# On the Compatibility of Islam and Gender Equality

Effects of Modernization, State Islamization, and Democracy on Women's Labor Market Participation in 45 Muslim Countries

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Abstract Although the Muslim world is sometimes depicted as a homogeneous civilization lacking democracy and gender equality, Muslim countries show tremendous economic, political and cultural variation. In this paper, this variation is used to gain insight into the determinants of women's labor market participation (LMP) in the Muslim world. We use data on 45 Muslim countries and apply SEM models to determine effects of modernization, democracy, cultural background, and state Islamization on women's participation in the formal economy (absolute LMP) and on the share of women in the labor force (relative LMP). Women's absolute LMP is higher in Muslim countries with higher levels of economic development and in the oil-exporting countries. For women's relative LMP, practical democracy (the degree to which people actively participate in the system) takes in a key position. It has a strong positive effect on women's relative LMP and mediates the effects of economic development (positive), formal democratic structures (positive) and state Islamization (negative) on women's relative LMP. Results indicate that in these countries modernization may lead to empowerment of women by increasing their absolute LMP, but that for attaining gender equality the political opportunity structures is most important.

**Keywords** Democracy · Islam · Women's labor market participation · Modernization

#### 1 Introduction

After 9/11 we have witnessed a resurgence of Islam as a central issue in the media and scientific literature. The scientific discussions that enfolded cover a wide spectrum of topics (Hilsdon and

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Rozario 2006), such as Islamic family law (Moors 2004), integration of Muslims in Western societies (Ketner et al. 2004), economic activity of women in Muslim countries (Gundüz-Hoşgor and Smits 2008; Jansen 2004), the Islamic electoral gap (Stepan and Robertson 2003), female circumcision (Johnsdotter 2003), Arab Feminism (Ghorashi 1996) and Islamic democracy (Abou el Fadl 2004). Despite the divergence among these studies, they make clear that democracy and gender equality are at the core of the debate about Islam.

One of the most influential papers on the relationships between democracy and Islam is Samuel P. Huntington's 'Clash of Civilizations', in which Huntington (1993, p. 40) argued that "Western concepts differ fundamentally from those prevalent in other civilizations. Western ideas of ... democracy ... have little resonance in Islam". Huntington's arguments, though crude generalizations, have been widely cited, especially after 9/11. However, when empirically tested by Norris and Inglehart (2002), the argument turned out to be erroneous. Norris and Inglehart found that democratic values are supported more or less the same in Muslim and Western countries, whereas values regarding gender equality and sexual liberalization differ widely. This led them to the conclusion that Huntington was mistaken and that the core clash between the West and Islam concerns gender equality (Norris and Inglehart 2002; Inglehart and Norris 2003).

Both Huntington and Norris and Inglehart seem to consider the Islamic and Western civilizations as more or less homogeneous blocks. However, when we compare countries within the Muslim world with regard to an important indicator of gender equality, women's labor market participation (LMP), Huntington's and Norris and Inglehart's position seems untenable. Figures on women's total LMP for 2000 reported by ILO (2006) range from 19.2% in Oman, through 41.4% in Morocco, 55.2% in Indonesia, and 62.3% in Uzbekistan respectively, to 77.3% in Guinea. If the Muslim civilization is characterized by an absence of gender equality, how can labor market participation of women show such a wide variation among these countries? Similar variation can be seen for democracy: from autocratic rule by royal family dynasties (e.g. Saudi Arabia, Jordan) to almost full flown parliamentary democracies (e.g. Turkey, Bangladesh).

In this paper, we study women's LMP from a modernization and a gender equality perspective, starting from the ideas formulated by Inglehart and Norris when comparing the West to the Muslim world. Using the variation in economic, political and cultural characteristics among 45 Muslim countries, we show that modernization alone cannot account for all difference among these countries in the number of women in the labor market, or the gender ratio of the labor force. Whereas modernization theory would predict the same level of women's LMP in all (Muslim and non-Muslim) countries at the same level of development, empirics show otherwise. Women's formal LMP in Egypt is double that of Algeria, and in Libya is double that of Egypt, while the GDP per capita is about the same in each of these countries. Another example, Guinea-Bissau and Mali have roughly the same GDP/c, but women's formal LMP is four times higher in Mali. In order to explain the variation in women's LMP and understand the effects of modernization within the Muslim world, we extent Inglehart's theoretical framework by incorporating ideas from the gender and development literature introducing state Islamization and democracy as additional explanatory factors. We show that the degree to which orthodox Islam is integrated into the state structure, and the level of democracy are important in explaining gender equality in the labor market. In addition, cultural and social heritage and the presence of oil resources turn out to be important in explaining various aspects of women's LMP.

<sup>&</sup>lt;sup>1</sup> See Appendix A.



In the next sections, we develop the building blocks of our theoretical framework on the interrelationships among modernization, state Islamization, democracy and culture and their effects on both forms of women's LMP. The theoretical ideas are brought together into a structural equations model, which is subsequently tested on the basis of data for 45 Muslim countries.

# 2 Islam, Democracy, Women and Modernization

# 2.1 Inglehart's Modernization Theory

According to Inglehart's modernization theory (Inglehart 1997; Inglehart and Baker 2000; Inglehart and Norris 2003), economic development influences the value systems of people in the direction of democracy and gender equality. Inglehart argues that this development has two distinctive phases. In the first phase of modernization (called *industrialization*) there is a cultural shift from traditional to secular-rational values, due to occupational specialization, growing organizational complexity, and rising educational levels. This modernization brings women into the (non-agricultural) labor market. Furthermore, the public becomes more articulated and occupations more often require people to think for themselves, as a result of which political participation increases.

The second phase (called *postmodernization*) encompasses a cultural shift from survival to self-expression values, due to the existential security of generations growing up in modern industrialized welfare states. In post-modern societies, gender and sexual roles tend to loosen and the public is less easily led by authoritarian forces. Improvements in women's position lead to increased gender equality and, while the first phase of economic development could lead to both democratic and authoritarian regimes, postmodernization is conducive only to democracy. With regard to Muslim countries, Inglehart and Norris (2003) and Norris and Inglehart (2004) argue that these countries are all still in the first phase. Therefore women's relation to the labor market would still be the most important aspect of gender equality there. Thus an increase of economic development within the Muslim world is expected to influence women's LMP positively.

There are however exceptions to the rule. According to Inglehart (1997) and others, countries with a substantial oil-production, such as Libya and Saudi Arabia, take in an exceptional position. Consequently, these countries are regularly expelled from the analyses (e.g. Lenski and Nolan 1984; Wickrama and Mulford 1996). We think this is regrettable; several of these oil-exporting countries are at the heart of the Muslim world. Moreover, if economic development based on oil export is not conductive to gender equality, as Inglehart (1997, p. 161) suggests, then it must be possible to empirically substantive this idea by including these countries in the analysis.

