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THE IMPACT OF SOCIAL INSTITUTIONS
ON THE ECONOMIC ROLE OF WOMEN
IN DEVELOPING COUNTRIES

by

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	4
PREFACE	5
RÉSUMÉ.....	6
SUMMARY	7
I. INTRODUCTION.....	8
II. DONOR POLICIES AND GENDER INEQUALITIES	11
III. A FRAMEWORK FOR ANALYSIS OF THE ECONOMIC ROLE OF WOMEN	13
IV. THE ECONOMIC ROLE OF WOMEN IN DEVELOPING COUNTRIES: A NEW DATABASE.....	19
V. THE IMPORTANCE OF SOCIAL INSTITUTIONS FOR THE ECONOMIC ROLE OF WOMEN IN DEVELOPING COUNTRIES.....	24
VI. CONCLUSIONS	29
BIBLIOGRAPHY	30
ANNEXES.....	32
OTHER TITLES IN THE SERIES/ AUTRES TITRES DANS LA SÉRIE.....	53

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PREFACE

The improvement of the socio-economic situation of women is a major objective of OECD countries' policies. The international community has included promoting gender equality in developing countries and empowering women in the Millennium Development Goals. By improving women's access to education, health care, micro-credit, justice and employment considerable progress in reducing gender disparities can be achieved. However, millions of women are still denied basic rights.

A major element in the Development Centre's work on social institutions and development is persisting gender inequality. In an innovative approach, this paper measures the impact of social institutions such as laws, codes of conduct, social norms and traditions on the possibilities of women to participate in economic activities. The authors find evidence that established institutional frameworks outweigh the importance of commonly assumed factors and are the most important determinants of women's participation in economic activities.

Three policy conclusions emerge from this work: First, standard gender equality policies are likely to fail in countries with an unfavourable institutional environment. Secondly, donors can assist policy makers in developing countries to address the underlying causes of gender discrimination within the local culture; otherwise, women's effective participation in labour markets can be thwarted. This change will help to unlock potential for more sustainable growth. Third, although changing social institutions takes time, such changes are, in fact, possible. The current modification of the family law in Morocco, within the framework of Islamic law, is a promising example.

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RÉSUMÉ

Les agences d'aide et les responsables politiques s'accordent en général sur l'idée suivante : un accès accru des femmes à l'éducation, à la santé, au crédit, aux droits reconnus par la loi et aux possibilités d'emploi, en conjonction avec la croissance économique, améliorera significativement le rôle des femmes dans la société et l'économie des pays en développement. Ce document conteste cette idée pour la raison suivante : ces mesures risquent de ne pas suffire aussi longtemps que le cadre institutionnel limite dans un pays la participation des femmes aux activités économiques. Il montre que les institutions sociales, c'est-à-dire les lois, les normes, les traditions et les codes de comportement dans une société représentent le facteur le plus important qui détermine la liberté de choix des femmes en matière d'activité économique. Les institutions sociales n'ont pas seulement un impact direct sur le rôle économique des femmes, mais elles ont aussi un impact indirect à cause de leur incidence sur l'accès des femmes à des ressources telles que l'éducation et les soins de santé. Les résultats de l'étude laissent penser qu'un cadre institutionnel qui désavantage la moitié de la population adulte freine le développement. La conclusion suggérée par ces résultats est que les responsables politiques et les agences d'aide, pour agir efficacement sur les inégalités en fonction du sexe, doivent se demander s'il faut intervenir et comment pour modifier un cadre institutionnel qui discrimine les femmes. C'est à l'évidence une tâche encore plus ardue qu'augmenter les taux de scolarisation des filles ou introduire des formules durables de micro-crédit, deux objectifs déjà difficiles à atteindre.

SUMMARY

Donor agencies and policy makers tend to agree that increased access of women to education, health, credit, formal legal rights and employment opportunities, in conjunction with economic growth, will substantially improve the socio-economic role of women in developing countries. This paper challenges that view. It argues that these measures might not be sufficient if the institutional framework within a country constrains women from participating in economic activities. It finds that social institutions — laws, norms, traditions and codes of conduct — constitute the most important single factor determining women's freedom of choice in economic activities. They have not only a direct impact on the economic role of women but also an indirect one through women's access to resources like education and health care. The findings suggest that an institutional framework that disadvantages half of the adult population hinders development. To address gender inequalities effectively, policy makers and donors must think about and address institutional frameworks that discriminate against women, a task even more difficult than the tough exercises of increasing female enrolment rates or introducing sustainable micro-credit schemes.

I. INTRODUCTION

“Preventing women from contributing to the sustenance and improvement of others by means of their efforts infringes the basic rules of public co-operation to such a degree that our national society is stricken like a human body that is paralysed on one side. Yet women are not inferior to men in their intellectual and physical capacities.”

Namil Kemal (a leader of the Young Turks), 1867

A steadily growing literature has examined the relationship between gender and economic development since the early 1970s. This study contributes to the debate by identifying the basic determinants of the economic role of women. Based on a newly developed data set including various kinds of variables measuring gender inequalities, two new indicators measure discrimination against women related to constraints imposed by social institutions — laws, social norms, codes of conduct and traditions. Using these indicators, three important results emerge. First, the study finds a clear gap between countries in East Asia and Latin America on the one hand and those in Sub-Saharan-Africa, South Asia and the Middle East and North African region (MENA) on the other. In the former, even in poor countries, women have economic roles nearly comparable to those in the developed countries, while in the latter strong gender inequalities exist even in some countries with high per capita incomes. Second, important disparities in gender inequality exist across countries with the same levels of development and the same dominant religions. This means that a country could develop while gender inequalities persist, and religion *per se* does not prevent improvement in the economic role of women. Third, an unfavourable institutional environment that disadvantages women hinders development, because through various channels it excludes the participation of half of the population in economic activities.

Most current work on gender and development reflects three stylised schools of thought concerning the impact of development and growth on gender inequalities (Forsythe *et al.*, 2000):

- The *modernisation-neoclassical approach* holds that gender inequalities likely will decline as a country develops. Economic growth entails an increase in employment opportunities and competition, which gradually eliminates gender inequalities in education, finance, training and so forth.
- The *Boserup (1970) approach* views the relationship between gender inequalities and economic growth in terms of a U-shaped pattern. Where no market economy exists, such inequalities remain negligible. With growth and development, discrimination against women initially increases as a consequence of the specialisation of roles, with women

having the principal responsibility for childcare and men for earning income. Later, however, and with the overall transformation of society, this trend can reverse owing to increasing opportunities and demand for women in the workforce.

- *Feminist studies* (e.g. Tinker and Bramsen, 1976; Semyonov, 1986) emphasise the major role played by institutions such as patriarchal family structures in perpetuating gender inequality. Economic growth is regarded as a factor that increases the vulnerability of women.

In a comprehensive and detailed cross-sectional and longitudinal analysis using data from more than 100 developed and developing countries, Forsythe *et al.* (2000) find support for the neoclassical approach. They measure gender inequality mainly with the UNDP's Gender Development Index (GDI), which includes inequalities in access to health, education and income-earning opportunities. As an independent variable they use a proxy for the prevalence of patriarchal institutional arrangements, a dummy variable that takes the value of one for countries with more than 50 per cent Muslim populations or are located in Latin America. They also include the Gender Empowerment Measure (GEM), which tries to capture discrimination against women in political and economic opportunities. These choices of independent variables present two main problems. First, it is not clear and not backed up by the existing literature that patriarchal institutions exist only in mainly Muslim or Latin American countries. In North Indian states, for example, patriarchal institutions remain very strong and discriminate against women. Second, one can question the hypothesised directions of causality and the treatment of endogeneity. It is reasonable to assume that women's levels of education determine their chances of becoming parliamentarians as well as their ability to acquire managerial positions. Ordinary Least-Squares estimators as used in the article thus might lead to biased results.

In addition to studies of how growth or economic development affects gender, an emerging debate concerns the reverse causality, i.e. whether gender inequalities can explain different country growth rates (Lagerlöf, 2003). The empirical evidence so far is inconclusive. Klasen (1999) for instance, using cross-country regressions, shows that gender inequality reduces growth. He uses two variables for educational inequality: the ratio of women's to men's total years of schooling within populations aged 15 and older in 1960, and the ratio of annual growth rates over 1960-90 in years of schooling for women and men within populations defined the same way. A comparison between South and East Asia shows that 0.7 percentage point of the annual growth difference of 2.5 per cent in GDP per capita in 1960-92 can be attributed to gender inequality in education. In contrast, however, Seguino (2000) finds that for open developing countries gender inequalities stimulate growth. Seguino's cross-country analysis of semi-industrialised, export-oriented economies finds a lower female wage rate correlated positively with growth across countries and over time. It detects two channels of influence, namely the quantity and quality of investment. Countries with relatively lower wages attract more investment, and it is used more productively.

This brief review of the empirical research on the relationship between gender inequalities and economic development stresses the importance of finding valid indicators of gender inequality. Cross-national and individual country studies usually draw on data in the UNDP *Human Development Report*, the UN *World's Women* surveys and the World Bank's gender

statistics database, GenderStats. In general, these indicators measure discrimination against women in terms of access to education, health care, political representation, earnings or income and so forth. The aggregate indices that have received the most attention recently are the UNDP's well known GDI and GEM. The GDI is the unweighted average of three indices that measure gender differences in terms of life expectancy at birth, gross enrolment and literacy rates and earned income. The GEM is also an unweighted average of three variables reflecting the importance of women in society. They include the percentage of women in parliament, the male/female ratio among administrators and managers and professional and technical workers, and the female/male GDP per capita ratio calculated from female and male shares of earned income.

The validity of these aggregate indices has been widely debated and questioned (Dijkstra, 2000; Bardhan and Klasen, 1999; Dijkstra and Hanmer, 2000; White, 1997). The criticisms raised are pertinent and straightforward, but this paper argues that the more fundamental problem with the use of GDI and GEM lies in their failure to pay attention to the institutional frameworks that constrain the economic role of women in many countries. It demonstrates that this framework is key to our understanding of the role of women in developing countries and that ignoring traditions, customs and explicit or implicit laws can limit the usefulness of policy actions aimed at improving the situation of women. The paper's original feature is its inclusion of exogenous variables in the analysis of women's socio-economic conditions. These variables reflect laws, customs and traditions that have prevailed for centuries. The paper's main argument holds that these traditional social institutions have a long-lasting impact on the role of women and on their access to resources such as land, credit, health care and education. To support it, a comprehensive database includes variables not taken into account elsewhere, such as age of marriage, women's freedom of movement, parental authority over children, inheritance law and so forth. They are used to construct two indices for the institutional framework. In a ranking of 66 developing countries according to these two indices, a distinct gap appears between the situation of women in East Asia and Latin America on one hand and in Sub-Saharan-Africa, South Asia and the Middle East-North Africa (MENA) region on the other.

This paper is divided into six sections. This introduction (section I) is followed by a short description on the way donor policies address gender inequalities (section II). In section III an analytical framework is presented, while in section IV a new data base on the economic role of women is developed. Section V discusses the relative importance of the various determinants of the economic role of women: social institutions, access to resources and policy. Lastly, section VI concludes.

II. DONOR POLICIES AND GENDER INEQUALITIES

The approach to women in development policies changed significantly over the last sixty years. In the 1950s and 1960s, policies viewed women mainly as mothers and passive beneficiaries of development aid. The main focus was on food aid and family planning. The “Women in Development” (WID) approach developed in the 1970s and influenced by the seminal work of Boserup (1970) acknowledged the various contributions of women to development and sought equity for them in the form of political and economic autonomy. It called for reducing women’s inequality *vis à vis* men. Since the beginning of the 1990s the “Gender and Development” (GAD) approach has dominated the debate, and governments and aid agencies have widely adopted it. It emerged from the Fourth World Conference on Women in Beijing in 1995. The Beijing Declaration calls for a fundamental restructuring of society and the removal of remaining sources of inequality between men and women. It introduces gender equality as a human right and it contains the method of “gender mainstreaming” that requires inclusion of a gender dimension throughout institutions, policies, planning and decision-making. Gender mainstreaming involves women’s political, economic and social empowerment. The Beijing Platform of Action specifies the 12 critical areas of action that represent the main obstacles to women’s advancement:

- Women and poverty;
- Women and education and training;
- Women and health;
- Violence against women;
- Women and armed conflict;
- Women and the economy;
- Women in power and decision-making;
- Institutional mechanisms for the advancement of women;
- Human rights of women;
- Women and the media;
- Women and the environment; and
- The girl child.

