) and results from the World Value Survey (Inglehart & Norris, 2003).[12]

[12] See Section 2.1 discussing differences between this paper and the both studies stated.

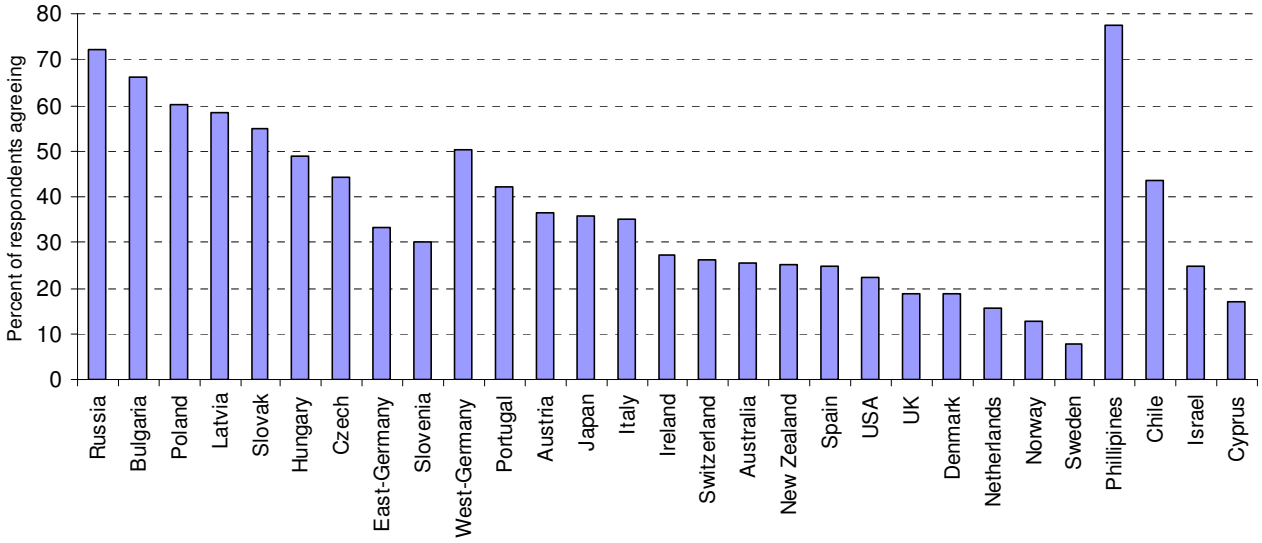
How do different countries compare and what can we say about differences within regions? For answering this question I collapse the response categories into a dichotomy of respondents agreeing (strongly agree and agree) and others and compare the share of respondents in favour of patriarchal gender attitudes across countries in Figure 2. The countries are ordered first by regional groups (CEE, OECD and other countries (incl. developing countries)) and second by the share of agreement.

Figure 1: Percent of respondents in response categories of gender attitude by region



Source: ISSP 1998, author's calculations.
Note: OECD countries are Australia, Austria, Denmark, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, USA and West-Germany. CEE countries are Bulgaria, Czech Republic, East-Germany, Hungary, Latvia, Poland, Russia, Slovakia and Slovenia. Figures refer to the unweighted country group average.

Figure 2: Percent of respondents agreeing with the patriarchal gender attitude by country



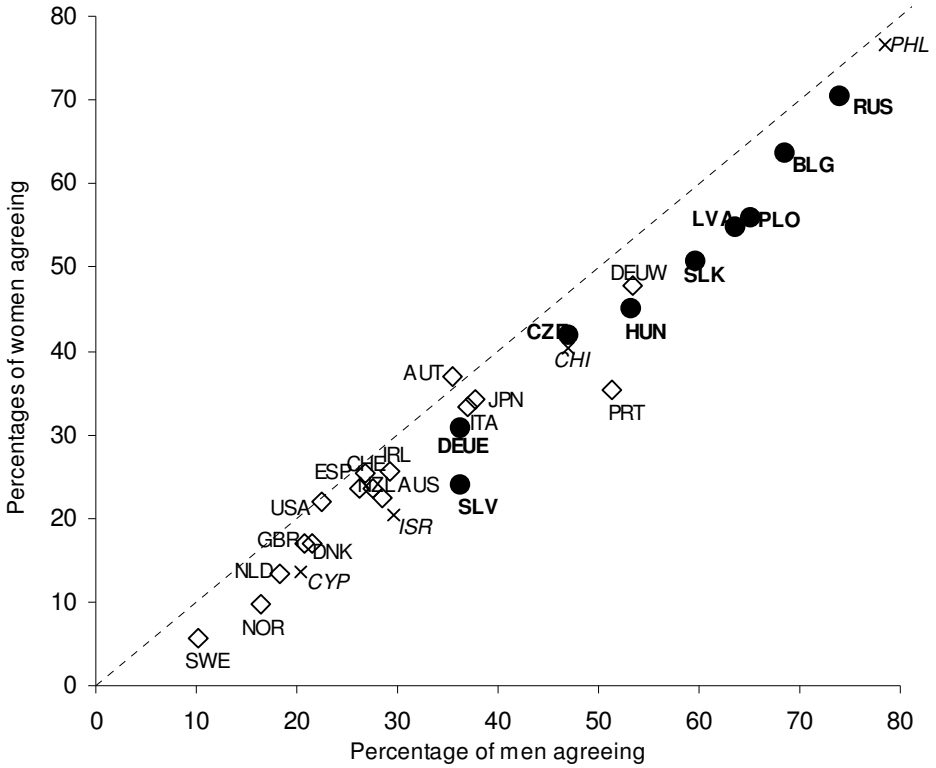
Source: ISSP 1998, author's calculations

As the graph reveals there is substantial variation across the entire set of countries. People in the Philippines assume the top rank with almost 80 per cent agreeing with the patriarchal gender attitude, closely followed by 70 per cent of people in Russia. On the other hand, only 8 percent of respondents in Sweden think that the statement is right. The share of agreement in Sweden is also significantly lower (1 percent level) than in any other OECD and transition country as multiple comparison of agreement between countries reveals (Table A 2 in the Appendix).

Within each group variation in agreement is also considerably high. The share of respondents in West-Germany adherent to traditional gender stereotypes is about 6 times higher than in Sweden.

Regarding CEE countries, more than half of the population in Russia, Bulgaria, Poland, Latvia and Slovakia believe in the traditional division of work between genders. Traditional values in Russia are significantly more pronounced than in any other transition or OECD country. This is also true for Bulgaria once Russia is not taken into account. (see Table A 2 in the Appendix)

Figure 3: Percent of women and men agreeing with patriarchal gender attitudes



Source: ISSP 1998, author's calculations.

One might think that the views on this issue differ greatly between men and women, for instance because the current construction of society is one that has very much been dominated by men thereby leaving women in the economically less advantageous positions. Hence, in this case we would assume that differences between countries regarding patriarchal gender attitudes are driven predominantly by the differences in agreement of men. Quite surprisingly, the empirical evidence contained in the answers to the above question firmly rejects the hypothesis of substantial male-female differences in attitudes to women's work. To illustrate this finding, Figure 3 shows a scatter plot containing the national shares of 'agree' and 'strongly agree' for woman (on the vertical axis) and for men (on the horizontal axis) for 29 countries covered in ISSP 1998.

As the figure indicates, the gender-specific answers appear to lie on a straight line parallel to the 45° line. I run a simple linear regression through the data-points expressed in the following formula:

Agree female=$ß_0$+ $ß_1$*Agree male

Column 1 of Table 3 presents the result for the data points given in Figure 3.

Table 3: OLS regression results with dependent variable percent of women agreeing and independent variable percent of men agreeing with patriarchal gender attitude

Age group	All age groups	17-29	30-44	45-59	60-
Men's agreement	0.960 (0.035)**	0.879 (0.056)**	0.937 (0.063)**	0.913 (0.054)**	0.946 (0.070)**
Constant	-3.9 (1.5)*	-3.2 (2.0)	-3.5 (2.4)	-3.0 (2.5)	-2.1 (4.2)
No. countries	29	29	29	29	29
R-squared	0.96	0.90	0.89	0.91	0.87

Note: standard errors in parentheses, * significant at 5%; ** significant at 1%

The intercept of - 3.9 (constant) captures the average differences in agreement in percent points between women and men: surprisingly, within the sample of countries analysed women agree (and strongly agree) by a mere four percentage points less than men with the above statement. This difference is significant at the 5 per cent level and it is indeed anything but 'substantial'. One might also suspect that the degree of disagreement between men and women differs systematically across countries, for instance in the sense that in countries where male 'patriarchal attitudes' are particularly pronounced, women are much less in favour of the traditional roles they 'are bound to' assume. However, as the slope of 0.96 - which is not significantly different from 1 (p=0.26) – indicates, gender differences in agreement do not vary between countries with more and less traditional societal values on women's work.

The results of column 1 discussed until now reflect countries' entire population. However, we might expect that gender differences in agreement vary between age groups. Women and men in older age groups might be more homogenous in their beliefs in traditional values than the younger generations. I therefore estimate women's and men's agreement with the statement for four different age groups for each country and run again the same regressions but this time through country points of different age groups. The results are given in columns 2 to 5 of Table 3. The slight decrease in the intercept over age groups indicates that gender differences seem to decline with older age. However, the difference between the gender gap of 3.2 percent for the youngest age

cohort (17 to 29) compared to 2.1 percent for the oldest age cohort (over 59) is not significant (t=0.23).

Similar to the regression for all age groups (column 1), the slope is generally not significantly different from 1 for regression results by age group indicating that gender differences in agreement do not vary between countries with higher or lower patriarchal attitudes. However, one exception is the youngest age group where the slope of 0.879 is significantly smaller (4 percent level) than 1. Hence, in countries where young males' patriarchal attitudes are greatest young women are less in favour of their traditional gender roles. However, the slopes for over 60 year-olds and for the youngest age group are not significantly different and there is no constant trend of increasing slope with higher age. Therefore, it is difficult to tell, whether the result of the youngest age group indicates a future trend that gender differences in patriarchal attitudes increase the more men adhere to traditional gender roles.

Hence, the surprising pattern of women's and men's similar agreement with patriarchal attitudes is robust across different age cohorts.

4.2 Regional differences in attitudes conditional on individuals' characteristics

The practice to measure traditional values by summarising people attributing themselves to gender stereotypes cannot take into account 'pure' (or 'conditional') effects that demographic variables have on individuals' agreement with traditional gender roles. However, these pure effects are of interest since regional differences in agreement with the patriarchal gender attitude might partly be driven by regional diversity in terms of individual background characteristics. This Section estimates differences in gender attitudes between regions and countries controlling for varying individuals' characteristics across regions.

4.2.1 Research design

Ordered logit (or probit) models[13] can measure the pure size effect of attitudes to gender inequality in regions and countries. The ordered logit models described in the following will also be applied similarly in Sections 2.5 (comparing the impact of socio-

[13] For the examination of factors determining attitudes to gender inequality I prefer logistic regressions instead of probit regression models since coefficients of logistic regressions are easier to interpret. However, since the predicted probabilities of logit and probit regressions are very close, probit regressions could be used alternatively.

economic background between genders and regions) and Section 6 (estimating changes in attitudes to gender inequality).

Model

I assume that the attitudes to family roles of individual i can be characterised by a latent variable A_i^* ranging from - ∞ to ∞. The structural model is as follows:

$$(1)\quad A_i^* = \beta x_i + \varepsilon_i ,$$

whereby A* is the dependent variable indicating the degree of patriarchal gender values, β is the vector of unknown coefficients, x the vector of explanatory variables and ε the random term in the equation.

The variable A_i^* is not directly observed, but a variable A_i taking values from 1 to 5 decreasing in individual endorsement of traditional family roles.