In line with Inglehart's approach, we focus on women's LMP in the formal economy. Women's formal LMP fosters their participation in society and "creates a new social and political constituency—women—empowered to question the bases of both patriarchal gender relations and the political-economic order" (Moghadam 1998, 2007). We do not focus on women's informal LMP, which in these countries mostly consists of agricultural work at the family farm, marketing of agricultural products, or—in the urban areas—of domestic work or some kind of home production (Chen et al. 1999; World Bank 2004). Although we acknowledge the importance of these activities for women's economic position within the household, we stress, with others, that the empowerment and economic independence derived from a job in the formal economy is generally higher (World Bank



2004). Hence, in this paper women's LMP denotes women's formal labor activities in the non-agricultural economy. Besides the degree to which women in Muslim societies are active in the formal economy, we will also study the percentage of women active in the formal labor market compared to the percentage of men (called women's *relative* LMP henceforth). Whereas women's absolute LMP reflects the proportion of women that gained (some) economic independence or economic power and fits the idea of women entering the labor market during the first phase of economic development, women's relative LMP is a better indicator of gender equality at the labor market. Inglehart and Norris (2003; Norris and Inglehart 2004) therefore would predict women's relative LMP to be promoted more strongly in the second phase of the modernization process, which has not yet started in the Muslim world.

# 2.2 Cultural and Social Heritage

A disadvantage of Inglehart's and other so-called 'liberal' modernization theories is their focus on the economic domain and their neglect of social, historical and cultural factors (e.g. Jahan 1995). In the later version of Inglehart's theory, the problem of neglecting cultural traits has been recognized and has led to a 'cultural modification' of the theory: "Economic development tends to push societies in a common direction, but rather than converging, they seem to move on parallel trajectories shaped by their cultural heritage" (Inglehart and Baker 2000, p. 49). For our comparison of Muslim countries, this cultural-heritage issue is highly relevant, because the 'Muslim world', which ranges from Dakar to Jakarta, consists of culturally very diverse countries, and not just one cultural bloc. We address the diversity to a certain extent by dividing the Muslim world into four regions according to their historic-cultural background: the Middle Eastern region, the Sub-Saharan region, the former Soviet region, and the Southeastern Asian region.

The Middle Eastern region consists of the countries with a strongly Arab influenced cultural heritage, often called the MENA region. It is these Arab countries—in which Islam originates and rapidly spread in its early years—that are generally meant when in the popular media is spoken about the "Islamic world". Given the deep rootedness of Islam in the history of these countries, a possible negative effect on women's position and democracy can be expected here as well as a positive effect on state Islamization (Donno and Russett 2004; Stepan and Robertson 2003). Or as stated in the first Arab Human Development Report: "[T]he predominant characteristic of Arab reality today seems to be the existence of deeply rooted shortcomings that stand as obstacles to building human development (...) the three deficits of freedom, women's empowerment and knowledge." (UNDP RBAS 2003, p. 18). Our expectation is therefore that both forms of LMP are lowest in this region.

The second region distinguished in this study consists of the Muslim countries in Sub-Saharan Africa, which are characterized by a horticultural background (Lenski and Nolan 1984). Because food cultivation in these societies was generally women's work, women contributed more to subsistence activities than in agricultural societies. As a result, the position of women is stronger in these societies and gender inequality tends to be lower (Bullock 1994; Jaquette 1982; Lenski and Nolan 1984). Taking the level of economic development into account, we could expect that in these countries both women's absolute and relative LMP is higher than in the Middle Eastern region.

The former Soviet countries, with their political history of Soviet-communism, are a third distinct group. These countries are characterized by the secularization and egalitarianism that were central to communist policies, which are associated with a break-down of religiously



based patriarchal family structures and with inclusion of the whole population in the labor force (Ro'I 2000; Tohidi 1996). It can be expected that in countries with such a historical background, many women will be active in the labor market (Tohidi 1996), both absolutely and relatively. In fact, we expect this region the have the highest levels of women's LMP.

The fourth region distinguished here consists of the South and Southeastern Asian Muslim countries. These countries share some cultural influences, like those of Buddhism, Hinduism and Confucianism. With regard to our cultural division it is clear that these countries constitute a distinct fourth region. *Nafakah*, as a concept of financial support, takes a central place in Islamic Southeast Asia regarding women and work, according to Fealy and Hooker (2006). Whereas these authors stress that in this region especially the attitude towards women's work is shaped by the idea that the husband should provide for his family, they do no make a comparison to other regions' attitudes. We assume that historical and cultural traits are distinguished for this fourth region, however we don't have clear expectations of its LMP-levels.

# 2.3 State Islamization and Democracy

Liberal approaches to development (like Inglehart's modernization theory) expect that gender relations will change more or less automatically when women gain full participation. However, others say that it is necessary that women get better access to critical resources before patriarchal structures are undermined and gender equality can be attained (i.e. Rathgeber 1990; Jaquette 1982; Kandiyoti 1991; Moghadam 1998, 2007). These resources may be embedded in the political opportunity structure of these societies. We will focus on two different aspects of this opportunity structure: The incorporation of Islam in the state (called 'State islamization') and the degree of Democracy (at the level of formal rules and at the level of practices).

Both Huntington and Inglehart and Norris emphasize the importance of Islam in influencing societal values. Whereas we reject their use of crude generalizations and envisage religion as a continuum, there are reasons to expect that positions taken within Islam can have negative effects on the position of women. With regard to political opportunity structures, it seems important which ideas of Islam are codified in these structures. The political orthodox ideology with strong patriarchal views on society is often the same as that which propagates to establish an Islamic state. Consequently, the incorporation of Islam into the framework of a country might mean that patriarchal ideas are institutionalized and may frame state actions, laws and practices. This might limit the opportunities of women. We test whether such an embeddedness of (orthodox) Islam in the state is associated with lower LMP of women.