In the gender debate today, achieving the Millennium Development Goals (MDGs) is a major concern. The promotion of gender equality and women’s empowerment is Goal Three of the MDGs agreed at the Millennium Summit of the United Nations in September 2000. Goal Three is unique because it underpins all the others, which, as is widely recognised, cannot be

reached without achieving it. Increased interest in gender equality has also contributed to the creation of several databases and regular reporting on gender inequalities and the role of women in the world. Examples include the UNDP *Human Development Reports* (which began in 1990) together with the GDI and GEM, both introduced in 1995, *World's Women* (UN, first issue in 1991) and *GenderStats* (World Bank, first issue 1999).

Despite an overall consensus among donors about the need for the advancement of women, the actions of individual donors often fail technically. They have a conceptual confusion about what gender mainstreaming means and how to do it in practice. The recently released *Transforming the Mainstream, Gender in UNDP* (UNDP, 2003) indicates this. It notes that most development agencies do not use "social relations analysis", a concept that addresses the power structure of a society in a broad sense, including its processes and relations. The report concludes that to end women's subordination, men will have to transfer some of their economic, political and social power to women. Development agencies tend to use the "gender roles" framework that focuses only on the household unit and on allocating resources among family members (Razavi and Miller, 1995). The first, more challenging approach attacks the *status quo* in a society, but the second is more politically acceptable for developing countries and carries less threat that donors will be accused of "cultural neo-colonialism".

A critical look at donors' conceptual documents reveals two important points. First, donors generally acknowledge the roles in gender inequality of informal institutions, social norms and traditions of conduct, but often not prominently and rather as side remarks (e.g. OECD-DAC 1998 and 1999; UNDP, 2003; World Bank, 2001). Second, they often lack concrete targets to empower women economically and politically within in a given time. The OECD-DAC network on gender equality, for instance, criticises the absence of formulated, quantitative targets to measure progress of women's participation in paid work outside the agricultural sector (Rodenberg, 2003).

Donor agencies do cover a wide range of issues related to the 12 agreed areas of action from the Beijing Platform. A main focus lies on women's access to resources like education, health and nutrition as well as micro-finance. More recently issues related to governance, trafficking in human beings and information and communication technologies have attracted attention. Yet they address only at the margins, if at all, the role of social institutions in determining the status of women.

III. A FRAMEWORK FOR ANALYSIS OF THE ECONOMIC ROLE OF WOMEN

The framework used here assumes that three major factors influence the economic role of women: social institutions, women's access to resources and the level of development (Figure 1 on the following page). A recently published World Bank study (2001) follows a somewhat similar approach, highlighting the key importance of norms and customs for gender inequality. Its index of gender equality incorporates various aspects of women's rights: political, legal, social, economic and in marriage and divorce. It shows that inequalities in rights lie at the heart of those in education, access to health care and political representation. It also points out that religion in general influences gender relations and outcomes, but the effects of specific religious affiliations are mixed, due to different interpretations of obligations and codes of conduct in different cultural settings. Given the objectives of the present study, however, this World Bank study has two major shortcomings. It addresses only partly the determinants of the economic role of women and provides no figures or estimates for individual countries.

The core idea behind the framework presented in Figure 1 is that sets of laws, norms, codes of conduct and traditions heavily influence the economic roles of women in developing countries. Social institutions¹ may impose direct constraints on women's activities — by not allowing them to start their own businesses, for instance — and influence women's access to resources such as land, credit and other productive inputs and assets. In societies where girls are married at between 12 and 15 years of age, parents may be unwilling to send their daughters to school. The direct and indirect costs of schooling can be quite high for the household, and the return on this investment is uncertain or zero. Social institutions may also influence policy; it would be very difficult, for example, for a state to enact and enforce a law that prohibits marriage below the age of 18 years.

An important assumption — tested later in the empirical section — is that social institutions are exogenous while the other variables — access to resources and level of development — are endogenous with respect to the economic role of women. Many social norms, codes of conduct, formal and informal laws and traditions may have existed for a century, a millennium or more and have changed only marginally if at all. Thus better access to education may increase women's participation in the labour force and a significant increase of women in the labour force might reduce gender inequalities in access to health care, but neither would affect the custom of polygamy or increase freedom of dressing.

1. The concept of exogenous versus endogenous institutions and their impact on development outcomes is discussed in Jütting (2003).

The individual indicators in the analytical framework are explained in more detail below. The quantitative data for the countries studied are presented in Annex 1 and discussed in a later section.

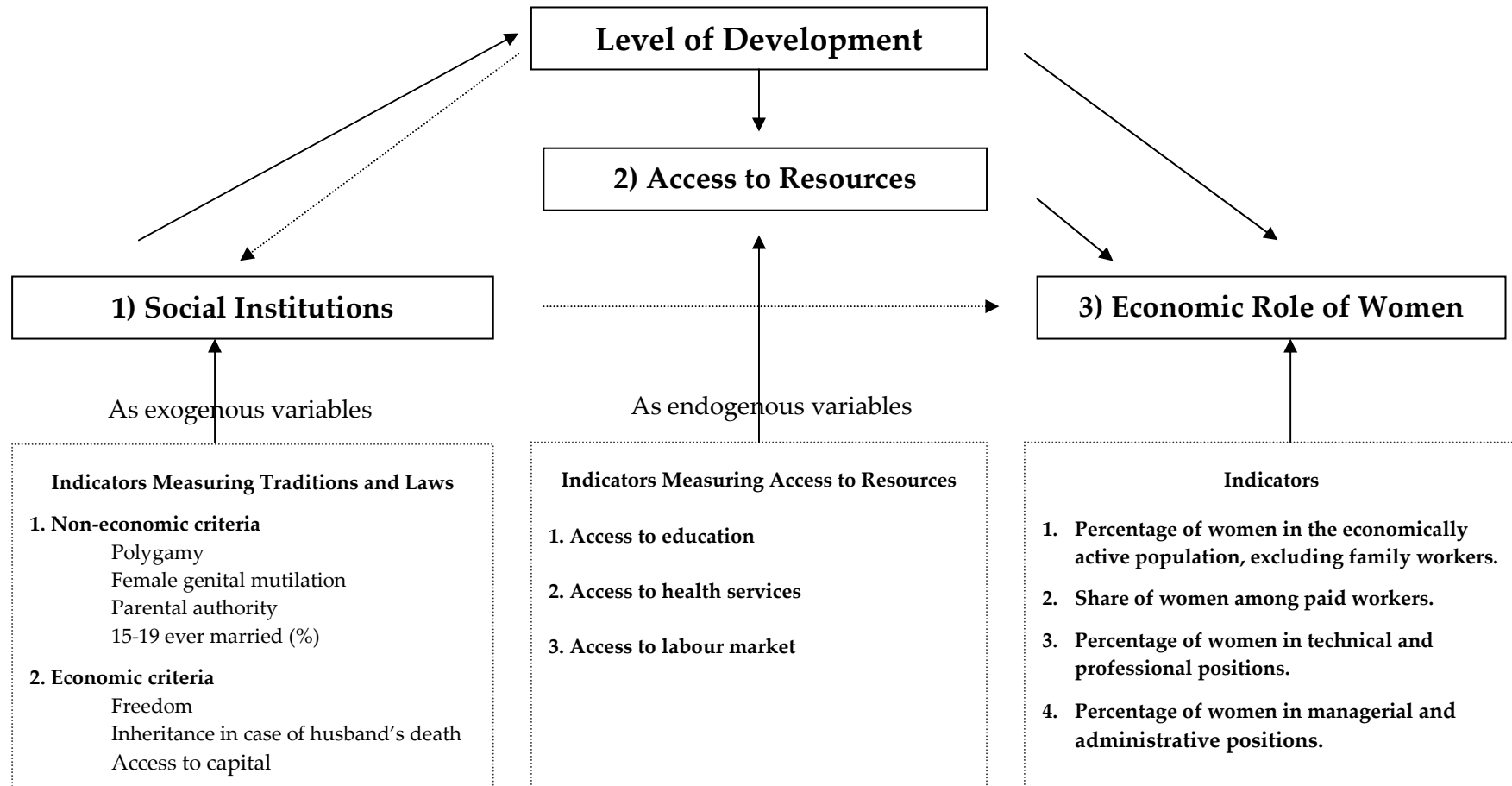
The Dependent Variable: The Economic Role of Women

The economic role of women is very difficult to measure. A commonly used proxy is the percentage of economically active women or (in a different form) the ratio of that percentage to that of economically active men. It can mislead, because it aggregates employment situations that may differ considerably across countries, regions or ethnic groups. In most of Africa and South Asia, most economically active women are family workers. The proxy considers them as full-time workers, although some work only part-time. It also fails to account for even more important differences in women's autonomy to choose activities. It makes a considerable difference whether a woman owns her own crop and sells part of her harvest for her own benefit or works instead under the authority of her husband. The former has an individual income that in principle is at her disposal, while in the latter case the income-earner is the husband. That such an individual income is important for women, is shown in a recent study by Kabeer and Mahmud (2004). They report findings of interviews with female workers in the garment manufacturing in Bangladesh. These women stress that having an independent income increased their self reliance, reduced their dependency on household income and helped them to stand on their feet. Yet statistics on women in the agricultural sector that reflect these differences are not available.

To counter these problems, the analysis uses a new general measure and supplements it with three more specific ones. The general measure is the percentage of working women, excluding family workers. It captures salaried or self-employed women with personal incomes that ensure their financial independence². The three other variables are the percentage of women among wage earners, the percentage of women in professional and technical positions and the percentage of women among administrative workers and managers. The first of these is a good indicator if within a given society women have access to salaried employment that procures them regular and stable incomes, but this is not the case for most women working in the informal sector. The two other variables measure the proportion of women in relatively highly skilled positions that give them access to high salaries and power.

2. It subtracts from the percentage of economic active women the percentage of women working as family workers. Data sources: ILO (2001) and UN (2000).

Figure 1. Indicators Affecting the Economic Role of Women



The Independent Variables

Social Institutions. Two indicators, NON-ECO and ECO, were constructed to estimate the importance of social institutions. Both are aggregates composed of variables considered exogenous, i.e. not dependent on current economic and social conditions. They reflect longstanding norms, customs and traditions that have long prevailed³. NON-ECO and ECO aggregate seven different variables in all. NON-ECO includes four that have no economic character — genital mutilation⁴, marriage before the age of 20, polygamy and authority over children — all selected on the assumption that these customs constrain women's freedom to choose the economic activities they wish to pursue. The first two are continuous variables for which data are available. The other two are dichotomous; the coding of polygamy does not refer to the frequency of polygamy but to its legality. Countrywide estimates of how many women live in polygamous households are not available, but one can safely assume that the percentage of polygamous couples remains relatively low because only a small minority can support several wives. When polygamy is permitted it is coded as one, when it is forbidden as zero. Polygamy entails inequality between men and women because usually there is a difference of 20 to 30 years between the second (or third) wife and her husband. For the woman it is a marriage in some respect under compulsion by her family, often with no free consent between the spouses. Authority over children is coded as one when the father has the whole parental authority and as zero when he shares the authority with the mother. Full authority of the father means that only he can seek passports for his children or take educational decisions for them. After a divorce he will always be given custody, except in some cases for babies and very young children.

The combination of the four variables can indicate strong domination of men over women. The maximum value of NON-ECO can reach about 0.86 after dividing the individual components by four and summing the results. (That is, $0.95/4$ if excision is practised on 95 per cent of girls, as in Mali, plus $0.50/4$ when half the girls marry before the age of 20, as in Bangladesh, plus $1/4$ for polygamy, plus $1/4$ when the father monopolises parental authority.) OECD countries have NON-ECO values of less than 0.05.