In particular, I measure the model

(2)

$$A_i = 1 \text{ if } A_i^* \le \mu_1$$

$$A_i = 2 \text{ if } \mu_1 < A_i^* \le \mu_2$$

$$\ldots$$

$$A_i = 5 \text{ if } \mu_4 < A_i^*$$

where $\mu_1,\ldots,\mu_4$ are unknown threshold parameters to be approximated with the β-coefficients. Assuming that the distribution of the error term is logistic, I estimate an ordered logit model**.**

An alternative to the ordered logit model is the binary choice model by applying e.g. a logit analysis. In such a model the dependent variable of interest (originally comprising 5 answer categories) would be collapsed into a dummy variable with e.g. a 1 for answer categories ‘strongly agree’ and ‘agree’ and 0 otherwise. (Such a model is applied later on in Section 5.3.) On one hand this approach leads to some loss of information since 5 different judgements about the gender attitude are summarised into just two categories. On the other hand it is reasonable to argue that the five different answer categories include considerable ‘noise’ since the percent differences between

countries regarding people adhering to categories like 'strongly agree' and 'agree' might be mainly driven by different interpretations of the word 'strongly' in different languages.

Independent variables used in the model

Region and countries: It is assumed that all transition countries can be treated as a fairly homogeneous group. This may be justified to the extent that all share the common experience of socialism. A 'CEE country dummy' is introduced for measuring the 'effect' of transition countries.

On the other hand, however, it might be reasonable to distinguish between Russia and the other Eastern European countries, all of which have strongly committed themselves to the Western market model by becoming official candidates for accession to or member states of the European Union. Russia differs also insofar as it has by far the longest history of communism, being the only country under communist rule before the world wars. To capture this I separate the CEE country dummy into one for Russia and one for the remaining eight transition countries ('CEE8').

Besides regional dummy variables, countries' adherence to patriarchal values can be estimated by single country dummies, even though the size and significance of which would certainly be influenced by international differences in the exact interpretation of the question, given the languages differences.

Gender: Women are less likely to agree with patriarchal values as shown before.

Age, education, cohabitation, single parenthood, household income, social class and religion: Literature show that individual resources and characteristics like higher education, lower age, cohabitation, single parenthood, higher household income, higher social class and low degree of religion are all related to more liberal attitudes. (Inglehart & Norris, 2003; Batalova & Cohen, 2002).

Besides these individual resources, gender relations in the family household are likely to shape gender attitudes.[14] In households where gender relations are asymmetric, we can expect a presence of less egalitarian gender attitudes. *Marital status, household*

[14] Asymmetric gender relation in the household might shape patriarchal attitudes. However, these variables might also have an endogenous character since patriarchal attitudes might determine women's dependence in the household. One example might be, that couples with liberal gender values are more likely to cohabit before marriage. (Batalova & Cohen, 2002)

size, education, labour force participation, employment status and children in household are all variables that can capture women's dependence on men. (Baxter and Kane, 1995)

Integrating these variables into the model, I can specify the vector of explanatory variables x in (1) as follows

$$(3)\quad A_i^* = RE_i\beta_1 + G_i\beta_2 + D_i\beta_3 + FS_i\beta_4 + SES_i\beta_5 + ES_i\beta_6 + R_i\beta_7 + (Y_i\beta_8) + \varepsilon_i$$

where the variable RE denotes the region individuals are living in, G is people's gender, D captures individual demography, FS refers to the family structure, SES captures the socio-economic status, ES is individuals' employment status and R refers to people's religious affirmation. In Section 2.6 where trends in gender attitudes are measured I also add a control capturing the year of the data ('Y'). ε is an error term and the vectors β_1 to β_8 are parameters.

The aim of this paper is to examine the regional gap in patriarchal attitudes and where these regional differences derive from. The use of independent variables in the model serve for explaining regional differences but these variables are not considered to be of interest *per se*. Hence, no special focus is placed on developing hypotheses of interest relating to the independent variables chosen for the model[15].

The variables and their coding are described in Table 4. The variables household size, family structure (number of children and adults in the household), household income level and social class have a high number of missing values. However, since these variables are very likely to be related to gender attitudes, they were used by including a dummy variable to indicate non-response[16].

[15] Baxter and Kane (1995) and Batalova and Cohen (2002) examine the impact of many variables selected for the model in this analysis on gender attitudes of couples and in general focusing on a different set of countries.

[16] Missing values are too high for integrating the following variables into the regression: household structure, occupation, self-employment and area (rural/urban).

Table 4: Variables used and coding of variables

	Term in formula	Used variables	Coding of variables
A	**Dependent variable**	**Husband's job to earn money, wife's job to look after home and family**	**1=strongly agree, 2=agree, 3=neither nor, 4=disagree, 5=strongly disagree**
RE	Region	Central and Eastern Europe	1= CEE, 0= otherwise
		CEE without Russia (CEE8)	1= CEE without Russia, 0=otherwise
		Russia	1=Russia, 0=otherwise
		OECD countries	*Control group*
G	Gender	Gender of the respondent	0=male, 1=female
D	Demography	Age (age)	Metric
		Divorced or separated	1 = divorced or separated, 0 = otherwise
		Widow / Widower	1=widowed, 0=otherwise
		Married	1= married, 0= otherwise
		Single	*Control group*
FS	Single parent	Respondent single parent	1= single parent, 0= otherwise
	Cohabitation	Respondent is cohabiting	1= Living with steady life partner, 0=otherwise (married or single)
	Household size	Household size /controlled for missing values	Metric
	Children	Children in the household	1=child in household, 0=otherwise
SES	Education	*Primary education*	*Control group (primary education or less)*
		Secondary education	1= some or completed secondary education, 0=other
		Tertiary education	1=Some or completed tertiary, 0=other
	Income	Household income /controlled for missing values	Metric (1 to 10 income categories)
	Social class	Subjective social class / controlled for missing values	1=lower or working class, 0=otherwise
ES	Employment status	*Full-time employed*	*Control group*
		Retired	1 = retired, 0 = otherwise
		Part-time employed	1=part time employed, 0=otherwise
		Not in labour force (disabled, students, housewife or man, others)	1= not in labour force, 0= others
		Unemployed	1 = unemployed, 0 = otherwise
R	Religion	Religious degree	From 1= extremely religious to 7=extremely not-religious
		Religious service (only if 1994 compared to 1998)	From 1= once a week or more to 6=never
Y	Year	Year of ISSP wave	0=year 1994, 1= year 1998

Tables A3 and A4 in the Appendix present the summary statistics for the question and the independent variables discussed in the following Sub-section for CEE and OECD

countries separately. For some variables there is a considerable difference in respondents' characteristics between regions. For example, about 10 percent more respondents in CEE than in OECD countries hold some secondary education[17] while about 5 percent more people in OECD than CEE countries attended tertiary education. In this context, it is important to note that educational attainment levels are difficult to compare across countries and regions due to institutional differences in how education is organised. The OECD sample comprises about five percent less retired people but seven to eight percent more housewives and part-time employed than the CEE sample. In addition, the share of the unemployed and those estimating themselves to be part of the lower societal class[18] is twice as high in transition as in Western industrialised countries. Income levels are measured by people's estimates of their household income in their country's currency. For each country I categorised these incomes into 10 different levels of the distribution of all sampled individuals in a country; the higher the level the higher is the individual's household income. As can be expected, the average is around five in both regions.

For four variables, 'child in household', 'household income level', 'household size' and 'low social class', dummy variables were introduced in order to control for high non-response to these questions. In OECD countries, for all variables besides household size information is missing for almost 20 percent and in CEE for between seven to 17 percent of the sample.

Table A 5 gives the correlation matrix of the explanatory variables. Correlation between the variables age and retirement (0.6) and children in household and household size (0.5) is considerably high. In general, correlation coefficients of the independent variables remain below 0.3.

4.2.2 Results

Table 5 displays the ordered logit regression results. (For the interpretation of results it is important to remember that the higher is the value of the dependent variable

[17] Respondents were asked about their highest qualification, answers were summarised into primary, secondary and tertiary education with a similar country classification system than that used for ISCED levels. (ZA, 2000)

[18] The question on social class is as follows. 'Which social class do you attribute yourself to?' The percentage gives the share of people attributing themselves to the 'lower class' or 'working class' in contrast to the other answer categories 'lower middle class', 'middle class', 'upper middle class' and 'upper class'.

'agreement with gender attitude' the more liberal is the respondents' attitude.) Models 1 and 2 measure the regional 'effect' without control variables that are added in Models 3 and 4.

Results reflect patterns of Figure 1 showing that CEE countries are on average significantly more 'traditional' than OECD countries that serve as a control group in the ordered logit regression. The absolute difference in the size of the CEE country dummy coefficient is about 1.25 (Model 1). As expected, average predicted probabilities for agreement given in Table 6 show similarly to regional averages of agreement (see Figure 1) that about 25 percent of people in OECD countries and as many as 54 percent of respondents in transition countries are predicted to agree with patriarchal gender norms on the division of work.

Splitting the CEE country dummy variable into two confirms that people in Russia tend to be significantly (1 percent level) more traditional as regards gender roles (coefficient – 1.93, translates into predicted probability of 0.70 for agreement) than people in Central Europe (coefficient -1.1, predicted probability of 0.51 for agreement), who in turn continue to be more traditional than the OECD average (0.25 predicted probability for agreement).

Table 5: Ordered logit regression results, dependent variable agreement with statement (the higher the value the less agreement with the patriarchal gender attitude)

	(1)	(2)	(3)	(4)
CEE	-1.244		-1.315	
	(0.022)***		(0.024)***	
CEE 8		-1.122		-1.202
		(0.023)***		(0.026)***
Russia		-1.937		-1.970
		(0.046)***		(0.051)***
Female			0.509	0.496
			(0.023)***	(0.023)***
Age			-0.025	-0.024
			(0.001)***	(0.001)***
Divorced/separated			-0.009	0.008
			(0.049)	(0.049)
Widow			-0.148	-0.131
			(0.054)***	(0.054)**
Married			-0.093	-0.088
			(0.034)***	(0.034)***
Household size			-0.085	-0.085
			(0.010)***	(0.010)***
HH size missing			-0.725	-0.702
			(0.058)***	(0.058)***
Secondary education			0.418	0.464
			(0.028)***	(0.028)***
Tertiary education			0.963	1.005
			(0.036)***	(0.036)***
Retired			-0.079	-0.142
			(0.038)**	(0.038)***
Part-time employed			-0.031	-0.019
			(0.038)	(0.038)
Not in labour force			-0.299	-0.255
			(0.031)***	(0.031)***
Unemployed			-0.093	-0.092
			(0.047)**	(0.047)*
Cohabitation			0.143	0.136
			(0.045)***	(0.045)***
Child in household			-0.078	-0.077
			(0.032)**	(0.032)**
Single parent family			0.171	0.155
			(0.078)**	(0.078)**
Child missing			0.635	0.605
			(0.036)***	(0.036)***
Household income			0.070	0.064
			(0.005)***	(0.005)***
HH income level Missing			-0.073	-0.067
			(0.028)***	(0.028)**
Low social class			-0.156	-0.146
			(0.025)***	(0.025)***
Class missing			0.303	0.303
			(0.031)***	(0.031)***
Highly religious			-0.630	-0.595
			(0.032)***	(0.032)***
Observations	31511	31511	30232	30232
Pseudo R-squared	0.03	0.04	0.09	0.09
log-lklhd	-48751.12	-48599.71	-43954.37	-43844.45

Source: ISSP 1998, author's calculations.

Note: OECD countries reflect the benchmark and cover the following: Austria, Australia, Denmark, Italy, Ireland, Japan, New Zealand, Netherlands, Norway, Portugal, Spain, Sweden, Swiss, USA and West-Germany. CEE countries are Bulgaria, Czech Republic, East-Germany, Hungary, Latvia, Poland, Russia, Slovakia and Slovenia Standard errors in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%.

Models 3 and 4 estimate the regional differences in agreement with patriarchal gender stereotypes conditional on individual background characteristics. Most of these individual determinants selected enter highly significantly and with the 'right' sign into the regression. Traditional attitudes are increasing in age and decreasing in income, social class and education. Men, the retired and the unemployed are more in favour of the traditional role system than their counterparts.

