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**GLOBALIZATION AND CULTURE AS FACTORS THAT SHAPE THE GENDER GAP:
A COMPARATIVE STUDY OF URBAN LATIN AMERICA AND EAST ASIA (1970-
2000).**

Abstract:

In this paper we present: 1. The available data on comparative gender inequality at the macroeconomic level and 2. Gender inequality measures at the microeconomic and case study level. We see that market openness has a significant effect on the narrowing of the human capital gender gap. Globalization and market openness stand as factors that improve both the human capital endowments of women and their economic position. But we also see that the effects of culture and religious beliefs are very different. While Catholicism has a statistically significant influence on the improvement of the human capital gender gap, Muslim and Buddhist religious beliefs have the opposite effect and increase human capital gender differences.

In the second global era, some Catholic Latin American countries benefited from market openness in terms of the human capital and income gender gap, whereas we find the opposite impact in Buddhist and Muslim countries like China and South Korea where women's economic position has worsened in terms of human capital and wage inequality.

Key words: wage inequality, gender gap, market openness, human capital.
JEL CODES: J22, J13, J16

GLOBALIZATION AND CULTURE AS FACTORS THAT SHAPE THE GENDER GAP: A COMPARATIVE STUDY OF URBAN LATIN AMERICA AND EAST ASIA (1970-2000)¹.

1. INTRODUCTION.

In last few years, a considerable amount of literature on economic inequality, its connection to globalization and its influence on economic growth has been published.. A large school of economic historians, Jeffrey G. Williamson, Peter Lindert and many of their co-authors, friends, and students, have been dealing with this topic although they have not concentrated on the topic of gender. This literature has shown changes in the relative prices of production factors during the first global era (1820-1913) that imply changes in long term total income inequality distribution (Lindert, Williamson, 2003), which were driven by labour supply forces and fostered convergence of the economies involved (O'Rourke, Williamson, 1999). But it is much more difficult to frame general conclusions on income inequality during the second globalization era, in which the intensity of migration flow and capital movement is lower than in the first, while trade liberalization policies are more widespread. According to some perspectives, this is a critical factor of the second globalization era because Latin American countries, with a long tradition in protectionist trade policies, had to pay the price of adjusting to free trade and this normally

¹ A first version of this paper is published in the WP series of the Economics Department at UPF, co-authored together with María Camou, Silvana Maubrigades and Natalia Mora-Sitja under the title "Globalization and Wage Inequality in South and East Asia, and Latin America: a gender approach". This draft was written during my leave at the Economics Department of Harvard University (January 2005, August 2006) and since then they have kindly provided data sources on Latin American income distribution (household budgets) and the calculation of Theil and Gini gendered inequality indexes. From that initial draft we are now trying to provide our own approach to the topics that we want to underline the most, and it is plausible that a series of papers on these topics are going to appear in the future.

As for myself, I want to acknowledge Jeff Williamson, Li Han, Jinu Koola and Stan Engerman from the Economics Department of Harvard University for enriching suggestions regarding ideas and bibliography. In the meantime the paper has received rich suggestions for improvement and criticisms in The Economic History Seminar of Universidad de la República de Uruguay (2006), the Macroeconomics Workshop of Universitat Pompeu Fabra (2006), people attending the session on Inequality of the International Economic History Conference at Helsinki (2006), The Conference of Economic History of Asia and the Pacific Rim at Sidney (2007), the Global Business Association Conference at Kyoto (2007), The international Conference on Latin America's Economic History at Montevideo (2007), the Workshop on Human Capital Inequality and Gender, held at UPF, Barcelona in 2007. The discussants, Sergi Jiménez, members of CREI at UPF, Rosemary Thorp, Jan Luiten van Zanden have provided the primary indications for solving the main problems of the preliminary draft. But those who really looked carefully at the results and their inconsistencies were María Camou, Silvana Maubrigades and Natalia Mora Sitja to whom I owe a lot in the process of revising this final draft. I sincerely hope that this paper is going to be followed by many others that are going to underline their own concerns and major topics of interest.

implied the curtail of public and social spending and subsidies (such as public schools and public health), which particularly affect women and children, and ultimately the formation of human capital (see on the topic Thorp, 1998).

In most of the empirical results regarding the second globalization era, the unit of analysis of the datasets is the household, and the results refer to Gini coefficients for income or expenditure (see for instance Deininger, Squire, 1996 , 1998; World Bank, 1995; Chai and Chai, 1994; Higgins, Williamson, 1999; Riskin, Renwei, Shi, 2001). Other innovative approaches have focused on individuals instead of households, using national income shares and national account information (see Bourguignon and Morrison, 2002; Sala-i-Martin, 2003), and have raised new conclusions on the reasons behind the diminution of world-wide global inequality and global poverty rates during the last quarter of the 20th century. The impact of economic liberalization of the most populated countries of the world, China and India, is the key factor.