The ECO indicator incorporates three variables: the right to inherit from the husband, the right of ownership and freedom of movement and dress. All three have an economic impact. If women are partially or totally barred from inheritance, cannot borrow or own property in their own names and cannot move around or dress freely, they cannot gain economic independence. When women are disadvantaged in inheritance, the relevant variable is assigned a value of one. This occurs, for example, when a father has a son and a daughter and the latter receives half of

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3. The data set includes a few countries where social institutions changed due to major cultural revolutions, such as Turkey after 1924, Tunisia in 1956 and Iran in 1979.
 4. Genital mutilation exists in most but not all Sub-Saharan African countries as well as in a few others like Yemen, Oman, Bahrain and Egypt. The weight of genital mutilation in the NON-Eco indicator is 0.25. It has the shortcoming of not fully grasping the various forms of violence that women confront, but better data on violence are not available. In any case, excision is a very severe form of violence against women and a strong sign of their subordination.

what the son gets from the father's estate, or when a husband dies childless and the estate goes only to his family, not to his widow. A value of zero is assigned in situations of equality of rights between siblings of different sexes and when the rules on inheritance in the absence of children are identical for women and men. Women's right of ownership is weighted as follows: 30 per cent for access to bank loans, 30 per cent for the right to ownership of property other than land and 40 per cent for access to land ownership. Thus if women can borrow freely from banks and own property but not land, the variable takes a value of 0.4. If women have none of these rights, it is coded as one. For freedom of movement and dress, each component is coded as 0.5 for prohibitions. Usually (but not always) the two freedoms relate closely. Veiled women cannot leave their homes without permission of their husbands, for example, in the North Indian custom of *purdah*. When women have freedom of movement but must wear the veil, they have no access to some occupations and consequently fewer economic opportunities. Such cases are coded as 0.5; if this obligation applies to only half the population, the value becomes 0.25. Having coded these three variables from zero to one, the value of the ECO indicator emerges after dividing their sum by three.

Variables Measuring Access to Resources. Women's access to resources also influences their economic role. Women with better education and access to health care as well as to the labour market will be more likely to get wage employment or highly qualified jobs than those excluded from these resources. The following variables make up the data set:

- Education: the school enrolment ratio, literacy ratio, female school enrolment rate and literacy rate for women. The first indicator measures disparities in access to primary, secondary and higher education, with one being the value for female-male parity. The second indicator shows disparities in ability to read and write⁵. The last two variables provide additional information, but are not significant *per se*. A low enrolment rate for girls means nothing by itself, as the rate for boys may be equally low.
- Health: the life expectancy gap, sex ratio and maternal mortality rate all are indicators to measure gender disparities related to access to health care. The newly developed life-expectancy gap measures differences in access to health services over the entire lifetimes of individuals. In most developed countries, the life expectancy of women is on average 5.9 years greater than that of men. The variable used here is calculated as the observed difference in life expectancy between men and women in the country under consideration, less 5.9. Its value thus is approximately zero in a country where women are supposed to have equal access to health care (as in the OECD countries) and is negative when women's access is constrained. In Bangladesh, for example, the observed male/female difference in life expectancy is only 0.1 year, so the life expectancy gap value is –5.8, indicating that women suffer discrimination in access to health services. The sex ratio (female/male) is inferior to one when sex-specific abortions and infanticides are practised and when girls receive less food or less health care than boys do.

5. The ratio is calculated by dividing the female literacy rate by the male literacy rate.

- Access to the labour market: the percentage of women having access to birth control and the total fertility rate both proxy for labour-market entrance barriers faced by women. It goes without saying that women denied such access and having six children on average will find it practically impossible to have independent activities. Chad provides a good example; only 4 per cent of women have access to birth control, and the average number of children per woman is 6.4. In such situations, women can work only in family agriculture, with often little or no independence. Therefore, these two demographic variables act as key prerequisites for freedom of labour market participation.

Level of Development

One may suppose that the economic role of women improves with higher levels of development. This could occur when women's access to resources becomes easier with higher per capita incomes. That in turn allows women to participate more in paid economic activities outside the agricultural sector. With the creation of a more formalised, rules-based system, informal institutions might lose importance. This would allow positive changes in the institutional constraints imposed on women.

IV. THE ECONOMIC ROLE OF WOMEN IN DEVELOPING COUNTRIES: A NEW DATABASE

Social Institutions

Table 1 provides an overview of the economic role of women in low-income countries of different world regions. Table A-1 in Annex 1 covers the 66 countries from which this regional survey is drawn. From a global perspective one can observe important differences between two large multi-regional groupings – Southeast Asia and Latin America, on the one hand, and Sub-Saharan Africa, the Indian Sub-continent and the MENA region, on the other. The values of ECO and NON-ECO, at less than 0.08, are consistently very low in the first group and comparable to those that one would get for OECD countries. In this group polygamy is forbidden, early marriages are not frequent, inheritance laws are egalitarian and women have access to property and can circulate and dress freely.

In the second group, the values of ECO and NON-ECO amount to approximately 0.6, with several instances like Pakistan or the Sahelian countries where they are above 0.7 (Table A-1). The explanation of these results for Sub-Saharan Africa lies in the conjunction of excision, early marriage, polygamy and the absence of access to land holding. Excision is not usual in the MENA region, but in many countries polygamy is legal, women are disadvantaged in inheritance and authority over children and, in some cases, they cannot move and dress freely. In South Asia, the Islamic code is enforced in Bangladesh and Pakistan, whereas in India, except in the South, women are disadvantaged for inheritance, parental authority and access to capital, and they have no freedom of movement. The NON-ECO indicator is greater than or equal to 0.6 in many Sub-Saharan African countries (Benin, Chad, Eritrea, Guinea, Mali, Niger, Senegal and Sudan) and in Egypt. These are countries where female genital mutilation is widely practised, over 40 per cent of girls are married before 20 and polygamy is legal (Table A-1).

Excision is not usual in Arab and Muslim countries, and values for the NON-ECO indicator are lower in these countries than in Sub-Saharan-Africa when polygamy is forbidden. For example, in Tunisia the value is 0.26, less than half of that for many countries in Sub-Saharan Africa. In Turkey, a Muslim country where neither excision nor polygamy is practised and where civil law does not invest parental authority in the father alone, the value is very low, at 0.04⁶. In most Arab and Muslim countries, however, polygamy remains legal, early marriages are frequent and the father holds sole parental authority. As a result, the NON-ECO indicator is

6. The value does not reach the developed-country benchmark of 0 because 14 per cent of girls are married under the age of 20.

higher than 0.5 in many cases. In Latin American countries, Christianised centuries ago, polygamy is forbidden and excision is never practised. Early marriages are frequent in some countries, however, so that the value of the indicator ranges from 0.01 to 0.07. In the Southeast Asian countries, polygamy and excision do not exist and marriage before the age of 20 is very rare (2 per cent of women in China, 1 per cent in South Korea). The indicator is thus often close to zero. Indonesia is an exception with a value of 0.26, due to the possibility of polygamy and the practice of marriage before the age of 20. In India, polygamy is practised mainly among Muslims (15 per cent of the population) and marriages before the age of 20 are very common (39 per cent of women). As the father also has sole parental authority, the value of the NON-ECO indicator for India is rather high, at 0.40, although still lower than for the neighbouring Muslim countries of Bangladesh (0.63) and Pakistan (0.56).

Table 1. An Overview of the Economic Role of Women in Various Regions of the World
(Average values of the indicator variables)

	South Asia (n=4)	Southeast Asia (n=6)	Latin America and Caribbean (n=15)	Sub-Saharan Africa (n=25)	Middle East & North Africa (n=15)
ECO	0.62	0	0.01	0.44	0.55
NON-ECO	0.49	0.08	0.05	0.52	0.53
ECO + NON-ECO	1.11	0.08	0.06	0.96	1.08
Access to Education					
Literacy ratio ¹	0.52	0.92	0.96	0.71	0.75
School enrolment ratio (primary) ² (%)	0.76	0.97	0.99	0.84	0.91
School enrolment ratio (secondary) (%)	0.75	0.98	1.07	0.71	0.96
Access to Health Care					
Life expectancy gap ³	-5.85	-0.88	-0.61	-3.83	-2.79
Level of Development					
GDP/per capita ⁴	1 390	4 891	3 773	1 592	4 898
Access to Labour Market					
Birth Control (in %)	42.25	62.33	59.93	29.92	44.73
Total fertility rate	4.1	2.27	2.96	5.43	3.7
Economic Role					
Economic active women without family workers (%)	14.83	27.7	35.09	28.85	16.27
Women among technical and professional workers (%)	N/A	47.5	47.71	28.87	30.64
Women among administrators and managers (%)	5.25	17.8	28.79	12.48	8.73
Women in total number of paid workers(%)	16.92	33.25	38.12	27.01	17.43

Notes:

1. Literacy ratio: women's literacy rate/ men's literacy rate.
2. School enrolment ratio (primary): girls schooling rate/ boys schooling rate in primary education.
3. Life-expectancy gap: difference between the observed women and men's life expectancy minus 5.9 (for explanation see text).
4. GDP per capita: Gross Domestic Product per capita, in dollars (1999).

The values of the ECO indicator correlate partially with those of NON-ECO ($R^2 = 0.58$), but significant differences appear in individual countries. In Tunisia, for example, the results show a higher value for ECO than NON-ECO. Polygamy is forbidden in Tunisia, but the law on inheritance discriminates against women.

To sum up so far, inter-regional comparison of the magnitude of these indicators of social institutions reveals a dichotomy. In Southeast Asian and Latin American countries, authority over children is always shared, inheritance laws are egalitarian and women have access to property and enjoy freedom of movement and dress. As a consequence the indicators are quite low. By contrast, in Sub-Saharan Africa, South Asia and the MENA region women often face disadvantage in terms of inheritance and parental authority and have access neither to land nor to other property. Unsurprisingly, the sums of the NON-ECO and ECO indicators for these countries very often exceed unity. There is thus a distinct gap in the condition of women between Southeast Asian, Latin American, European and North American countries on one side and Sub-Saharan Africa, the Indian sub-continent and countries in the MENA region on the other. Some exceptions appear in the second group, such as Mauritius, Togo, Tunisia and Turkey.

One might argue that religion and economic development drive or govern the economic role of women. As Annex 2 shows, there is a tendency in Muslim countries for gender inequalities higher than in Christian and Buddhist ones if one compares the average value of NON-ECO + ECO. One can also show, however, that this must not hold *per se*, as in Muslim countries the NON-ECO value might drop to 0.04 while in a Christian country it might be 0.72. This hints that religion cannot fully explain the economic situation of women in developing countries. The same holds true for the level of development. Gender inequalities are quite high in some high-income countries and low in some low-income countries. All this reinforces the strong role of social institutions in shaping women's opportunities for active participation in economic activity.

Access to Education, Health Care and the Labour Market

In the regions characterised by high values of ECO and NON ECO, women generally suffer discrimination in education, health and their access to the labour market, whereas in Latin America and Southeast Asia such discrimination does not exist. Such results show clearly a relation between the institutional framework or social institutions and the access of women to human capital and economic activity. The regional comparison reveals strong disparities in the indicators (Tables 1 and A-1). The literacy ratio is highest in Latin America and Southeast Asia (about 0.95), followed by the MENA region and Sub-Saharan Africa. South Asia has the lowest literacy ratio (about 0.50). These disparities reflect differences in primary school enrolment rates. In Latin America and East Asia, the ratio between the rates for boys and girls is nearly equal to unity, whereas it is only 0.76 in South Asia. The literacy ratio is less than 0.7 in the three countries of the Indian sub-continent and in many African countries. The disparity is less marked in Arab countries, with values of 0.66 for Morocco and Egypt and 0.68 for Syria. Yemen, at 0.37, is an exception. The contrast with Latin America, East Asia and Southeast Asia is striking. In all but one Latin American country, the value is higher than 0.9 and often equal to one. In Southeast Asia, it is also equal to one, except in China (0.83) and Indonesia (0.89), where it nevertheless remains much higher than for the countries in the remaining regions (Table A-1).

The proxies measuring access to and use of health care confirm the disparities between regions. Latin America and Southeast Asia show a life-expectancy gap between 0 and -1, indicating that women's life expectancy is five years greater than men's, nearly the same as in the developed countries. The MENA region, Sub-Saharan Africa and finally South Asia follow in descending order. In the last case, women have nearly the same life expectancy as men, indicating a strong bias against them in access to health care. The life expectancy gap shows a particular discrimination in access to health services in countries such as Bangladesh, Pakistan, Nepal, Botswana, Zambia and Zimbabwe. Here the variable has a value of minus six. In Mauritius and Korea the gap is positive, which means that, as in the developed countries, women have the same access to health services as men (Table A-1).

Finally, one can observe important differences in access to the labour market. On average, about two-thirds of women in Latin America and Southeast Asia have access to birth control, compared with one-third in Sub-Saharan Africa. Hence it comes as no surprise that fertility rates also differ remarkably, between less than three and over five in the respective regions. At the country level the situation becomes even more pronounced. The average rate of women having access to birth control in Benin, Burkina-Faso, Central African Republic, Ivory Coast, Eritrea, Guinea, Mali, Mauritania, Mozambique, Niger and Chad is less than 10 per cent, and the average birth rate amounts to 5.7. Having more than five children makes it nearly impossible to enter the labour market.