Once individual characteristics are controlled for results indicate a slight but at the 1 percent level significant[19] increases of the regional CEE dummy coefficient (Model 1 compared to Model 3) and CEE8 (Model 2 compared to Model 4). However, Table 6 reveals that these differences in the coefficients are marginal once expressed in predicted probabilities of agreement given mean characteristics of the whole population (OECD and CEE countries) for independent variables. Hence, controlling for population characteristics does not greatly change the result that patriarchal attitudes are much greater in transition than in OECD countries.

Table 6: Predicted probabilities of agreement (strongly agree, agree) for models in Table 5

	OECD	CEE countries	CEE 8 countries	Russia
Model 1	0.252	0.538		
Model 2	0.251		0.507	0.699
Model 3	0.234	0.532		
Model 4	0.234		0.504	0.686

Note: predicted probabilities for agreement are calculated by assuming mean values of the whole population (OECD and CEE countries) for the independent variables.

How does the ranking of countries regarding their traditional value systems (displayed in Figure 2) change once it is controlled for individual background characteristics across countries and regions? For this analysis, I replace the CEE-dummy with country dummies using Austria as the benchmark country. Table 7 summarises the results. Russia, Latvia, Bulgaria, Poland, Slovakia, Hungary and the Czech Republic remain the most patriarchal countries. In contrast, only the former communist countries Eastern Germany and Slovenia do not show significantly higher attitudes to gender

[19] The increase of the coefficient for CEE countries from Model 1 to 3 and for Central Europe from Model 2 to 4 is significant with a t-value of around 3. Comparing the coefficient for Russia in Model 2 and 4 shows a significant difference in the coefficients with a t-value of 2.3.

inequality than the benchmark country Austria. Not surprisingly, Scandinavian countries are situated on the other end of the spectrum with most liberal values on gender attitudes.

Table 7: Country dummies added to Model 3 in Table 5.

	β-coefficient	Standard error
Russia	-1.823	0.068
Latvia	-1.613	0.071
Bulgaria	-1.402	0.075
Poland	-1.284	0.074
Slovakia	-1.253	0.070
Hungary	-0.949	0.074
Czech Rep.	-0.805	0.070
West-Germany	-0.760	0.075
Japan	-0.140	0.070
Italy	-0.111	0.074
Switzerland	-0.036	0.070
Slovenia	0.021	0.164
New Zealand	0.078	0.075
Ireland	0.089	0.074
East-Germany	0.089	0.075
USA	0.347	0.073
Portugal	0.399	0.077
Australia	0.401	0.197
Netherlands	0.609	0.063
Norway	0.635	0.067
Spain	0.754	0.159
Sweden	0.913	0.073
Denmark	1.367	0.078

Source: ISSP 1998, author's calculation.
Note: benchmark country is Austria. Same control variables used as in Table 5. Pseudo R^2=0.12, log-likelihood=-45497. Significant country parameters (5 percent level) are shaded grey, transition countries are printed bold.

Taken together, even if controlled for population characteristics CEE countries show in general much higher patriarchal attitudes than Western European Countries. However, post-communist countries are very heterogeneous; Russia, Latvia and Bulgaria are definitely different from OECD countries, but Eastern Germany and Slovenia are comparable to Austria in their gender attitudes on women's homemaker role.

5 Where do regional and gender differences in attitudes to women's work derive from?

How can we explain the great regional differences in patriarchal gender attitudes? Furthermore, where do gender differences in agreement derive from and are they different between regions? This Section will examine these questions.

5.1 Regional differences

Up to now the regression model described in 2.4.2.1 was applied to a sample of OECD and CEE countries using a dummy variable for identifying the region of the individual. The assumption of this model was that individual determinants like education or income impact similarly on gender attitudes in both regions. However, this is not necessarily the case. In the following, regional differences in the importance of respondents' characteristics for adherence to traditional gender attitudes are investigated by estimating regression models separately for the group of CEE and OECD countries. Hence, the regression model 3 of Table 5 is run separately for OECD and CEE countries (consequently excluding the regional dummy). Table 8 presents the results. Besides the impact of respondents' characteristics on gender attitudes for both regions (OECD in column 1 and CEE in column 2) it also shows the regional difference in variables' impact (difference of regional coefficients) and its standard error (column 3). Coloured fields denote that dissimilarities in impacts of population's characteristics are significantly different between countries. Light grey colour indicates that the variable has a higher impact in OECD countries (whether in positive or negative direction); while dark grey colour denotes that the importance of the variable is more pronounced in CEE countries.

Results show that background characteristics impact in the same direction for both regions, the OECD and CEE country group. Nevertheless, the comparison of the extent of variables' impact on gender attitudes between East and West does provide some interesting and surprising insights.

The gender dummy reveals that women in OECD countries agree significantly less with their male counterparts (1 percent level) on traditional gender roles than women in CEE countries conditional on respondents' characteristics. This outcome stands in contrast to unconditional results given in Figure 3 that did not imply variation in gender differences in agreement with patriarchal attitudes between East and West. It is also noteworthy that conditional on respondent background gender differences in agreement with patriarchal attitudes are lower in the CEE country group with higher levels than in the OECD country group with low levels of these attitudes. This result motivates the examination of gender differences in attitudes and their determinants separately for regions in Section 5.2.

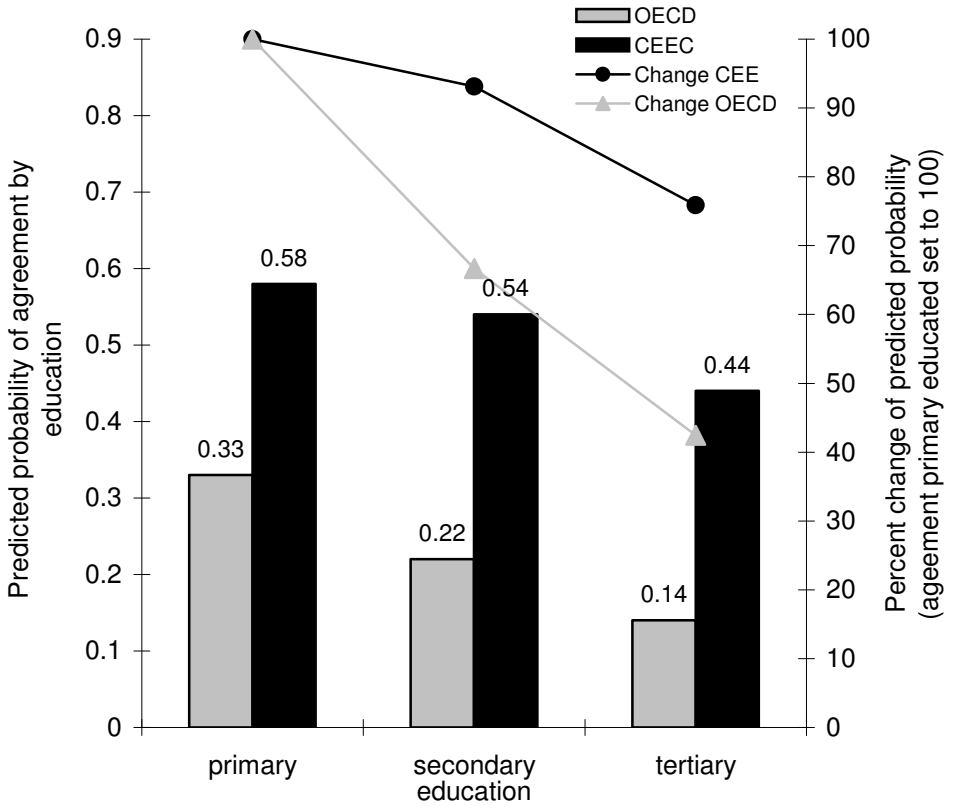
Table 8: Ordered logit regressions results by region, dependent variable agreement with statement (the higher the value the less agreement with the patriarchal gender attitude)

	OECD	CEE countries	Coefficient difference between OECD and CEE countries
Female	0.574	0.381	0.193
	(0.029)***	(0.038)***	(0.048)***
Age	-0.028	-0.013	-0.015
	(0.001)***	(0.002)***	(0.002)***
Divorced/separated	0.072	-0.107	0.179
	(0.061)	(0.086)	(0.105)*
Widow	-0.212	-0.138	-0.074
	(0.068)***	(0.093)	(0.115)
Married	-0.122	-0.073	-0.049
	(0.040)***	(0.062)	(0.074)
Household size	-0.089	-0.083	-0.006
	(0.012)***	(0.016)***	(0.020)
HH size missing	-0.551	-0.263	-0.288
	(0.062)***	(0.309)	(0.315)
Secondary education	0.536	0.189	0.347
	(0.034)***	(0.050)***	(0.060)***
Tertiary education	1.107	0.590	0.517
	(0.043)***	(0.066)***	(0.079)***
Retired	-0.187	0.025	-0.212
	(0.048)***	(0.064)	(0.080)***
Part-time employed	-0.076	-0.000	-0.076
	(0.043)*	(0.082)	(0.093)
Not in labour force	-0.329	-0.217	-0.112
	(0.038)***	(0.056)***	(0.068)*
Unemployed	-0.044	0.011	-0.055
	(0.070)	(0.066)	(0.096)
Cohabitation	0.212	-0.055	0.267
	(0.055)***	(0.081)	(0.098)***
Child in household	0.072	-0.234	0.306
	(0.042)*	(0.053)***	(0.068)***
Single parent family	0.194	0.015	0.179
	(0.097)**	(0.136)	(0.167)
Child data missing	0.481	0.982	-0.501
	(0.045)***	(0.064)***	(0.078)***
HH income level	0.077	0.065	0.012
	(0.006)***	(0.008)***	(0.010)
HH income missing	-0.168	0.216	-0.384
	(0.034)***	(0.051)***	(0.061)***
Low social class	0.044	-0.524	0.568
	(0.033)	(0.041)***	(0.053)***
Class data missing	0.321	0.173	0.148
	(0.035)***	(0.077)**	(0.085)*
Highly religious	-0.693	-0.475	-0.218
	(0.039)***	(0.055)***	(0.067)***
Observations	20145	10087	
Pseudo R2	0.08	0.05	
log-lklhd	-28694.99	-14829.77	

Note: results of this table are based on a similar regression model to that given in model 3 of Table 5 but this model here is run for OECD and CEE countries separatly. OECD countries are Austria, Australia, Denmark, Italy, Ireland, Japan, New Zealand, Netherlands, Norway, Portugal, Spain, Sweden, Swiss, USA and West-Germany. CEE countries are Bulgaria, Czech Republic, East-Germany, Hungary, Latvia, Poland, Russia, Slovakia and Slovenia. Source: ISSP 1998, author's calculations. Note: standard errors in parentheses; * significant at 10 per cent; ** significant at 5 per cent; *** significant at 1 per cent, light grey colour denotes that impact is significantly more pronounced in OECD countries, dark grey colour indicates that characteristic is significantly more important in transition countries.

Besides gender, Table 8 shows that higher age has a two times greater impact on the adherence to traditional values in the West than in the East. Since birth cohort differences can give some indices on changes in gender attitudes over time, Section 6 will investigate this issue further.

Figure 4: Predicted probability of respondents to agree with patriarchal gender stereotype by education and region



Source: ISSP 1998, author's calculations
Note: calculations are based on regional means for demographic variables of models 1 and 2 in Table 8. Agreement refers to answer categories 'agree' and 'strongly agree'.

The most important regional difference in determinants is education. Respondents with secondary and tertiary education disagree significantly more with the gender stereotype in both regions than the benchmark respondent with primary education.

However, education matters much more in terms of the magnitude of impact in OECD than in former communist countries at a significance level of 0.1 percent. The impact of secondary education (compared to primary education) on attitudes is three times and that of tertiary education two times smaller in the East than in the West.

As an aid for estimating the lower impact of education on traditional values in the East, Figure 4 graphs the predicted probabilities for agreeing with the gender stereotype by educational level for both regions (bars) based on the regression model results of Table 8 (all other independent variables are set to the regional mean).

In addition, changes in predicted probabilities are given for both regions (lines) as percentage decrease of agreement of the primary educated (set to 100).