Besides the influence of state Islamization, we address the role of democracy as a condition facilitating the application of (women's) agency (i.e. Wickrama and Mulford 1996). According to Kandiyoti (1991), democracy is an important institution that unleashes women's labor market potential. Democracy opens up the decision-making process to the less privileged, resulting in redistributive policies benefiting these groups. In the case of the subordination of an entire gender, democracy could reduce gender inequality (Huber et al. 1997). We distinguish two dimension of democracy (cf. Huber et al. 1997). Formal democracy is the political structure that gives people the possibility to influence policies. It includes subdimensions such as regular and open electoral competition and the rule of law and enables women to exercise their right to vote or be voted on. Practical democracy on the other hand, indicates how participation is implemented in practice; whether people



really participate in high and equal levels. A formal framework is not sufficient for an equal distribution of influence over the people; it is necessary that the people really participate, that there are possibilities to deliberate and that different styles and channels of communication are available. Practical democracy is expected to be especially important in changing gender structures, since it focuses on fair and equal participation, and thus makes it possible for women to apply their agency effectively in the political system (i.e. Othman 2006).

Since we do not expect orthodox Islamic views to support democracy, state Islamization is expected to influence democracy negatively. If this is true, then state Islamization might influence the position of women in society not only directly, but also indirectly via a negative effect on the development of democratic structures that give women the possibility to change the "rules of the game".

#### 2.4 The Model

The theoretical ideas developed in the preceding sections about the relationships between economic development, state Islamization, cultural heritage, democracy and (the two forms of) women's LMP are displayed schematically in Fig. 1. On the left-hand side of the figure, regional cultural heritage and oil endowment are placed. Region addresses the variation in history and culture of the different region of the Muslim world. Oil endowment is expected to have a positive effect on economic development, because of oil-based economic growth. It is expected to have a negative effect on democracy, because the government is less dependent on taxpayers and can satisfy the population with wealth instead of democratic rights or has the means to suppress the people (Fish 2002; Friedman 2006; Ross 2001). Because of the lack of pressure on leaders in oil-exporting countries to change their conservative ideas, the level of state Islamization probably will also be higher in these countries.

The two dimensions of democracy, formal and practical, take a central position in the model. They are expected to be affected positively by modernization and negatively by state Islamization and also to vary among regions. Because formal democracy opens possibilities to practical democracy (e.g. elections create the opportunity to participate), the

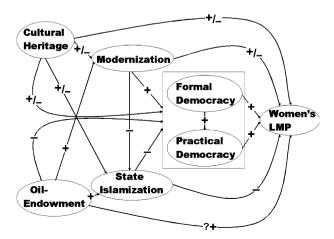


Fig. 1 Theoretical model explaining women's LMP



level of practical democracy is positively influenced by the level of formal democracy. At the right side of the model, we see the outcome variable, women's LMP (in either its absolute or its relative version), which is supposed to be influenced by all preceding factors. The effects of modernization and democracy are expected to be positive and the effect of state Islamization negative. Moreover, we expect stronger effects on women's relative LMP of practical democracy and state Islamization than of formal democracy, because formal democracy taps less into gender equality than the other two.

## 3 Data and Methods

#### 3.1 Data and Variables

The data used in this study cover 45 Muslim countries, which were defined as countries where (1) in 2000 Islam was the religion with a plurality of adherents and which (2) defined themselves as being Islamic by being a member of the Organization of Islamic Conferences over the period 1996–2000 (OIC 2005). This definition is largely congruent with the ones used by Huntington (1996) and Norris and Inglehart (2004). Of the 47 countries that fulfilled both criteria, Djibouti and Somalia were left out because of missing information on the dependent variable and the absence of a formal government respectively.

Figures on *women's LMP* were derived from ILO's LABORSTA Yearly Data and EA-PEP 4 databases (ILO 2005) for women aged 15 and over. To obtain women's formal non-agricultural LMP, we used information on the number of women working in the non-agricultural sector in 2000 from the LABORSTA Yearly Data database. In a number of cases, the information for the year 2000 was missing. In those cases we used the available figures in the Yearly Data database for other years or the EAPEP 4 database to estimate the 2000 figures. To compute *women's relative LMP*, we computed men's LMP in the same way as described above for women and then applied the following formula: Women's relative LMP = 100\*(women's absolute LMP/men's absolute LMP). The figures include immigrant workers, which in oil-exporting countries constitute a substantial part of the labor force.

Economic development is measured by the (natural logarithm of) GDP per capita for 1997. GDP/c was derived from Maddison (2003) and for Brunei Darussalam from the CIA (2005). For *Oil Endowment* we created a dummy variable indicating whether the country had oil-export revenues of 30% or more of the country's GDP in 1996. Data were derived from the OPEC (2003) and the CIA (2005).

Historical-cultural background or *Cultural Heritage* was measured by dividing the group of countries in four categories: the Greater Middle East. Sub-Saharan Africa, former Soviet and Southeastern Asia (exact classifications are presented in Appendix A).

To measure *state Islamization*, we have developed a new scale by performing a content analysis of the 1996/1997 constitutions of all involved countries. The following progressive seven point scoring system was used: (0) Secular countries; (1) Islam is mentioned as a historical part of the country; (2) Islamic state religion, with guarantee of freedom of religion; and subsequently, one point was added for the mentioning of each of the following four items: the country is called an 'Islamic state', only Muslims can become head of state, the *shari'a* is the foundation for other laws, religious freedom is not guaranteed.

To measure *Formal Democracy*, the averages of the standardized values of the Freedom House Political Rights (2002) and the Polity IV democracy (2005) indices were taken for the year 1996/1997. For Brunei Darussalam, Lebanon, the Maldives and Sierra Leone no valid Polity IV scores were available. For Sierra Leone we could take the mean of the



preceding and following year. For the other three, we used the average Polity IV score of the countries in our dataset with the same Freedom House score as the country for which the Polity IV-score was missing.

The level of *Practical Democracy* encompasses the concepts of participation, deliberation, human rights, and diversity in communication. To measure this, we combined (the standardized values of) the Freedom House Civil Liberty index (2002)<sup>2</sup> with the IPU (1997) percentage of women in parliament, and the 1997 IDEA turnout figures (2005). The representation and turnout figures were used to include the idea of participation, which was missing in the Freedom House score. For turnout we used the average of the presidential and parliamentary elections in the year 1997, but when there were no elections in that year the average is taken of the surrounding years. If a country did not hold elections in the nineties (which often indicates that no elections were held at all), that country scored zero on turnout. Regarding women in parliament, for Nigeria the 1999 figure is taken and for Oman we had to make use of an additional source (US DoS 2000).

# 3.2 Methods

First, we show some descriptive information for the main factors included in this study. Next, bivariate relationships are analyzed. Then, we estimate structural equations models (SEM) to identify the direct and indirect effects of the explanatory variables, while controlling for the effects of the other variables (Mueller 1996). In the last part of the empirical section, the SEM analysis is repeated for the Greater Middle Eastern countries—or 'classic Muslim region'—to gain more insight into the generalizability of our findings.