The Economic Role of Women: A New Database

As pointed out above, the percentage of economically active women can be quite misleading as a measure of women's economic role. It would indicate that Africa has the highest rate of economically active women among all the regions studied (75 per cent) owing to a high rate of female participation in agriculture and household work. Yet these are not necessarily forms of employment in which women have autonomy. The measure of economically active women excluding family workers proves to be a more precise indicator. It is 32 per cent in Latin America and East Asia, seven per cent in South Asia, 16 per cent in the MENA region and 29 per cent in Africa. Note that most women in South Asia are indeed family workers; the rate of activity increases from seven per cent to 59 per cent when family workers are included.

Of the three regions where women are disadvantaged, Africa has the highest rate of female economic activity. This arises from the importance of small commerce, often controlled by women. Although in terms of the institutional background the condition of women looks particularly bad in Sub-Saharan Africa, women in this region enjoy liberties that women in the MENA region do not. A comparison of the average values for freedom of movement and for the percentage of women who wear the veil reveals why. Sub-Saharan women can conduct economic activity in petty trading or the craft industry, whereas customs in the MENA region generally allow women to have such activities only if they pursue the business at home. The low rate of economically active women in the MENA region arises primarily from the institutional framework rather than backwardness in education, because female/male ratios in primary, secondary and higher education as well as literacy rates are higher in the MENA region than in Sub-Saharan Africa.

Similar results emerge from a regional comparison of the percentages of women among wage earners. Some 35 per cent of wage earners are women in Latin America and East Asia, 19 per cent in South Asia, 27 per cent in Sub-Saharan Africa and 17 per cent in the MENA region. The low scores for South Asia and the MENA region reflect mainly the influence of the institutional framework. A comparison with figures for China and South Korea — where women account for 38 per cent and 40 per cent of the total number of salaried workers respectively, proportions twice as high as in South Asia and MENA — shows how these low rates curb the development of manufactured goods exports.

The percentage of technicians who are women goes up to 50 per cent in many Latin American countries as well as China, Thailand and the Philippines. It is far lower, around 20 per cent, in a number of African countries, such as Central African Republic, Mali, Mauritania, Mozambique, Togo and Niger (the lowest value, at eight per cent). The figure for the MENA region is 30 per cent, quite low compared to Latin America and East Asia but far higher than in Sub-Saharan Africa and South Asia. Women represent around 20 per cent of managers in Latin America and East Asia but under 10 per cent in South Asia and the MENA region and 13 per cent in Africa. The higher result for Africa seems paradoxical because women in the MENA region and South Asia have greater access to secondary education — a vital prerequisite for managerial jobs — than do women in Sub-Saharan Africa. Yet this just underlines the importance of the institutional factors. More women may have access to secondary education in South Asian and MENA societies, but tradition makes it unacceptable for them to hold responsibilities and possibly give orders to men. The percentage of women technicians is higher in Arab than in African countries, but technicians' jobs are somewhat different; usually these women are not in a position to give orders.

V. THE IMPORTANCE OF SOCIAL INSTITUTIONS FOR THE ECONOMIC ROLE OF WOMEN IN DEVELOPING COUNTRIES

This part analyses the determinants of the economic role of women. Following the framework developed above, assume that the variable of interest, the economic role of women, depends on social institutions, the level of development and access to resources, and that access to resources depends on social institutions and the level of development.

Based on this framework, the following equations are estimated:

- 1) (access to resources) = f (ECO/NON-ECO) + (log Y) + e_t
- 2) (economic role of women) = f (access to resources) + e_t
- 3) (economic role of women) = f (ECO/NON-ECO) + (log Y) + e_t

A core assumption of the model is that the variables used to build the ECO and NON-ECO indicators are exogenous. The conditions that they measure have existed for more than a century and have not changed with very few exceptions (e.g. Turkey, Tunisia, Iran). Nevertheless, one might argue that religious affiliation or some other country-specific variable might simultaneously influence the economic role of women, ECO and NON-ECO. This would mean that ECO and NON-ECO are in fact endogenous. One can test for this with an endogeneity test computationally equivalent to the Hausman test. It uses the predicted values from the reduced-form equation, regressing religious affiliations on ECO and NON-ECO, and inserts these values on the right-hand side of the primary equation⁷. The test examines whether the unobservable values in the reduced-form equation help to explain the variation in the economic role of women after controlling for the observable explanatory variables (Waters, 1999). The results are displayed in Annex 5, where a two-stage least-squares model instrumenting ECO and NON-ECO is estimated. They show that with the exception of women among administrators and managers the hypothesis that ECO and NON-ECO are exogenous cannot be rejected. In Table 3 for the percentage of women among managers and administrators a two stage least square model instrumenting Eco and Non-Eco is estimated, otherwise OLS estimates are reported.

The hypothesis that access to education and health care are influenced by social institutions is confirmed (Table 2). All coefficients have the expected negative sign and nearly all of them are highly significant. To use the equation explaining the literacy ratio as an example, the explanatory power of the models including ECO and NON-ECO indicators is quite satisfactory, with R^2 values of 0.29 and 0.44. The R^2 values are not as high for enrolment rates in primary and secondary education, at 0.31 and 0.20 (NON-ECO indicator) and 0.17 and 0.08 (ECO indicator).

7. Dummies for religious affiliations included are: Muslim, Christian, Hindu, Buddhist and Other.

These findings permit one to conclude that social norms, traditions and codes of conduct like polygamy, excision, arranged marriages and parental authority (NON-ECO indicator) have an impact on the literacy ratio and the female/male school enrolment ratio, although at first sight no links exist between these variables and education. The results suggest further that access to human capital is more difficult for women in societies where they are considered “inferior”.

Table 2. The Impact of Social Institutions on Access to Resources

Dependent variable	ECO	NON-ECO	Log y	R ²	Prob. (F-statistics)	Number of countries included
Ratio LIT ¹	-3.5***			.29	0.000	64
	-2.87***		1.94***	.46	0.000	59
		-4.7***		.44	0.000	64
		-3.83***	1.55***	.52	0.000	59
Ratio PRIM ²			2.62***	.28	0.000	59
	-1.8***			.17	0.000	66
	-1.63***		9.20**	.29	0.000	60
		-2.6***		.31	0.000	66
Ratio Sec. ³		-2.10***	6.76*	.32	0.000	60
	-2.4**		1.30***	.16	0.002	60
	-1.64		2.26***	.22	0.001	60
		-4.1***		.20	0.000	66
Ratio TERT ⁴		-2.47**	1.91**	.25	0.000	60
	-5.8***		2.64***	.18	0.001	60
	-3.01		7.66***	.43	0.000	56
		-8.1***		.18	0.001	62
Life Expectancy Gap ⁵		-2.60	7.60***	.42	0.000	56
	-4.22***		8.43***	.40	0.000	56
		-4.58***		.40	0.000	66
			2.83***	.28	0.000	60
	-3.82***		1.93***	.55	0.000	60
		-3.81***	1.69***	.48	0.000	60

Notes:

- Ratio LIT: women's literacy rate/men's literacy rate.
- Ratio PRIM: girls' schooling rate/boys schooling rate in primary school.
- Ratio SEC: girls' schooling rate/boys' schooling rate in secondary school.
- Ratio TERT: girls' schooling rate/boys' schooling rate in tertiary school.
- Life-expectancy gap: difference between observed women's and men's life expectancy minus 5.9 (for explanation see text).

*: Significant at the 0.1 level; **: significant at the 0.05 level; ***: significant at the 0.01 level.

The institutional framework is not the only factor that explains educational discrimination between girls and boys, however. GDP per capita (y) has been added to check whether economic growth can reduce it. The coefficient of (log) y is always significant, and the values of R² increase (0.46 as against 0.29, or 0.52 as against 0.44 for the literacy ratio). With higher GDP per capita, discrimination against women declines. When GDP per capita is very low most of the population is poor, the cost of education is too high for poor families, and parents

choose which children they will send to school. In an institutional framework unfavourable to girls, the preference always goes to boys. In contrast, when only a small minority of the population is poor and even if the institutional framework is the same, parents can usually send all their children to school.

The regressions for the life-expectancy gap suggest that women have less access to health services when the institutional framework is hostile to them. The coefficients of ECO and NON-ECO are highly significant and the value of R^2 reaches 0.40. The relatively high coefficients (4.2 and 4.6) mean that ECO or NON-ECO values of 0.7 reduce women's life expectancy by three years. Income has less influence on the life-expectancy gap ($R^2 = 0.26$). As income rises, more and more people have access to health services, which previously disadvantaged women. Using both variables (y and institutions) very satisfactory results appear (R^2 equal to 0.51 or 0.59 with significant coefficients).

Table 3 presents the results of regression analyses using the proxies for the institutional framework – the ECO and NON-ECO indicators – and those for women's access to resources as independent variables to explain gender inequalities in the economic role of women. For all four dependent variables chosen, both the NON-ECO and ECO indicators have significant, often highly significant impact, and the coefficients have the expected negative sign. Thus a clear link appears between an unfavourable institutional environment and a low rate of female participation in economic life. The impact of social institutions has more importance for women's entry into the labour market as wage earners than for their having independent economic activity.

The impact of social institutions is straightforward, but that of income is not. Contrary to the finding of Forsythe *et al.* (2000) of a positive relationship between economic growth and the role of women, quite mixed effects appear here. The income variable is not significant for women's participation in the labour force, with one exception. Regressing women's percentage among paid workers on NON-ECO + income, the income variable even becomes negatively significant. Thus women can remain excluded from participating in the labour force even if the level of development increases. Income does become (positively) significant for women's participation in technical and managerial positions. This is an indication that women find it easier to get highly skilled or specialised jobs in more developed countries than in low-income countries.

The regressions also confirm the importance of basic education for women's chances to enter the labour force, although education alone is not sufficient. As Table 1 showed, the percentage of women in wage employment is twice as high in Latin American countries as in the MENA region. This disparity does not arise simply from a difference in access to education. The two regions have nearly identical school enrolment rates for women, yet the difference in female salaried employment is very large. Comparing instead the sum of the NON-ECO and ECO indicators, the MENA region has a high value of 1.08 as against 0.06 in Latin America, signalling much stronger discrimination against women in MENA.

Table 3. The Influence of Social Institutions and Access to Resources
on the Economic Role of Women

	ECO	NON- ECO	Ratio LIT	Ratio PRIM	Ratio SEC	Ratio TERT	Birth Control	Log <i>y</i>	R ²	Prob. (F-stats.)	No. of Countries
W% act. Pop. ¹	-1.5*								.09	0.088	32
		-2.1**							.13	0.047	32
			0.25*						.11	0.058	32
				0.19					.02	0.402	32
					0.25*				.10	0.073	32
						0.02			.00	0.783	29
W% paid W. ²							0.12		.02	0.389	32
								1.04	.00	0.891	32
	-2.04*							-7.57	.11	0.193	32
		-2.93**						-1.06	.17	0.067	32
	-2.2**								.33	0.000	66
		-2.3***							.30	0.000	66
			0.33***						.32	0.000	64
				0.46***					.28	0.000	66
					0.17***				.14	0.002	66
						0.03			.00	0.225	62
							0.12*		.06	0.050	65
	W % tech. ³								1.48	.00	0.707
-2.43***								-4.22	.36	0.000	60
		-2.91***						-7.19**	.38	0.000	60
-2.8***									.43	0.000	49
		-3.3***							.52	0.000	49
			0.52***						.59	0.000	49
				0.7***					.41	0.000	49
					0.33***				.36	0.000	49
						0.12***			.22	0.001	45
							0.29***		.29	0.000	48
W % man. ⁴								17.3	.24	0.001	45
	-2.49***							9.13**	.50	0.000	45
		-2.56***						7.45*	.55	0.000	45
	-3.3***								.16	0.000	60
		-2.9***							.24	0.000	60
			0.28***						.24	0.000	58
				0.29***					.12	0.007	60
					0.13**				.09	0.017	60
						0.06**			.11	0.014	56
							0.15***		.12	0.007	59
	-2.10***						7.1*	.07	0.060	54	
		-2.35***					-0.03	.31	0.000	54	
							-1.63	.33	0.000	54	

Notes:

1. W% act. Pop.: percentage of women in active population (family workers excluded).
2. W % paid W.: percentage of women among paid workers.
3. W % tech.: percentage of women among technical and professional workers.
4. W % man.: percentage of women among managers and administrative workers.

Log (*y*): log GDP/per capita.