In this essay we want to go a step further. We want to explore the implications that changes in the gender gap in developing countries have had on income distribution and gender income distribution during the second globalization era. Therefore our unit of analysis must be the individual and not the household, since Gini coefficients for household income mask important information on the unequal economic position of women inside the household. This means that our measure of inequality is going to be different from conventional household inequality measures. In most countries of the world, marriage is very homogamic and the wealth backgrounds of the bride and groom have a major influence on partner choice in the marriage market and on family and household formation. The implication of this fact is that household measures for inequality normally exaggerate real inequality among people at the average level. Therefore there is a difference in the magnitude of our inequality indicators with respect to the traditional household Gini coefficients. We are going to measure the evolution of wage differences between people (not households) stressing the differences between men and women.

The countries studied here are in Latin America and East Asia. We think that the comparison of Latin American and East Asian experiences is especially worthwhile since income inequality and the gender gap are shaped in significantly different ways on these two continents. According to the standard Gini calculations based on household budgets by Deininger and Squire, 1996, Asia has been a more egalitarian continent than Latin America. But as regards the educational gender gap, we obtain an egalitarian distribution in Latin America and more unequal gender patterns in East and South Asia (Barro, Lee, 2000). These factors challenge recent research on the role of women's education in the transmission of human capital to the children (Galor, Weil, 1996; Hazan, Berdugo, 2004). On the other hand, they suggest that the patterns of income distribution in both regions of the world mask different magnitudes of the gender gap originated by economic and cultural factors, as we shall underline later.

A second set of hypotheses refers to the impact of increasing competition in labour markets – brought about by globalization- on the narrowing of the gender gap. As stated by the simple Stolper-Samuelson model, free trade has further implications on the rise of wages on the relative abundant production factor in developing countries, unskilled work (Samuelson, 1948). Since most unskilled labor is often performed by women, we can infer from the Stolper-Samuelson model that globalization, which causes an increasing demand for women's labor, should have as a final result the relative increase of women's levels of participation and the diminution of the gender gap (see the case of Mexico in Dell, 2005; Artecona, Cunningham, 2002, Garcia-Cuellar, 2001). For the case of Mexico it has been effectively proven that economic integration in NAFTA since 1994 has led to an increase in female participation and a decrease in the gender gap.

On the other hand, according to Becker (1957), gender discrimination seems to depend on male cultural tastes and it is eliminated by the increasing intensity of competitive market forces. According to recent research, economic competition brought about by economic openness and equal treatment laws result in a considerable narrowing of the gender gap (see Weichselbaumer, Winter-Ebmer, 2003).

In this paper, we analyse the impact of the globalization process and religious beliefs on human capital formation and the gender gap in these two different cultural settings. First, by means of regression analysis we study the cultural and market openness determinants of the human capital gender gap in East Asian and Latin American countries. Second, we have reconstructed the gendered inequality indexes for a sample of East Asian and Latin American countries. In this part of the paper we want to frame explanations on the evolution of the gender gap and its impact on inequality. We think that, in this respect, our results are new since we have found very few studies that take into account including women's earnings in the calculation of income inequality indexes. The countries chosen are China, South Korea and Singapore in Asia, and Argentina, Uruguay and Brasil in Latin America. The available information is still preliminary, but we think our evidence is a step forward in the research of the relationship between globalization and the gender gap.

2. THE DATA.

It is well known that when we include women's income information in world's international comparisons the first problem we have is the lack of reliable data. In poor countries part of the work performed by women is in the informal economy, performed at home and for piece rates. The available information on this kind of work is still scattered in few datasets and not comparable across countries. The same problems arise to evaluate women's income derived from properties and other financial assets. This lack of information makes the comparison of women and men's incomes very difficult, almost impossible.

This is why we have limited our observations to urban wage earnings. As we shall see different sources report female and male wage earnings in a very systematic way, although this analysis also has some limitations. Income inequality measures are higher than wage inequality indexes, since wage earnings show a lower dispersion than total incomes. Additionally, poor people, workers in the informal sector of the economy, employers and property owners are excluded from our analysis, which means that our data is not useful to analyse some economy-wide changes. But instead our data allows us to analyse rigorously and systematically gender differences in wage earnings, the main engines causing them and their implications for income inequality evolution.

In part 4 of this paper we present the world results on the earnings gender gap on the bases of UN datasets. UN uses them to calculate Gender Development Index and the Gender Empowerment Index. These data are available in the Human Development Report (2005). It is important to stress here that UN data referring to female incomes and the ratio female/male incomes are different from the data we use to compute inequality in part 5 of the paper. To estimate gender differences in earnings as can be observed in map 1 the UN uses the ratio of the female non agricultural wage over the male non agricultural wage, the female and male shares of the economically active population, the total female and male population, and per capita GDP(PPP US\$).² When data on gender wages are not available, the UN assumes a rate of 75% in female/male wages outside the agriculture. This is certainly a limitation of this source. In map 1 we use this data because they are the first available that make possible worldwide comparisons. But we are aware of the deficits of this data, particularly when we compare our results on the wage gender gap with the UN indicator of income gender gap. Nonetheless, we think it is worth to

² The precise arithmetical formula for the calculation is specified in technical note 1, Human Development Report (2005), pg. 346.

make use of the first evidence available on gender income differences in order to make the first comparative analysis.