To test for outliers and multicollinearity we used bi- and multivariate regressions analyses in SPSS, partial plots and Cook's distance. The bivariate analyses did not indicate multicollinearity, with all correlations far below .9 (De Vocht 2000), nor did the multivariate analyses in SPSS lead to substantially different results. However, Guinea-Bissau had to be removed as an outlier in the analysis of women's relative LMP for all countries. In the Greater Middle East-analysis, Mauritania was removed as an outlier. Compared to the level of relative LMP, Guinea-Bissau and Mauritania had a very high and very low level of practical democracy respectively.

Because of the restricted number of countries, several SEM models were tested and only variables with significant coefficients were included in the final models. Furthermore, we repeated the analyses bootstrapped, which did not affect the results in this paper in any important way.

## 4 Results

# 4.1 Descriptives

The distribution of the variables used in this study across the four regions of the Muslim world is presented in Table 1 and the figures for separate countries are presented in Appendix A. Table 1 shows that the average level of women's absolute LMP is quite low

<sup>&</sup>lt;sup>2</sup> One of the 15 items used in the FH CL index one states: 'Are there personal social freedoms, including gender equality, choice of marriage partners, and size of family?' (Freedom House 2002). This could lead to endogeneity. However, this is only a very small part of the total practical democracy index and furthermore, it does not directly measure women's LMP and practical democracy should, following our conceptualization, encompass equal participation in the decision-making process and the adherence to human rights.



|                           | Women's LMP       |                      | GDP per                                      | State<br>Islamization | Formal                 | Practical              |  |
|---------------------------|-------------------|----------------------|--|-----------------------|------------------------|------------------------|--|
|                           | Absolute 2000 (%) | Relative<br>2000 (%) | capita 1997 Islamization<br>(US\$) 1996–1997 |                       | democracy<br>1996–1997 | democracy<br>1996–1997 |  |
| Southeastern<br>Asia      | 38.3              | 63.4                 | 7,237  | 2.75                  | 14                     | .28                    |  |
| Greater<br>Middle<br>East | 17.3              | 27.7                 | 4,470  | 3.74                  | 13                     | 48                     |  |
| Former<br>Soviet          | 32.5              | 75.3                 | 2,357  | .00                   | 10                     | .50                    |  |
| Sub-Saharan<br>Africa     | 9.3               | 36.0                 | 758  | .36                   | .38                    | .38                    |  |
| Overall mean              | 19.6              | 40.3                 | 3,480  | 2.24                  | .00                    | .00                    |  |
| Overall range             | 50.3              | 77.6                 | 15,379                                       | 6                     | 3.41                   | 2.67                   |  |

**Table 1** Means per region and overall means and ranges

with 19.6%. However, there is substantial variation among the four regions. In South-eastern Asia, absolute LMP is twice the average, whereas in Sub-Saharan Africa it is only half. The range of 50.3% points shows that within the region much variation exist as well.

Women's relative LMP—which indicates the degree of gender (in)equality at the labor market—is highest in the former Soviet countries and also relatively high in the Southeastern Asian countries. In the former Soviet Kazakhstan, Kyrgyzstan and Uzbekistan, the gender ratio is even over 80% (Appendix A). These countries are, however, an exception, because in only 16 of the 45 countries women's LMP reaches over 50% of men's. In the Greater Middle East, women's relative LMP is only 28%. In Sub-Saharan Africa, this percentage is somewhat higher with 36%. The overall average is 40%, with a range of 78% points.

With regard to the indicator of modernization, many of the Sub-Saharan countries have a *GDP/c* below 1,000 US\$, whereas seventeen Middle Eastern states have a GDP/c that is at least twice as high (ranging to over 10,000 US\$ in some oil states). Overall, the Southeastern Asian countries are richest (mainly due to the wealth in Brunei Darussalam) and the Sub-Saharan countries are poorest. The average GDP/c is 3,480 US\$.

As could be expected, the Greater Middle Eastern countries have clearly the highest level of *state Islamization*. In this region full-fledged Islamic states are found around the Persian Gulf and rather strong Islamic states along the Mediterranean. In the former Soviet countries, orthodox Islam is not at all embedded in the state's structure, as is the case for most of the Sub-Saharan countries and Turkey. With regard to *formal democracy*, the average of the Sub-Saharan African countries is clearly higher than that of the three other regions, which have about the same level. Appendix A shows furthermore that formal democracy is low in all oil-exporting countries, most of which lack female enfranchisement or have not organized elections at all. Some countries with high levels of formal democracy can be found in all regions. The average level of *practical democracy* was highest in the former Soviet countries in 1996/1997, with the figure for Azerbaijan being highest of all Muslim countries studied. Practical democracy was lowest in the Greater Middle East. Characteristics of the countries with a high level of practical democracy were, for example, female parliamentary participation rates of 12% for Mali and 13% for Kazakhstan,<sup>3</sup> and high voter turnout in Indonesia.

<sup>&</sup>lt;sup>3</sup> As a comparison: Belgium, France, Italy, Liechtenstein, Malta, Monaco, San Marino, the United Kingdom, and the United States of America score below this.



## 4.2 Bivariate Associations

Table 2 presents the relevant bivariate associations between the variables in our model, based on Pearson correlations, *T*-tests (for the oil-dummy), and OLS regression models with the regional dummies. In line with expectations, GDP/c is positively related to women's absolute LMP. Thus, in more wealthy Muslim countries, more women were engaged in economic activities. However, the correlation between economic development and women's relative LMP is not significant. This suggests that modernization in these countries did not lead to more gender equality (directly).

Neither State Islamization, nor practical democracy is significantly related to women's absolute LMP. However, practical democracy does show a significantly positive relationship with women's relative LMP and State Islamization a significantly negative one. Hence, the way democracy worked in practice seems to be relevant for gender equality in the Muslim world and State Islamization seems to have been related negatively to gender equality. Rather surprisingly, the relationship of formal democracy with women's absolute LMP is significantly negative. So, in more formal democratic Muslim countries, women