The predicted probability to agree with the patriarchal gender attitude for respondents with primary education is 0.58 and shrinks to 0.54 for secondary educated in the East. This decrease of predicted probabilities reflects a change of 8 percent (presented by the black line in Figure 4). In contrast, the decrease in the predicted probabilities for agreement from 0.33 (primary educated) to 0.22 (secondary educated) reflects a 35 percent fall in the West (grey line). Even though 10 percent less tertiary than secondary educated agree with the gender stereotype in the East, once expressed in percent of the predicted probability for the primary educated the fall in agreement in the West remains still greater. Hence, better education in the West leads to greater abandonment of patriarchal attitudes than in the East. Or formulated differently: people with different education in the East are more homogenous in their beliefs in traditional values than the population in OECD countries.

Social class does not have a significant impact on gender attitudes in the West but it has an as great impact as tertiary education in the East (the lower the social class the higher is adherence to traditional gender values) once controlled for individual characteristics.[20]

Retired people have (conditional on age) a greater adherence and single parents a smaller adherence to patriarchal values in the West while there are no sizable effects in the East. In addition, cohabitation leads to significantly higher liberal gender attitudes in

[20] While this dummy variable is not correlated with a dummy on secondary education, the correlation is still moderate with a coefficient of -0.23 regarding tertiary education (Table A 5).

the West, but is not affecting gender stereotypes in the East. Differences between both regions are significant at the one percent level. This might confirm results of Batalova and Cohen (2002) indicating that cohabiting couples share housework more equally than married couples in the West while this 'effect' could not be found as distinct in several CEE countries.

In transition countries respondents with children in the household are more traditional than other respondents but there is no similar pattern for the West.

Taken together, three main results are of importance. First, in both regions individual characteristics impact generally in the same direction on the degree of tradition gender attitudes. However, there are some interesting differences in the explanatory power and size of those effects. Second, different individual backgrounds are of varying importance in the regions. Lower social class and children in the household leads to more traditional values in the East but have rather no importance in the West. However, in the West single parenthood and cohabitation have some impact on gender attitudes but there is no similarly significant pattern in the East. Third, the size of the impact seems to differ between regions. Without taking into account significant differences for variables that just control for missing values[21] there is a considerable higher number of 'light grey' fields, indicating that in general individual background factors have a bigger sizeable 'effect' in the West than in the East. Especially education, retirement, religion and age gain a much higher explanatory power for differences in gender attitudes in the West than in the East. This indicates that people in CEE countries are more homogenous in their traditional beliefs than people with different background characteristics in Western industrialised countries.

5.2 Gender differences

This Sub-section aims at examining gender differences in the impact of individual background characteristics with the use of ordered logit regressions applied separately for men and women in East and West. Table 9 shows the results and presents for each region the gender difference of the β-coefficient with the standard error. Light grey fields indicate that males with the specific characteristic are more traditional than their female

[21] For household size, children in household, household income and social class missing values were great, so that I controlled for missing values with the introduction of a dummy variable indicating non-response.

counterparts (negative values), while dark grey fields show a greater female adherence to gender inequality (positive value).

Results indicate that men who are married are not greatly different from single men in both regions. In contrast, in the East and the West married women adhere more to traditional gender attitudes on women's work than single women. This might suggest that women who marry are in general more prone to patriarchal attitudes. Another explanation could be that marriage in itself changes women's but not men's attitudes to women's work.

A further regional similarity in gender differences of the impact of individuals' characteristics regards those respondents who are not participating in the labour force. Again, men who are not in the labour force do not differ from (CEE country group) or are even more prone to liberal gender attitudes (OECD country group) than their full time working counterparts. In contrast, women who are not participating in the labour force are greatly in favour of patriarchal attitudes on women's work compared to full-time working women. This 'effect' found for women might be endogenous, since women who think that it is the women's job to stay at home are likely to decide against entering the labour force. However, it is noteworthy that women's opportunity to stay at home might be quite limited in CEE where two earner incomes are often necessary for maintaining a household.

Gender differences in the impact of individual characteristics differ across regions for all other variables besides marriage and labour force participation. Being divorced or separated compared to being single has a greater 'effect' on women than on men in the East but a similar pattern is not visible in the West. However, in OECD countries retirement and part-time employment are more related with patriarchal views for women than for men. A similar pattern cannot be found in transition countries. This regional difference corresponds with the finding that retirement was found to be significant for explaining gender attitudes only in the West (see Table 8). However, only about 5 percent of respondents in the CEE sample but 13 percent in the OECD sample is part-time employed (see Tables A 2.3 and A 2.4 in the Appendix) so that smaller sample sizes in the East might lead to the insignificant gender difference.

Table 9: Ordered logit regression results by region and gender, dependent variable agreement with statement (the higher the value the less agreement with the patriarchal gender attitude)

	OECD		Coefficient difference	CEE countries		Coefficient difference
	Male	female	Male-female	male	female	Male-female
Age	-0.029	-0.025	-0.0040	-0.016	-0.013	-0.0030
	(0.002)***	(0.002)***	(0.0028)	(0.003)***	(0.003)***	(0.0042)
Divorced/separated	0.166	-0.006	0.172	0.132	-0.276	0.408
	(0.092)*	(0.082)	(0.123)	(0.136)	(0.111)**	(0.176)
Widow	-0.133	-0.260	0.127	0.047	-0.262	0.309
	(0.128)	(0.084)***	(0.153)	(0.175)	(0.115)**	(0.209)
Married	0.114	-0.224	0.338	0.134	-0.234	0.368
	(0.060)*	(0.057)***	(0.083)***	(0.095)	(0.084)***	(0.127)***
Household size	-0.133	-0.058	-0.075	-0.074	-0.096	0.022
	(0.018)***	(0.017)***	(0.025)***	(0.024)***	(0.022)***	(0.033)
HH size missing	-0.499	-0.642	0.143	-0.180	-0.377	0.197
	(0.089)***	(0.088)***	(0.125)	(0.474)	(0.408)	(0.625)
Secondary education	0.601	0.500	0.101	0.165	0.200	-0.035
	(0.051)***	(0.045)***	(0.068)	(0.077)**	(0.066)***	(0.101)
Tertiary education	1.071	1.138	-0.067	0.548	0.603	-0.055
	(0.062)***	(0.060)***	(0.086)	(0.101)***	(0.088)***	(0.134)
Retired	-0.120	-0.435	0.315	0.026	0.013	0.013
	(0.069)*	(0.072)***	(0.100)***	(0.099)	(0.085)	(0.130)
Part-time employed	0.117	-0.270	0.387	0.147	-0.084	0.231
	(0.078)	(0.056)***	(0.096)***	(0.139)	(0.102)	(0.172)
Not in labour force	0.369	-0.656	1.025	0.077	-0.355	0.432
	(0.070)***	(0.050)***	(0.086)***	(0.095)	(0.070)***	(0.118)***
Unemployed	0.048	-0.166	0.214	0.048	-0.012	0.060
	(0.098)	(0.103)	(0.142)	(0.097)	(0.092)	(0.134)
Cohabitation	0.129	0.312	-0.183	0.052	-0.162	0.214
	(0.078)*	(0.078)***	(0.110)*	(0.121)	(0.110)	(0.164)
Child in household	0.112	0.090	0.022	-0.230	-0.226	-0.004
	(0.061)*	(0.058)	(0.084)	(0.079)***	(0.072)***	(0.107)
Single parent	0.372	0.094	0.278	0.166	-0.003	0.169
	(0.206)*	(0.112)	(0.234)	(0.379)	(0.149)	(0.407)
Child missing	0.482	0.541	-0.059	0.948	1.034	-0.086
	(0.064)***	(0.063)***	(0.090)	(0.095)***	(0.088)***	(0.129)
HH income level	0.095	0.061	0.034	0.059	0.074	-0.015
	(0.009)***	(0.008)***	(0.012)***	(0.013)***	(0.011)***	(0.017)
HH income missing	-0.191	-0.148	-0.043	0.192	0.244	-0.052
	(0.052)***	(0.045)***	(0.069)	(0.076)**	(0.069)***	(0.103)
Low social class	0.052	0.042	0.010	-0.512	-0.528	0.016
	(0.048)	(0.045)	(0.066)	(0.062)***	(0.055)***	(0.083)
Class missing	0.304	0.355	-0.051	0.317	0.054	0.263
	(0.051)***	(0.047)***	(0.069)	(0.117)***	(0.102)	(0.155)
Highly religious	-0.660	-0.716	0.056	-0.483	-0.443	-0.040
	(0.064)***	(0.050)***	(0.081)	(0.093)***	(0.068)***	(0.115)
Observations	9292	10853		4530	5557	
Pseudo R-squared	0.07	0.09		0.04	0.05	
log-lklhd	-13583.30	-15011.47		-6546.33	-8255.60	

Note: OECD countries are Austria, Australia, Denmark, Italy, Ireland, Japan, New Zealand, Netherlands, Norway, Portugal, Spain, Sweden, Swiss, USA and West-Germany. CEE countries are Bulgaria, Czech Republic, East-Germany, Hungary, Latvia, Poland, Russia, Slovakia and Slovenia. Source: ISSP 1998, author's calculations

It is noteworthy that the magnitude of gender differences is bigger for the West than for the East. This is similar to the pattern found for regional differences. Regional and gender differences in the impact of explanatory values show that the influence of

demographic factors in forming traditional values is generally lower in CEE than in OECD countries. This indicates that people in transition countries seem to be more homogenous in their traditional beliefs.

5.3 Decomposition analysis

Where do regional differences in gender attitudes derive from? First, they might be determined by differences in the population composition between regions. On one side Section 4.2 showed that the control for regional characteristics did not change greatly the regional gap between OECD and CEE countries regarding the agreement with patriarchal attitudes. This might indicate that regional differences in population characteristics are not of great importance. Nevertheless, as shown in Tables A 2.3 and A 2.4 in OECD countries more people complete tertiary education and less people are retired or attribute themselves to a low social class than in CEE. This composition in Western industrialised countries seems to be favourable in terms of liberal gender attitudes since low social class, retirement and lower education are related to higher traditional values in CEE (as discussed above). Hence, regional differences in gender attitudes might be partly due to variation in population composition between regions.

Second, another explanation for attitude gaps could be the great regional differences in the impact of individual characteristics on patriarchal attitudes that were examined in Section 5.1.

This Section examines the contribution of the two factors (first regional differences in population characteristics and second regional differences in the impact of these characteristics) on the regional gap of gender attitudes by estimating an Oaxaca decomposition that is described in Sub-section 5.3.1. Results are discussed in 5.3.2.

5.3.1 Theoretical considerations

The decomposition analysis, introduced by Oaxaca (1973) and Blinder (1973), offers a way of determining the extent to which any observed differences is a consequence of characteristic differences (e.g. in the West more people completed tertiary education than in the East) or the consequence of a different impact of characteristics (e.g. higher age has a greater impact on gender attitudes in the West than in the East).

Gomulka and Stern (1990) extended the Oaxaca and Blinder method for decomposing group differences in means into an explained and residual component for group differences in probabilities for probit models.

This analysis uses a logit model based on the following equation for CEE countries:

$$(1) \qquad P(\hat{\beta}^{CEE} X_i^{CEE}) = \frac{1}{1+\exp(-\hat{\beta}^{CEE} X_i^{CEE})}$$

where $P(\hat{\beta}^{CEE} X_i^{CEE})$ is the probability of person *i* in the CEE countries to agree or strongly agree with the gender stereotype, $\hat{\beta}^{CEE}$ is the vector of the estimated coefficients and X_i^{CEE} is the associated vector of characteristics like socio-economic background and gender. A similar logit model is fitted for OECD countries.