In the last part of the paper we estimate the inequality indexes and gendered inequality indexes of urban wage workers for a sample of six countries of Asia and Latin America: Brasil, Argentina and Uruguay (1975-1995) in Latin America and China, Korea and Singapore (1985-1995) in South East Asia. It is important to stress that the measure of inequality we obtain in part 5 is different from approach presented in map 1 on the bases of the data provided by UN. The Gini and Theil indexes presented in the last part of the paper give an indication on the unitary basic wage dispersion controlled by gender. Therefore aspects that are crucial to represent gender inequality by UN (like PPP GNP, employment of women, or the female/male rate of population) and that may give broad hints on earnings differentials of women/men may hide other dynamic aspects such as human capital provision or the influence of culture on well-being (and not merely on incomes).

For the Asian cases of China, South Korea, and Singapore the data source is the October Inquiry (OI). OI is an annual survey conducted by ILO since the mid 20th century. The Inquiry collects returns on wages by occupation in October every year as reported by the Statistical Institutes of different national governments. The number of countries and the scope of information it covers has enlarged and improved over time. Since 1983, the survey includes 140 wage categories for very thin and well-specified occupations. In some cases specific information is missing, in which case ILO fills it in by using average wages. Other problems arise from this source when you want to make the information comparable. Wages can be expressed hourly, daily, weekly or monthly with very few scattered information on the number of working hours per day or per week according to the country. All these problems are being analysed by R.Oostendrop and R. Freeman who are calibrating the data to make feasible international comparisons³.

In the countries we have chosen the wage rate information refers always to monthly earnings and the male and female earnings are specified in all the occupations. In fact, from all the countries for which the survey gives information these 3 countries are the most reliable in terms of data source. These wage rates refer to net earnings of the basic wage and do not include earnings derived from productivity plusses or extraordinary working hours or days. Therefore the observations from our sample once standardised are homogeneous and allow for international comparisons.

To calculate the inequality indexes we have matched the gendered wage rates by occupation as specified by OI with the gender employment of the census returns according to ISCO ILO

³ See Freeman, Oostendrop, 2000. The detailed series of male wages 1983-2003 are already available in Occupational Wages Around the World (OWW) Database www.nber.org/oww/

classification criteria⁴. Wage and employment information do not always have a single match, and our criteria has been to maximize employment and to calculate average wages per employment category. The census employment categories that do not have any match with OI wage information are ignored. Since most of the wage information refers to the economy of urban areas the final employment categories derived from this matching process belong to the industrial and services sectors and can be considered representative of the urban setting. In the case of China OI makes explicit that the wage information is urban. South Korea and Singapore are highly urbanized countries and OI gives very little information on rural agrarian wages.

Data on gender wage earnings for the cases of Argentina, Uruguay and Brasil come from the Household Surveys of every country. These surveys are normally used to analyse household income inequality, but they also provide information on wage earnings of individual members of the household, men and women. For the Latin American case this information is increasingly available since the 1970s and can be regarded as a rich reservoir of data for the analysis of living standards and income distribution. Household Surveys inquire on the basic wage weekly or monthly. In the cases of Argentina, Uruguay and Brasil and in order to make possible the comparisons with the Asian data we have only selected the urban data, in the case of Argentina more specifically Gran Buenos Aires.

3. THE METHODOLOGY.

In part 4 we present a panel regression analysis on the human capital gender gap, 1960-2000 trying to test the significance of culture and market openness on the gender gap. In part 5, we have calculated the Gini index for earnings inequality in the economy as a whole as well as for inequality within men and within women. But since the Gini index for a population is not a linear function of the Gini indexes of its subgroups if these subgroups overlap in the earnings distribution, as it happens in the case of gender, we cannot decompose the relative contribution of gender inequality to inequality in the economy using Gini. The alternatives are the so-called generalized entropy measures, of which the best known are the Theil indexes. These indexes, while keeping the same properties as the Gini index, allow estimation of how much inequality is explained by inequality within groups and how much by inequality between groups. We use these indexes to decompose inequality into its gendered sources. More specifically, this paper uses the so-called Theil's L index or mean log deviation measure, the most commonly used in the literature. Its formula can be expressed as follow:

⁴ This data are available at the ILO website www.ilo.org/public/english/bureau/stat/child/actrep/octing.htm the dataset Laborsta.