**Table 2** Correlations between the explanatory variables and two types of women's labor market participations for 45 countries

|   | Women's<br>absolute<br>LMP 2000 | Women's<br>relative<br>LMP 2000 | Economic<br>development<br>1997 | State<br>Islamization<br>1996–1997 | Formal<br>democracy<br>1996–1997 | Practical<br>democracy<br>1996–1997 |
|---|---------------------------------|---------------------------------|---------------------------------|------------------------------------|----------------------------------|-------------------------------------|
| Pearson correlations                        | S                               |                                 |                                 |                                    |                                  |                                     |
| Economic<br>development<br>1997             | .532***                         | ns                              |                                 |                                    |                                  |                                     |
| State<br>Islamization<br>1996–1997          | ns                              | 399**                           | .494**                          |                                    |                                  |                                     |
| Formal<br>democracy<br>1996–1997            | 347*                            | ns                              | ns                              | ns                                 |                                  |                                     |
| Practical<br>democracy<br>1996–1997         | ns                              | .356*                           | ns                              | 698***                             | .567***                          |                                     |
| T-test                                      |                                 |                                 |                                 |                                    |                                  |                                     |
| Oil dummy<br>1996 (oil<br>minus<br>non-oil) | 15.11**                         | ns                              | 1.35**                          | 2.47***                            | 96***                            | 96***                               |
| Multivariate regress                        | ion with region                 | n dummies                       |                                 |                                    |                                  |                                     |
| Southeastern<br>Asia                        | 13.917**                        | 12.800*                         | .849**                          | 1.037*                             | 143 ns                           | .088 ns                             |
| Greater<br>Middle East                      | -7.061**                        | -22.928***                      | .346 ns                         | 2.026***                           | 128 ns                           | 580***                              |
| Former Soviet                               | 8.161*                          | 24.703***                       | 050 ns                          | -1.713***                          | 102 ns                           | .307 ns                             |
| Sub-Saharan<br>Africa                       | -15.017***                      | -14.575***                      | -1.144***                       | -1.350***                          | .374 ns                          | .184 ns                             |

<sup>\*\*\*</sup> p < .001; \*\* p < .01; \* p < .05; ns, not significant



worked less instead of more in the formal non-agricultural economy. The effect of formal democracy on women's *relative* LMP is not significant.

In the oil-exporting countries, women's absolute LMP is significantly higher than in the other countries. On the other hand, oil export had no effect on women's relative LMP, but, as was expected, the level of both forms of democracy was lower in these countries, whereas State Islamization was increased there. There is also substantial variation among the four regions with regard to most of the variables. The levels of both forms of women's LMP are significantly higher than average in the former Soviet and Southeastern Asian countries and lower than average in the Greater Middle East and Sub-Saharan Africa. We further see that the Sub-Saharan region is least economically developed and has the second lowest level of State Islamization after the former Soviet countries. Together with Southeastern Asia, the Greater Middle East has the highest level of State Islamization. Also, practical democracy levels in the Greater Middle East are below those of the other regions.

Surprisingly, the correlation between economic development and State Islamization is positive and between economic development and formal democracy a negative relationship is found. This suggests that more economically developed Muslim countries were less democratic and their states were more Islamized.

## 4.3 Multivariate Analyses

In the preceding section we identified several interesting bivariate associations. However, these analyses do not show which factors are most important, to what extent the relationships hold when other factors are considered, and whether indirect paths exist. To answer these questions we now turn to multivariate SEM analyses in which the relationships among the independent variables and between the independent and dependent variables are studied simultaneously. These SEM analyses were carried out separately for the two forms of women's LMP. The results of these analyses are presented in Table 3, and Figs. 2 and 3.

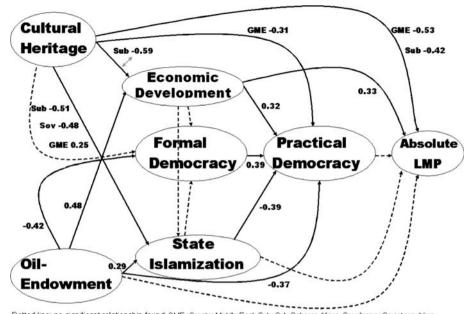
 Table 3
 Direct, indirect and total effects on women's labor market participation

|                               | Women's labor market participation 2000 |          |          |       |                       |    |          |       |  |  |
|-------------------------------|---|----------|----------|-------|-----------------------|----|----------|-------|--|--|
|                               | Abso                                    | Absolute |          |       | Relative <sup>a</sup> |    |          |       |  |  |
|                               | Dire                                    | ct       | Indirect | Total | Direc                 | t  | Indirect | Total |  |  |
| GDP per capita 1997           | .331                                    |          | _        | .331  | _                     |    | .083     | .083  |  |  |
| Oil exporting 1996            | _                                       |          | .157     | .157  | .376                  |    | 122      | .254  |  |  |
| Southeastern Asia             | Ref                                     |          | Ref      | Ref   | Ref                   |    | Ref      | Ref   |  |  |
| Greater Middle East           | 52                                      | 27       | _        | 527   | 610                   | 5  | 100      | 716   |  |  |
| Former Soviet                 | _                                       |          | _        | _     | .230                  |    | .047     | .277  |  |  |
| Sub-Saharan Africa            | 42                                      | 20       | 195      | 615   | 37                    | 1  | .000     | 371   |  |  |
| State Islamization 1996-1997  | _                                       |          | _        | _     | _                     |    | 098      | 098   |  |  |
| Formal democracy 1996-1997    | _                                       |          | _        | _     | _                     |    | .087     | .087  |  |  |
| Practical democracy 1996-1997 | _                                       |          | _        | _     | .246                  |    | _        | .246  |  |  |
|                               | n                                       | df       | $\chi^2$ | SMC   | n                     | df | $\chi^2$ | SMC   |  |  |
|                               | 45                                      | 21       | 84.618   | .728  | 44                    | 19 | 66.100   | .825  |  |  |

<sup>-</sup> = No significant effect, all mentioned coefficients are significant at p < .05; SMC = squared multiple correlation for women's LMP



<sup>&</sup>lt;sup>a</sup> Guinea-Bissau, being an outlier, was removed from the analyses



Dotted line: no significant relationship found, GME=Greater Middle East, Sub=Sub-Saharan Africa, Sov=former Soviet republics

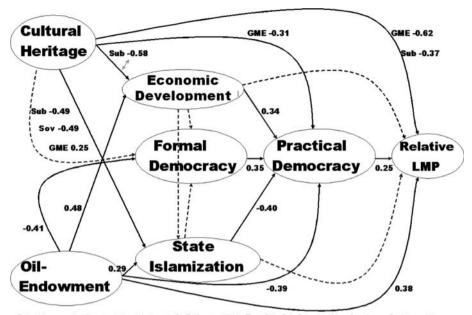
Fig. 2 Empirical model explaining women's absolute LMP

In explaining women's *absolute* LMP, we see in Table 3 that economic development and cultural heritage are both important. In line with modernization theory, higher levels of GDP per capita are associated with higher participation of women's in the labor market. The oil dummy has no significant direct effect on women's absolute LMP. However, as Fig. 2 shows, there is a significant effect of oil endowment on economic development and via this path also indirectly on women's absolute LMP. Regarding cultural heritage, in the Greater Middle East and Sub-Saharan Africa women's absolute LMP was significantly lower than in the other two regions. For Sub-Sahara Africa this effect was partly running via economic development.