Using equation (1) the probability of agreement for each individual is calculated separately for East and West and then averaged for both regions. The regional differences in the average probabilities for agreeing with the patriarchal attitude Pr is then

$$(2) \qquad \overline{\Pr}_{CEE} - \overline{\Pr}_{OECD} = \overline{P}(\hat{\beta}^{CEE} X_i^{CEE}) - \overline{P}(\hat{\beta}^{OECD} X_i^{OECD})$$

By subtracting and adding the term $\overline{P}(\hat{\beta}^{OECD} X_i^{CEE})$ this regional difference (PR_{Dif}) can then be decomposed into the two components:

$$(3) \; \overline{\Pr}_{CEE} - \overline{\Pr}_{OECD} = [\overline{P}(\hat{\beta}^{CEE} X_i^{CEE}) - \overline{P}(\hat{\beta}^{OECD} X_i^{CEE})] + [\overline{P}(\hat{\beta}^{OECD} X_i^{CEE}) - \overline{P}(\hat{\beta}^{OECD} X_i^{OECD})]$$

$$Pr_{Dif} = \quad CT \quad + \quad PT$$

Hence, I make use of the OECD coefficients to predict the CEE countries' average probability using the CEE countries characteristics.[22] The first term in square brackets (CT) is the contribution of the coefficients and the second term (PT) is the contribution of population characteristics to the total differences in regional average probabilities.

[22] The construction of a second decomposition for CEE countries by simply adding and subtracting the term $\overline{P}(\hat{\beta}^{CEE} X_i^{OECD})$ in (2) shows that the use of the CEE countries coefficients to predict the OECD probabilities leads to similar results.

Due to the use of a logit model, I collapse the categorical variable with five response categories into a binary variable as dependent variable with A_i= 0 / 1 whereby A_i= 1 if respondents agree or strongly agree with the traditional statement A_i=0 otherwise. Independent variables are again those given in Table 4.

5.3.2 Results

Table A 6 in the Appendix presents parameters of the logistic regression model used for the estimation of probabilities by regional coefficients and population characteristics displayed in Table 10.[23] Similar to results in previous Sections (see Table 6) OECD countries' predicted probability of agreement with traditional gender stereotypes is 0.263 and it is about twice as high with 0.534 in CEE countries. Hence, in post-transition countries there is a 0.271 higher probability to agree with gender stereotypes (Pr_{Dif}). If the impact of determinants in CEE countries were that of OECD countries (β_{OECD}) the probability of agreement in post-communist countries would be rather similar to that in OECD countries (0.265). On the other hand, if we applied the coefficients of CEE countries to the sample of OECD countries, the degree of agreement in OECD countries (β_{CEE}) would be slightly lower than in transition countries (0.491). Hence, it is the different impact of coefficients (CT=0.269) that explain differences between regions, whereby differing populations characteristics have a rather negligible explanatory power (PT=0.002).

Table 10: Decomposition analysis showing probabilities depending on regional coefficients and characteristics

	β_{OECD}	β_{CEE}
X_{OECD}	0.263	0.491
X_{CEE}	0.265	0.534

Source: ISSP 1998, authors' own calculations

It is noteworthy that unobserved variables not included in the model might drive results of the Oaxaca decomposition through the constant term. Especially in case a

[23] There are slight differences between results of Tables 2.6 and 2.10 even though results are based on a similar assumption of determinants of agreement Table 2.6 shows results of an ordered logit model while Table 2.10 gives results of a binary logistic model (parameter results given in Table A 6) for the Oaxaca decomposition. In Table 2.6 the predicted probabilities are estimated by setting independent variables to the mean of both regions.

variable were excluded that is very important for explaining differences in agreement in transition but not in OECD countries or vice versa results of the decomposition analysis would be different. However, it is very difficult to judge the inclusiveness of the model used. The low pseudo R^2 of the regression results (see Table A 6 in the Appendix) indicates that other factors besides gender, family structure, demography, socio-economic status, employment status and religion are at work. Hence, the results of the Oaxaca decomposition need to be viewed with some caution.

What does it mean in practical terms regarding the further development of liberal values in both regions that it is not differences in population characteristics but in their impacts that drive the great regional gender attitude gap? Assuming that regression results were valid also in the future, an increase of people with higher education, lower average age etc. would decrease traditional values in OECD countries significantly but not so much in CEE countries. Even if people are very different in their characteristics within CEE countries they seem to be more homogenous in their traditional beliefs in post-communist countries than people with different background characteristics in Western industrialized countries. Hence, while in the West traditional values are contested between different population groups, gender stereotypes are a common and widely accepted feature among people in post-communist countries.

Given the much lower impact of individual background factors, increases of liberal gender views over time might be lower in post-communist countries. How patriarchal values might be changing by region over time will be the focus of the next Section.

6 How will gender-role attitudes change over time in the East and West?

Explanations for changes of gender stereotypes over time are mainly twofold but interlinked. First, changes in attitudes might simply reflect the trend, that older, more traditional generations are replaced by younger, more egalitarian-minded ones (‘cohort succession’). Hence, these changes can be measured by comparing attitudes between different birth cohorts. Section 6.1 examines these changes in attitudes. (This Section focuses on age groups instead of birth cohorts. Since both are perfectly correlated once

only one time point (data for 1998) is used results are the same whether the focus is on birth cohorts (e.g. born between 1974 and 1980) or age group (18 to 24 year-olds).)

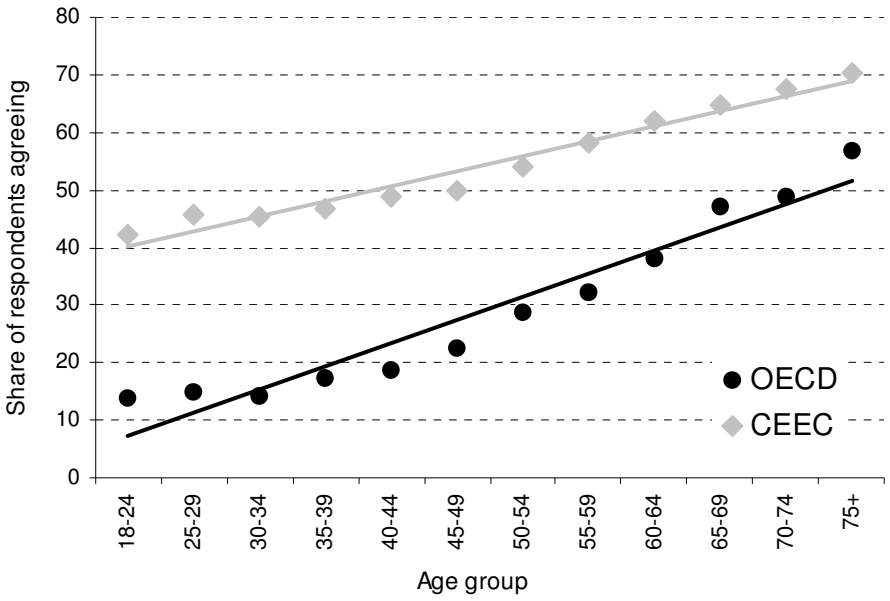
However, the examination of age group or birth cohort effects does not take into account that there might be a deeper underlying value shift among the populations in form of a gradual change across all populations segments. (Rice & Coates, 1995) For CEE countries an important argument in favour of this value shift might be that the impact of transition did not only change people's lives in the economic sphere but had also a direct influence on individuals' cultural and societal norms. For catching this effect, Section 6.2 compares cross-sectional data collected in the ISSP waves for the rather short time period from 1994 to 1998.

6.1 Change over time estimated by different attitudes of age groups

A precondition for the measurement of changes over time by using solely age groups is the assumption that social trends have only a marginal effect on cultural norms but that, through the socialization process, the experience of predominant conditions during the formative years of childhood and early adolescence make an indelible impression on people. (Ingelhart & Norris, 2003) Even if certain decisive events can alter gender attitudes in age groups the underlying assumption of this Section is that most predominantly values held in later life can be attributed to experiences in early years. (This assumption will be relaxed in Section 6.2.)

It is also important to note that attitudes in the next decade will be an average across birth cohorts that are covered in ISSP 1998 data, but also future cohorts that cannot yet be observed. In the following analysis it is assumed that the changes of attitudes over birth cohorts are constant so that it is possible to predict future birth cohorts' attitudes. Nevertheless, we cannot be sure that current trends in changes of attitudes will reflect also those of future cohorts.

Figure 5: Share of respondents agreeing (agree + strongly agree) with traditional gender roles by age group and region



Source: ISSP 1998
Note: OECD and CEE country group agreement refers to unweighted average of country figures. OECD countries are Australia, Austria, Denmark, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, USA and West-Germany. CEE countries are Bulgaria, Czech Republic, East-Germany, Hungary, Latvia, Poland, Russia, Slovakia and Slovenia.

Figure 5 presents the share of respondents agreeing (agree + strongly agree) with the traditional gender-role statement for different age groups and regions. The graph does not only display the already examined higher liberal values in OECD countries but reveals also the much more pronounced increase in agreement with rising age in the West compared to the East (see regression results on the variable 'age' given in Table 8 by region). In OECD countries 40 percent points more people in the oldest age group agree (75 + year-olds) with the gender stereotype compared to the youngest group (18 to 24 year-olds). These differences are less than 30 percent points in CEE countries. Figures A1 and A2 in the Appendix show the share of respondents agreeing with the statement for each transition country covered in ISSP separately.

Transition countries appear to be heterogeneous regarding the impact of age on traditional values. Impacts of age on patriarchal attitudes are similar between (pre-1990) OECD countries and East-Germany, Slovenia and Poland (see Figure A1 in the Appendix). Very different to these countries is the agreement between age groups in

Russia, Bulgaria and Latvia (see Figure A2 in the Appendix). In all three countries only 20 percent points more elderly than youngsters agree with the tradition gender statement. Hence, expressed in absolute differences age has a twice as high impact in Western European countries (with 40 percent points difference) than in these three transition countries.

Changes of attitudes across birth cohorts are likely to reveal time trends of societal traditional value adherence. Greater variation in agreement between cohorts in one country is probable[24] to result in a greater shift of traditional values to liberal values by cohort succession over time (since much more traditional cohorts are taken over from younger much less traditional cohorts). In order to estimate changes over time within countries I run an OLS regressions through the data points given in Figure 5 and in Figures A1 and A2 for each country separately. Hence, a group's (c) agreement (agree + strongly agree) (A_c) with the gender stereotype is the dependent variable and age groups are the continuous independent variable[25]. The following equation clarifies the simple regression model used:

$$(1) \qquad A_c = \beta_0 + \beta_1 * \text{age group}$$

The 'age group' variable is continuous with the units of measurement ranging from 1 to 12; 1 denotes the youngest age group, 18 to 24 year-olds (or youngest birth cohort with those born between 1974 and 1980), 12 the oldest age group (above 75) or birth cohort. In this model it is not controlled for any other respondents' characteristics. The resulting slope given by the β_1-coefficient captures the increase of the share of people agreeing with patriarchal gender attitudes for each older age group or birth cohort (that comprises 5 years).[26] Table A 7 in the Appendix shows the regression results for all transition countries separately and for the pooled OECD sample. In OECD countries the constant and the β-coefficient are both about 4 points. This implies an 8 percent

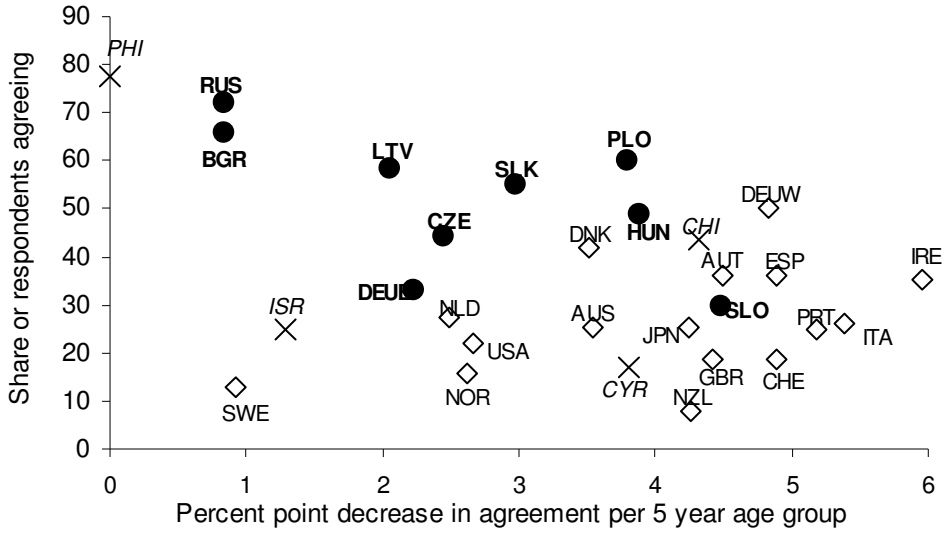
[24] An important assumption is that changes over age groups prevail also in future age groups for that attitudes cannot yet be measured.
[25] The age group variable is continuous since one age group covers respondents born in 5 consecutive years.
[26] I hereby assume a linear relationship between agreement and age cohort which seems true given results of descriptive statistics presented in Figures A1 and A2 in the Appendix.

agreement of 18 to 24 year-olds (intercept value+1*4) and a 4 percent increase with each older age group. For example, 12 percent of 25 to 29 year-olds and about 52 percent of the last age group (75 + year-olds) are predicted to agree.