* Significant at the 0.1 level; ** significant at the 0.05 level; *** significant at the 0.01 level.

Finally, as expected, access to birth control has a strong influence on the probability that women will get higher-paid jobs. It is significant for women among paid workers and non-significant for women in the economically active population. This observation has an explanation. Women belonging to large families can have economic activities of their own such as petty trade, but they cannot enter the formal labour market due to family obligations and the associated time constraints.

Both the institutional framework and access to education have important impacts as determinants of women joining the skilled labour force as technicians. The coefficients of these variables are always very significant and the values of R^2 are high: 0.43 and 0.52 for ECO and NON-ECO and 0.59, 0.41 and 0.36 for the literacy, primary education and secondary education ratios. The lower value of R^2 for the higher education ratio is not surprising because most technicians do not attend institutions of higher education. Income alone, in contrast, does not have a significant impact and the value of R^2 is very low.

The percentage of women managers presents an interesting case. First, the analysis again shows social institutions as important for having access to these jobs, with relatively high R^2 values (0.30 and 0.24). Second, women's access to literacy training or primary education has an impact on the percentage of managers who are women. Surprisingly, however, the R^2 values for secondary and higher education are quite low (0.09 and 0.11), suggesting that the institutional framework acts as a greater barrier to women's access to these jobs than discrimination in education. An institutional framework that strongly hinders women's participation in economic activity raises obstacles to their access to the kinds of employment that would offer them higher social roles in terms of power and income.

In sum, if social institutions in developing countries discriminate against women, policy measures aiming to improve their situation *via* improved access to education and health will have only a limited impact. While there is evidence that in countries where women have less education than men do they participate less in economic activity, it can also be shown that women's access to education depends on the institutional framework. This calls for a more proactive donor approach to address these fundamental roots of gender inequality.

VI. CONCLUSIONS

This paper aims to identify the basic determinants of gender inequalities in participation in economic activity. While the debate in the literature touches mainly on the causality between gender inequalities and levels of development, this study emphasises the important role of social institutions. Three important results emerge:

- First, using a newly developed data set the study detects strong regional disparities. It finds a clear gap between countries in East Asia and Latin America and countries from Sub-Saharan-Africa, South Asia and the MENA region. There are certainly many poor countries in the second group, but the relationship between GDP per capita and the indicators for the institutional framework is not always confirmed. As an example, South Korea and the United Arab Emirates have the same GDP per capita, but the NON-ECO indicator is much higher in the latter. In poor Latin American countries such as Haiti and Nicaragua, the value of this indicator is never higher than 0.08, while in African countries with the same average income such as Ivory Coast, Mozambique and Senegal it can reach 0.60.
- Second, while there is evidence that gender inequalities in participation in economic activities generally are higher in Muslim and Hindu-dominated countries compared with Christian and Buddhist ones, there are important exceptions. This suggests that within the dominant religion various interpretations and applications regarding the economic role of women are possible. It is of utmost importance for future research to identify the main determinants of these differences.
- Third, an institutional framework that disadvantages women hinders development because it governs the possibilities of half of the population for participation in economic activities. It also reduces human capital formation, a major factor explaining growth.

From all this it follows that the current approaches by donors to improve women's access to education, health, credit and so forth is important but fails to address the underlying causes of gender discrimination in countries with strong social institutions discriminating against women. If custom forbids outside work for women, the enrolment rate of girls in primary school can double without entailing an increase in female participation in the labour market. If custom goes against accepting that women can be in a position to exercise authority, the enrolment rate in universities can double without increasing the number of women managers. These examples show that to increase the effectiveness of country and donor policies, measures to address the institutional framework have to be undertaken. The encouraging finding is that even in different settings influenced by culture, religion or economic roles, changes in favour of women are possible. Yet tackling the deep roots of gender inequality still has a long way to go and demands much political will.

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ANNEXES

	<u>Page</u>
A-1. Data by Country	33
A-2. Data by Region	46
A-3. Data by Religious Affiliation	47
A-4. Data by Level of Economic Development	48
A-5. Test of Endogeneity	49

A-1. Data by Country

		Fiji	Bangladesh	India	Nepal	Pakistan	China
Eco		0.11	0.50	0.58	0.52	0.87	0.00
	Freedom (discrimination =1, no d. =0)	0	0	0.75	0	1	0
	=0)	0	1	0.5	0.8	1	0
	Access to Capital (discrimination =1, no d. =0)	0.35	0.5	0.5	0.79	0.62	0
Non-eco		0.03	0.63	0.40	0.39	0.56	0.01
	Polygamy (0=no, 1=yes)	0	1	0.2	0.1	1	0
	Female genital mutilation (discrimination =1, no d. =0)	0	0	0	0	0	0
	Parental authority (discrimination =1, no d. =0)	0	1	1	1	1	0
	15-19 ever married (%)	13	50	39	44	22	2
Total Eco + Non-eco		0.14	1.13	0.98	0.91	1.43	0.01
GDP per Capita			835	1818	954	1952	3259
Education	School enrollment, (primary, ratio)	0.99	0.96	0.77	0.77	0.55	1.02
	School enrollment, (secondary, ratio)	1	0.99	0.68	0.69	0.63	0.92
	School enrollment, (tertiary, ratio)	0.49	0.51	0.61	0.25	0.25	0.5
	Literacy rate (ratio)	0.96	0.57	0.66	0.4	0.48	0.83
	School enrollment, primary (%)	100	100		67		92
	School enrollment, secondary (%)	76	12	31			48
	School enrollment, tertiary (%)		3				
	Literacy rate (%)	90.8	29.9	45.4	24	27.9	76.3
Health	Life expectancy at birth, women (years)	70.9	59.5	63.8	58.3	59.8	72.8
	Life expectancy gap (years)	-2.4	-5.8	-4.9	-6.4	-6.3	-1.6
	Life expectancy at birth, men (years)	67.4	59.4	62.8	58.8	60.2	68.5
	Maternal mortality rate (per 100000 live birth)	20	600	440	830	200	60
	Sex ratio (at birth)	105	106	105	105	105	109
	Sex ratio (under 15 years)	104	105	106	107	106	110
Access to labour market	Birth control (%)	41	54	48	39	28	84
	Total fertility rate (children per woman)	3	3.6	3	4.5	5.3	1.8
	Birth attendance by skilled staff (%)	100	12	42	12	20	70
Economic status of women	Economic active women without family workers (%)		8.7		38	4.9	
	Women among tech. and prof. workers (%)	45	35	21	N/A	20	45
	Women among admi. And managerial workers (%)	9	5	3	9	4	12
	Women in total number of paid workers (%)	33.55	26.7	17.06	11.7	12.2	37.92

		Korea, Rep.	Indonesia	Myanmar	Philippines	Thailand
Eco		0.00	0.00	0.00	0.00	0.00
	Freedom (discrimination =1, no d. =0)	0	0	0	0	0
	=0)	0	0	0	0	0
	Access to Capital (discrimination =1, no d. =0)	0	0	0	0	0
Non-eco		0.00	0.26	0.14	0.03	0.02
	Polygamy (0=no, 1=yes)	0	0.8	0	0	0
	Female genital mutilation (discrimination =1, no d. =0)	0	0.1	0	0	0
	Parental authority (discrimination =1, no d. =0)	0	0	0.5	0	0
	15-19 ever married (%)	1	14	7	10	6
Total Eco + Non-eco		0	0.26	0.14	0.03	0.02
GDP per Capita		13317	3031	1050	2291	6398
Education	School enrollment, (primary, ratio)	1.01	0.95	0.96	0.94	0.97
	School enrollment, (secondary, ratio)	0.92	0.93	1.05	0.99	1.05
	School enrollment, (tertiary, ratio)	0.55	1.74	1.6	1.28	1.18
	Literacy rate (ratio)	0.97	0.89	0.91	1	0.97
	School enrollment, primary (%)	98				76
	School enrollment, secondary (%)					57
	School enrollment, tertiary (%)				31	33
	Literacy rate (%)	96.4	82	80.5	95.1	93.9
Health	Life expectancy at birth, women (years)	78.6	68.2	58.5	71.3	73.2
	Life expectancy gap (years)	1.5	-2	-1.1	-1.9	0
	Life expectancy at birth, men (years)	71.2	64.3	53.7	67.3	67.3
	Maternal mortality rate (per 100000 live birth)	20	470	170	240	44
	Sex ratio (at birth)	111		106	105	105
	Sex ratio (under 15 years)	113		104	104	104
Access to labour market	Birth control (%)	81	57	33	47	72
	Total fertility rate (children per woman)	1.5	2.3	2.8	3.2	2
	Birth attendance by skilled staff (%)	100	56	57	56	95
Economic status of women	Economic active women without family workers (%)	32.8	22		30.8	25.2
	Women among tech. and prof. workers (%)	32	42	N/A	64	52
	Women among admi. And managerial workers (%)	4	17		35	21
	Women in total number of paid workers (%)	40.3	32	35.2	36.1	18

		Brazil	Colombia	Costa Rica	Cuba	Dominican Rep.	Ecuador
Eco		0.00	0.00	0.00	0.00	0.00	0.00
	Freedom (discrimination =1, no d. =0)	0	0	0	0	0	0
	=0)	0	0	0	0	0	0
	Access to Capital (discrimination =1, no d. =0)	0	0	0	0	0	0
Non-eco		0.04	0.04	0.02	0.07	0.07	0.05
	Polygamy (0=no, 1=yes)	0	0	0	0	0	0
	Female genital mutilation (discrimination =1, no d. =0)	0	0	0	0	0	0
	Parental authority (discrimination =1, no d. =0)	0	0	0	0	0	0
	15-19 ever married (%)	17	17	6	29	29	20
Total Eco + Non-eco		0.04	0.04	0.02	0.07	0.07	0.05
GDP per Capita		5459	5317	5346	2164	3163	4165
Education	School enrollment, (primary, ratio)	0.95	0.96	0.93	1.01	1.01	1.01
	School enrollment, (secondary, ratio)	1.07	1.06	1.03	1.11	1.18	1.03
	School enrollment, (tertiary, ratio)	1.22	1.07	1.15	1.42	1.35	
	Literacy rate (ratio)	1	1	1	1	1	0.96
	School enrollment, primary (%)	96			97	88	97
	School enrollment, secondary (%)				79	57	47
	School enrollment, tertiary (%)	15			22		
	Literacy rate (%)	85.4	91.7	95.7	96.6	83.6	90
Health	Life expectancy at birth, women (years)	72	74.8	79.3	78.4	70	73
	Life expectancy gap (years)	2	0.7	-1.2	-2	-0.7	-0.7
	Life expectancy at birth, men (years)	64.1	68.2	74.6	74.5	64.8	67.8
	Maternal mortality rate (per 100000 live birth)	260	120	35	24	110	210
	Sex ratio (at birth)	105	103	105	106	105	105
	Sex ratio (under 15 years)	104	102	105	106	104	103
Access to labour market	Birth control (%)	77	77	75	73	64	66
	Total fertility rate (children per woman)	2.2	2.6	2.7	1.6	2.7	2.8
	Birth attendance by skilled staff (%)	88	86	98	100	96	69
Economic status of women	Economic active women without family workers (%)	36	43.1	30.7		15.36	35.5
	Women among tech.and prof. workers (%)	63	44	45	48	50	47
	Women among adm. And managerial workers (%)	37	35	27	25	28	26
	Women in total number of paid workers (%)	36.7	47.5	33.9	37.85	35.8	31.6