Contrary to our expectations, state Islamization and the two dimension of democracy are not significantly related to women's absolute LMP. These results are in line with Inglehart's modernization theory, which predicts economic development and (after its "cultural modification") cultural heritage to be the major factors determining women's absolute LMP in countries like the Muslim ones, which are still in the first phase of the modernization process. Results indicate that the role of agency, practiced through formal and practical democracy, is less important in explaining women's absolute LMP. Also the idea that a strong incorporation of Islam in the state structure would negatively affect women's participation in the formal economy is not supported by our findings.

Besides the effects on women's absolute LMP, Table 3 shows a number of other interesting relationships (see also Figs. 2 and 3). We see that both State Islamization and economic development differed among the regions and between the oil exporting and the other countries. Economic development was lowest in the Sub-Saharan countries and State Islamization in the Sub-Saharan and the former Soviet countries. State Islamization is highest in the Greater Middle East. The oil exporting countries were more economically developed and had higher levels of State Islamization.





Dotted line: no significant relationship found, GME=Greater Middle East, Sub=Sub-Saharan Africa, Sov=former Soviet republics

Fig. 3 Empirical model explaining women's relative LMP

In the countries of the Greater Middle East and in the oil-exporting countries, practical democracy was significantly lower than elsewhere. In line with expectations, there is also a significant positive effect of formal democracy on practical democracy, and practical democracy is also fostered by economic development. However, the expected influences on formal democracy were hardly found. Only oil endowment is significantly related to formal democracy. Oil-exporting countries have significantly lower levels of formal democracy. Neither economic development nor State Islamization is related significantly to formal democracy.

Whereas for women's absolute LMP, practical democracy did not play a role of importance, in the model explaining women's *relative* LMP it takes in a very central position, mediating the effects of economic development, State Islamization and formal democracy. Muslim countries with higher levels of practical democracy had higher levels of women's relative LMP. Besides practical democracy, region and oil endowment are the only other variables with significant direct effects on women's relative LMP. Women's relative LMP was highest in the former Soviet countries and lowest in the Greater Middle East. Women's relative LMP is also significantly increased in the oil exporting countries compared to the other countries. Besides these direct effects, region and oil endowment also have substantial indirect effects, via their significant relationships with GDP/c, State Islamization and—for oil endowment—also with formal democracy.

Contrary to expectations, the effects of economic development and State Islamization on women's relative LMP were only indirect, via their effects on practical democracy. The level of practical democracy is significantly higher in countries with higher levels of GDP/c and it is significantly lower in countries with higher levels of State Islamization.



## 4.3.1 Greater Middle East

When the analyses are repeated for the Greater Middle Eastern countries, our major conclusions remain intact. Table 4 shows that the coefficients differ somewhat from those in Table 3, but they all have the same sign and the basic patterns are very similar. For women's absolute LMP only economic development and oil endowment are significantly related to it, whereas for women's relative LMP, practical democracy again plays a key role, as mediator of the effects of economic development, formal democracy and State Islamization.

The relationships among the other variables are also about the same as in the larger analysis. Economic development and formal democracy have significant positive effects on practical democracy and State Islamization and oil endowment has negative effects. Oil endowment also has a significant positive effect on economic development. The only small difference with the model for all countries is that within the Greater Middle Eastern region the positive effect of oil-endowment on State Islamization is now significant at the .1 level.

## 5 Conclusion and Discussion

We contribute to the discussion on the compatibility of Islam with gender equality and the role of modernization and democracy, by analyzing the relationships among economic, political and cultural characteristics of Muslim countries and the effects of these characteristics on women's LMP for almost the complete Muslim world. Women's LMP is measured in two ways: absolutely and relatively. The former indicates women's economic empowerment and is measured as women's participation in the formal non-agricultural economy. The latter can be seen as a measure for gender equality since it compares women's (absolute) LMP to men's.

To gain insight into the factors that affect these forms of women's LMP, we developed a theoretical model that uses indicators for the countries' degree of modernization, level of (formal and practical) democracy, degree of incorporation of Islam in the state structure, regional cultural heritage and the countries' dependency on the

| Table 4 | Women's LMP in the Greater Middle-East |
|---------|--|
|         | Waman'a lahan manka                    |

|                               | Women's labor market participation in the GME 2000 |         |                |                       |         |         |                |             |  |  |
|-------------------------------|--|---------|----------------|-----------------------|---------|---------|----------------|-------------|--|--|
|                               | Abso   |         |                | Relative <sup>a</sup> |         |         |                |             |  |  |
|                               | Direc  | et      | Indirect       | Total                 | Direc   | t       | Indirect       | Total       |  |  |
| Economic development 1997     | .437   |         | _              | .437                  | _       |         | .147           | .147        |  |  |
| Oil exporting 1996            | _  |         | .261           | .261                  | .888    |         | 175            | .714        |  |  |
| State Islamization 1996–1997  | _  |         | _              | _                     | _       |         | 132            | 132         |  |  |
| Formal democracy 1996-1997    | _  |         | _              | _                     |         |         | .207           | .207        |  |  |
| Practical democracy 1996-1997 | _  |         | _              | _                     | .375    |         | _              | .375        |  |  |
|                               | n<br>23  | df<br>1 | $\chi^2$ 5.937 | SMC<br>.191           | n<br>22 | df<br>7 | $\chi^2$ 7.060 | SMC<br>.619 |  |  |

<sup>-</sup> = No significant effect, all mentioned coefficients are significant at p < .05; SMC = squared multiple correlation for women's LMP

a Mauritania, being an outlier, was removed from the analyses



export of oil. The hypothesized relationship among these variables were tested using structural equation modeling, both for all 45 countries together and separately for only the 'core' group of Muslim countries, which together constitute the so-called Greater Middle East.

Contrary to expectations, no effect of state Islamization or democracy on women's absolute LMP was found. The only factors with significant direct effects on women's employment in the formal economy are the country's level of economic development and the (cultural heritage of the) region within the Muslim world to which the country belonged. The countries with higher levels of development have significantly higher levels of women's absolute LMP and the countries in the Greater Middle East and in Sub-Saharan Africa significantly lower levels than the other countries. Besides these direct effects, there are a few indirect effects, running via economic development. Oil exporting countries were more economically developed and had therefore higher levels of women's absolute LMP; the opposite was found for the Sub-Saharan countries. The fact that no effect of state Islamization on women's absolute LMP was found refutes the widely-spread idea that state Islamization is negatively related to women's economic independence or economic power. Our findings suggest that mainly economic factors (level of development and oil endowment), together with specific cultural patterns determine the possibilities of women to participate in the formal, non-agricultural economy. This result is largely in line with Inglehart's modernization theory, which supposes that women enter the labor market during the first phase of modernization.