Figure 6 shows the so calculated β-coefficient for each country on the x-axis and the agreement (agree + strongly agree) for the whole society on the y-axis.

In OECD countries higher agreement with traditional values is positively correlated with a greater variation between age groups (correlation coefficient between societal agreement and change 0.39). Hence, in Western industrialised countries the gap between more traditional and less traditional countries will decrease over time (assumed that current trends in attitude changes observed across current birth cohorts will reflect also those of future cohorts). The extreme case is Ireland, where a great agreement with patriarchal attitudes in the population of 38 percent is likely to shrink rapidly over time, since there is a fall in agreement of 6 percent points from one age group to the consecutive younger age group. Sweden is the other extreme, where a very low agreement with patriarchal values in the society (10 percent) is paired with a low decrease in agreement over age groups (1 percent) indicating that agreement with the patriarchal statement will change very slowly in this country.

Figure 6: Relation between changes of traditional values by age groups and the percentage of people agreeing with traditional gender stereotypes



Source: ISSP 1998, author's calculations

Note: the y-axis shows the percentage of people in a county that agree or strongly agree with the statement that women should stay at home. The x-axis shows the country-specific slope of the curve (see Figures A

2.1 and A 2.2 in Appendix) regarding the increase of traditional values for each age group that comprises 5 years.

In contrast, the trend is the other way round in transition countries (correlation coefficient -0.61). These transition countries that are highly traditional in terms of gender attitudes are also those countries where changes of attitudes take place slowly. The large average agreement with the gender stereotype of 70 percent in Russia is difficult to overcome given that there is only an about 1 percent point difference in agreement between each age group. Attitudes to gender inequality are also very probable to persist in Bulgaria and Latvia over time. On the other hand, Poland with an average agreement of 60 percent and Hungary with 50 percent show a relative high change in traditional values over groups. This indicates that these countries are very likely to follow the path of greater gender equality in the future. Hence, in contrast to OECD countries the gap in gender attitudes between transition countries is likely to increase over time. In addition, given that attitudes change faster in OECD than in transition countries in terms of age group succession, additionally the East-West gap in gender attitudes is likely to increase.

However, an important assumption of these predictions is that the trend of changes observed across current birth cohorts remains stable also for future cohorts.

6.2 Changes of gender attitudes between 1994 and 1998

The cross-sectional focus on changes in gender attitudes cannot disentangle generational effects (cohort succession) from life-cycle effects that may alter attitudes as people move from youth to middle age and to retirement. Two waves of the ISSP survey serve as an alternative estimation of these life-cycle effects. Given that comprehensive data are only available for the years 1994 and 1998 life cycle effects need to be huge for being visible in this short period of time. However, since the transition process was a decisive historical event changing people's political and economical environment dramatically, societal changes might be at stake in this region in the 1990s. If changes in attitudes to gender inequality are as big as changes in the economic and political sphere four years of differences might already be sufficient for showing trends in gender attitudes.[27]

[27] In addition, changes in trends measured from 1994 to 1998 are also likely to reflect the before discussed change from on age cohort to the next, since the time span of one age cohort was set to 5 years.

Figure 7 presents the changes of agreement (agree + strongly agree) with gender stereotypes for some CEE countries in comparison to three OECD countries between the years 1988 and 1998: Norway with a low, Austria with a moderate and the Philippines with a high average consent on gender stereotypes.

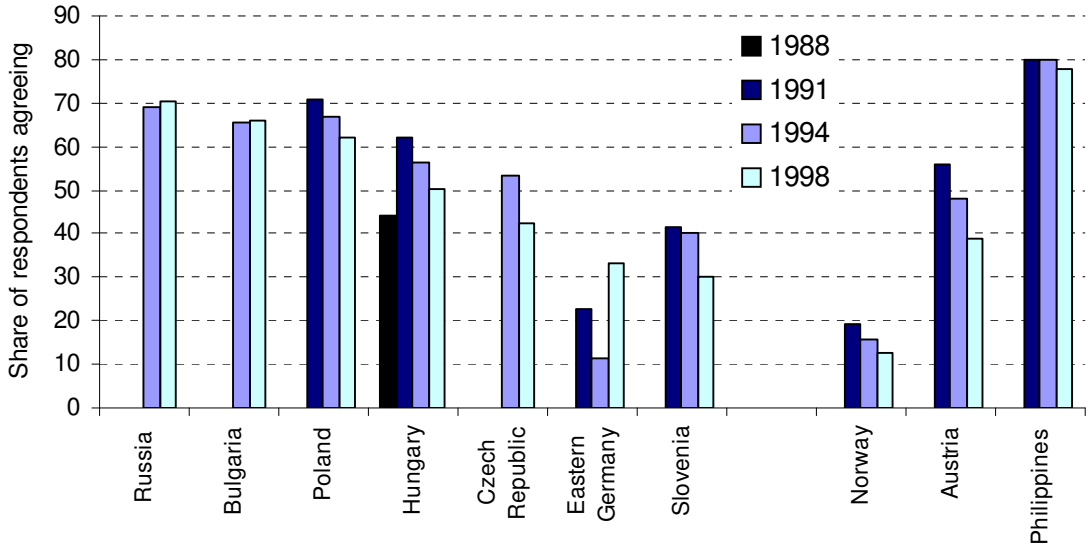
Results indicate that there is little change in agreement with the gender stereotype in Russia, Bulgaria and the Philippines between 1994 and 1998. These are the countries in which changes in traditional values between age groups were very small, too (see previous Section). With the exception of Eastern Germany in all other countries attitudes to gender inequality were decreasing in the time period of four or eight years. From 1991 to 1998 greatest changes in agreement seem to appear in Austria and Hungary. Both countries were characterised with a relative high variation in gender attitudes between age groups (Figure 6).

Nevertheless, in Hungary from 1988 to 1991 and in Eastern Germany from 1994 to 1998 data suggest an increase in traditional values that is difficult to explain.

Differences in gender attitudes over years might derive from different population characteristics between countries and years, even though great changes over time are rather unlikely. Nevertheless, I estimate the 'conditional' effect of the year change by applying ordered logit regression described already in 2.4.2.1 with the additional use of a dummy variable for years (year 1994 set to 0, year 1998 set to 1) and interaction variables for years and regions.[28]

[28] In this analysis data refer solely to the 12 OECD and seven CEE countries that were covered in both ISSP waves.

Figure 7: Percentage of people who agree or strongly agree with the patriarchal gender attitude by country and year



Source: ISSP 1988, 1991, 1994 and 1998. Countries are ordered first by region and second by agreement in 1998

Table 11 presents only these results important for examining changes over years (the remainder of the regression results is reported in Table A 8 in the Appendix). The control group are respondents in year 1994 in OECD countries.

In all models of Table 11 the year dummy shows a highly significant positive value indicating that in 1998 patriarchal attitudes are less predominant than in 1994. This result confirms unconditional results of Figure 7. In order to examine whether there is a different decrease in gender attitudes between regions over time I introduce interaction variables in Model 3 (capturing differences between OECD countries as a control group and CEE countries) and 4 (comparing OECD countries with Russia and the six remaining CEE countries).

Table 11: Changes of attitudes to gender inequality over years? Ordered logit. 1994 and 1998 data.

	(1)	(2)	(3)	(4)
Year 1998	0.221 (0.029)***	0.235 (0.029)***	0.242 (0.032)***	0.210 (0.032)***
CEE countries	-1.076 (0.020)***		-1.044 (0.029)***	
CEE countries in 1998			-0.058 (0.038)	
cee6		-1.253 (0.021)***		-1.300 (0.031)***
Russia		-2.137 (0.042)***		-2.111 (0.059)***
cee6 in 1998				0.084 (0.039)**
Russia in 1998				-0.055 (0.081)
Observations	40612	40612	40612	40612
Pseudo R-squared	0.08	0.10	0.08	0.10
log-lklhd	-59610.03	-58454.03	-59608.85	-58451.21

Source: ISSP 1994, 1998, author's own calculations
Note: regression model similar to that applied for estimations in Table 5. This table shows only the results for the year and regional variables and their interaction; see Table A 8 in Appendix for full results. OECD countries refer to Australia, Austria, Ireland, Italy, Netherlands, New Zealand, Norway, Spain, Sweden, UK, USA and West-Germany; CEE countries are Bulgaria, Czech Republic, Eastern Germany, Hungary, Poland, Russia and Slovenia.

The 'CEE countries in 1998' dummy proves not to be significant, indicating that there is no noteworthy difference between OECD and transition countries in the decline of adherence to traditional values during both years (Model 3). Once transition countries and Russia are split up (Model 4), also the 'Russia in 1998' dummy does not show any significant effect in time changes. However, the dummy for the remaining six transition countries becomes significant (5 percent level) with a positive value. This result suggests a slight trend of decreasing traditional values in the transition countries of Eastern Germany, Hungary, Czech Republic, Slovenia, Poland and Bulgaria once pooled together and compared to the OECD country sample. Nevertheless the 'effect' is rather small in magnitude (0.084)[29] given that it is still 15 times lower than the difference in patriarchal attitudes between OECD and transition countries (-1.300) and covers a 4 year time period.[30] Furthermore, a significance level of 5 percent is not very impressive given the high sample size.

[29] The effect vanished once a second dummy variable for Bulgaria is introduced.
[30] One possibility for estimating the impact of the small coefficient is to guess roughly how much time this group of transition countries would need for catching up with the relative low adherence to gender

Taken together, results suggest that traditional values in post-communist countries will not be overcome as quickly as in Western industrialised countries. If we assume that traditional gender values are decisively moulded by early adolescence experience the relation between age groups and agreement with gender values shows indeed that though there is a higher traditional believe in gender roles in post-transition countries this will be transformed slower into liberal beliefs than in Western industrialised countries. Hence, the gap between the East and West regarding the adherence to traditional values on women's work might even increase. However, transition countries are very heterogeneous: changes to liberal gender attitudes are more unlikely in Russia, Bulgaria and Latvia where attitudes on gender inequality are very pronounced than in Poland, Slovakia and Hungary where societies adhere much less to traditional beliefs. This indicates, that the gap in traditional beliefs between transition countries is likely to increase.

Based on attitudes in two time intervals, 1994 and 1998, results show a slight but not very significant trend that especially in Central European countries value changes have taken place more pronounced than in Western industrialised countries. In case this effect is persistent over greater time periods the widening gap between East and West in terms of patriarchal attitudes forecasted by birth cohort succession might be diminished.

7 Conclusion

Economic indicators on women's access to tertiary education, women's employment share and the gender pay gap revealed a similar level of gender equality in the labour force for East and West. This stands in contrast to the regional differences in what people actually think on women's societal role: a strikingly higher share of people in the East than in the West believe that women should be homemakers and men breadwinners. In Russia - the country with the longest history of communism – as many as 70 percent of the population judges women's job to be at home. This prevalence of traditional attitudes to women's work is more than twice as high as in a pooled sample of

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inequality predominant in OECD countries: not before the next 60 years (15 * 4). Nevertheless, this prediction over a long time period is only based on two data sets covering a four year trend and needs therefore to be interpreted with caution.

Western industrialised countries. In Sweden agreement with patriarchal values is significantly lower than in every other transition or OECD country covered by the data.