$$I_0 = \frac{1}{N} \sum_{i=1}^n \ln \frac{\bar{y}}{y_i}$$

where I_0 is the inequality index, N is the total size of the population, and y is income or earnings. One of the properties of these indicators, as already said, is that they can be decomposed as a function of some subgroups characteristics. Subgroups can be defined according to occupation, age, or gender, amongst others. Let y_k be the average income of a subgroup, n_k the population in the subgroup, and I_0^k the inequality index for the subgroup, then,

$$I_0 = \sum_{k=1}^n \left(\frac{n_k}{N} \right) I_0^k + \sum_{k=1}^n \frac{n_k}{N} \ln \frac{1}{y_k / \bar{Y}}$$

The first term represents within-group inequality, and the second term between-group inequality (Mookherjee and Shorrocks, 1982). We will use this to assess how earnings inequality within and across gender contributes to inequality in the economy. Within-gender inequality refers to the diversity of male wages and female wages. If over time wages become less spread out in one of the subgroups, women for example, this would contribute to reduce inequality in the economy, other things equal. The second term, between-gender inequality, refers to inequality between subgroups, that is, it ignores the spectrum of wages within each subgroup and looks at differences in average wages across subgroups. In other words, it measures the contribution of the gender gap to overall inequality. If women's average earnings increase, for example –and taking into account that women are the lowest paid subgroup-, inequality will decrease, *ceteris paribus*.

Another indicator of gender inequality is occupational segregation, that is, the tendency for men and women to be employed in different occupations. High levels of segregation have been considered to be a significant factor in the discrepancy between the wages of women and men, and generally to be at the root of gender inequalities. In order to measure segregation, the most common indicator is the dissimilarity index, which generally measures whether a particular group is distributed across occupations in the same way as another group. The formula to calculate gender occupational segregation is the following:

$$S = \frac{1}{2} \sum_i |m_i - f_i|$$

where m_i and f_i are the percentage of male and female employment in occupation i . The dissimilarity index is a measure from 0 to 1. The closer to 1 the values, the more segregated the two groups are.

3. REAL INCOME VERSUS HUMAN CAPITAL GENDER GAP.

Since the classical book by Ester Boserup (1970) many authors have insisted on the importance that all factors fostering female market power have in the erosion of the gender gap. Human capital and exposure to the labour market are some of these factors. Institutional and cultural factors promoting more bargaining power by women are other elements (Field, 2003; 2005). But in several poor countries of Asia and Latin America women may have problems to develop market power. One of their main restrictions refers to available time to devote to market activities. In table 3 we present the working time balance on men and women in several countries of Latin America and Asia. This table is based on scattered data at the country level, and must be analysed with caution. But as a general remark table 3 shows that in poor countries women work more hours than men because of the loads of work in non-market activities⁵. With the available technologies for domestic work, in poor countries women must deploy between 5.5 and 6 hours daily to unpaid work. Part of this work is addressed to supply goods and services that in rich countries are offered by the market. This is an important time restriction when considering the possibilities of women's market exposure in poor countries⁶. This situation of time collapse between alternative activities only gradually changes as a consequence of human capital investments and improvements, which increase women's capabilities and market dexterity and as a result the value of their market activities also improves (Becker, 1991).

A first problem we face when we deal with the gender gap is that we must make explicit what we want to measure since several variables account for gender differences. The most widespread meaning of the gender gap is the wage gender differential of women relative to men. This in turn implies that in a given society exists equality of opportunities and freedom of choice. In historical terms the emancipation of women and their massive incorporation into the labor markets dates from World War II in the capitalist World, and from the soviet revolution in the communist world.

⁵ This data refers to unweighted averages of time devoted by women to paid and unpaid works. It has meaning in relative terms and not in absolute terms. Time devoted to work in unpaid non-market activities (as well as to paid activities) may vary a great deal according to the social class or women's economic status. Evidence from Spain supports this assertion both in the 19th and 20th century. See Perez-Fuentes (2005); Carrasco (1991).

⁶ With an ordinary duration of the paid day's work, 8 hours, the total time women must devote to work in a urban setting is 13,5 hours according our estimations of time necessary to perform non-market activities. It is well known that many women of poor countries perform part time, out doors work in the informal economy, more compatible with the loads of unpaid work as shown in table 1.

In this second case while employment is universal both for men and women freedom of choice is very limited. Anyway, and in spite the failure of communism and socialism as a path of economic development since the 1990s, in map 1 we can see that countries like China, India or Russia stand amongst the most egalitarian in terms of income gender gap, together with the US, Canada, Australia and New Zealand. Indeed map 1 is also clear to show that the income gender gap has a lot to do with economic inequality in general. Being the most unequal regions of the world, countries of Latin America, Africa and the Middle East are also the countries that exhibit the highest wage gender gap. We must put special stress to socialist countries in transition because in this case economic inequality is increasing sharply in the recent past while the tradition of women to work for a wage still remains, and the income gender gap is lower.