		El Salvador	Haiti	Honduras	Nicaragua	Panama	Paraguay
Eco		0.00	0.00	0.10	0.00	0.00	0.00
	Freedom (discrimination =1, no d. =0)	0	0	0	0	0	0
	=0)	0	0	0	0	0	0
	Access to Capital (discrimination =1, no d. =0)	0	0	0.33	0	0	0
Non-eco		0.04	0.04	0.08	0.09	0.05	0.04
	Polygamy (0=no, 1=yes)	0	0	0	0	0	0
	Female genital mutilation (discrimination =1, no d. =0)	0	0	0	0	0	0
	Parental authority (discrimination =1, no d. =0)	0	0	0	0	0	0
	15-19 ever married (%)	16	17	30	34	21	17
Total Eco + Non-eco		0.04	0.04	0.18	0.09	0.05	0.04
GDP per Capita		2717	816	2035	1451	5705	3160
Education							
	School enrollment, (primary, ratio)	1.17	1.06	0.98	0.98	0.93	1.01
	School enrollment, (secondary, ratio)	1.01	0.99	1.22	1.15	1.02	1.07
	School enrollment, (tertiary, ratio)	1.23		1.28	1.11	1.62	1.2
	Literacy rate (ratio)	0.93	0.92	1	1.01	0.99	0.98
	School enrollment, primary (%)	87	82				92
	School enrollment, secondary (%)	38					43
	School enrollment, tertiary (%)	20					
	Literacy rate (%)	76.1	47.8	74.5	66.8	91.3	92.2
Health							
	Life expectancy at birth, women (years)	73.1	55.7	68.9	71.1	76.8	72.6
	Life expectancy gap (years)	0.1	0.1	-0.2	-1.2	-1.3	-1.3
	Life expectancy at birth, men (years)	67.1	49.7	63.2	66.4	72.2	68
	Maternal mortality rate (per 100000 live birth)	180	1100	220	250	100	170
	Sex ratio (at birth)	105	105	105	105	104	105
	Sex ratio (under 15 years)	104	103	104	104	104	103
Access to labour market							
	Birth control (%)	60	27	62	60	58	57
	Total fertility rate (children per woman)	2.9	4	3.7	3.8	2.4	3.8
	Birth attendance by skilled staff (%)	90	24	55	61	90	71
Economic status of women							
	Economic active women without family workers (%)	11.1	38.7	78.3		34.9	27.3
	Women among tech.and prof. workers (%)	44	39	45	N/A	49	54
	Women among admi. And managerial workers (%)	25	33	39		27	14
	Women in total number of paid workers (%)	36.3	44.2	34.2	49	38.8	38.2

		Peru	Venezuela	Angola	Benin	Botswana
Eco		0.06	0.00	0.42	0.28	0.52
	Freedom (discrimination =1, no d. =0)	0	0	0	0	0
	=0)	0	0	1	0.5	1
	Access to Capital (discrimination =1, no d. =0)	0.15	0	0.24	0.4	0.58
Non-eco		0.03	0.05	0.72	0.65	0.32
	Polygamy (0=no, 1=yes)	0	0	1	0.8	0.2
	Female genital mutilation (discrimination =1, no d. =0)	0	0	0.5	0.5	0
	Parental authority (discrimination =1, no d. =0)	0	0	1	1	1
	15-19 ever married (%)	13	20	36	29	6
Total Eco + Non-eco		0.09	0.05	1.14	0.93	0.84
GDP per Capita		3666	8965	647	1257	4200
Education						
	School enrollment, (primary, ratio)	0.99	0.94	0.87	0.68	1.04
	School enrollment, (secondary, ratio)	0.98	0.15	0.77	0.46	1.18
	School enrollment, (tertiary, ratio)	0.34	1.42	0.69	0.25	0.79
	Literacy rate (ratio)	0.9	0.99		0.45	1.07
	School enrollment, primary (%)	100		53		82
	School enrollment, secondary (%)	61			10	61
	School enrollment, tertiary (%)	15		1	1	3
	Literacy rate (%)	85.3	92.1		23.6	79.8
Health						
	Life expectancy at birth, women (years)	71.6	76.2	46.6	55.5	40.1
	Life expectancy gap (years)	-0.9	-0.1	-3.2	-2.5	-6
	Life expectancy at birth, men (years)	66.6	70.4	43.9	52.1	40.2
	Maternal mortality rate (per 100000 live birth)	240	43	1300	880	480
	Sex ratio (at birth)	105	107	105	103	103
	Sex ratio (under 15 years)	103	107	102	102	101
Access to labour market						
	Birth control (%)	69	21	8	19	40
	Total fertility rate (children per woman)	2.6	2.7	7.2	5.7	3.9
	Birth attendance by skilled staff (%)	56	95	23	60	99
Economic status of women						
	Economic active women without family workers (%)	38.3	26.4		34.8	39.5
	Women among tech.and prof. workers (%)	41	57	N/A	N/A	61
	Women among admi. And managerial workers (%)	23	24	15	7	26
	Women in total number of paid workers (%)	35	35.1	42.7	20.9	43.1

		Burkina Faso	Cameroon	Chad	Central Africa	Cote d'Ivoire	Equatorial Guinea
Eco		0.13	0.23	0.76	0.44	0.07	0.67
	Freedom (discrimination =1, no d. =0)	0	0	0.5	0	0	0
	=0)		0	1	1	0	1
	Access to Capital (discrimination =1, no d. =0)	0.4	0.73	0.8	0.4	0.24	1
Non-eco		0.51	0.34	0.77	0.41	0.67	0.57
	Polygamy (0=no, 1=yes)	0.9	0.6	1	0.7	0.8	1
	Female genital mutilation (discrimination =1, no d. =0)	0.7	0.2	0.6	0.5	0.6	0
	Parental authority (discrimination =1, no d. =0)	0	0.2	1	0	1	1
	15-19 ever married (%)	45	36	49	42	28	26
Total Eco + Non-eco		0.64	0.57	1.53	0.85	0.74	1.24
GDP per Capita			1008	471	653	1373	
Education	School enrollment, (primary, ratio)	0.68	0.86	0.62	0.68	0.75	0.79
	School enrollment, (secondary, ratio)	0.59	0.78	0.29	0.42	0.55	0.36
	School enrollment, (tertiary, ratio)	0.29		0.18	0.18	0.36	0.43
	Literacy rate (ratio)	0.41	0.84	0.66	0.58	0.71	0.8
	School enrollment, primary (%)	28		42	43	51	73
	School enrollment, secondary (%)	6		3			14
	School enrollment, tertiary (%)				1	4	
	Literacy rate (%)	14.1	69.5	34	34.9	38.6	74.4
Health	Life expectancy at birth, women (years)	47.6	50.7	46.9	46	48.1	52.6
	Life expectancy gap (years)	-3.9	-4.4	-3.5	-2.6	-5.3	-2.7
	Life expectancy at birth, men (years)	45.6	49.2	44.5	42.7	47.5	49.4
	Maternal mortality rate (per 100000 live birth)	1400	720	1500	1200	1200	1400
	Sex ratio (at birth)	103	103	104	103	103	103
	Sex ratio (under 15 years)	102	102	101	102	101	101
Access to labour market	Birth control (%)	12	19	8	15	15	
	Total fertility rate (children per woman)	6.8	4.7	6.3	4.9	4.8	5.9
	Birth attendance by skilled staff (%)	27	56	16	44	47	5
Economic status of	Economic active women without family workers (%)						
	Women among tech.workers (%)	26	24	N/A	19	N/A	27
	Women among admi. And managerial workers (%)	14	10	13	9	10	2
	Women in total number of paid workers (%)	12.5	24.3	5.5	9.5	20.6	13.3

		Eritrea	Guinea	Kenya	Madagascar	Mali	Mauritania
Eco		0.58	0.11	0.57	0.03	0.60	0.58
	Freedom (discrimination =1, no d. =0)	0.25	0	0	0	0	0.25
	=0)	1	0	1	0.1	1	1
	Access to Capital (discrimination =1, no d. =0)	0.5	0.4	0.7	0	0.82	0.5
Non-eco		0.82	0.82	0.32	0.39	0.86	0.65
	Polygamy (0=no, 1=yes)	1	1	0.6	0.2	1	1
	Female genital mutilation (discrimination =1, no d. =0)	0.9	0.8	0.5	0	0.92	0.25
	Parental authority (discrimination =1, no d. =0)	1	1	0	1	1	1
	15-19 ever married (%)	38	49	17	34	50	36
Total Eco + Non-eco		1.4	0.93	0.89	0.42	1.46	1.23
GDP per Capita				1075	690	783	993
Education	School enrollment, (primary, ratio)	0.86	0.69	0.98	1.02	0.7	0.94
	School enrollment, (secondary, ratio)	0.8	0.38	0.91	1.07	0.52	0.88
	School enrollment, (tertiary, ratio)	0.16	0.13	0.47	0.83	0.25	0.2
	Literacy rate (ratio)	0.66		0.98	0.81	0.7	0.59
	School enrollment, primary (%)	31	37		63	34	58
	School enrollment, secondary (%)	17	7		13		
	School enrollment, tertiary (%)					2	
	Literacy rate (%)	44.5		76	59.7	34.4	30.1
Health	Life expectancy at birth, women (years)	53.3	48	51.5	53.8	52.4	53.1
	Life expectancy gap (years)	-3.2	-4.9	-4.4	-3.6	-3.9	-2.7
	Life expectancy at birth, men (years)	50.6	47	50	51.5	50.4	49.9
	Maternal mortality rate (per 100000 live birth)	1100	1200	1300	580	630	870
	Sex ratio (at birth)	103	103	103	103	103	103
	Sex ratio (under 15 years)	100	99	102	100	101	100
Access to labour market	Birth control (%)	5	6	39	19	8	8
	Total fertility rate (children per woman)	5.3	5.8	4.2	5.7	7	6
	Birth attendance by skilled staff (%)	21	35	44	46	24	57
Economic status of women	Economic active women without family workers (%)			20.2			
	Women among tech. and prof. workers (%)	30	N/A	N/A	N/A	19	21
	Women among admi. And managerial workers (%)	23	19	5	4	20	8
	Women in total number of paid workers (%)	32.3	30.1	29.6	26	35.6	43.3

		Mauritius	Mozambique	Niger	Senegal	South Africa	Tanzania
Eco		0.00	0.50	0.76	0.40	0.56	0.62
	Freedom (discrimination =1, no d. =0)	0	0	0.4	0	0	0
	=0)	0	1	1	0.7	1	1
	Access to Capital (discrimination =1, no d. =0)	0	0.5	0.88	0.5	0.7	0.88
Non-eco		0.03	0.62	0.71	0.60	0.16	0.50
	Polygamy (0=no, 1=yes)	0	1	1	0.9	0.5	0.65
	Female genital mutilation (discrimination =1, no d. =0)	0	0	0.2	0.2	0.1	0.1
	Parental authority (discrimination =1, no d. =0)	0	1	1	1	0	1
	15-19 ever married (%)	11	47	62	29	4	25
Total Eco + Non-eco		0.03	1.12	1.47	1	0.72	1.12
GDP per Capita		9350	1187	532	1302	3858	553
Education							
	School enrollment, (primary, ratio)	1	0.81	0.64	0.84	1	1.03
	School enrollment, (secondary, ratio)	1.01	0.71	0.63	0.65	1.1	0.74
	School enrollment, (tertiary, ratio)	0.88	0.32	0.33	0.36	1.15	0.26
	Literacy rate (ratio)	0.93	0.48	0.35	0.58	0.98	0.79
	School enrollment, primary (%)	93	37	20	54	100	49
	School enrollment, secondary (%)	63	6	5			3
	School enrollment, tertiary (%)	7				18	
	Literacy rate (%)	81.3	28.7	8.4	27.6	84.6	66.5
Health							
	Life expectancy at birth, women (years)	75.3	40.2	45.5	55.2	53.9	52.1
	Life expectancy gap (years)	1.8	-4.1	-5.3	-2.2	-2.2	-3.8
	Life expectancy at birth, men (years)	67.6	38.4	44.9	51.5	50.2	50
	Maternal mortality rate (per 100000 live birth)	45	980	920	1200	340	1100
	Sex ratio (at birth)	102	103	103	103	102	103
	Sex ratio (under 15 years)	102	100	104	101	101	101
Access to labour market							
	Birth control (%)	75	6	14	13	56	25
	Total fertility rate (children per woman)	1.9	5.9	8	5.1	2.9	5
	Birth attendance by skilled staff (%)	99	44	16	51	84	35
Economic status of women							
	Economic active women without family workers (%)	31.7			25.8	20.5	
	Women among tech. and prof. workers (%)	38	20	8	N/A	47	N/A
	Women among admi. And managerial workers (%)	23	11	8	4	19	19
	Women in total number of paid workers (%)	33.2	15.2	8.6	28.1	37.1	33.1