It is not population characteristics that determine the great gap in gender attitudes found between East and West. But different impacts of population characteristics explain the regional divergences in gender attitudes as was shown by applying an Oaxaca decomposition analysis. People in the East appear to be quite homogeneous in their strong patriarchal beliefs that are mainly unaffected by their socio-economic background. Patriarchal values in the West, quite the reverse, are predominantly shaped by individual background. Hence, results suggest that an increase in education would diminish patriarchal values substantially in the West, but would not necessarily have an as great effect on societal norms in the East.

Results of ordered logit regressions run separately for OECD and transition countries indicate a much greater impact of education, female full-time employment, gender, retirement and age shaping attitudes in the West than in the East. In addition, some different individual backgrounds gain varying importance in the regions. Single parenthood and cohabitation leads to more liberal gender attitudes only in OECD countries. On the other hand, only in former communist countries lower social class, children in the household and being married account for more traditional values.

Surprisingly, gender differences in agreement with gender stereotypes on work are anything but substantial and seem not to be related to the degree of patriarchal attitudes in the society. This proves also to be true once controlled for population characteristics. However, gender differences in determinants of attitudes are much greater in the West than in the East. Part-time employment and retirement has a significantly greater ‘effect’ on patriarchal attitudes for the female than for the male population in the West. There is no comparable pattern in the East.

Since there is a huge regional gap in patriarchal attitudes it is important to estimate how preferences for gender-roles will change over time. First, I assumed that changes in attitudes simply reflect the trend that older more traditional generations are replaced by younger, more egalitarian minded ones. Comparing OECD with transition countries shows that agreement with patriarchal values is more conform between age groups in the East than in the West. Hence, the regional gap in patriarchal values might

even increase between transition and OECD countries since liberal values are accumulating more quickly in the West than in the East. For OECD countries results suggest that those countries with an on average high agreement with the gender stereotype show greater variation between age groups. This indicates that the gap between OECD countries regarding patriarchal values will decline over time. The contrary is true for transition countries. Those countries that are most in favour of gender inequality show also the highest conformity between age groups. The average agreement with the gender stereotype of 70 percent in Russia and Bulgaria is difficult to overcome given that there is only an about 1 percent point difference in agreement between age groups (that comprise 5 years of age difference).

Nevertheless, the transition process might have lead to a deeper underlying value shift among the whole population. This is measured by comparing attitudes between the years 1994 to 1998. Results show a very slight trend for predominantly Central European transition countries that value changes have taken place more pronouncedly in the East than in the West. However, the effect is very small in magnitude and not very significant. Nevertheless, if this trend is persistent over greater time periods it might diminish the widening gap between the West and East forecasted by just focusing on birth cohort succession.

The high adherence to patriarchal values regarding women's work as well as their probable persistence over time are of a great concern for CEE countries. These attitudes are likely to impact upon labour market policies and people's (e.g. employers') behaviour. Therefore, they will probably shape women's opportunities in labour market. Hence it is astonishing, that the high patriarchal attitudes to women's work cannot be revealed once focusing on economic indicators. One reason might be that economic factors discussed do not capture the already existing gap between East and West in gender equality in the labour market that the analysis of attitudes revealed. Another explanation is, that economic indicators still show the inherited 'gender equality' in the labour market having been forced upon the society during communism. In this case, societal agreement on patriarchal values is very likely to change labour market structures and decrease women's opportunities in transitional labour markets over time.

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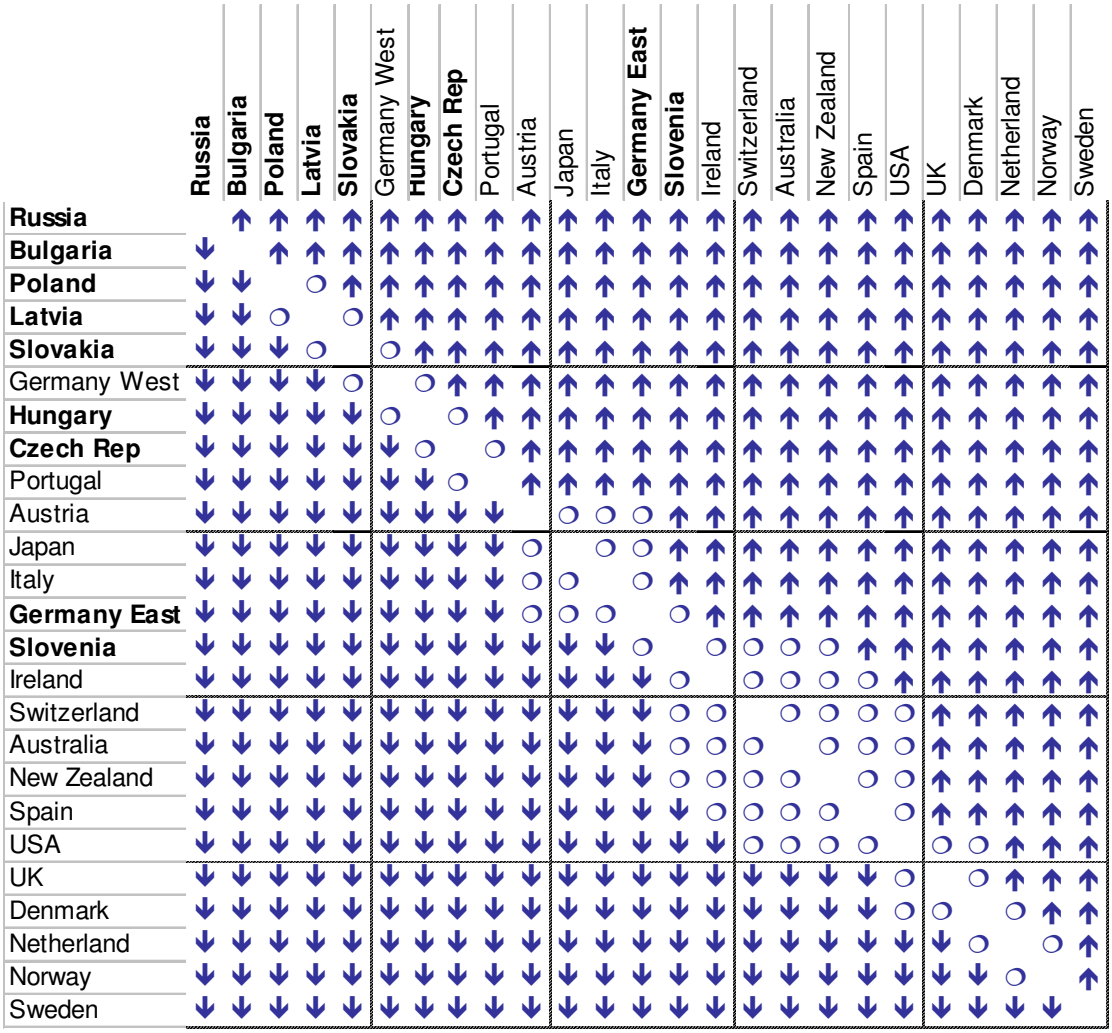
Appendix

Table A1: Response rate, field work and sample size of ISSP 1998

Country	Response rate in percent	Sample size	Field work	Sample
Austria	60.7	1002	Face-to-face	Stratified multi-stage random sample
Australia	Na	1310	Na	Na
Bulgaria	94.1	1102	Face-to-face	Two stage randomised clustered sample
Canada	29.1	974	Self-completion Mail, one reminder	Stratified random sample
Czech Republic	39.6	1223	Face-to-face	Three stage random stratified sample
Denmark	64.0	1114	Face-to-face	Stratified random sample
France	10.3	1133	Mail, no reminder	Stratified random sample
Germany West	60.1	1000	Face-to-face + self-completion questionnaire	Multistage random sample
Germany East	66.0	1006		
Hungary	52.2	1000	Face-to-face	Three stage random stratified sample
Ireland	Na	1010	Na	Na
Italy	73.7	1369	Face-to-face	Na
Japan	80.4	1368	Self-completion	Two-stage stratified random sample
Latvia	83.4	1200	Face-to-face	Multi-stage stratified sample
Netherlands	96.1	2020	Face-to-face	Random sample
New Zealand	64.9	998	Mail survey with four waves	Random sample
Norway	61.6	1532	Mail-survey, one reminder, two follow ups	Stratified random sample
Poland	67.2	1147	Face-to-face	Multi stage random sample
Portugal	79.7	1201	Face-to-face	Random sample
Russia	52.9	1703	Face-to-face	Multi-stage stratified random sample
Slovenia	35.3	1006	Face-to-face	Stratified random sample
Slovakia	Na	1284	Face-to-face	Stratified random sample
Spain	96.0	2488	Face-to-face	Stratified random sample
Sweden	59.7	1189	Postal survey with two reminders	Stratified random sample
Switzerland	Na	1204	Telephone interviews	Random sample
UK merged Great Britain	45.3	804	Face-to-face + self-completion questionnaire	Multi-stage random sample
Northern Ireland	Na	812		Na
USA	68.6	1284	Face-to-face	Multistage probability sample

Table A2: Multiple comparisons of agreement (strongly agree and agree) with statement between countries



Note: refers to significance at 1 percent level. Without Bonferroni adjustment.

❍not statistically significant difference
🡻country in row significantly smaller agreement with gender stereotype than country in column
🡹country in row significantly higher agreement with gender stereotype than country in column

Table A3: Summary statistics for OECD countries based on ISSP 1998

Variable	Obs	Mean	Std. Dev.	Min	Max
Gender stereotype	21040	3.500	1.338	1	5
Female	21320	0.534	0.499	0	1
Age	21291	45.931	17.356	16	95
Divorced/separated	21248	0.069	0.254	0	1
Widow	21248	0.074	0.262	0	1
Married	21248	0.605	0.489	0	1
Household size	21344	2.956	1.451	1	13
HH size missing	21344	0.069	0.253	0	1
Secondary education	21255	0.522	0.500	0	1
Tertiary education	21255	0.217	0.412	0	1
Retired	21220	0.180	0.384	0	1
Part-time employed	21220	0.125	0.330	0	1
Not in labour force	21220	0.098	0.297	0	1
Unemployed	21220	0.040	0.196	0	1
Cohabitation	21344	0.066	0.248	0	1
Child in household	21344	0.301	0.459	0	1
Single parent	21344	0.023	0.149	0	1
Child missing	21344	0.194	0.395	0	1
Household income level	21344	5.035	2.575	1	10
HH income missing	21344	0.190	0.393	0	1
Low social class	21344	0.252	0.434	0	1
Class missing	21344	0.195	0.396	0	1
Highly religious	20705	0.132	0.338	0	1

Note: OECD countries are Australia, Austria, Denmark, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, USA and West-Germany.

Table A4: Summary statistics for CEE countries based on ISSP 1998

Variable	Obs	Mean	Std. Dev.	Min	Max
Gender stereotype	10471	2.552	1.287	1	5
Female	10672	0.534	0.499	0	1
Age	10660	44.568	16.963	16	92
Divorced/separated	10665	0.085	0.279	0	1
Widow	10665	0.109	0.312	0	1
Married	10665	0.604	0.489	0	1
Household size	10672	3.120	1.531	1	15
HH size missing	10672	0.004	0.059	0	1
Secondary education	10655	0.611	0.488	0	1
Tertiary education	10655	0.161	0.368	0	1
Retired	10646	0.228	0.420	0	1
Part-time employed	10646	0.053	0.224	0	1
Not in labour force	10646	0.116	0.320	0	1
Unemployed	10646	0.097	0.296	0	1
Cohabitation	10672	0.058	0.233	0	1
Child in household	10672	0.360	0.480	0	1
Single parent	10672	0.021	0.143	0	1
Child missing	10672	0.100	0.300	0	1
Household income level	10672	5.252	2.579	1	10
HH income missing	10672	0.165	0.371	0	1
Low social class	10672	0.433	0.495	0	1
Class missing	10672	0.070	0.255	0	1
Highly religious	10305	0.133	0.339	0	1

Note: CEE countries are Bulgaria, Czech Republic, East-Germany, Hungary, Latvia, Poland, Russia, Slovakia and Slovenia.