But if these are the results we obtain from wage and earning rates, can we assert that these indexes measure the real gender gap? Amartya Sen (1990, 1992, 2003) has been the lider author stressing the connections between market exposure and cultural backgrounds and the real gender gap. In countries such as China and India many women have to confront social exclusion. In most of these transition economies, the low preferences of men regarding visibility and exposure of women mean a real threat to equality of opportunities according to gender. Economic backwardness but also cultural factors can explain the lack of equity in the supply of human capital services according to gender, both in terms of health and education. This is visible in the data of school achievement and attainment by Barro-Lee but also by the computation of missing women by Sen which normally mean that women loose their biological (genetic) advantage and prematurely die.

In table 4, by means of a linear panel across country regression we have compared the effects of globalization and market exposure with those of religion, on the human capital gender gap. The human capital gender gap is calculated as the ratio “years of women enrolment in school/years of men enrolment in school”. Market openness has a statistically significant positive role in diminishing the human capital gender gap. Indeed in totally autharquic societies women can only follow the orders of the ruler. In more open societies women have real freedom to choose, and this normally implies that they also have more visibility, exposure and empowerment and as consequence the human capital gender gap diminishes. If this is the universal role of market openness we can see that the influence of other variables can eliminate the effects of market exposure. In table 4 we show that culture, here measured by means of religious beliefs is not neutral. In Buddhist and Muslim countries religion is a factor that fosters the increase of differences between men and women and enlarges the human capital gender gap. Instead in catholic countries, such as Latin American counties, Catholicism acts a factor that promotes the diminution of the human capital gender gap. May be this is the reason why during the last 40 years and together with more market openness, in catholic countries of Latin America there has been

sensible achievements in women's human capital investment (or improvement of their health and education backgrounds). This is visible using all sort of variables related to health and education like infant mortality by gender, life expectancies, and school enrolment and achievement according to gender.

To summarize, we can stress the fact that globalization and market exposure have a positive effect in the relative situation of women. This is a factor that helps to develop more capabilities and to make effective individual choices, as we have shown in Table 4. This fact has as a consequence the diminution of the differences in human capital endowments of men and women. But the net impact of globalization on gender differences depends a lot on the cultural and religious background of every country. While in Latin American Catholic countries women benefited from more market freedom and improved their human capital endowments relative to men, in countries of East Asia like China and South Korea, prevalent religious practices like Buddhist and Muslim beliefs have had as an outcome the worsening of female human capital investments, both in terms of health and education.

4. A MICRO ANALYSIS OF THE GENDERED WAGE RATES.

The Gini and Theil results on total inequality and gendered inequality evolution for the six Asian and Latin American countries of our sample are presented in table 6 . It is important to stress that these results refer to the basic wage urban population. On the other hand when we look at the data of the table it is also worth to note that when we look at individual gender differences the magnitude of the index of inequality also diminishes. In the well known estimations of inequality form total household income the scale of inequality is higher because the marriage market is very homogamic in most of the countries. By definition, our data does not include the inequality shares of the top (owners and employers) and the bottom (poor and employed in the informal economy) of the income distribution. In spite of all these problems, by studying urban waged labour we are able to identify some of the gender inequality patterns that arise from changes in the gender gap.

In table 5 we present the evolution of the gender gap (or, to be more precise, the female/male earnings ratio) and index of dissimilarity for the six countries of our sample. The latter ranges from 0 to 1. When the dissimilarity index of occupations is close to 1 this means that occupations

are more segregated according to gender than when the index is close to 0. This index quantifies the extent to which men and women can be substitutes in the labour market but it does not explain if the occupation segregation or its absence involves changes in income levels.

A first result we can stress from this table is that gender inequality has improved in all countries with the exception of China and South Korea in recent decades. In all Latin American countries, including Brasil, the gender gap has eroded from 1975 to 1995⁷. Therefore from our case studies we can infer that in Latin America women's situation has improved a great deal. When we try to explain why, we must remember the results we got in the previous section: market openness reinforced by the existing catholic religion cultural backgrounds fostered the improvement of the human capital endowments of women. According to the index of dissimilarity more economic equality according to gender does not imply that women perform the same jobs than men. The indexes of dissimilarity are high and imply that women are employed in different occupations than men. We can also see in tables 1 and 2 of this paper that women's participation levels are lower in Latin America than in East Asia. Indeed we have identified that Latin American working women from these 3 countries concentrate in the employment opportunities provided by liberal professions (teachers, nurses) clerical work (administrative) and services, and therefore the job and professional choices of women are different from those of men. This case is very significant on the importance of the freedom of choice and human capital achievements on the erosion of the gender gap. Notice that we must read the meaning of this information in terms of a trend and not in absolute terms. We already have stressed the limitations of our data that are the basic wage rates of urban workers. But there is no reason to expect that if gender differences narrow for this particular sector of the population other parts of the society are going to behave very differently. Of course globalization brought free trade to Latin America and together with it the growth of the informal sector of the economy. But as stated before the information we present here deals with the waged formal sector of the economy and still the real size and behaviour of the informal sector is imprecise to reach conclusions.