		Togo	Uganda	Zambia	Zimbabwe	Algeria	Bahrain
Eco		0.27	0.67	0.57	0.57	0.67	0.33
	Freedom (discrimination =1, no d. =0)	0	0	0	0	0.25	0
	=0)	0	1	1	1	1	1
	Access to Capital (discrimination =1, no d. =0)	0.82	1	0.7	0.7	0.78	0
Non-eco		0.23	0.46	0.54	0.35	0.53	0.77
	Polygamy (0=no, 1=yes)	0.6	0.3	1	0.7	1	1
	Female genital mutilation (discrimination =1, no d. =0)	0.12	0.05	0	0	0	1
	Parental authority (discrimination =1, no d. =0)	0	1	0.9	0.5	1	1
	15-19 ever married (%)	20	50	27	21	10	7
Total Eco + Non-eco		0.5	1.13	1.11	0.92	1.2	1.1
GDP per Capita		644	726	674	1448	2689	4620
Education	School enrollment, (primary, ratio)	0.79	1	0.98	0.97	0.95	1.02
	School enrollment, (secondary, ratio)	0.44	0.85	0.85	0.88	1.01	1.12
	School enrollment, (tertiary, ratio)	0.21	0.53	0.46	0.6	0.5	1.56
	Literacy rate (ratio)	0.59	0.73	0.84	0.91	0.75	0.91
	School enrollment, primary (%)	78	100	72		92	98
	School enrollment, secondary (%)	14	8	20		59	85
	School enrollment, tertiary (%)	1	1	2			32
	Literacy rate (%)	42.5	56.8	71.5	84.7	57.1	82.6
Health	Life expectancy at birth, women (years)	53	44.6	40.9	42.5	71	75.8
	Life expectancy gap (years)	-3.5	-2.6	-6.8	-6.6	-3	-1.7
	Life expectancy at birth, men (years)	50.6	43.3	41.8	43.2	68.1	71.6
	Maternal mortality rate (per 100000 live birth)	980	1100	870	610	150	38
	Sex ratio (at birth)	103	103	103	103	104	103
	Sex ratio (under 15 years)	101	101	101	102	104	103
Access to labour market	Birth control (%)	24	23	15	54	64	62
	Total fertility rate (children per woman)	5.4	7.1	5.7	4.5	2.8	2.3
	Birth attendance by skilled staff (%)	51	38	47	84	92	98
Economic status of women	Economic active women without family workers (%)		22.1		36.2		
	Women among tech.and prof. workers (%)	21	N/A	32	40	28	26
	Women among admi. And managerial workers (%)	8	14	6	15	6	21
	Women in total number of paid workers (%)	46.6	24.3	36.1	23.53	12.2	12.34

		Egypt	Iran	Jordan	Libya	Morocco
Eco		0.45	0.50	0.64	0.38	0.64
	Freedom (discrimination =1, no d. =0)	0.35	0.5	0.4	0.15	0.25
	=0)	1	1	1	1	1
	Access to Capital (discrimination =1, no d. =0)	0	0	0.56	0	0.7
Non-eco		0.73	0.56	0.27	0.38	0.53
	Polygamy (0=no, 1=yes)	1	1	1	1	1
	Female genital mutilation (discrimination =1, no d. =0)	0.97	0	0	0	0
	Parental authority (discrimination =1, no d. =0)	0.8	1	0	0.5	1
	15-19 ever married (%)	14	22	9	1	13
Total Eco + Non-eco		1.18	1.06	0.91	0.76	1.17
GDP per Capita		2128	4265	4139		2693
Education						
	School enrollment, (primary, ratio)	0.94	0.91	1.02	0.97	0.86
	School enrollment, (secondary, ratio)	0.9	0.89	1.07	1.13	0.68
	School enrollment, (tertiary, ratio)	0.71	0.89	1.06	1.03	0.75
	Literacy rate (ratio)	0.66	0.83	0.88	0.75	0.58
	School enrollment, primary (%)	89		65	96	73
	School enrollment, secondary (%)			62	76	
	School enrollment, tertiary (%)				57	8
	Literacy rate (%)	43.8	69.3	83.9	68.2	36.1
Health						
	Life expectancy at birth, women (years)	68.8	69.8	71.8	72.8	69.5
	Life expectancy gap (years)	-3.1	-4.1	-3.2	-1.9	-2.2
	Life expectancy at birth, men (years)	65.7	68	69.1	68.8	65.8
	Maternal mortality rate (per 100000 live birth)	170	130	41	120	390
	Sex ratio (at birth)	105	105	106	105	105
	Sex ratio (under 15 years)	105	105	104	104	104
Access to labour market						
	Birth control (%)	56	73	53	40	50
	Total fertility rate (children per woman)	2.9	2.8	4.3	3.3	3
	Birth attendance by skilled staff (%)	61	86	97	94	40
Economic status of women						
	Economic active women without family workers (%)	14.1				
	Women among tech.and prof. workers (%)	30	33	29	N/A	31
	Women among admi. And managerial workers (%)	16	2		3	26
	Women in total number of paid workers (%)	18.8	9.5	20.75	18.9	28.5

		Oman	Saudi Arabia	Sudan	Syria	Tunisia
Eco		0.61	0.85	0.93	0.35	0.33
	Freedom (discrimination =1, no d. =0)	0.5	0.85	0.85	0.1	0
	=0)	1	1	1	1	1
	Access to Capital (discrimination =1, no d. =0)	0.4	0.7	0.95	0.2	0
Non-eco		0.60	0.54	0.76	0.50	0.26
	Polygamy (0=no, 1=yes)	1	1	1	0.75	0
	Female genital mutilation (discrimination =1, no d. =0)	0.2	0	0.89	0	0
	Parental authority (discrimination =1, no d. =0)	1	1	1	1	1
	15-19 ever married (%)	21	16	16	25	3
Total Eco + Non-eco		1.21	1.39	1.69	0.85	0.59
GDP per Capita		6267	8225	880	5765	4190
Education	School enrollment, (primary, ratio)	0.98	0.93	0.83	0.92	0.97
	School enrollment, (secondary, ratio)	1.02	0.86	1.61	0.92	1.03
	School enrollment, (tertiary, ratio)	1.38	1.35	0.89	0.7	0.97
	Literacy rate (ratio)	0.77	0.81	0.67	0.68	0.74
	School enrollment, primary (%)	65	57	42	89	96
	School enrollment, secondary (%)	58			36	56
	School enrollment, tertiary (%)		22			17
	Literacy rate (%)	61.6	66.9	46.3	60.5	60.6
Health	Life expectancy at birth, women (years)	72.6	73	57.4	72.4	71.4
	Life expectancy gap (years)	-3	-3.4	-3.1	-3.5	-3.5
	Life expectancy at birth, men (years)	69.7	70.5	54.6	70	69
	Maternal mortality rate (per 100000 live birth)	120	23	1500	200	70
	Sex ratio (at birth)	105	105	105	106	108
	Sex ratio (under 15 years)	104	104	105	106	107
Access to labour market	Birth control (%)	24	32	8	36	60
	Total fertility rate (children per woman)	5.5	5.5	4.5	3.7	2.1
	Birth attendance by skilled staff (%)	91	91	86	77	90
Economic status of women	Economic active women without family workers (%)				16.25	25.5
	Women among tech.and prof. workers (%)	N/A	N/A	29	37	36
	Women among admi. And managerial workers (%)			2	3	9
	Women in total number of paid workers (%)	25.3	14.2	20.1	16.7	22.7

		Turkey	United Arab Emirates	Yemen
Eco		0.22	0.71	0.75
	Freedom (discrimination =1, no d. =0)	0.5	0.75	0.5
	=0)	0	1	1
	Access to Capital (discrimination =1, no d. =0)	0.2	0.4	0.76
Non-eco		0.04	0.63	0.62
	Polygamy (0=no, 1=yes)	0	1	1
	Female genital mutilation (discrimination =1, no d. =0)	0	0.31	0.23
	Parental authority (discrimination =1, no d. =0)	0	1	1
	15-19 ever married (%)	14	19	24
Total Eco + Non-eco		0.26	1.34	1.37
GDP per Capita		6552	13857	2298
Education	School enrollment, (primary, ratio)	0.92	0.98	0.58
	School enrollment, (secondary, ratio)	0.67	1.06	0.4
	School enrollment, (tertiary, ratio)	1.65	2.59	0.29
	Literacy rate (ratio)	0.82	1.06	0.37
	School enrollment, primary (%)	96	82	44
	School enrollment, secondary (%)		73	20
	School enrollment, tertiary (%)	18		5
	Literacy rate (%)	76.5	79.3	25.2
Health	Life expectancy at birth, women (years)	72.4	78	61.6
	Life expectancy gap (years)	-0.8	-1.6	-3.7
	Life expectancy at birth, men (years)	67.3	73.7	59.4
	Maternal mortality rate (per 100000 live birth)	55	30	850
	Sex ratio (at birth)	105	105	105
	Sex ratio (under 15 years)	104	104	104
Access to labour market	Birth control (%)	64	28	21
	Total fertility rate (children per woman)	2.3	2.9	7.6
	Birth attendance by skilled staff (%)	81	99	22
Economic status of women	Economic active women without family workers (%)	9.24		
	Women among tech.and prof. workers (%)	33	25	N/A
	Women among admi. And managerial workers (%)	6	2	
	Women in total number of paid workers (%)	19.4	13.8	8.2

*Notes:*ECO:

Freedoms: arithmetic average of two variables:

- Freedom to dress
- Freedom to circulate

Each component is coded 0.5 for prohibitions.

Inheritance in case of the husband's death: if women cannot inherit without any discrimination, the value assigned for the variable is one. The opposite situation is coded zero.

- Access to capital: this variable is a weighted average of
- Access to bank loans (30 per cent)
- Right to ownership of property other than land (30 per cent)
- Access to land ownership (40 per cent)

If women have none of the aforementioned rights, the value attributed is one. If women have the first two rights but cannot own land, the value is 0.4.

NON-ECO:

"Polygamy": This variable is coded as one or zero, depending on whether polygamy is legal or not. If half of the country's population is Muslim, the code is 0.5.

"Genital mutilation": per cent of girls who undergo excision.

"Parental authority": If the father holds sole parental authority over children, the code attributed is one, whereas it is zero if the authority is shared.

"15-19 ever married": per cent of women who are married before the age of 20.

Education:

"School enrolment ratio, primary/secondary/tertiary": Girls schooling rate/boys schooling rate. Measures the disparities in terms of access to primary, secondary and higher education, with one as the value for a situation of parity.

"Literacy ratio": This is ratio between the female and male literacy rates. It reveals disparities in being able to read to write.

"School enrolment, primary/secondary/tertiary": rate of women enrolled in primary, secondary and tertiary education.

"Literacy rate": rate of literate women.

Health role:

"Life expectancy at birth women/men": Number of years a girl can expect to live when born, divided by the same measure for boys at birth.

"Life expectancy gap": newly developed measure describing gender disparities in access to health services over the entire lifetime of an individual. For developed countries, women live 5.9 years longer than men do. This variable is thus the difference between men and women's life expectancies less 5.9. Hence, in a country where women have the same access to health services than men, the value is supposedly zero, and it is negative when women's access is constrained.

"Maternal mortality rate": Number of maternal deaths per 100 000 women.

"Sex ratio at birth/under 15 years": This is the number of females relative to males at a given age.

Access to labour market:

"Birth control": per cent of women using effective contraception measures.

"Total fertility rate": number of children born alive per 1 000 women aged 15-49.

Birth attendance by skilled staff": per cent of births realised with skilled and competent staff.

Economic role of women:

"Economically active women without family workers": refers to salaried or self-employed women, with personal incomes that ensure their financial independence

"Women among technical and professional workers": per cent of women working as professional or technical workers in the whole "technical and professional workers" population.

"Women among administrators and managerial workers": per cent of women employed as managers or involved in administrative positions in the whole "administrative" and "managers" population.

"Women in total number of paid workers": percentage of women within the whole population of paid workers.