Table A5: correlation matrix

	Women	Age	HH size	Secondary	Tertiary	retired	Part-empl.	Not labour	Unemployed	Child HH	HH income	Low class	religious
Women	1												
Age	0.013	1											
HH size	-0.016	-0.318	1										
secondary	-0.018	-0.196	0.072	1									
Tertiary	-0.025	-0.109	-0.020	-0.564	1								
Retired	-0.023	0.642	-0.277	-0.142	-0.096	1							
Part-empl.	0.126	-0.093	0.049	0.012	0.049	-0.162	1						
Not labour	0.024	-0.202	0.024	0.005	0.023	-0.158	-0.115	1					
Unemploy	-0.015	-0.118	0.048	0.037	-0.048	-0.116	-0.084	-0.082	1				
Child HH	0.043	-0.305	0.518	0.076	-0.013	-0.275	0.065	-0.030	0.014	1			
HH income	-0.085	-0.176	0.235	0.025	0.214	-0.207	0.019	-0.066	-0.089	0.132	1		
Low class	-0.021	0.057	0.044	0.038	-0.229	0.056	-0.038	-0.039	0.080	0.026	-0.207	1	
religious	0.072	0.126	0.016	-0.072	-0.019	0.081	-0.021	0.010	-0.019	-0.002	-0.086	0.047	1

Table A6: Logistic regression results by region, dependent variable is set to 1 if respondent agreed or strongly agreed with patriarchal attitudes, 0 otherwise

	OECD countries	CEE countries
Female	-0.497	-0.452
	(0.041)***	(0.045)***
Age	0.032	0.015
	(0.002)***	(0.002)***
Divorced/separated	-0.158	0.134
	(0.089)*	(0.100)
Widow	0.112	0.133
	(0.088)	(0.111)
Married	0.066	0.076
	(0.059)	(0.074)
Household size	0.107	0.096
	(0.017)***	(0.020)***
HH size missing	0.426	0.341
	(0.091)***	(0.398)
Secondary education	-0.668	-0.266
	(0.042)***	(0.060)***
Tertiary education	-1.297	-0.726
	(0.062)***	(0.079)***
Retired	0.141	0.023
	(0.062)**	(0.077)
Part-time employed	-0.167	0.015
	(0.068)**	(0.097)
Not in labour force	0.313	0.273
	(0.052)***	(0.066)***
Unemployed	-0.039	0.003
	(0.100)	(0.077)
Cohabitation	-0.508	-0.023
	(0.098)***	(0.095)
Child in household	-0.018	0.233
	(0.059)	(0.062)***
Single parent family	-0.199	-0.022
	(0.144)	(0.158)
Child data missing	-0.532	-1.030
	(0.063)***	(0.082)***
HH income level	-0.080	-0.064
	(0.009)***	(0.010)***
HH income missing	0.206	-0.263
	(0.044)***	(0.060)***
Low social class	-0.067	0.595
	(0.045)	(0.048)***
Class data missing	-0.541	-0.066
	(0.049)***	(0.088)
Highly religious	0.788	0.596
	(0.048)***	(0.068)***
Constant	-1.761	-0.329
	(0.108)***	(0.134)**
Observations	20145	10087
Pseudo R-squared	0.15	0.09
log-lklhd	-9729.87	-6310.19

Note: this table gives the parameter estimates on that decomposition results presented in Table 10 are based on. OECD countries are Austria, Australia, Denmark, Italy, Ireland, Japan, New Zealand, the Netherlands,

Norway, Portugal, Spain, Sweden, Switzerland, USA and West-Germany. CEE countries are Bulgaria, Czech Republic, East-Germany, Hungary, Latvia, Poland, Russia, Slovakia and Slovenia. Source: ISSP 1998, author's calculations. Note: standard errors in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A7: Slopes of agreement by age group in respective countries (Model 1, Section 6)

	β_1 (slope)	s.e.	β_0 Const	s.e.
Slovenia	4.48	0.42	4.42	2.78
Hungary	3.88	0.45	23.46	3.43
Poland	3.79	0.43	38.75	2.98
Slovakia	2.98	0.44	41.55	2.41
Czech Republic	2.44	0.42	28.18	2.84
Germany East	2.22	0.44	19.04	3.21
Latvia	2.04	0.45	47.84	2.75
Bulgaria	0.84	0.43	60.91	3.04
Russia	0.84	0.36	65.89	2.23
OECD	3.97	0.09	3.46	0.59

Note: this table gives regression results of Model (1), Section 6. Results are ordered by the increase of traditional values with older age groups (slope) and can be interpreted as follows: in OECD countries agreement with patriarchal attitudes increases for about 4 percent with each older age group/birth cohort (that comprises 5 years).

Figure A1: Agreement with traditional gender roles by age group and country

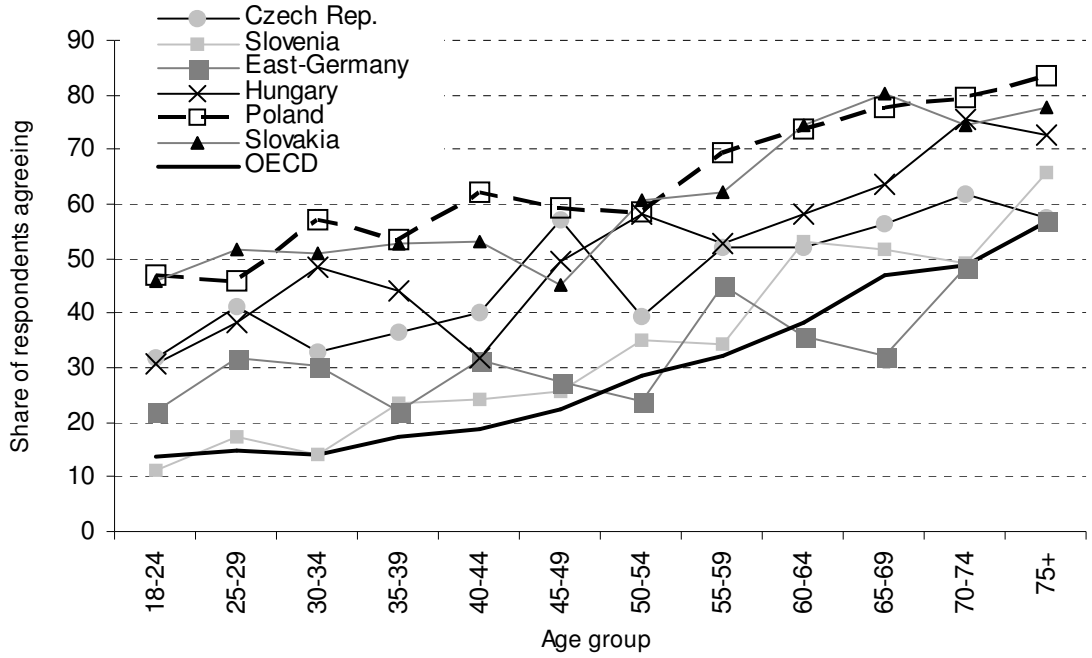
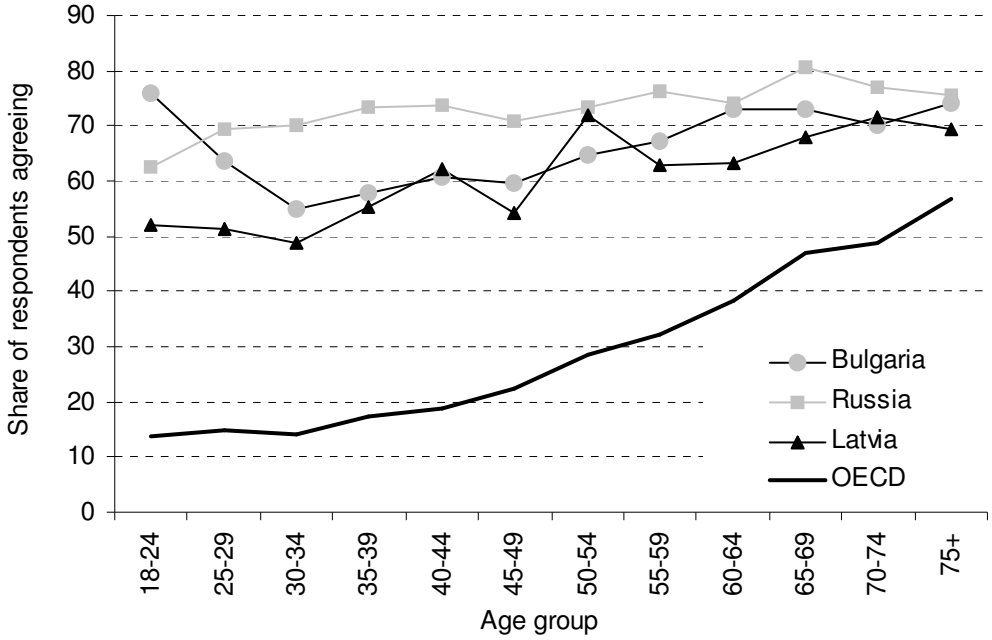


Figure A2: Agreement with traditional gender roles by age group and country



Source: ISSP 1998
Note: OECD refers to unweighted average.

Table A8: Agreement with gender stereotypes over time, remainder of regression results given in Table 11

	(1)	(2)	(3)	(4)
Female	0.468	0.458	0.467	0.458
	(0.020)***	(0.020)***	(0.020)***	(0.020)***
Age	-0.023	-0.025	-0.023	-0.025
	(0.001)***	(0.001)***	(0.001)***	(0.001)***
Divorced/separated	-0.140	-0.070	-0.139	-0.074
	(0.044)***	(0.044)	(0.044)***	(0.044)*
Widow	-0.357	-0.260	-0.355	-0.262
	(0.048)***	(0.048)***	(0.048)***	(0.048)***
Married	-0.229	-0.183	-0.228	-0.186
	(0.032)***	(0.032)***	(0.032)***	(0.032)***
HH size	-0.098	-0.090	-0.098	-0.090
	(0.008)***	(0.008)***	(0.008)***	(0.008)***
HH size missing	-0.083	-0.174	-0.082	-0.175
	(0.042)**	(0.042)***	(0.042)**	(0.042)***
Secondary edu.	0.399	0.406	0.399	0.407
	(0.023)***	(0.023)***	(0.023)***	(0.024)***
Tertiary edu.	0.974	1.012	0.973	1.011
	(0.030)***	(0.030)***	(0.030)***	(0.030)***
Retired	-0.184	-0.216	-0.185	-0.218
	(0.032)***	(0.032)***	(0.032)***	(0.032)***
Part-time employed	0.005	-0.010	0.006	-0.010
	(0.034)	(0.034)	(0.034)	(0.034)
Not in labour force	-0.390	-0.347	-0.387	-0.347
	(0.028)***	(0.028)***	(0.028)***	(0.028)***
Unemployed	-0.031	-0.159	-0.028	-0.160
	(0.042)	(0.042)***	(0.042)	(0.042)***
Cohabitation	0.337	0.294	0.335	0.301
	(0.032)***	(0.032)***	(0.032)***	(0.033)***
Child in HH	-0.012	-0.021	-0.012	-0.019
	(0.031)	(0.031)	(0.031)	(0.031)
Single parent	0.239	0.184	0.239	0.185
	(0.078)***	(0.078)**	(0.078)***	(0.078)**
Child missing	0.388	0.393	0.386	0.393
	(0.028)***	(0.028)***	(0.028)***	(0.028)***
HH income level	0.073	0.065	0.073	0.065
	(0.004)***	(0.004)***	(0.004)***	(0.004)***
HH income miss	-0.017	-0.002	-0.019	-0.001
	(0.024)	(0.024)	(0.024)	(0.024)
Low social class	-0.063	-0.074	-0.063	-0.075
	(0.022)***	(0.022)***	(0.022)***	(0.022)***
Class missing	0.207	0.137	0.203	0.143
	(0.026)***	(0.026)***	(0.026)***	(0.026)***
Highly religious	-0.141	-0.110	-0.143	-0.109
	(0.024)***	(0.024)***	(0.024)***	(0.024)***

Source: ISSP 1998 and 1994. Note: standard errors in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%

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