The gender gap information arising from East Asian case is very different. Except for Singapore, gender economic inequality is higher in East Asia than in Latin America. The gender gap only slightly improves in the case of Singapore and worsens in the cases of South Korea and China. The Chinese case deserves special attention. Before the economic reforms that began in 1987, the wage distribution in this communist country was very egalitarian and inequality has specially increased after 1991 when the scale and scope of the economic reforms intensified (see the Chinese inequality patterns in Knight, Shi, Renwei, 2001; Gustafsson, Shi, 2001; Guthrie, 2006).

⁷ The changes observed in table 7 have a meaning in terms of trend of improvement and before we can make more general conclusions we need to enlarge our sample of countries.

In table 4 we have seen that in spite the effects of market openness are to narrow the gender differences in countries with the cultural backgrounds of China and South Korea, in this particular cases religion is the engine that widens gender differences of these transition and capitalist economies of East Asia. On the other hand the dissimilarity index shows that in this case women's are less segregated. In this respect the Chinese example is illustrative. Urban women have very low fertility rates and they are present in the blue-collar spheres of the economy. In the case of China (like in most developing countries) real wages were very low because the productivity levels were also very low. The strategy has been to specialise in the production of export goods like textiles that make intensive use of the pool of cheap and unskilled female labour. By means of the production of labour intensive products, they could compete at the international markets. In these East Asian cases the causes of women's exclusion are not economic and as we have already stated the gender gap increases (both in terms of wage rate and in terms of human capital) because of cultural and religion reasons.

Therefore the direction of the move in Latin American countries is different from the East Asian case. In both cases there has been a trend towards market openness and globalization of trade. But the impact of culture and religion on gender differences has been very diverse. While economic planification was an instrument to level up the incomes of men and women in the past, market openness and exposure and freedom of choice has increased differences between men and women in Buddhist and Muslim countries as a consequence of gendered cultural backgrounds. The opposite effect can be found in Latin America. In this second case, trade competition with the cheap prices (and low wages) supplied by China has meant increasing economic inequality. But income and human capital gender gaps substantially narrowed. Freedom of choice has meant better health and education for women as well as for men and this fact has had as an effect the erosion of the human capital gender gap and as a consequence also the income gender gap.

5. CONCLUSIONS

In the previous pages we have presented the available comparative data on the gender gap and the factors that shape it. Market openness but also religious beliefs can explain the path towards a

more egalitarian gender situation in Latin America as opposed to the gender regression in East Asia. The effects of globalization on freedom of choice and public visibility and empowerment of women have had clear outcomes on a better human capital formation of Latin American women and therefore on their economic performance. In this case we have also observed that the result obtained is positively influenced by the religion (and cultural backgrounds) practiced in this part of the world which is Catholicism. But in other countries also experiencing globalization and the transition to the market economy such as countries from East Asia, we find the opposite effect. Here market openness also has a positive effect on the erosion of the gender gap. Nonetheless and in economic terms the point of departure of these transition economies was total equality of income distribution. The positive effects brought by market openness on the human capital gender gap are here eliminated by gendered religious beliefs and culture that repeal the effects of economic openness.

Once we tried to give here the general picture we must nevertheless stress the fact that to totally capture gender well-being and equality of opportunities in these two set of countries more research is needed. We need to know more on women employed in the informal sector of the economy in Latin American countries and also we need to dig deeper on the effective inequality reality of East Asian women.

TABLE 1**FEMALE ECONOMIC ACTIVITY. WORLD INDICATORS**

	RATE (%2003)	INDEX (1990=100)	% OF MALE RATE
	>15		
World	55.6	103	69
OECD	51.8	107	72
Developing count.	56.0	102	67
Arab States	33.3	119	42
East Asia & Pac.	68.9	100	83
Latin America	42.7	110	52
South Asia	44.1	107	52
Sub-Saharan Africa	62.3	99	73

Source: Human Development Report, 2005, p. 314

TABLE 2**FEMALE LITERACY. WORLD INDICATORS, 2003**

	ADULT LITERACY		YOUTH LITERACY	
	Female rate	Female/male	Female rate	Female/male
	>15		15-24	
Developing count.	69.6	84	81.2	92
Arab States	53.1	71	75.8	87
East Asia & Pacific	86.2	91	97. 5	99
Latin America	88.9	98	96.3	101
South Asia	46.6	66	63.3	79
Sub-Saharan Africa	52.6	76	67.9	88

Source: Human Development Report, 2005, p.310

TABLE 3
THE USE OF WORK TIME ACCORDING TO GENDER IN POOR COUNTRIES, 1990-2000. (UNWEIGHTED AVERAGES).