The picture is very different for women's relative LMP. Whereas for explaining women's absolute LMP democracy played no role, for women's relative LMP the level of practical democracy in the country seems to be a key issue. Modernization and formal democracy have the expected positive effect on women's relative LMP and state Islamization has the expected negative effect. However, these effects run only indirectly through their influence on practical democracy. Also, oil endowment and cultural heritage influence women's relative LMP indirectly, partly through the practical democracy channel. However, these variables have direct effects on women's relative LMP as well. Women's relative LMP was lowest in the Greater Middle Eastern and Sub-Saharan countries, and highest in the former Soviet countries, which around 2000 probably still experienced the gender egalitarian influence of the communist ideology on the labor market. Women's relative LMP was also significantly higher in the oil exporting countries. Although indirect negative effects of oil through state Islamization and democracy partly reduced this effect, the total effect of oil endowment on women's relative LMP remains significantly positive. A likely explanation for this effect might be the high percentage of female immigrant workers in the service sectors of these countries.

The central role played by practical democracy in explaining women's relative LMP points to the importance of the political opportunity structure for reaching gender equality. Although the total effects of region and oil endowment seem stronger than those of the policy variables, political factors are more open to change than the cultural heritage of the region in which one lives or the presence of oil. In politics, women are not only treated as objects but also as subjects, and the political system offers women (as agents) a way to make a difference by facilitating them to take action. Our results indicate that this is especially the case with practical democracy, or the way in which the democratic structure is implemented. However, practical democracy is partly rooted in formal democracy in structures, as the significant positive effect of formal democracy on practical democracy in



our data shows. Yet, for attaining gender equality on the labor market the most important aspects of democracy seem to be civil liberties, actual participation of the population in elections, and women's representation in politics.

Besides formal democracy, also modernization and state Islamization seem significant in explaining the variation in practical democracy among the countries. Hence, the conclusion of Norris and Inglehart that modernization may lead to political participation and democracy already in the first phase of the modernization process (in which the Muslim countries still are) finds some support in our analyses. However, their crude generalizations and conclusions about the Muslim world as a whole are, just as the conclusions of Huntington, clearly not supported by our results. Among Muslim countries there is huge variation in all indicators studied in this paper. Women's absolute LMP varied between 2% and over 50% and women's relative LMP between 8% and over 80%. Also with regard to modernization, democracy, and state Islamization such large disparities were found, indicating that these variables should be treated as continuums instead of dichotomies. An important conclusion of this paper is therefore that the Muslim world as such does not exist, and that this misleading notion hinders a clear view on the complex relationship between modernization, Islam, democracy and gender equality.

In line with modernization theory, this study focused on women's LMP. This implies that our findings are restricted to only one aspect of women's empowerment. Although, women's LMP generally increases their economic independence and bargaining power within the household, a high level of women's LMP does not necessarily imply a high level of gender equality or female empowerment in other domains. As Donno and Russett (2004, p. 583) put it: "Female political rights, economic activity, health and educational attainment should be treated as distinct measures". Therefore, we would like to encourage comparable research on other aspects of women's position in Muslim societies.

The results of this study with regard to the influence of Islam raise the question whether the relationships that were identified are also present for other (monotheistic) religions, such as Christianity, Judaism and Buddhism (Hilsdon and Rozario 2006). Our focus was on the diversity within Islam and the Muslim world, in which none of the other religions is codified at the state level. There are some scholars who link low levels of women's LMP to dominance of Catholicism, or of Christian-democratic parties, in European countries (Huber and Stephens 2000; Walby 2001). However, these studies do not analyze the relevance of 'state Christianity' to women's LMP. We think that such an extension of the research to other religions would be very important for the development of a broader theory on gender, economic development, religion and the state.

In sum, our study shows that—contrary to positions taken by Huntington and Norris and Inglehart—Islam, democracy and gender equality are not inherently incompatible, as was illustrated by the great variation in State Islamization, women's labor market participation, formal and practical democracy. Whereas the absolute number of women on the labor market was found to be primarily a function of economic factors, for explaining gender equality on the labor market a more complex model was needed. In addition to economic factors, also the political opportunity structure (democracy and state Islamization) and women's agency were found to be important explanatory factors.

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Appendix A: Country's scores per region on women's labor market participation, modernization, state Islamization and democracy