A-2. Data by Region

	Averages				
	South Asia	Southeast Asia	Latin America + Caribbean	Sub Saharan Africa	Middle East & North Africa
Number of countries	5	6	15	25	15
ECO	0.62	0	0.01	0.44	0.55
NON-ECO	0.49	0.08	0.05	0.52	0.53
Total ECO + NON-ECO	1.11	0.08	0.06	0.96	1.08
GDP per Capita	1389.75	4891	3772.47	1591.62	4897.71
Education					
School enrolment, primary*	76	98	99	85	92
School enrolment, secondary*	75	98	107	71	96
School enrolment, tertiary*	41	114	120	43	109
Literacy rate*	52	92	96	71	75
Health					
Life expectancy at birth, women	60	70	72	50	71
Access to labour market					
Birth control	42.25	62.33	59.93	29.92	44.73
Total fertility rate	4.1	2.27	2.96	5.43	3.7
Birth attendance by skilled staff (%)	22	72	76	46	80
Political participation					
Women in parliament (%)	6	10	13	12	6
Women in ministerial level positions (%)	4	4.5	9	8	2
Economic role					
Economically active women without family workers (%)	14.83	27.7	35.09	28.85	16.27
Women among admin. and managerial workers (%)	5.25	17.8	28.79	12.48	8.73
Women among technical and professional workers (%)	N/A	47.5	47.71	28.87	30.64
Women in total number of paid workers (%)	16.92	33.25	38.12	27.01	17.43

A-3. Data by Religious Affiliation

	A (Muslim)			B (Hindu)			C (Animist)	D (Christian)			E (Buddhist)			Mixed 1			Mixed 2		
Number of Countries	22			2			1	19			3			5			14		
Lowest/Highest Value	L	H	A	L	H	A		L	H	A	L	H	A	L	H	A	L	H	A
ECO	0.11	0.93	0.55	0.52	0.58	0.55	0.57	0	0.57	0.09	0	0	0.00	0.07	0.76	0.33	0	0.67	0.34
NON-ECO	0.04	0.86	0.57	0.93	0.4	0.39	0.35	0.02	0.72	0.12	0.01	0.14	0.05	0.41	0.77	0.6	0.03	0.82	0.35
ECO + NON-ECO	0.26	1.69	1.12	0.91	0.98	0.95	0.92	0.02	1.14	0.21	0.01	0.14	0.06	0.64	1.53	0.94	0.03	1.4	0.69
Education																			
Literacy ratio ²	0.35	1.06	0.69	0.4	0.66	0.53	0.4	0.84	1.01	0.96	0.83	0.97	0.9	0.41	0.71	0.56	0.48	1.07	0.82
School enrolment ratio (primary) ³ (%)	0.55	1-Jan	0.87	0.77	0.77	0.77	0.77	0.87	1.17	0.98	0.96	1.02	0.98	0.62	0.75	0.68	0.79	1.04	0.94
Health status																			
Life expectancy gap ¹	-0.8	-6.3	-3.31	-4.9	-6.4	-5.65	-6.6	2	-6.8	-1.23	0	-1.6	-0.9	-2.5	-5.3	-3.56	1.8	-6	-2.81
Participation																			
Women in parliament (%)	0	33	6.48	7.9	8.9	8.4	10	6.7	29.8	14.23	0	21.8	10.47	2.4	11	6.98	3.6	30	11.58
Access to labour market																			
Birth Control (in %)	6	73	36.45	39	48	43.5	54	8	77	53.95	33	84	63.00	8	19	13.8	5	81	34.92
Total fertility rate	2.1	8	4.38	3	4.5	3.75	4.5	1.6	7.2	3.34	1.8	2.8	2.2	4.8	6.8	5.7	1.5	7.1	4.41
Economic status																			
Economically active women without family workers ⁴ (%)	4.9	25.8	14.93	38	38	38.00	36.2	11.1	78.3	33.83	25.2	25.2	25.2	34.8	34.8	34.8	20.2	39.5	28.05
Women in total number of paid workers (%)	8.2	43.3	0.27	11.7	17.6	14.38	23.5	31.6	49	38.1	18	37.9	39.37	5.5	20.9	13.8	13.3	46.6	30.49
Women in Technical positions (%)	8	37	27.5	21	21	21.00	40	32	64	47.71	45	52	48.5	19	26	22.5	20	61	34.00
Women among admin. and managerial workers (%)	2	26	9.11	3	9	6.00	15	6	40	26.56	12	21		7	14	10.6	2	26	12.5

Notes:

1. Lowest value for countries where more than 70 per cent of the population is affiliated to the religion aforementioned.
2. Highest value for countries where more than 70 per cent of the population is affiliated to the religion aforementioned.
3. Average between the lowest and the highest value.
4. Mixed 1: Countries where the total Muslim, Hindu and Animist populations equal 70 per cent and more of the country's population.
5. Mixed 2: Countries where the total Christian and Buddhist populations equal 30 per cent and more of the country's population.

A-4. Data by Level of Economic Development

		Averages											
		LIE		LMIE		UMIE		HIE		LIE	LMIE	UMIE	HIE
Number of countries		2		19		3		0		32	23	8	3
Lowes/Highest value		L	H	L	H	L	H	L	H				
Eco		0	0.93	0	0.67	0	0.85	0	0.71	0.44	0.2	0.3	0.35
Non-eco		0.04	0.86	0.01	0.73	0.02	0.6	0	0.77	0.51	0.18	0.25	0.47
Eco + Non-eco		0.04	1.69	0.01	1.2	0.02	1.39	0	1.34	0.95	0.38	0.54	0.81
Education	Literacy ratio ²	0.55	1.03	0.58	1	0.75	1.07	0.91	1.06	0.68	0.88	0.91	0.98
	School enrolment ratio (primary) ³ (%)	0.35	1.01	0.86	1.17	0.93	1.04	0.98	1.02	0.83	0.98	0.97	1.00
Health status	Life expectancy gap ¹	-6.8	0.1	-4	2	-6	1.8	-1.7	1.5	-3.75	-1.16	-1.89	-0.6
Participation	Women in parliament (%)	0	30	0.5	29.8	0	33	0	5.9	9.85	10.95	11.83	2.95
Access to labour market	Birth Control (in %)	5	60	36	77	21	75	28	81	23.55	61.48	45.63	57.00
	Total fertility rate	2.8	8	1.6	4.3	1.9	5.5	1.5	2.9	5.26	2.85	3.49	2.23
Economic status	Economically active women without family workers ⁴ (%)	4.9	38.7	9.25	78.3	26.4	39.5	32.8	32.8	25.14	29.19	32.64	32.8
	Women in total number of paid workers (%)	5.5	49	9.5	47.5	14.2	43.1	12.34	40.3	25.57	29.66	30.31	22.15
	Women in Technical positions (%)	8	42	29	64	38	61	25	32	26.28	42.96	50.00	27.67
	Women among admi. And managerial workers (%)	2	33	2	40	3	27	2	21	10.93	20.73	21.67	9.00

Notes:

LIE: Low income economies

LMIE: Low-middle income economies

UMIE: Upper middle income economies

HIE: High-income economies

A-5. Test of Endogeneity

Dependent Variable: Women among administrative and managerial workers				
Method: Least Squares				
Date: 01/05/04 Time: 16:47				
Sample(adjusted): 1 65				
Included observations: 60				
Excluded observations: 5 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2,337,701	1,810,132	1,291,454	0.0000
ECO	-2,258,841	4,139,521	-5,456,768	0.0000
IVECO	-1,760,689	7,353,665	-2,394,301	0.0200
R-squared	0.351883	Mean dependent var		1,550,000
Adjusted R-squared	0.329142	S.D. dependent var		1,066,358
S.E. of regression	8,734,098	Akaike info criterion		7,221,053
Sum squared resid	4,348,214	Schwarz criterion		7,325,770
Log likelihood	-2,136,316	F-statistic		1,547,357
Durbin-Watson stat	1,800,406	Prob(F-statistic)		0.000004

Dependent Variable: Women among technician workers				
Method: Least Squares				
Date: 01/05/04 Time: 16:48				
Sample(adjusted): 1 65				
Included observations: 49				
Excluded observations: 16 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4,620,254	2,153,094	2,145,867	0.0000
ECO	-3,014,381	4,947,596	-6,092,617	0.0000
IVECO	-8,335,482	8,240,638	-1,011,509	0.3171
R-squared	0.448729	Mean dependent var		3,659,184
Adjusted R-squared	0.424761	S.D. dependent var		1,280,123
S.E. of regression	9,709,037	Akaike info criterion		7,443,261
Sum squared resid	4,336,208	Schwarz criterion		7,559,087
Log likelihood	-1,793,599	F-statistic		1,872,176
Durbin-Watson stat	1,426,288	Prob(F-statistic)		0.000001

Dependent Variable: Women in active population				
Method: Least Squares				
Date: 01/05/04 Time: 16:49				
Sample(adjusted): 2 64				
Included observations: 32				
Excluded observations: 31 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3,289,791	3,354,723	9,806,447	0.0000
ECO	-1,589,784	9,534,608	-1,667,383	0.1062
IVECO*	-6,798,100	1,853,180	-0.366834	0.7164
R-squared	0.087490	Mean dependent var		2,916,406
Adjusted R-squared	0.024559	S.D. dependent var		1,382,362
S.E. of regression	1,365,282	Akaike info criterion		8,154,830
Sum squared resid	5,405,587	Schwarz criterion		8,292,242
Log likelihood	-1,274,773	F-statistic		1,390,242
Durbin-Watson stat	1,817,571	Prob(F-statistic)		0.265121

Dependent Variable: Women among paid workers				
Method: Least Squares				
Date: 01/05/04 Time: 16:49				
Sample: 1 66				
Included observations: 66				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3,442,439	1,893,516	1,818,014	0.0000
ECO	-2,135,610	4,172,617	-5,118,155	0.0000
IVECO	3,813,958	8,028,035	0.475080	0.6364
R-squared	0.316855	Mean dependent var		2,741,061
Adjusted R-squared	0.295168	S.D. dependent var		1,141,229
S.E. of regression	9,581,099	Akaike info criterion		7,401,851
Sum squared resid	5,783,240	Schwarz criterion		7,501,381
Log likelihood	-2,412,611	F-statistic		1,461,030
Durbin-Watson stat	1,577,512	Prob(F-statistic)		0.000006

Note:

IVEco/Non-Eco: Instrumented Variable; that is Eco and Non-Eco instrumented by Religious Affiliations.

Dependent Variable: Women among administrative and managerial workers				
Method: Least Squares				
Date: 01/05/04 Time: 16:54				
Sample(adjusted): 1 65				
Included observations: 60				
Excluded observations: 5 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2,366,379	2,029,716	1,165,867	0.0000
NECO	-2,088,446	4,330,937	-4,822,156	0.0000
IVNon-Eco	-1,656,635	7,634,658	-2,169,887	0.0342
R-squared	0.299203	Mean dependent var		1,550,000
Adjusted R-squared	0.274614	S.D. dependent var		1,066,358
S.E. of regression	9,082,125	Akaike info criterion		7,299,200
Sum squared resid	4,701,645	Schwarz criterion		7,403,917
Log likelihood	-2,159,760	F-statistic		1,216,800
Durbin-Watson stat	1,568,206	Prob(F-statistic)		0.000040

Dependent Variable: Women among technician workers				
Method: Least Squares				
Date: 01/05/04 Time: 16:54				
Sample(adjusted): 1 65				
Included observations: 49				
Excluded observations: 16 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4,772,426	2,050,739	2,327,173	0.0000
NECO	-3,395,013	4,710,206	-7,207,780	0.0000
IVNon-Eco	-8,178,983	7,546,546	-1,083,805	0.2841
R-squared	0.532204	Mean dependent var		3,659,184
Adjusted R-squared	0.511865	S.D. dependent var		1,280,123
S.E. of regression	8,943,798	Akaike info criterion		7,279,068
Sum squared resid	3,679,610	Schwarz criterion		7,394,894
Log likelihood	-1,753,372	F-statistic		2,616,669
Durbin-Watson stat	1,641,996	Prob(F-statistic)		0.000000

Dependent Variable: Women in active population				
Method: Least Squares				
Date: 01/05/04 Time: 16:55				
Sample(adjusted): 2 64				
Included observations: 32				
Excluded observations: 31 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3,392,155	3,364,939	1,008,088	0.0000
NECO	-2,111,110	1,026,543	-2,056,523	0.0488
IVNon-Eco	-4,800,945	1,785,413	-0.268898	0.7899
R-squared	0.127285	Mean dependent var		2,916,406
Adjusted R-squared	0.067097	S.D. dependent var		1,382,362
S.E. of regression	1,335,181	Akaike info criterion		8,110,240
Sum squared resid	5,169,851	Schwarz criterion		8,247,653
Log likelihood	-1,267,638	F-statistic		2,114,811
Durbin-Watson stat	1,830,654	Prob(F-statistic)		0.138884

Dependent Variable: Women among paid workers				
Method: Least Squares				
Date: 01/05/04 Time: 16:55				
Sample: 1 66				
Included observations: 66				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3,532,362	2,099,325	1,682,618	0.0000
NECO	-2,197,262	4,483,314	-4,900,978	0.0000
IVNon-Eco	4,148,129	8,126,023	0.510475	0.6115
R-squared	0.299773	Mean dependent var		2,741,061
Adjusted R-squared	0.277544	S.D. dependent var		1,141,229
S.E. of regression	9,700,147	Akaike info criterion		7,426,548
Sum squared resid	5,927,850	Schwarz criterion		7,526,078
Log likelihood	-2,420,761	F-statistic		1,348,544
Durbin-Watson stat	1,436,197	Prob(F-statistic)		0.000013

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