	URBAN AREAS		RURAL AREAS	
	HOURS/DAY	%	HOURS/DAY	%
TOTAL WORK TIME				
WOMEN:	8.01		10.28	
MARKET ACTIVITIES	2.48	31	3.6	38
NON-MARKET ACTIVITIES	5.52	69	6.03	62
MEN:	7.55		8.58	
MARKET ACTIVITIES	5.96	79	6.52	76
NON-MARKET ACTIVITIES	1.58	21	2.05	24
WOMEN/MEN %	107		120	

Source: Human Development Report(2005), calculated from table 29, p.315. Based on time surveys. Urban areas based in Colombia, Indonesia, Kenya, Nepal, Venezuela. Rural areas based in Bangladesh, Guatemala, Kenya, Nepal, Philippines.

TABLE 4.
THE ROLE OF MARKET OPENESS AND CULTURE IN SHAPING THE HUMAN
CAPITAL GENDER GAP.

ACROSS COUNTRY LINEAR PANEL REGRESION, 1960-2000

Dependent variable: Years of school women/Years of school men

	(1)	(2)	(3)
Market openess	0.0023139 (0.0012274)*	0.0020139 (0.0012218)*	0.0023931 (0.011935)**
Gini coef*urban share	-0.0594599 (0.0315714)*	0.0206303 (0.02791)	0.0494648 (0.028893)*
Catholic*urban share	0.1386253 (0.0421793)***		
Muslim*urban share		-0.2671665 (0.0711539)***	
Buddhist*urban share			-0.2767896 (0.0518004)***
1960	-0.1990823 (0.0288728)***	-0.2109165 (0.0303868)***	-0.2027946 (0.0277031)***
1965	-0.1914564 (0.0279903)***	-0.2053038 (0.0294233)***	-0.1917831 (0.0267985)***
1970	-0.2014801 (0.026537)***	-0.2136894 [^] (0.0280565)***	-0.1996761 (0.0253638)***
1975	-0.1794736 (0.026617)***	-0.1931434 (0.02813)***	-0.1793117 (0.0254354)***
1980	-0.1490377 (0.0263726)***	-0.1640693 (0.0277864)***	-0.1517645 (0.0252067)***
1985	-0.1257156 (0.0261615)***	-0.1390088 (0.0269203)***	-0.1280971 (0.0249982)***
1990	-0.0979618 (0.0255197)***	-0.112742 (0.0269203)***	-0.102029 (0.0243878)***
1995		-0.0138033 (0.0305774)	
2000	0.0168061 (0.0305567)		0.0135757 (0.0291494)
Constant	0.80335987 (0.0407258)***	0.8630158 (0.0415124)***	0.8199689 (0.0405604)***
TIME FIXED EFFECTS	YES	YES	YES
COUNTRY FIXED EFFECTS	YES	YES	YES
N	328	328	328
	R-sq within=0.4311	0.4391	0.4933
	Between=0.0575	0.0671	0.0027
	Overall=0.0258	0.0637	0.0140
	Wald chi2(11)=190.54	193.22	226.92

Source: data on religion com from Alesina et alt, and data on market openess and school attendance from Barro-Lee.

TABLE 5**GENDER GAP EVOLUTION AND DISSIMILARITY INDEX IN A SAMPLE OF URBAN ASIAN AND LATIN AMERICAN COUNTRIES, 1975-1995 (*).**

COUNTRY	YEAR	INEX DISSIMILARITY	GENDER GAP (female/male earnings)
Argentina	1975	0.68	0.55
Argentina	1985	0.41	0.79
Argentina	1995	0.34	0.91
Brasil	1976	0.56	0.59
Brasil	1999	0.62	0.91
Uruguay	1985	0.54	0.70
Uruguay	1995	0.56	0.84
China	1990	0.35	0.84
China	1997	0.38	0.74
South Korea	1985	0.35	0.6
South Korea	1995	0.34	0.7
Singapore	1985	0.49	0.82
Singapore	1995	0.52	0.95