| Region and country <sup>a</sup>  | Women's<br>market<br>participation |                      | GDP per<br>capita 1997<br>(US\$) | State<br>Islamization<br>1996–1997 | Formal<br>democracy<br>1996–1997 | Practical<br>democracy<br>1996–1997 |
|----------------------------------|------------------------------------|----------------------|----------------------------------|------------------------------------|----------------------------------|-------------------------------------|
|                                  | Absolute 2000 (%)                  | Relative<br>2000 (%) |                                  |                                    |                                  |                                     |
| Southeastern Asia                |                                    |                      |                                  |                                    |                                  |                                     |
| Brunei Darussalam                | 52.3                               | 72.5                 | 15,800 <sup>h</sup>              | 4                                  | 83                               | 74                                  |
| Indonesia                        | 27.1                               | 60.9                 | 3,655                            | 1                                  | 83                               | 1.13                                |
| Malaysia                         | 38.9 <sup>e</sup>                  | 60.7 <sup>e</sup>    | 7,874                            | 2                                  | 1.26                             | .46                                 |
| Maldives                         | 34.9                               | 59.5                 | 1,620                            | 4                                  | 16                               | .28                                 |
| Greater Middle East              |                                    |                      |                                  |                                    |                                  |                                     |
| Afghanistan <sup>b</sup>         | 7.7                                | 22.5                 | 517                              | 5                                  | 83                               | -1.36                               |
| Algeria                          | 5.2                                | 19.1                 | 2,654                            | 3                                  | 07                               | .01                                 |
| Bahrain <sup>b</sup>             | 33.4                               | 38.9                 | 4,633                            | 5                                  | -1.02                            | -1.05                               |
| Bangladesh                       | 12.5                               | 31.7                 | 783                              | 2                                  | 2.29                             | .96                                 |
| Egypt                            | 9.8 <sup>e</sup>                   | 19.7 <sup>e</sup>    | 2,647                            | 3                                  | 36                               | 56                                  |
| Iran                             | 8.2                                | 15.5                 | 4,411                            | 6                                  | .51                              | 18                                  |
| Iraq <sup>b</sup>                | 10.9                               | 15.0                 | 962                              | 2                                  | -1.02                            | 89                                  |
| Jordan <sup>b</sup>              | 18.6                               | 26.3                 | 4,067                            | 4                                  | .77                              | 13                                  |
| Kuwait <sup>b</sup>              | 36.6                               | 48.5                 | 11,164                           | 5                                  | 08                               | 48                                  |
| Lebanon <sup>b</sup>             | 28.3                               | 36.9                 | 3,418                            | 1                                  | 16                               | .33                                 |
| Libya <sup>b</sup>               | 20.7                               | 28.5                 | 2,467                            | 3                                  | 83                               | -1.02                               |
| Mauritania <sup>b</sup>          | 27.8                               | 50.7                 | 979                              | 4                                  | 36                               | 27                                  |
| Morocco <sup>b</sup>             | 9.8                                | 23.3                 | 2,579                            | 3                                  | 08                               | 13                                  |
| Oman <sup>b</sup>                | 15.9                               | 35.7                 | 7,300                            | 5                                  | 65                               | 34                                  |
| Pakistan                         | 3.1                                | 8.4                  | 1,833                            | 5                                  | 1.64                             | 22                                  |
| <b>Qatar</b> <sup>b</sup>        | 41.1                               | 47.1                 | 7,290                            | 4                                  | -1.12                            | -1.05                               |
| Saudi Arabia <sup>b</sup>        | 20.2                               | 25.9                 | 8,378                            | 6                                  | -1.12                            | -1.36                               |
| Sudan <sup>b</sup>               | 7.3                                | 21.9                 | 863                              | 3                                  | 83                               | 57                                  |
| Syria                            | 7.5                                | 13.1                 | 7,469                            | 4                                  | -1.02                            | 01                                  |
| Tunisia <sup>b</sup>             | 25.1                               | 36.2                 | 4,050                            | 3                                  | 07                               | .47                                 |
| Turkey                           | 10.0                               | 19.4                 | 6,528                            | 0                                  | 1.64                             | .33                                 |
| United Arab Emirats <sup>b</sup> | 31.7                               | 39.7                 | 15,312                           | 4                                  | 55                               | 74                                  |
| Yemen <sup>b</sup>               | 6.3                                | 12.5                 | 2,502                            | 6                                  | .40                              | 60                                  |
| Former Soviet                    |                                    |                      | •                                |                                    |                                  |                                     |
| Albania <sup>b</sup>             | 25.0                               | 58.2                 | 2,233                            | 0                                  | 1.45                             | .66                                 |
| Azerbaijan                       | $23.4^{\rm f}$                     | 74.6 <sup>g</sup>    | 1,947                            | 0                                  | 36                               | 1.31                                |
| Kazakhstan <sup>b</sup>          | 38.0                               | 86.0                 | 4,532                            | 0                                  | 16                               | .89                                 |
| Kyrgyzstan                       | 21.1                               | 70.9                 | 2,076                            | 0                                  | .68                              | .37                                 |
| Tajikistan <sup>b</sup>          | 36.5                               | 81.1                 | 908                              | 0                                  | 26                               | 03                                  |



# Appendix continued

| Region and country <sup>a</sup> | market            | Women's labor<br>market<br>participation <sup>d</sup> |       | State<br>Islamization<br>1996–1997 | Formal<br>democracy<br>1996–1997 | Practical<br>democracy<br>1996–1997 |
|---------------------------------|-------------------|---|-------|------------------------------------|----------------------------------|-------------------------------------|
|                                 | Absolute 2000 (%) | Relative<br>2000 (%)                                  |       |                                    |                                  |                                     |
| Turkmenistan <sup>b</sup>       | 37.7              | 73.7  | 1,635 | 0                                  | -1.02                            | 05                                  |
| Uzbekistan <sup>b,c</sup>       | 46.1              | 82.7  | 3,166 | 0                                  | -1.02                            | .38                                 |
| Sub-Saharan Africa              |                   |   |       |                                    |                                  |                                     |
| Burkina Faso <sup>b</sup>       | 4.7               | 60.5  | 802   | 0                                  | .21                              | .69                                 |
| Chad <sup>b</sup>               | 7.7               | 33.7  | 421   | 0                                  | .03                              | .03                                 |
| Comoros <sup>b</sup>            | 7.1               | 22.8  | 625   | 1                                  | .98                              | .23                                 |
| Gambia <sup>b</sup>             | 4.6               | 18.2  | 849   | 1                                  | 63                               | 18                                  |
| Guinea-Bissau <sup>b</sup>      | 2.6               | 11.6  | 858   | 0                                  | 1.82                             | 1.23                                |
| Guinea <sup>b</sup>             | 9.5               | 58.0  | 548   | 0                                  | .13                              | .53                                 |
| Mali <sup>b</sup>               | 10.3              | 57.1  | 794   | 0                                  | 1.92                             | 1.05                                |
| Niger <sup>b</sup>              | 1.9               | 11.2  | 506   | 0                                  | 73                               | .01                                 |
| Nigeria <sup>b</sup>            | 33.0              | 57.7  | 1,172 | 2                                  | 73                               | 14                                  |
| Senegal <sup>b</sup>            | 11.4              | 39.0  | 1,322 | 0                                  | .87                              | .63                                 |
| Sierra Leone <sup>b</sup>       | 9.9               | 26.7  | 441   | 0                                  | .28                              | .08                                 |

Notes: Bold printed countries are considered oil states; 1996 for OPEC member-states and 1998 for other countries

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<sup>&</sup>lt;sup>a</sup> Regarding our classification of countries, rearrangements of the four regions (e.g. Albania, Bangladesh, Comoros and Mauritania) do not affect our main conclusions

b EAPEP 4 data, in stead of LABORSTA Yearly Data, agricultural employment percentages are extrapolated for the period 1950–1990 to 2000

<sup>&</sup>lt;sup>c</sup> LABORSTA Yearly Data was used. However no population figures where available, but according to other data, the gender ration in Uzbekistan comes very close to 1

<sup>&</sup>lt;sup>d</sup> Morocco 2002; Algeria, Brunei Darussalam and Kazakhstan, 2001; Indonesia 1999; Iran 1996. In the labor market participation figures of ILO migrant or foreign workers are counted in the host country

<sup>&</sup>lt;sup>e</sup> Active population figures for women between 14 and 65 years of age

f Active population figures for women between 14 and 57 years of age and the population figures thru 61

g The active male population covers men between 14 and 61

h Figure not from Maddison, but CIA World Fact Book

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