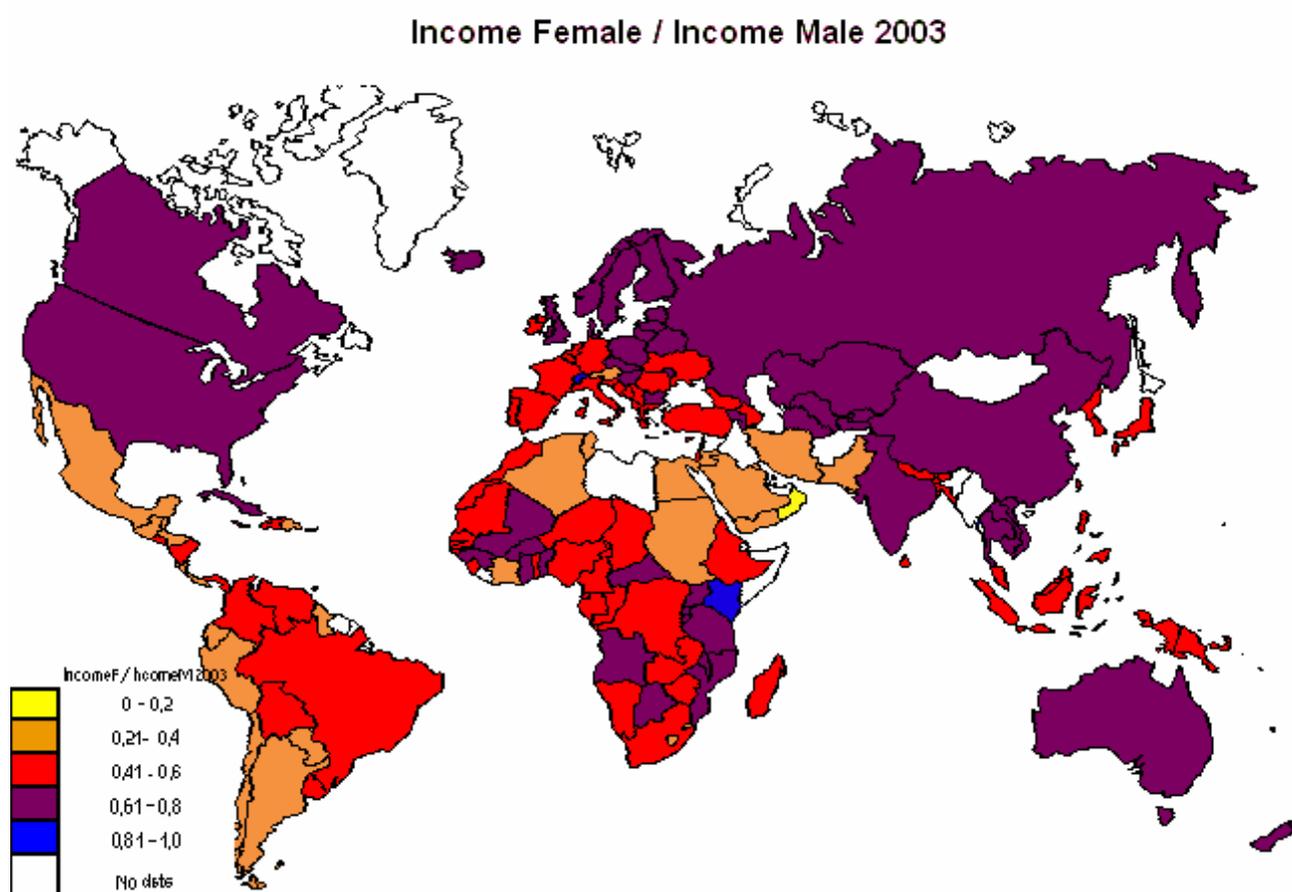
Source: see part 2 of the paper.

TABLE 6

COUNTRY	GINI			THEIL			INEQUALITY		
	Total	Men	Wom	Total	Men	Wom	Men%	Wom%	%
Arg 1975	0.026	0.176	0.226	0.098	0.065	0.084	51.18	19.94	28.87
Arg 1985	0.266	0.252	0.26	0.119	0.104	0.123	51.91	42.24	5.84
Arg 1995	0.262	0.266	0.251	0.111	0.118	0.1	66.23	33.61	0.16
Brasil 1976	0.406	0.418	0.421	0.275	0.234	0.288	60.44	30.24	9.33
Brasil 1999	0.367	0.378	0.341	0.216	0.23	0.187	68.78	30.76	0.45
Urug 1985	0.287	0.282	0.257	0.136	0.132	0.106	58.75	30.60	10.65
Urug 1995	0.284	0.278	0.282	0.128	0.123	0.126	57.55	39.70	2.75
China 1990	0.132	0.145	0.086	0.027	0.032	0.013	63.18	22.33	14.49
China 1997	0.14	0.124	0.084	0.03	0.025	0.013	49.45	16.89	33.66
Korea1985	0.258	0.193	0.269	0.109	0.062	0.122	37.65	37.32	25.03
Korea1995	0.156	0.125	0.122	0.039	0.024	0.027	39.79	24.80	35.41
Singap1985	0.254	0.264	0.238	0.113	0.111	0.103	63.94	32.04	4.02
Singap1995	0.244	0.238	0.24	0.098	0.098	0.096	60.15	39.51	0.34

Source: see part 2.

MAP 1. THE EARNINGS GENDER GAP AT THE WORLD LEVEL, 2003.



Source: U.N. (2005).

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